

**CONTINUING MEDICAL EDUCATION**

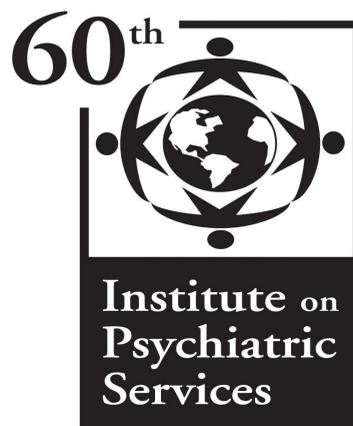
**SYLLABUS  
AND  
PROCEEDINGS SUMMARY**

**FOR THE**

**60<sup>th</sup>**

**INSTITUTE ON PSYCHIATRIC  
SERVICES**

**October 2-5, 2008  
CHICAGO, IL**



APA's Leading Educational  
Conference on Public and  
Community Psychiatry

**Institute on Psychiatric Services  
American Psychiatric Association  
1000 Wilson Boulevard, Suite 1825  
Arlington, VA 22209-3901  
1-888-357-7924**

# AMERICAN PSYCHIATRIC ASSOCIATION 60TH INSTITUTE ON PSYCHIATRIC SERVICES

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**2008–2009 OFFICERS AND STAFF**  
**AMERICAN PSYCHIATRIC ASSOCIATION**  
**1000 Wilson Boulevard, Suite 1825, Arlington, VA 22209-3901**  
**Telephone: 703-907-(see extensions listed below)**  
**E-Mail for Staff: First initial of first name, last name, and @psych.org**

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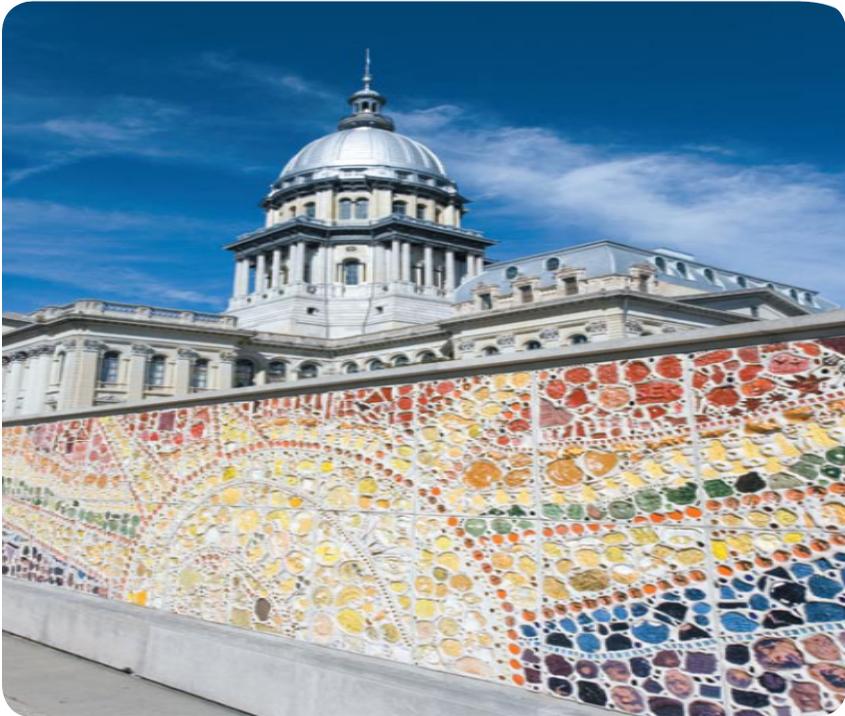
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# CONTINUING EDUCATION CREDITS FOR OTHER DISCIPLINES



## Conference Objectives

At the conclusion of the 2008 Institute on Psychiatric Services, participants will:

- 1) Recognize and improve mental health disparities in the community;
- 2) Demonstrate and apply new skills that will be useful in public psychiatry settings;
- 3) Utilize new knowledge and skills in clinical psychiatry that can be used to improve patient care;
- 4) Examine how the current health care system affects patient care;
- 5) Describe how to transform systems of care; and
- 6) Assess and evaluate all aspects of recovery.

## Target Audiences

Administrators and Managers; Advocates and Policymakers; Consumer and Family Members; Educators, Faculty, and Training Directors; Medical Students and Residents; Nurses; Physicians (Nonpsychiatric); Planners, Researchers, and Evaluators; Psychiatrists; Psychologists; Counselors; and Social Workers

## Continuing Education Credits For Other Disciplines

### *Accreditation Statement:*

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of Drexel University College of Medicine and the American Psychiatric Association. The Drexel University College of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. Physicians should only claim credit commensurate with the extent of their participant in the activity.

### *APA (Psychology):*

Drexel University College of Medicine, Behavioral Healthcare Education is approved by the American Psychological Association to sponsor continuing education for psychologists. Drexel University College of Medicine, Behavioral Healthcare Education maintains responsibility for this program and its content. This program is offered for up to 24 hours of continuing education.

### *ASWB (National Social Work):*

This organization, Drexel University College of Medicine, Behavioral Healthcare Education, provider #1065, has been approved as a provider for continuing education by the Association of Social Work Boards, 400 South Ridge Parkway, Suite

B, Culpeper, VA 22701. ([www.aswb.org](http://www.aswb.org)) ASWB Approval Period: 7/27/2008-7/27/2011. Social Workers should contact their regulatory board to determine course approval. Social workers will receive 24 continuing education clock hours in participating in this course.

### *PA Nurses:*

Drexel University College of Medicine, Behavioral Healthcare Education is an approved provider of continuing education by the PA State Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation. Participants will be awarded a maximum of 24 contact hours for attending this program.

### *NBCC (National Counselors):*

Drexel University College of Medicine is recognized by the National Board for Certified Counselors to offer continuing education for National Certified Counselors. We adhere to NBCC continuing education guidelines and can award a maximum of 24 hours of continuing education credits for this program.

### *CEU for All Others:*

The Drexel University College of Medicine, Behavioral Healthcare Education, has been reviewed and approved as an Authorized Provider by the International Association for Continuing Education and Training (IACET), 8405 Greensboro Drive, Suite 800, McLean, VA 22102. In obtaining this approval, the Drexel University College of Medicine, Behavioral Healthcare Education, has demonstrated that it complies with the ANSI/IACET standards, which are widely recognized as standards of good practice internationally. As a result of their authorized provider membership status, Drexel University College of Medicine, Behavioral Healthcare Education, is authorized to offer IACET CEUs for its programs that qualify under the ANSI/IACET Standards. Drexel University College of Medicine, Behavioral Healthcare Education, is authorized by IACET to offer 2.4 CEUs for this program.

## Disclosure Statement

All faculty participating in continuing medical education activities sponsored by the American Psychiatric Association and Drexel University College of Medicine are required to disclose to the audience whether they do or do not have any real or apparent conflict(s) of interest or other relationships related to the content of their presentation(s).

**Please note that CE and CEU credits are only being offered for the following formats: Industry-Supported Symposia; Innovative Programs; Lectures; Symposia; and Workshops. Credits will NOT be awarded for attendance in any other format, session, event, or program other than those listed above.**





# **MISSION STATEMENT**

## **VISION, MISSION, VALUES, AND GOALS of the INSTITUTE ON PSYCHIATRIC SERVICES**

### **VISION**

The Institute on Psychiatric Services (IPS) of the American Psychiatric Association is a yearly educational meeting which focuses on the needs of the most vulnerable, disenfranchised, and difficult-to-serve patients.

### **MISSION**

The mission of the IPS is to train and support psychiatrists to provide quality care and leadership through study of the array of clinical innovations and services necessary to meet the needs of individuals who suffer from serious mental illness, substance abuse, or other assaults to their mental health due to trauma or adverse social circumstances, in order to assure optimal care and hope of recovery.

### **VALUES AND GOALS**

To fulfill this mission, the IPS holds an annual meeting each fall that focuses on clinical and service programs, especially those that provide a complex array of services and clinical innovations to meet the needs of the most difficult-to-serve patients. Such programs constitute the continuum of care, from state and general hospitals to community-based drop-in centers, and attempt to meet the needs of persons living in rural communities, as well as the urban poor. The focus on more difficult-to-serve patients requires attention to the social and community contexts in which these patients are treated and reside. Contextual issues must be addressed because they operate as significant variables in the course of the psychiatric illnesses of certain patient populations such as those with severe and persistent mental illness, members of minority groups and those suffering economic hardships, most children and adolescents, the elderly, patients living in rural communities or in communities of immigrants, and patients treated in settings for physically or intellectually disabled individuals.

The IPS, therefore, fosters discussions of such issues as housing and vocational rehabilitation equally with innovative psychological treatments and pharmacotherapy. The clinical focus of the IPS is on innovations and adaptations of proven therapies as they are applied to the more difficult-to-serve populations. The IPS also serves as a forum for discussing systems of care, quality management, government policy, and social and economic factors as they have an impact on the most vulnerable patients.

The mission of the IPS is of particular significance to an important subset of APA members who are its prime constituents. This includes psychiatrists who identify themselves as in community practice, those involved in teaching community practice, those who serve in the public sector, such as staff working in state, community, and Veterans Affairs hospitals, community clinics, jails, or other community agencies, psychiatric administrators and those with a particular interest in the social issues that have an impact on patients. It is a goal of the IPS to provide a venue for relevant scientific programs that will retain such psychiatrists as valued members of the APA and attract colleagues who are not yet members. The IPS functions as a prime APA service to these important, devoted, and often isolated colleagues, many of whom are psychiatrists of color or international medical graduates. It is the goal of the IPS to reach out and encourage these psychiatrists to join the APA and attend this meeting. In turn, the APA will strive to ensure that the IPS serves as a professional home for these groups of colleagues.

Serving the populations that have been identified as the focus of the IPS involves collaboration with a wide variety of other professionals as well as with consumers, family members, and advocates. Therefore, an important part of the mission of the IPS is to encourage interdisciplinary and family member participation. Indeed, this mission has been an organizing principle of the IPS since its inception. Efforts will be made to further reach out to families, consumers, and allied professionals in the communities where meetings are held, and attention will be paid to ensuring their access to the IPS. The IPS is supportive of allied psychiatric organizations who share a similar vision and mission for which the IPS can serve as a scientific venue. It is part of the mission of the IPS to meet the needs of such allied groups for meeting times and space.

# INDUSTRY-SUPPORTED SYMPOSIA

## INDUSTRY-SUPPORTED SYMPOSIUM 1: PART I

FRIDAY, OCTOBER 3

12 noon-1:30 p.m.

### PARTNERSHIPS TO ENHANCE TREATMENT OUTCOMES FOR DEPRESSION

*Supported by AstraZeneca Pharmaceuticals*

Madhukar H. Trivedi, M.D., *University of Texas Southwestern Medical Center, 6363 Forest Park Road, #13.354, Dallas, TX 75235*, Harold Alan Pincus, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this symposium, the participant should be able to: 1.) Discuss the essential ingredients in the collaborative care approach to depression; 2.) Implement measurement-based care; 3.) Employ the chronic disease management model and ways to reduce obstacles; 4.) Describe the problems and efficacy in using a computerized decision support system; and 5.) Explain the pay for performance approach to managing mental illness

#### OVERALL SUMMARY:

Depression remains a major source of disability due to its chronicity, propensity to reoccur, and impact on both work and non-work function in addition to its life shortening effects. No single treatment is a panacea. Often several different treatment steps or attempts are required. More recently, the field has recognized that the available treatments are often not well delivered. In fact, a range of options to improve the care of depressed patients (and therefore the outcome) has been developed. These options include: collaborative care; measurement-based care; computerized decision support for treatment algorithms; and paying for performance. All of these efforts fall within the broader disease management model for depression. This symposium will review the overall model and review the range of options that have been developed to help improve the care of depressed patients. Presenters are each experts in the option to be reviewed. They will highlight the key ingredients, requisite experience, training, staffing and tools to implement the option and summarize the evidence for its utility and efficacy. As a result of attending this symposium, attendees will have a greater understanding of various ways to enhance the care of depressed patients and will be able to choose among them for use in their own clinic or practice. This symposium will discuss practical ways and review the evidence that supports efforts to increase recognition, enhance adherence, reduce attrition, and optimize clinical outcomes in the outpatient treatment of depression. Dr. Katon will discuss the evidence advantages and disadvantages for collaborative care approach and identifying its active ingredients. Dr. Trivedi will review the key elements and evidence for effectiveness in measurement-based care, which focuses on the provider and patient level interactions. Dr. Kurian will present new data on the efficacy of computerized decision support to enhance adherence to guideline recommendations in depressed outpatients. Dr. Pincus will review the elements entailed in the chronic disease management model and discuss issues in implementation. Dr. Frank will discuss the pay for performance approach and review the evidence for its efficacy.

## 1. MEASUREMENT-BASED CARE FOR DEPRESSION: WHAT IS IT? DOES IT WORK?

Madukar H. Trivedi, M.D., *University of Texas Southwestern Medical Center, 6363 Forest Park Road, #13-354, Dallas, TX 75235*

#### SUMMARY:

Measurement-based care (MBC) refers to the routine measurement, at each treatment visit, of key outcome targets to be achieved (e.g., symptom reduction, functional improvement) and to be avoided (e.g., side effects) during the delivery of acute and longer-term care. Combined with systematic guidance as to how to change the tactics (e.g., dose, duration of treatment) or how to change the treatment strategies (e.g., type of treatment) to achieve optimal benefit with minimal harm or discomfort. In addition, patient education is a key ingredient in MBC which allows patients to collaborate in their own care, thereby enhancing adherence. MBC can be used to manage most psychiatric and general medical conditions. The aim is to reduce inappropriate variance among practitioners, while retaining needed flexibility to adapt care to a wide range of individuals. For example, dose escalation and final doses may be different for the older, medically more fragile, patients than for younger patients. The tools and methods to implement MBC for depressed patients will be reviewed. Evidence for efficacy will be highlighted from the Texas Medication Algorithm Project and the German Algorithm project. Evidence that MBC can be widely used will be highlighted from the STAR\*D project. Additional research needs to improve on MBC will be discussed as will new methods to better engage patients and their significant others in implementing MBC.

## 2. COLLABORATIVE CARE FOR DEPRESSION: WHAT ARE THE ACTIVE INGREDIENTS?

Wayne J. Katon, M.D., *Department of Psychiatry, University of Washington School of Medicine, 1959 N.E. Pacific Street, #356560, Seattle, WA 98195-0001*

#### SUMMARY:

Although the percentage of primary care patients with major depression who are accurately diagnosed and initiate antidepressant treatment has improved markedly in the last two decades, there are still major gaps in the quality of depression treatment provided. Over the last two decades, studies have consistently found that only 40% to 45% of patients initiating treatment for major depression in primary care have at least a 50% decrease in symptoms by 4 to 6 months. Collaborative care models were developed to improve these gaps in quality of depression care by increasing exposure of patients with major depression to evidence-based depression treatments in primary care. A recent meta-analysis of 37 trials of collaborative care found that these models increased adherence to antidepressant medication by two-fold and improved outcomes for as long as two to five years. Collaborative care models in patients with depression and diabetes and panic disorder and depression have also been shown to save total medical costs compared to usual primary care. The two key ingredients in collaborative

## INDUSTRY-SUPPORTED SYMPOSIA

care models are: 1.) Utilizing a depression care manager to improve patient education, increase the frequency of patient contacts to track adherence and outcomes by using standard depression scales (PHQ-9 and QIDS) and depression registers to gauge recovery and remission; and 2.) Providing decision support to the primary care doctor for changes in medication, based on caseload supervision of depression care managers by psychiatrists.

### 3. COMPUTERIZED DECISION SUPPORT HOW GOOD IS IT FOR DEPRESSION?

Ben T. Kurian, M.D., M.P.H., *University of Texas Southwestern Medical Center, 6363 Forest Park Road, 9119, Suite 13354, Dallas, TX 75235-5479*

#### SUMMARY:

Most collaborative depression studies depend on intensive involvement of care managers and specialists. Unfortunately, clinical systems are usually unable to sustain this level of intensity. Furthermore, implementation and fidelity of treatment algorithms among various providers remain inadequate. These studies have thus highlighted a clear need for a system that can support the implementation of algorithms but does not depend on the addition of clinical care managers. The Texas Medication Algorithm Project (TMAP) and the recently completed NIMH funded STAR\*D trial showed enhanced clinical outcomes for patients with Major Depressive Disorder (MDD) but also employed clinical coordinators to achieve the goals. TMAP and STAR\*D pointed to the three critical aspects of care necessary to drive decision support for the treatment of MDD. These include itemized measurement of symptoms, side effects and patient adherence. In order to ensure the use of these critical elements and yet reduce the need for clinical coordinators, we developed a computer decision support system (CDSS). This CDSS can be used for the implementation of depression algorithms and incorporates critical elements of measurement based care. We have evaluated the feasibility and effectiveness of implementing our CDSS in assisting physicians acutely treating patients with MDD through a series of trials in both primary and specialty care settings. Results from these studies will be presented and future directions that incorporate computerized decision support systems with electronic health records will be discussed.

#### INDUSTRY-SUPPORTED SYMPOSIUM 1: PART II

SATURDAY, OCTOBER 4 12 noon-1:30 p.m.

### PARTNERSHIPS TO ENHANCE TREATMENT OUTCOMES FOR DEPRESSION

*Supported by AstraZeneca Pharmaceuticals*  
Madhukar H. Trivedi, M.D., *University of Texas Southwestern Medical Center, 6363 Forest Park Road, #13-354, Dallas, TX 75235*

#### OVERALL SUMMARY:

Depression remains a major source of disability due to its chronicity, propensity to reoccur, and impact on both work

and non-work function in addition to its life shortening effects. No single treatment is a panacea. Often several different treatment steps or attempts are required. More recently, the field has recognized that the available treatments are often not well delivered. In fact, a range of options to improve the care of depressed patients (and therefore the outcome) has been developed. These options include: collaborative care; measurement-based care; computerized decision support for treatment algorithms; and paying for performance. All of these efforts fall within the broader disease management model for depression. This symposium will review the overall model and review the range of options that have been developed to help improve the care of depressed patients. Presenters are each experts in the option to be reviewed. They will highlight the key ingredients, requisite experience, training, staffing and tools to implement the option and summarize the evidence for its utility and efficacy. As a result of attending this symposium, attendees will have a greater understanding of various ways to enhance the care of depressed patients and will be able to choose among them for use in their own clinic or practice. This session will discuss practical ways and review the evidence that supports efforts to increase recognition, enhance adherence, reduce attrition, and optimize clinical outcomes in the outpatient treatment of depression. Dr. Katon will discuss the evidence advantages and disadvantages for collaborative care approach and identifying its active ingredients. Dr. Trivedi will review the key elements and evidence for effectiveness in measurement-based care, which focuses on the provider and patient level interactions. Dr. Kurian will present new data on the efficacy of computerized decision support to enhance adherence to guideline recommendations in depressed outpatients. Dr. Pincus will review the elements entailed in the chronic disease management model and discuss issues in implementation. Dr. Frank will discuss the pay for performance approach and review the evidence for its efficacy.

### 1. THE CHRONIC DISEASE MANAGEMENT MODEL FOR DEPRESSION: WHAT ARE THE OBSTACLES TO IMPLEMENTATION?

Harold Alan Pincus, M.D., *New York State Psychiatric Institute, 1051 Riverside Drive, Unit 9, New York, NY 10032*

#### SUMMARY:

Despite the high prevalence, extensive personal and societal costs and the proven effectiveness of collaborative/chronic care models of depression, these approaches have not been widely implemented in typical practice. Barriers to implementation persist at multiple levels: patient/consumer, providers, practices/delivery system, health plans (MCO and MBHO), purchasers (public and private) and populations/policy. This presentation will describe these obstacles and provide an overview of strategies to overcome them.

### 2. PAYING FOR PERFORMANCE HOW WELL WILL IT WORK?

Richard G. Frank, Ph.D., *Department of Health Care Policy, Harvard Medical School, Boston, MA 02115*

## INDUSTRY-SUPPORTED SYMPOSIA

### SUMMARY:

Pay for performance in private insurance and Medicare are being proposed as a mechanism to improve quality and possibly improve efficiency of health care. In this paper, we examine the conditions that must be in place to make P4P work effectively; we examine the likelihood that those conditions will be present in mental health delivery and we examine existing evidence on their impact of p4p.

### REFERENCES:

1. Crismon ML, Trivedi MH, Pigott TA, et al. The Texas Medication Algorithm Project(TMAP): report of the Texas Consensus Conference Panel on medication treatment of major depressive disorder. *J Clin Psych* 1999;60:142-156.
2. Trivedi MH, Rush AJ, Gaynes B, et al. Maximizing the adequacy of medication treatment in controlled trials and clinical practice: STAR\*D measurement-based care. *Neuropsychopharmacology* 2007; [Epub ahead of print].
3. Pincus HA, Hough L, Knox Houtsinger J, Rollman BL, Frank RG. Emerging models of depression care: multilevel ("6 P") strategies. *Int J Meth Psychiatr Res* 2003;12:54-63.
4. Pincus HA, Page AE, Druss B, Appelbaum PS, Gottlieb G, England MJ. Can psychiatry cross the quality chasm? Improving the quality of health care for mental and substance use conditions. *Am J Psychiatry* 2007 May;164: 712-719.

# INNOVATIVE PROGRAMS

## INNOVATIVE PROGRAMS: SESSION 1

### PROTECTING AT-RISK CHILDREN

THURSDAY, OCTOBER 2 8:00 a.m.-9:30 a.m.

#### 1. SHARE AND CARE: SCHOOL-BASED INTERVENTION

Suzanne Silverstein, M.A., ATR, 8730 Alden Drive, W-101, Los Angeles, CA 90048, Jeffrey Wilkins, M.D., D.F.A.P.A.

##### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Identify methods for developing a successful rapport with school personnel; 2.) Recognize the relationship of age to first substance abuse use and the risk for addiction disorder in adulthood; 3) State the correlation between mental illness and drug abuse in teens; and 4) Describe the structure and methodology of both the elementary trauma treatment and high school substance abuse programs along with their results/improvement rate.

##### SUMMARY:

The Psychological Trauma Center's "Share and Care" Program helps children who have been traumatized by gang and domestic violence cope with their feelings of fear, sadness or loss. This group-focused counseling program uses 12-week sessions of art therapy to teach students new coping skills. The goals are to help young, at-risk students to improve their self-esteem, resiliency and social skills, overcome traumatic experiences, and become better learners who will stay in school. The High School Substance Abuse Program provides two individual motivational therapy sessions, three cognitive behavior therapy groups followed by art therapy focused support groups. Students recognize their problem, identify their triggers, learn ways of coping that don't rely on substance use and avoid a self-destructive lifestyle. Outcome data is gathered on each program using Referrals, Intakes, and Pre/Post Coopersmith self-esteem tests. Early intervention prevents long-term mental health problems and violence driven criminal behavior, which in certain urban areas of the nation has reached the crisis stage!

##### REFERENCES:

1. Journal Article: Roller White, Catherine, Wallace, JoAnna, Huffman, Lynn C.: Use of Drawings to Identify Thought Impairment Among Students with Emotional and Behavioral Disorders: An Exploratory Study. *Art Therapy: Journal of the American Art Therapy Association* 2004.
2. Journal Article: Terr, L.C. (1988) What happens to early memories of trauma? *Journal of the American Academy of Child and Adolescent Psychiatry*, 27, 96-104.

#### 2. DEPRESSION IN PREGNANCY: IT AFFECTS MORE THAN ONE LIFE

Sarah B. Johnson, M.D., M.S.C., 501 East Broadway, Medical Center One, Suite 340, Louisville, KY 40202, Joyce Spurgeon M.D., 501 East Broadway, Suite 340, Louisville, KY 40202

##### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participants should be able to: 1.) Identify depression in the perinatal and postpartum period; 2.) Discuss both pharmacologic and non-pharmacologic treatments with evidence-based risk and benefits of each; 3.) Perform basic cognitive behavioral therapeutic exercises; and 4.) Recognize what patients are appropriate for referral to specialty clinics and depression centers.

##### SUMMARY:

Depression in the perinatal period is a common occurrence and the mother-infant dichotomy presents a unique set of challenges to the psychiatrist. Although the mother is the primary patient of the physician, he or she also must take into account the well-being of the fetus to maintain the therapeutic alliance. The pregnancy state demands that clinicians consider patient values when making treatment recommendations and practitioners must be aware of the expanse of treatment modalities available to guide their patients appropriately. One of the primary challenges in treating pregnant patients with pharmacotherapy arises from the magnitude of evidence-based literature with inconclusive findings. This session summarizes current findings in risks/benefit analysis in psychopharmacologic treatment during pregnancy. Conversely, the risks of untreated depression also pose risks to both mother and infant and an evidence-based review of these is included. At the conclusion of this session, participants should be able to discuss both the risks of common antidepressant agents and those of untreated depression. Often underutilized treatment modalities during the pregnancy period include non-pharmacologic methods that facilitate mother-infant bonding and psychotherapy. Cognitive behavior therapy is one of the most validated forms of psychotherapy and has been studied extensively during the pregnancy period. CBT is ideal for use with pregnant patients and will be extensively discussed. Finally, establishment of depression centers in the community may be the best means of making resources available to specialty populations such as pregnant women suffering from mental illness. Specialty clinics raise awareness in the community and command referrals from other specialties. At the conclusion of this workshop, participants will have an understanding of how a proposed depression center in one urban medical community plans to optimize the care of this patient population.

##### REFERENCES:

1. Wisner et. al. Risk-benefit decision making for treatment of depression during pregnancy. *American Journal of Psychiatry* 2000; 157:1933-40.
2. Cohen and Nonacs. *Mood and Anxiety Disorders During Pregnancy and Postpartum*. APA Publishing, Washington DC, 2005.

## INNOVATIVE PROGRAMS

### 3. BRINGING KIDS BACK INTO FOCUS: WORKING COLLABORATIVELY TO RESPOND TO YOUNG CHILDREN'S EXPOSURE TO VIOLENCE

Annelle B. Primm, M.D., M.P.H., *American Psychiatric Association, 1000 Wilson Blvd., Arlington, Virginia 22209*,  
Marlita White M.S.W., *Chicago Department of Public Health, Office of Violence Prevention, 333 South State Street, Suite 320, Chicago, IL 60604*, Anne Parry M.A.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to learn about local Child Exposure to Violence (CEV) public education and strategies. Participants will also learn about local CEV service partnerships.

#### SUMMARY:

There is an ever-increasing body of research showing that young children who are exposed to violence in their homes and/or communities often experience significant psychological and behavioral challenges as a result of their exposure to violence. Chicago Safe Start, a federally funded program, is working to prevent and reduce the impact of violence on children, ages 0 to 5. Using a public health approach, Chicago Safe Start is a collaboration of community residents and organizations, city and state agencies working together to serve young children and those responsible for their care by preventing violence before it occurs and minimizing consequences when it does. Self-Start promotes public awareness, community education, systems of policy change, and the identification and treatment of children. In the designated Chicago Safe Start communities, Englewood and Pullman, of the 18,922 children under 5, approximately 13,000 children (68 percent) have heard a gunshot, 2,600 (14 percent) have witnessed someone attacked with a knife, and 1,300 (7 percent) were present when someone was shot. This session will explore the public health paradigm that made this program possible. It will discuss how the program engaged in partnerships in order to serve the needs of children exposed to violence.

#### REFERENCES:

1. Craig CD, Sprang G.: Trauma exposure and child abuse potential: investigating the cycle of violence. *Am J Orthopsychiatry*. 2007 Apr;77(2):296-305.
2. Cox JM, Webber B, Joachim G.: A community program to fight child abuse: the Fort Wayne Children's Foundation and Kids' Law. *J Manipulative Physiol Ther*. 2007 Oct; 30(8):607-13.

### INNOVATIVE PROGRAMS: SESSION 2

#### SYSTEMS THINKING TO MEET PATIENT NEEDS

THURSDAY, OCTOBER 2 1:30 p.m. -3:00 p.m.

#### 1. CENTRAL PREADMISSION: A BED MANAGEMENT SYSTEM

Alan Q. Radke, M.D., M.P.H., *444 Lafayette Road, North St. Paul, MN 55164-0979*

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be

able to: 1.) Identify the clinical factors used to determine medical necessity for acute psychiatric inpatient level of care; 2.) Recognize the need for a medical stability screen and what constitutes a medical condition that a stand alone mental health unit cannot manage; 3.) Determine risk and management of risk on a inpatient treatment unit; and 4.) Recognize legal statuses and special needs.

#### SUMMARY:

When Minnesota transformed its state operated services (SOS) adult mental health hospital system from institution-based state hospitals to dispersed community-based behavioral health hospitals, it had to find a way to oversee and manage the beds. Its' solution was to develop a single point of entry for all patients seeking hospitalization in the SOS facilities. Central Preadmission (CPA) is an admission screening service utilizing a centralized telephone number available 24 hours a day, 7 days per week. The CPA admission officers screen all referrals by gathering information of the patient's clinical factors, medical stability, risk management issues, legal status and special needs for the doctors on-call who make the final admission decisions for their respective hospitals. Over 18 months operation, CPA has evolved through a sustained quality improvement initiative changed from a rigid design with operational faults to an effective, efficient preadmission process. CPA screens on an average 2,500 calls a month with approximately half of the calls resulting in hospital admissions, another third of the calls being deferred to alternative treatment and less than 7% being denied. This effort has lead SOS to explore gaps in the transformed system and further evolution of the public mental health system.

#### REFERENCES:

1. Chaput Y, Lebel MJ: Demographic and Clinical Profiles of Patients Who Make Multiple Visits to Psychiatric Emergency Rooms. *Psychiatric Services* 58: 335-341, 2007.
2. Goldberg JF, Ernst CL, Bird S: Predicting Hospitalization Versus Discharge of Suicidal Patients Presenting to a Psychiatric Emergency Service. *Psychiatric Services* 58: 561-565, 2007.

#### 2. TRANSFORMATION PAIN: GAPS IDENTIFICATION AND MANAGEMENT

Alan Q. Radke, M.D., M.P.H., *444 Lafayette Road, North St. Paul, MN 55164-0979*

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Define unmet adult mental health consumer needs; 2.) Recognize gaps as identified by a needs analysis; 3.) Develop short-term and long-term action plans to address said gaps; 4.) Formulate a communication plan to inform stakeholders of gaps and their management; and 5.) Define the "shared safety net", the state's role and community partners' roles.

#### SUMMARY:

As the State Operated Adult Mental Health Services in Minnesota undergoes transformation, "What If" questions have

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been asked. These questions lead to a data analysis of admission denials to community behavioral health hospitals, based on not meeting hospitalization criteria. The data revealed gaps in the public mental health system. These gaps include: 1.) People with serious mental illness (SMI) and violent histories in need of acute psychiatric treatment and are currently violent; 2.) People with SMI and substance use disorders in need of detoxification; 3.) People with developmental disabilities, traumatic brain injuries or cognitive disorders in a behavioral crisis; 4.) People with SMI and major medical conditions requiring convalescent care or long-term care; 5.) People with SMI who are clinically fragile and have a history of community treatment failures in need of community placement. Formerly state hospitals that took anyone referred to them put a thin veneer over these gaps. Now state policymakers, state operated services, and community providers must address these gaps proactively before they overwhelm the evolving shared safety net.

### REFERENCES:

1. Cunningham D, Stephan SH, et al.: Stakeholders' Perspectives on the Recommendation of the President's New Freedom Commission on Mental Health. *Psychiatric Services* 58: 1344-1347, 2007.
2. Mazade NA, Glover RW: Critical Priorities Confronting State Mental Health Agencies. *Psychiatric Services* 58: 1148-1150, 2007.

### 3. IN HOME TELEMENTAL HEALTH: THE LAST FRONTIER

Jose Nieves, M.D., 203 Fairfield Drive, Yorktown, VA 23692

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Recognize the difference between image and non image telemedicine applications in psychiatry; and 2.) Identify the clinical advantages and limitations of in home telepsychiatry technologies.

#### SUMMARY:

Nearly all clinical services applications in psychiatry are delivered through interactive videoconferencing (IV). IV technology exchanges both image and information using high speed (384 kilobytes/sec) transmission resulting in near "real time" quality image exchange, very similar to that of face to face. Individual, Family, and Cognitive Therapies are some of the clinical services routinely delivered effectively through IV. Recent randomized studies show comparable depression treatment outcomes and patient satisfaction, between patients treated through IV versus in person. Telepsychiatry makes treatment accessible to patients that live in remote areas or have urban barriers to contend with, increasing treatment access. However most of these treatment modalities are delivered through IV in a "hub and spoke" model. This model still requires patients to drive to a distant location to receive treatment. Videophones and interactive voice response (IVR) devices on the other hand provide Telepsychiatry alternatives directly to the patients' home. They have image restrictions,

but make patients the point of service and avoid travel altogether except when a face to face evaluation is needed. We have utilized videophones successfully in our intensive outpatient case management program for the seriously mentally ill (SMI). Patients with SMI often have medical co-morbidities that make travel uncomfortable and may lead to poor treatment adherence and adverse outcomes. Videophones can make medication management at home a convenient and safe way to augment medical/psychiatric services and promote treatment adherence, while preventing bad outcomes. Videophones can be easily carried (weigh less than 2 lbs.) and are "plug and play" technology readily accepted by both patients and staff, but they have both technical and functional limitations. Technical limitations include a small screen size, and low bandwidth. Functional limitations include patients' tendency to report past conditions.

### REFERENCES:

1. Ruskin PE, Silver-Aylaian, MA, Reed SA, Bradham DD, Hebel JR, Treatment Outcomes in Depression: Comparison of Remote Treatment Through Telepsychiatry to In Person Treatment, 2004 *American Journal of Psychiatry* 161:1471-1476.
2. Moore H, Wohlreich M, Wilson M G, Mundt J C, Fava M, et.al. Using Daily Interactive Voice Response Assessments to Measure Onset Symptom Improvement with Duloxetine, 2007 *Psychiatry* March, pages 30-37.

### INNOVATIVE PROGRAMS: SESSION 3

#### THINKING OUTSIDE THE PILLBOX AND AWAY FROM THE IVORY TOWER

FRIDAY, OCTOBER 3

8:00 a.m.-9:30 a.m.

#### 1. USE OF ALCOHOLICS ANONYMOUS AS PART OF MEDICAL SCHOOL EDUCATION: STUDENTS' AND EDUCATORS' PERSPECTIVES

Kathleen M. Stack, M.D., 100 Emancipation Drive, #18, Hampton, VA 23667, Gregory W. Briscoe, M.D., Lisa G. Fore-Arcand, Ed.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to recognize the utility of 12-step meetings such as Alcoholics Anonymous in the education of medical students, as well as identify some barriers to implementation of use.

#### SUMMARY:

Objective: To discover the experiences with, utilization patterns of, and barriers to use of Alcoholics Anonymous as a learning resource in Psychiatric Clerkships. Methods: A third year medical student cohort and psychiatric educators group were asked about experiential lessons learned, attendance requirements, attitudes, and obstacles encountered. Results: 43 educators, whose familiarity with AA varied widely, responded to the survey. 47% required AA attendance and reported it was a positive experience for their students. 84% felt students should attend AA and identified obstacles to its implementa-

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tion. 95 students attended a total of 191 AA meetings. Their responses were overwhelmingly positive or neutral. 11% implied something negative and 1 reported a directly negative experience. Conclusions: Respondents found AA meeting experiences generally positive, and while impediments to implementation of this experience still exist they may often be overcome with concerted efforts of psychiatric educators.

### REFERENCES:

1. Kahn M, Wilson L, Midmer D, Borsoi D, Martin D. Randomized controlled trial of the effects of a skills-based workshop on medical students' management of problem drinking and alcohol dependence. *Journal of substance abuse* 2003 March 24(1):5-16.
2. Miller N, Lorinda S, Colenda C, & Magen J. Why physicians are unprepared to treat patients who have alcohol and drug related disorders. *Academic Medicine* 76(5) May 2001: 410-418.

### 2. MARKETING ILLNESS OR CURE: ETHICS OF DRUG PROMOTION

Yasser A. Elsayed, M.D., M.S., *Institute of Psychiatry, Faculty of Medicine, Ain Shams University, Abbasia, Cairo, Egypt*, Ghada Abdel Razek, M.D., Ghada Refaat, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Identify the importance of ethical issues in drug promotion; 2.) Identify how the marketing strategies play and impact our attitudes towards drugs; and 3.) Recognize how to deal in a balanced way with pharmaceutical companies.

#### SUMMARY:

People are involved all the time in a process of attitude change? A lot of firms surrounding us are trying all the time to play with our attitudes. Marketing for anything is directed to make an attitude with the product whatever its competency. These mental games are played by all marketers all over the world, but to what extent the pharmaceutical companies are free to do such games? What extent are patients and society accepting these games in medicine? It is interestingly noticed that the rate of diagnosis of disorders increased much after promotion of new drugs for such disorders. This observation may be due to better awareness and may be due to a lot of factors. Also, psychiatrists are accused by increasingly turning normal people into patients. For example, shy people have "social phobia and require psychotropic drugs. A few nights of restlessness calls for sleeping pills. The ordinary experiences of life become a diagnosis, which makes healthy people feel like they're sick. What are we doing? Do we do marketing for illness or do we do marketing for the cure? People don't buy the drug because they want it, but because they think it will relieve some of their distress. The study of consumers helps pharmaceutical companies to improve their marketing strategies. Who is the consumer of the drug? He is the patient or the doctor or both. Pharmaceutical companies are playing mental games all the time with the consumers. To what extent are these games ethical? Sales representatives are responsible

for drug promotion. What are they selling? Do they think really they sell antidepressants or antipsychotics? Gillette knows that it doesn't sell blades. It sells clean shaves. Revlon knows it doesn't sell nail polish. It sells romance. Antipsychotics manufacturers sell safety and security to the family, sell re-integration to society and sell functional life. Antidepressant manufacturers sell the life you deserve. Sales representatives are highly trained in marketing and sales techniques and they know exactly how to sell satisfaction to people and physicians. Do doctors think they have enough training to deal with sales representatives? Do health professionals feel that discussions with sales representatives impact their prescribing behavior? These and more ethical questions will be discussed within this session.

### REFERENCES:

1. Joel S. Weissman, David Blumenthal, Alvin Silk, Kinga Zapert, Michael Newman, and Robert Leitman, "Consumer Reports on the Health Effects of Direct-to-Consumer Advertising (DTCA) of Prescription Drugs" (paper presented at the annual meeting of the Association for Health Services Research, Washington, D.C., June 2002).
2. Stein R., 2006: Marketing the Illness and the Cure? *Washington Post*, Tuesday, May 30, 2006; Page A03

### 3. JUSTICE PROJECT OUTREACH TEAM (J-PORT): AN OUTREACH ORIENTED JAIL DIVERSION TEAM USING THE SEQUENTIAL INTERCEPT MODEL

Christine E. Negendank, M.D., *CSTS: 555 Towner, Ypsilanti, MI 48198*

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Discuss the development of the Justice Project Outreach Team; 2.) Describe the ability of a jail diversion program to perform outreach into the community; 3.) Appraise the ability of a jail diversion program to span the boundaries between the justice system and community-based mental health; and 4.) Discuss the use of the Sequential Intercept Model to provide a conceptual framework for development and continued improvement of a jail diversion program.

#### SUMMARY:

Washtenaw County was provided a grant by the Michigan Department of Community Health to identify the number of individuals with mental illness in the county jail. Through the data gathered by the grant, the need was identified for an intensive multidisciplinary outreach and case management jail diversion team. Washtenaw County agreed to fund a full jail diversion team using the Sequential Intercept Model. The Sequential Intercept Model of jail diversion was selected because it offers a comprehensive conceptual framework to use when considering the interface between the criminal justice and mental health systems. J-PORT, the Justice Project Outreach Team, was developed using the values and missions of an already successful, established, and well-respected outreach team in Washtenaw County called Project Outreach Team

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(PORT). PORT is designed to operate solely as an outreach team filling gaps in services for individuals who do not meet criteria or who are unable/unwilling to engage in mainstream mental health services. J-PORT uses the same outreach approach recognizing that individuals cannot take care of their mental health or legal situations if they do not have assistance with life's most basic needs: housing, food, and clothing. J-PORT is able to provide jail diversion at multiple intercept points from law enforcement and emergency services to re-entry from jail and prison. Efforts have also been focused on collaboration and education at all levels of the criminal justice system including police and public safety officers, jail staff, lawyers, probation and parole officers, and judges. The vision of J-PORT is to ensure an appropriate array of treatment for individuals with mental illness who interface with the public safety and criminal justice system.

### REFERENCES:

1. Munetz M, Griffin P: Use of the Sequential Intercept Model as an Approach to Decriminalization of People With Serious Mental Illness. *Psychiatry Serv* 2006; 57:544-549.
2. Osher F, Steadman H: Adapting Evidence-Based Practices for Persons With Mental Illness Involved With the Criminal Justice System. *Psychiatry Serv* 2007; 58:1472-1477.

### INNOVATIVE PROGRAMS: SESSION 4

#### CRISIS, OUTREACH, AND EMERGENCY INNOVATIONS

FRIDAY, OCTOBER 3

1:30 p.m.-3:00 p.m.

#### 1. EFFECTIVENESS OF HOSPITAL PSYCHIATRIC EMERGENCY RESPONSE TEAMS AT SUPPORTING PEOPLE IN CRISIS

Gregory M. Smith, M.S., *Allentown State Hospital, 1600 Hanover Avenue, Allentown, Pennsylvania 18109*, Robert H. Davis, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Identify the composition of Response Teams used in Pennsylvania State Hospitals; and 2.) Recognize and appreciate the significant differences between a "Gang" approach and "Response Team" approach in supporting people in a psychiatric or behavioral crisis.

#### SUMMARY:

Response teams have been used in psychiatric health care since the 1800's, as a means of supporting people in psychiatric distress. Thomas Kirkbride, M.D., was one of the first to document the use of teams to manage assaultive situations at the Pennsylvania Hospital for the Insane in the 1850's. This approach usually involved the largest and strongest staff available and typically led to the application of restraint and or seclusion. This innovative program will examine the risks and benefits between an unorganized effort (Gang approach) to response teams and the value of highly structured team

processes to crisis management. Most inpatient settings provide an "all-code" response to crisis situations. However, this approach frequently leads to high-risk and traumatizing event with great potential for physical injury to patients and staff. The Psychiatric Emergency Response Team (PERT) process used at the Allentown State Hospital, Allentown, PA, will be examined, in detail, with data presented on the effectiveness of this approach. The PERT response has been credited for its therapeutic approach to crisis management and its success at discontinuing the use of seclusion and near elimination of mechanical restraint at this 175 bed, urban hospital.

#### REFERENCES:

1. Smith G., Davis, R., Bixler E, et. al: Pennsylvania State Hospital System's Seclusion and Restraint Reduction Program: *Psychiatric Services* 56:1115-1122, September 2005.
2. Hardenstine, B: Leading the way toward a seclusion and restraint-free environment, Pennsylvania's success story. Pennsylvania Department of Public Welfare, Office of Mental Health & Substance Abuse Services, Harrisburg, PA. 2001.

#### 2. INTEGRATION OF CRISIS SERVICES TO IMPROVE LINKAGES FOR CONTINUED CARE AMONG PSYCHIATRIC EMERGENCY ROOM PATIENTS

Zoya Simakhodskaya, Ph.D., *345 Seventh Avenue, Suite 1602, New York, NY 10001*, Fadi Haddad, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Demonstrate knowledge of how integration of crisis clinics and mobile crisis unit services within a comprehensive psychiatric emergency program improve outpatient follow-up; and 2.) Show the effect mitigates negative outcomes for acute psychiatric patients.

#### SUMMARY:

Review of the current literature shows persistent problems in linking emergency or inpatient psychiatric patients to outpatient resources in the community, as well as high rates of re-admission and recidivism (Bridge & Barbe, 2004). The 1999 Surgeon General report on mental health states that integrated community-based services and continuity of providers and treatments are the fundamental elements of effective services delivery. Bellevue Hospital Center Comprehensive Psychiatric Emergency Program (CPEP) assesses and treats approximately 8,000 patients per year. Its Interim Crisis Clinic opened in 2002 and became the first crisis clinic in New York State to be integrated within CPEP. This structure provides a unique opportunity to intervene immediately upon discharge from the psychiatric emergency service. Grogan and others (2005) showed that shorter wait periods for follow-up outpatient appointment results in a higher likelihood that the patient will be successfully connected. In addition, integrated use of the Mobile Crisis Unit and Crisis Clinic provides additional continuity of care for patients who are generally resistant to

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treatment. This presentation will describe the origin and development of the Interim Crisis Clinic, its staffing, and referral process. We will characterize the patient population of the Interim Crisis Clinic and Mobile Crisis Unit, and provide data regarding attendance and follow-up care for our patients over the 5 year interval from 2002 to the present. The comprehensive services provided in the Interim Crisis Clinic will be described and illustrated through clinical vignettes. We will demonstrate how the immediate scheduling follow-up appointments, continuity of information and providers, and collaboration between psychological, psychopharmacological, medical, and social disciplines leads to improved outcomes for emergency psychiatric patients.

### REFERENCES:

1. Bridge JA, Barbe RP: Reducing hospital readmission in depression and schizophrenia: current evidence. *Current Opinion in Psychiatry* 2004; 17 (6): 505-511.
2. Grogan LB, Ross LL, Hoffman WF, Hansen TE. Interim psychiatric care by emergency staff and completion of outpatient referrals. Poster presented at the Annual Meeting of the American Psychiatric Association, Atlanta, GA, May 2005.

### 3. EMERGENCY ROUNDS AND THE HOT LIST: A CRISIS PREVENTION AND HARM-REDUCTION STRATEGY FOR INDIVIDUALS WHO ARE HOMELESS

Raymond Brown, M.D., *Homeless Services Program, Office of Programs & Policies, 64 New York Avenue, N.E., 4th Floor, Washington, DC 20002*, Michele May, LICSW, Craig Keller, Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to: 1.) Describe how to initiate community-level support and integration for crisis prevention and harm reduction, including identifying and responding to various “pitfalls”; 2.) Develop basic data fields and systems for tracking at-risk individuals; and 3.) Develop protocols for action and intervention;

### SUMMARY:

Purpose: To describe and teach a strategy of system integration and mobile crisis response directed toward homeless individuals at greatest risk in the community. Content: The Homeless Outreach Program (HOP) in Washington, D.C., has been utilizing an integrated, monthly program of Emergency Rounds and the Hot List to identify and prioritize homeless individuals at risk—especially those living on the streets. Emphasis is placed on periods of the year with extreme weather (hypo- and hyperthermia). Emergency Rounds brings together a wide-variety of “front-line” service providers (government and non-profit). This meeting affords an opportunity to highlight consumers at greatest risk concerning their physical and psychiatric health. Collateral information is shared, and strategies are developed to address stated and possible needs. Protocols for action include increased levels of engagement

to involuntary psychiatric assessment and treatment. The Hot List is composed of individuals deemed to be at risk, and these individuals are tracked longitudinally. In this context, the decision-making matrix changes in a dynamic fashion to meet the evolving needs of a given homeless consumer. Methodology: HOP will provide a narrative summary of the inception and evolution of the program, while demonstrating the various protocols utilized over the past two periods of extreme weather; November 2007-March 2008 and June 2008-August 2008. Case studies will be employed and will highlight “successes” and “failures.” Results: Data will be presented demonstrating the number of interventions completed during the period of study and will focus on issues regarding linkages to mental health services, emergency intervention, housing, and mortality rates. Importance: Early initiatives for harm-reduction focused on “client-based” strategies to reduce harm due to extreme weather, substance abuse, self-harm, etc.

### REFERENCES:

1. Dennis DL, Cocozza JJ, Steadman HJ: What Do We Know About Systems Integration and Homelessness? In Practical Lessons: The 1998 National Symposium on Homeless Research, U.S. Department of Housing and Urban Development, Washington, DC August 1999, pp. 12-1 - 12-25.
2. O’Connell JJ, Mattison S, Judge CM, Allen JH, Koh HK: A Public Health Approach to Reducing Morbidity and Mortality among Homeless People in Boston. *J Public Health Manag Pract.* 2005 Jul-Aug;11(4):311-6.

## INNOVATIVE PROGRAMS: SESSION 5

### REACHING OUR KIDS AND FAMILIES WHATEVER WAYS WE CAN

SATURDAY, OCTOBER 4

1:30 p.m.-3:00 p.m.

### 1. INNOVATIVE PUBLIC AFFAIRS PROGRAMS OF A PSYCHIATRIC DISTRICT BRANCH AND A MENTAL HEALTH COALITION: A MODEL FOR DISTRICT BRANCHES NATIONWIDE

Lois Kroplick, D.O., *11 Medical Park Drive, Suite 106, Pomona, NY 10970*, James Flax, M.D., M.P.H., *11 Medical Park Drive, Suite 106, Pomona, NY 10970*, Rena Finklestein, B.A.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to understand how one might form a coalition of psychiatrists, other mental health providers including institutions, family members, and consumers. The participant will understand the benefits of these collaborative efforts, as well as see examples of numerous successful programs made possible through the sharing of resources.

### SUMMARY:

In 1996, the RCMHC was founded by the WHPS. A psychiatrist, and member of the executive council of the WHPS, continues to be the president of the RCMHC. The RCMHC is an umbrella organization composed of representatives from over

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twenty mental health groups, family members and consumers. The mission of the RCMHC is to destigmatize mental illness and promote mental health. The RCMHC operates three projects that psychiatrists participate in: The Public Forum, "Breaking The Silence", is an event where invited professionals, consumers, and family members openly talk about their first hand experiences with mental illness to an audience of 300 that includes patients, family members, school personnel, legislators, representatives of local hospitals, students and mental health professionals from all disciplines. The College Project is targeted at college students in psychology and nursing classes. The co-president of NAMI-FAMILYA of Rockland County brings a team of three people to the classroom: a mental health professional, a family member, and a consumer. The Elementary School Project provides skits performed by volunteer high school and college actors to teach about mental health and illness to 4th and 5th grade school children, school staff and parents. The goal is to encourage expression of thoughts and feelings through discussions and artwork. An art therapist and mental health clinicians discuss the skits further and the children illustrate their feelings and reactions by making drawings on a large paper, ultimately creating a mural. The (WHPS) operates two public affairs projects: an Information Phone Service associated with a 16 page information booklet about psychiatry and psychiatrists and Depression Screenings. These innovative public affairs projects serve as a model for all district branches of how psychiatrists can be more effective in their mission to destigmatize mental illness and promote mental health by collaborating with others.

### REFERENCES:

1. Nelson, G: The development of a mental health coalition: A case study. *Am J Community Psychology*; 1994; 22(2): 229-255.
2. Citrome, L Flax J: Depression Screening at Shopping Malls: The West Hudson Psychiatric Society Experience. *Primary Psychiatry*; 1996; 72-76

### 2. A MODEL FOR A MULTI-DIMENSIONAL MENTAL HEALTH SYSTEM FOR CHILDREN

David C. Lindy, M.D., *VNS Community Mental Health Services, 1250 Broadway, 22nd floor, New York, NY 10001*, Neil Pessin, Ph.D., *1250 Broadway, 22nd Floor, New York, NY 10001*, Jessica Fear, M.A., B.A.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to identify essential components of a family-centered, community-based mental health system for children, and how they interact.

### SUMMARY:

It is well known that children with mental health problems are underserved, especially if they are poor and from minority groups. When services exist, they are often fragmented and inadequate to meet needs. The South Bronx, one of the poorest sections in New York City's youngest and poorest

borough, is dramatically underserved in regard to children's mental health services. For 10 years the Visiting Nurse Service of New York's Community Mental Health Services has operated a program in the Mott Haven neighborhood of the South Bronx that provides family-centered, short-term, outreach-oriented mental health assessment and wrap-around treatment for children. We have recently added school-based teams to provide mental health consultation and support to local elementary and middle schools. We are now starting a children's mental health clinic to provide short-term assessment and treatment. Our goal is to create an integrated system of care for the children and families of Mott Haven by combining these separate programs. The model will provide a mental health assessment of the child's psychopathology in the context of family, home, and school, with short-term treatment that pursues focused behavioral goals in the clinic, home, and school, as indicated. Follow-up will be provided by on-going groups for children and parents, as well as therapeutically-oriented recreational activities. This session will present our integrated-system model and preliminary results. Participants will be encouraged to share feedback on our presentation, as well as their own experiences with children's mental health systems of care.

### REFERENCES:

1. U.S. Department of Health and Human Services. *Mental Health: A Report of the Surgeon General—Executive Summary*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health, 1999.
2. Engstrom M, Lee R, Ross R, et al. *Children's mental health needs assessment in the Bronx*. New York: New York City Department of Health and Mental Health (2003).

### 3. REACHING, EDUCATORS, CHILDREN AND PARENTS (RECAP) VANDERBILT

Elliott R. Hill, L.C.S.W., *2625 Piedmont Road, N.E., Suite 56-502, Atlanta, GA 30324*, Annelise B. Primm, M.D., M.P.H., *American Psychiatric Association, 1000 Wilson Boulevard, Arlington, Virginia 22209*, Shirley Berry-Yates, M.A., M.Ed., Tory Woodard, M.S.N.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Describe the Reaching, Educators, Children and Parents (RECAP) Curriculum; 2.) Recognize how the VMHC School-Based program was created, evolved and replicated; 3.) Increase strategies for achieving "buy-in" from school principles and key school personnel to establish and maintain an effective school based program; 4.) Explain the relevance of cultural and poverty in working in school; and 5.) Identify resources that will help them learn more about translating their understanding of cultural and poverty.

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## SUMMARY:

Most public behavioral health systems and school systems are limited in their ability to deliver comprehensive school-based mental health services. The challenges include the lack of proven approaches, high case loads, fragmentation of service delivery, and interventions that focus on the students without significant work with their families, teachers and other school staff. In this session, participants will learn about the Reaching Children and Parents (RECAP) Curriculum. RECAP is an evidence-based, skills training curriculum developed by Vanderbilt Mental Health Clinic (VHMC) and used in a VHMC school-based mental health program for elementary students in the Metropolitan Nashville Public School System. RECAP is unique in that it provides mental health services within a school system through a mental health system. Participants will learn the significance and involvement of parents, teachers and school staff; how the program is implemented in Nashville's Metropolitan School System, serving children pre-kindergarten to fourth grade from lower socio-economic backgrounds. There will be discussion of the lessons learned from creating a Medicaid-funded, school-based program. The relevance of culture and poverty in the implementation of a comprehensive school-based mental health program will also be explored.

## REFERENCES:

1. School-Based Mental Health Services: Creating Comprehensive and Culturally Specific Programs by Bonnie Kaul Nastasi, Ph.D., Rachel Bernstein Moore, Psy.D., and Kristen M. Varjasm, Psy.D. Washington, D.C., American Psychological Association, 2004.
2. Han, Susan S., Thomas Catron, Bahr Weiss, and Kristen K. Marciel, "A Teacher-Consultation Approach to Social Skills Training for Pre-Kindergarten Children: Treatment Model and Short-Term Outcome Effects," *Journal of Abnormal Child Psychology*, Vol. 33, No. 6, 2005, pp. 681-693.

## INNOVATIVE PROGRAMS: SESSION 6

### PRACTICE INNOVATIONS AT THE CROSSROADS: CO-MORBIDITIES AND LINKED CLINICAL SYSTEMS

SATURDAY, OCTOBER 4                      3:30 p.m.-5:00 p.m.

#### 1. THE USAGE OF MEDICATION AND THERAPY GROUPS IN AN UNINSURED, CHRONICALLY MENTALLY ILL POPULATION

Carol D. Collier, M.D., M.B.A., *405 Whitney Harbor, Windsor, CO 80550*, Maureen Crawford, R.N., B.S.N., Christie Benjamin, B.A., R.N., Frank Nemeth, M.A., BHT1

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Recognize that there is a cost effective way to provide medication management and therapy services to the uninsured chronically mentally ill; 2.) Identify appropriate candidates for medication and therapy groups; 3.) Recognize

obstacles to starting a medication group in a non-profit, hospital setting; and 4.) Describe how medication groups can be used to increase patient compliance.

## SUMMARY:

The shortage of mental health prescribers makes it difficult for many of those with chronic mental illness to access care. In response to this shortage we have developed a means for the uninsured chronically mentally ill and substance abusers to obtain continued treatment in a low cost setting. Through the use of low cost medication and educational groups we have been able to decrease readmissions to our inpatient unit with a resultant decrease in inpatient costs, decrease unrecoverable emergency room costs through a reduction in ER visits, increased patient services while minimizing physician time outlay, and increased medication compliance. The clients served include recently discharged hospital patients, community mental health center clients unable to obtain medication management visits in a timely manner, community correctional clients, and self-referrals. The groups are comprised of those with mental health and substance abuse problems and range in age from 12 and 75. They are seen by one of two psychiatrists along with two psychiatric nurses and a therapist. Each psychiatrist spends one hour a week seeing 5-10 patients. The case management is done by ancillary staff which average 90 minutes per client a week. A total of 108 clients are served in both medication groups. Patients are able to receive their medications through samples provided by pharmaceutical companies to the hospital outpatient clinic, prescriptions written by the doctor, or through pharmaceutical company patient assistance programs. The fee to attend the groups is \$20 for the medication group and \$10 for the education group. The program has continued since its initial piloting in 2004. Its consistent cost effectiveness has resulted in a 33% reduction in ER unrecoverable costs alone.

## REFERENCES:

1. Diamond RJ, Little ML: Utilization of patient expertise in medication groups. *Psychiatr Q.* 1984; 56(1):13-9.
2. Isenberg PL, Mahnke MW, Shields WE: Medication Groups for Continuing Care. *Hospital Community Psychiatry.* 1974; 25:517-519.

#### 2. PERINATAL MOOD AND ANXIETY DISORDERS: THE PUBLIC HEALTH ROLE OF MENTAL HEALTH PROVIDERS

Annelle B. Primm, M.D., M.P.H., *American Psychiatric Association, 1000 Wilson Boulevard, Arlington, Virginia 22209*, Terry Mason, M.D., F.A.C.S.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to; 1.) Describe the negative effects and epidemiology of perinatal mood and anxiety disorders; 2.) Identify barriers to increased involvement of primary care providers in perinatal mental health care; 3.) Discuss the stepped care model and the role of disease management and self care; 4.) Recognize the need for mental health partnerships with primary care providers; and 5.) Name a model for fostering increased primary

## INNOVATIVE PROGRAMS

care involvement in perinatal mental health care.

### SUMMARY:

Perinatal mood and anxiety disorders are important public health issues; they can increase the risk of negative health outcomes and affect the mother/infant relationship. These disorders are more common than gestational diabetes and hypertension, disorders for which all pregnant women receive screening. Studies show that without routine screening, perinatal anxiety and depression often go undiagnosed; there are validated screens and recognized treatments, and clear risks when treatment is interrupted. Because most women with these disorders will never see a mental health provider, routine screening would identify more patients if it is integrated into routine prenatal and postpartum appointments. There are models of care for screening, assessment and management of mood and anxiety disorders in the primary care setting. Some models support stepped care, which allows milder forms of illness to be managed in the primary care setting and limit mental health referrals to the more severe cases. This is often a more effective use of limited mental health resources. Illinois has introduced screening initiatives and supported this through providing provider education (lectures and trainings) and support (provider consultation line). This session will detail the ongoing work of the University of Illinois at Chicago's perinatal mental health project around these issues.

### REFERENCES:

1. Smith M, Brunetto W, Yonkers K: TITLE OF ARTICLE. Contemporary OB/GYN April 2004; v49 i4:p58(13).
2. Blake F.: Psychiatry: be vigilant for symptoms of perinatal depression. The Practitioner September 25, 2007; 27.

### INNOVATIVE PROGRAMS: SESSION 7

#### WHAT THE PENNSYLVANIA STATE HOSPITAL SYSTEM HAS SHOWN US: REDUCING COERCION, PLANNING FOR LONG-TERM CARE, AND USING PEER SPECIALISTS

SUNDAY, OCTOBER 5

8:00 a.m.-9:30 a.m.

#### 1. THE ROLE OF PEER-TO-PEER SPECIALISTS IN PENNSYLVANIA'S STATE HOSPITAL SYSTEM

Gregory M. Smith, M.S., *Allentown State Hospital, 1600 Hanover Avenue, Allentown, Pennsylvania 18109*, Gina Kaye Calhoun, Glenn Koons

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Describe the unique role of the Peer-to-Peer Specialist in promoting the recovery of people served by the Pennsylvania State Hospital System; and 2.) Explain the role of the Peer-to-Peer Specialist on the hospital treatment team.

#### SUMMARY:

In 2005, the Pennsylvania Office of Mental Health Substance Abuse Services (OMHSAS) gave full endorsement to the transformation of its public mental health system with significant emphasis on services that facilitate and support recovery. The notion of recovery reflects renewed optimism

about the outcomes of mental illness, including that achieved through an individual's own self-care efforts. Peer Specialist Services were defined in Pennsylvania as one of these services and their link to the 100 year old state hospital system was created. Their role and responsibilities include working with the individuals to create personal service plans based on their recovery goals and support the person in their decision-making. They also work directly with treatment teams in direct support of the person being served. More recently, OMHSAS was approved by the Centers for Medicare and Medicaid Services to begin offering peer support services as a Medicaid reimbursable service in Pennsylvania. As a result of this approval, many inpatient and psych rehabilitative services in the Commonwealth have begun the process to offer this important service. This innovative program will discuss the unique role of the Peer Specialists within Pennsylvania's hospital system and the many opportunities and challenges they have confronted with this change.

#### REFERENCES:

1. Anthony WA: A recovery-oriented service system: setting some system level standards. *Psychiatric Rehabilitation Journal* 24:159-168, 2000.
2. President's New Freedom Commission on Mental Health, *Achieving the Promise: Transforming Mental Health Care in America*. Department of Mental Health and Human Services, SMA-03-3832, Rockville, MD, 2003.

#### 2. EFFECTS OF REDUCING AND ELIMINATING SECLUSION, RESTRAINT, AND PSYCHIATRIC PRN ORDERS ON ASSAULTS IN A LARGE STATE HOSPITAL SYSTEM

Gregory M. Smith, M.S., *Allentown State Hospital, 1600 Hanover Avenue, Allentown, Pennsylvania 18109*, Robert H. Davis, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Describe the changes in Pennsylvania's State Hospital System and its efforts to decrease and eliminate the use of seclusion, restraint and psychiatric PRN orders; and 2.) Describe the effects of this change on hospital safety measures including assaults.

#### SUMMARY:

By the end of 2007 the Pennsylvania State Hospital System, (Civil and Forensic services), had decreased its use of seclusion and restraint by 99% when compared to 1997. Currently, five of the eight state hospitals no longer permit the use of seclusion and one hospital has totally eliminated the use of seclusion and mechanical restraint. Floor control physical restraint techniques, (prone or supine restraint), are no longer permitted in the state hospitals. In 2005 the hospital system discontinued the use of PRN order for psychiatric indications and permitted unscheduled psychiatric medications to be administered by STAT order only. This innovative program will examine the effects of these changes on hospital safety measures including Patient-to-Patient and Patient-to-Staff Assaults. The options to the use of restrictive measures will also

## INNOVATIVE PROGRAMS

be presented. Data on the use of unscheduled medications and restrictive measures in this large hospital system will be discussed.

### REFERENCES:

1. Thapa P et al: PRN orders and exposure of psychiatric inpatients to unnecessary psychotropic medications. *Psychiatric Services*, October 2003.
2. Smith G, Davis, R, Bixler E, et al: Pennsylvania State Hospital System's Seclusion and Restraint Reduction Program: *Psychiatric Services* 56:1115-1122, September 2006.

### 3. PENNSYLVANIA'S COMMUNITY SUPPORT PLANNING PROCESS FOR PEOPLE WITH EXTENDED LENGTHS-OF-STAY IN A STATE HOSPITAL

Gregory M. Smith, M.S., *Allentown State Hospital, 1600 Hanover Avenue, Allentown, Pennsylvania 18109*, Gina Kaye Calhoun, Glenn Koons

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Identify the unique needs of people with extended lengths-of-stay in a state hospital; and 2.) Describe the assessment process used and its use in the development of each person's unique Community Support Plan.

### SUMMARY:

In 2004 the Pennsylvania Office of Mental Health and Substance Abuse established as a systems goal to decrease the number of people served in its state hospital system with 2 or more years of inpatient care. At the time, that this goal was established, more than half the people inpatient in the state hospital system had a length-of-residence of 2 or more years. In the extreme, more than 30 people had been continually served in a state hospital for more than 25-years with one person being served at a state hospital for more than 45 years. This innovative program will discuss the Community Support Planning (CSP) process used to address the needs of this group of special people. Data on the success of this approach will be presented. The importance of the Clinical, Peer-to-Peer and Family-to-Family Assessments will also be discussed.

### REFERENCES:

1. Pennsylvania Community Support Program (CSP); <http://www.dpw.state.pa.us/PartnersProviders/MentalHealthSubstanceAbuse/003670136.htm>; 2007.
2. Responsible State Hospital Downsizing/Closure; A NAMI Southwestern Pennsylvania Position Brief: *The Voice*, February 2007.

# LECTURES

## LECTURE 1

**THURSDAY, OCTOBER 2 10:00 a.m.-11:30 a.m.**

### **THE FUTURE OF SUPPORTED EMPLOYMENT**

Robert Drake, M.D., 2 Whipple Place, Suite 202, Lebanon, NH 03766

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to describe supported employment and discuss future developments.

#### **SUMMARY:**

This paper reviews current research on innovative attempts to improve the dissemination and effectiveness of supported employment. The domains of active investigation include: 1.) Organization and financing of services; 2.) Disability policies; 3.) Program implementation and quality; 4.) Motivation; 5.) Job development; 6.) Illness-related barriers; 7.) Job supports; 8.) Career development; and 9.) New populations. Work in each of these areas offers the promise of improving services and outcomes in the near future.

#### **REFERENCES:**

1. Bond, G.R., Drake, R.E., Becker, D.R. An update on randomized controlled trials of evidence-based supported employment. *Psychiatric Rehabilitation Journal* 31:280-290, 2008.
2. Neuchterlein, K.H., Subotnik, K.L., Turner, L.R., Ventura, J., Becker, D.R., Drake, R.E. Individual placement and support for individuals with recent-onset schizophrenia: Integrating supported education and supported employment. *Psychiatric Rehabilitation Journal* 31:340-349, 2008.
3. Drake, R.E., Bond, G.R. The future of supported employment for people with severe mental illness. *Psychiatric Rehabilitation Journal* 31:367-376, 2008.
4. Frey, W., Azrin, S., Goldman, H., Kalasunas, S., Salkever, D., Miller, A., Bond, G., Drake, R. The Mental Health Treatment Study. *Psychiatric Rehabilitation Journal* 31:306-312, 2008.

## LECTURE 2

**THURSDAY, OCTOBER 2 10:00 a.m.-11:30 a.m.**

### **WHY THE STANDARD FOR INVOLUNTARY COMMITMENT DOES NOT MATTER (MUCH)**

Mark J. Heyrman, J.D., *Edwin F. Mandel Legal Aid Clinic, University of Chicago, 1111 East 60th Street, Chicago, IL 60637*

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Explain why lawyers and other civil libertarians have had little to do with the dramatic (and continuing) decline in the rate of psychiatric hospitalization, public and private; and 2.) Explore and explain the relationship (or lack thereof) between the standard for commitment and the day-to-day functioning of the mental health system.

#### **SUMMARY:**

Four years ago, Illinois lowered its standard for involuntary commitment. One would have expected this change to result in an increase in the number of persons committed. Instead, that

number continued its decade-long decline. To understand this phenomenon, one needs to explode the unhelpful myth that deinstitutionalization was primarily the result of either a change in mental health laws or the ideological view of persons in the field. Rather it was the result of complicated array of funding, clinical and organizational changes. Understanding the forces which led to deinstitutionalization is important because it will help us to predict what effects, if any, the current interest in increasing the use of coercion in the mental health system may have on the mental health services system.

#### **REFERENCES:**

1. Durham and LaFond, "The Empirical Consequences and Policy Implications of Broadening the Statutory Criteria for Civil Commitment" 3 *Yale Law & Policy Review* 395 9185.
2. Harcourt, "From the Asylum to the Prison: Rethinking the Incarceration Revolution" 84 *Texas Law Review* 1751 (2006).

## LECTURE 3

**THURSDAY, OCTOBER 2 1:30 p.m.- 3:00 p.m.**

### **NEW NEUROBIOLOGICAL TARGETS FOR THE TREATMENT OF SCHIZOPHRENIA**

Robert Freedman, M.D., *Department of Psychiatry C249-32, University of Colorado, 4200 E. 9th Avenue, Denver, CO 80262-0001*

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Examine the neurobiology of nicotine use in schizophrenia; and 2.) Present new and existing therapeutic discoveries that impact cognitive function in schizophrenia.

#### **SUMMARY:**

Dopamine receptor blockade, the current treatment for schizophrenia, has had marked clinical success, but patients nevertheless have residual cognitive symptoms. There is need for new therapeutic agents in addition to the dopamine antagonists. Nicotinic acetylcholine receptors were identified as possible therapeutic targets for schizophrenia, based on neurobiological and molecular evidence for deficiencies in expression of a 7-nicotinic receptors. This talk describes the research that led to this hypothesis and the first clinical assessments of the effects of a selective nicotinic receptor agonist drug in schizophrenia. Patients responded with improved cognition, particularly attention, and decreased negative symptoms of anhedonia and alogia. The selection and testing of new therapeutic agents for schizophrenia is a clinically relevant use of new discoveries in molecular genetics and neurobiology. The research also suggests that heavy smoking, long considered the bane of mentally ill patients, is a signal that their neurobiological deficits are not being fully treated.

#### **REFERENCES:**

1. Freedman R, Olincy A, Buchanan RW, Harris JG, Gold JM, Johnson L, Allensworth D, Guzman-Bonilla A, Clement B, Ball MP, Kutnick J, Pender V, Martin LF, Stevens KE, Wagner BD, Zerbe GO, Soti F, Kem WR., Initial Phase 2 Trial of a Nicotinic Agonist in Schizophrenia. *Am J Psychiatry*. 2008 Apr 1; [Epub ahead of print] PMID: 18381905.

## LECTURES

2. Olincy A, Harris JG, Johnson LL, Pender V, Kongs S, Allensworth D, Ellis J, Zerbe GO, Leonard S, Stevens KE, Stevens JO, Martin L, Adler LE, Soti F, Kem WR, Freedman R., Proof-of-concept trial of an alpha7 nicotinic agonist in schizophrenia. *Arch Gen Psychiatry*. 2006 Jun;63(6):630-8. PMID: 16754836.

### LECTURE 4

**THURSDAY, OCTOBER 2 1:30 p.m.- 3:00 p.m.**

#### **SUPPORTING THE USE OF EVIDENCE-BASED PRACTICE IN PSYCHIATRY**

David A. Pollack, M.D., *Department of Psychiatry, UHN-80, Oregon Health & Science University, 3181 S.W. Sam Jackson Park Road, Portland, OR 97239-3098*

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Recognize some of the challenges in defining, developing, implementing, and disseminating evidence-based practices in a public sector mental health and addiction services system; and 2.) Discuss the key national initiative to identify and compare the most effective treatments of health care conditions, including those for mental health and addictions disorders.

#### **SUMMARY:**

The advent of evidence-based practices (EBPs) in psychiatry has challenged clinicians, administrators, consumers, and advocates. Many critics have expressed fears that EBPs could not be identified in this field; that much of diagnosis and treatment is dependent on too many variables, including the nature of the treatment relationship, the subjectiveness and lack of direct observation of many treatments, and the lack of reliable outcomes measures. Some critics have worried that the use of EBPs would be rationalization for limiting costs or denying access to essential services and would diminish the quality of care. Others have expressed deep concern that lack of consistency or adherence to research-based treatment approaches have put us in a weaker position, in that they have undermined the confidence that public and private payers have in the value and benefits of mental health and addiction treatments. Several states have attempted to tackle the challenge of defining and implementing EBPs. Oregon is one notable example because its legislature mandated that most public funds for mental health and addiction treatment services be provided through evidence-based practices. At the national level, Congress authorized the Agency for Healthcare Research and Quality (AHRQ) to develop a program for identifying and comparing the effectiveness of treatments for high priority conditions. These comparative effectiveness reports would be broadly reviewed and disseminated to influence health policy decisions for patients, providers, and payers. Mental health and addictions conditions are included in the scope of topics that these reports will cover. The presentation will describe these efforts: the methods used, the policy and political challenges, and the lessons learned. The author will encourage the audience to participate in such initiatives.

#### **REFERENCES:**

1. Institute of Medicine: Improving the Quality of Health Care for Mental and Substance-Use Conditions. Washington, DC, National Academies Press, 2006.

2. Oregon Addiction and Mental Health Division: Evidence-Based Practices website: 2007, <http://www.oregon.gov/DHS/mentalhealth/ebp/main.shtml>.

### LECTURE 5

**THURSDAY, OCTOBER 2 3:30 p.m.- 5:00 p.m.**

#### **PSYCHOHISTORICAL DECISIONS OF MAHATMA GANDHI**

Prakash N. Desai, M.D., M.B.B.S., *1043 N. Lathrop, River Forest, IL 60305*

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Describe the personal and political decisions Mahatma Gandhi made that altered the course of India's independence movement; 2.) Examine these decisions in the context of Indian culture and history; and 3.) Discuss the unique interactions between a leader and his followers that bring about epochal change.

#### **SUMMARY:**

From a shy and frightened boy who mysteriously transformed himself into the universally acclaimed liberator of India, Mahatma Gandhi made decisions, personal and political, over a period of decades that shaped his struggle against the British Empire both in South Africa and India. His self-transformation was triggered by a lifelong search for a leader, a Guru, a father figure to consolidate himself. A product of his culture, he articulated his needs and the needs of his people in idioms that so resonated with the masses that he galvanized people into action, and fired them up to take on the mighty Raj. His momentous decision to take the vows of Brahmacharya (Celibacy) and launch a protest movement on the principles of Satyagraha (Truth Force) were the cornerstones of his transformation, as well as the cultural symbols onto which masses in South Africa and later India, projected their hopes and faith. His fight against the oppressive colonials in South Africa and India, his call for strikes, his marches and his fasts will be discussed in the unfolding of the Indian independence movement together with the developmental influences of his childhood, the amalgamation of the influences of his mentors in adulthood, and his settling on the Hindu scripture, The Bhagavad Gita, and how that ultimately led to his apotheosis by the Indian masses.

#### **REFERENCES:**

1. Mohandas K. Gandhi (1957), *An Autobiography; The Story of My Experiments with Truth*. Boston: Beacon Press.
2. Prakash Desai and Hyman Muslin (1998), *Triumph and Tragedy: Psychohistorical decisions of Mahatma Gandhi*. Delhi: Haranand Press.

### LECTURE 6

**FRIDAY, OCTOBER 3 8:00 a.m.- 9:30 a.m.**

#### **INTELLECTUAL DISABILITY THROUGH THE LIFE CYCLE: THE ROLE OF THE PSYCHIATRIST**

Ramakrishnan S. Shenoy, M.D., *1309 Port Elissa Landing, Midlothian, VA 23114-7154*

# LECTURES

## EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to understand the role of the psychiatrist in the treatment of individuals with intellectual disability and their families from the prenatal stage through all the stages of life including old age. This includes identification of genetic causes, symptomatic treatments, medication management and appropriate referrals to other providers.

## SUMMARY:

Intellectual Disability (Mental Retardation) is an evolving field in psychiatry. Even though several disciplines deal with the intellectually disabled, the psychiatrist's role is unique. Psychiatrists are often consulted in the prenatal stage when the family deals with the possibility of a child with birth defects. Developmental delay is a cause of concern in early childhood where the psychiatrist can evaluate and make appropriate referrals. The turmoil of adolescence does not spare the intellectually disabled and behavior problems disrupt the tranquility of the home environment. The psychiatrist helps with therapy, behavioral treatment referrals and medications if needed. Frequently, disorders like schizophrenia and major mood disorders manifest themselves at this stage or in early adulthood and psychiatric treatment can alleviate symptoms. As the person ages numerous physical ailments can occur, frequently linked to the underlying genetic disorder. The psychiatrist can work with the treating physician to deal with the behavioral aspects of the presenting illnesses. In the later stages of life, notably in Down's Syndrome, dementia of the Alzheimer's type is quite common and here again, the psychiatrist can diagnose and treat this condition.

## REFERENCES:

1. Alexander D: The Surgeon General focuses the nation on health and mental retardation. *The Exceptional Parent* 2002; 32(5):28-34.
2. Janicki MP, Dalton AJ, Henderson PW: Mortality and morbidity among older adults with intellectual disability: Health service considerations: *Disability and Rehabilitation* 1999; 21(5): 284-294.

## LECTURE 7

FRIDAY, OCTOBER 3

10:00 a.m.-11:30 a.m.

### NEUROPSYCHIATRY AND THE FUTURE OF PSYCHIATRY, NEUROLOGY, AND PSYCHIATRY

Stuart C. Yudofsky, M.D., *One Baylor Plaza, MS350, Houston, TX 77030*

## EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Recognize the historical evaluation of the concepts of psychiatry, neurology, psychoanalysis and neuropsychiatry and how conceptual transformations in each discipline have affected patient care, stigmatization of the mentally ill, and the public's regard for the respective mental health disciplines; and 2.) Define how neuroscience discovery, specifically in the realms of genetics, cellular and molecular biology, and functional brain imaging will change and advance the therapeutic armamentarium and everyday practice of these three mental health disciplines.

## SUMMARY:

What is neuropsychiatry? As with psychiatry, there is consider-

able disagreement about just what the concept of neuropsychiatry encompasses. Nonetheless, fundamental to any definition of neuropsychiatry is the indelible inseparability of brain and thought, of mind and body, and of mental and physical. As its very name implies, neuropsychiatry is a fundamentally integrative and collaborative field that eschews specialty-derived reductionistic categorizations that recognize and address only circumscribed features of a specific brain-based illness. Rather, the field bridges conventional boundaries imposed between mind and matter, between intention and function, and, most importantly, vaults the guild-based theoretical or clinical schisms between psychiatry and neurology. A prominent focus of neuropsychiatry is the assessment and treatment of the cognitive, behavioral, mood symptoms of patients with neurological disorders. Neuropsychiatrists are devoted to the care of patients whose symptoms lie in the "gray zone" between the specialties of neurology and psychiatry. These symptoms include impairment of attention, alertness, perception, motivation, memory, language, intelligence and impulse. Understanding the role of specific brain loci and dysfunctional systems in the etiology and treatment of patients with psychiatric conditions such as schizophrenia or bipolar illness is of special interest to neuropsychiatrists. Most importantly, neuropsychiatrists recognize, utilize and prioritize psychosocial factors including experiential, interpersonal, societal and spiritual in the understanding and care of all of our patients. Aware that all of the aforementioned foci of neuropsychiatry should be integral to the practice of both psychiatry and neurology, neuropsychiatrists believe that the re-alliance of the two specialties will best serve both patients and practitioners. We remain confident that the confluence six factors to be discussed will move the two fields progressively closer under the intact and integrating concept of clinical neuroscience.

## REFERENCES:

1. Martin, JB: the integration of neurology, psychiatry, and neuroscience in the 21st century. *Am J Psychiatry* 2002; 159: 695-704.
2. Yudofsky SC, Hales RE: Neuropsychiatry and the Future of Psychiatry and Neurology. *Am J Psychiatry* 2002; 159:1261-1264.

## LECTURE 8

FRIDAY, OCTOBER 3

10:00 a.m.-11:30 a.m.

### THE STULTIFYING INFLUENCE OF GOVERNMENT IN ADDRESSING PROMISING, BUT UNCONVENTIONAL NEW TREATMENTS

Jerry Dincin, Ph.D., *1628 Huntington Lane, Highland Park, IL 60035*

## EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Identify chemical and botanical materials, currently made unavailable by the Federal Government, that have shown potential for treating certain psychiatric ailments and quality of life issues; and 2.) Recognize the unusual and intransigent methods the government uses to forestall research on these materials, despite small foreign studies, strong anecdotal evidence, and hundreds of years of use by individuals.

# LECTURES

## SUMMARY:

This lecture will focus on the potential value of numerous botanical and chemical substances that have shown exciting promise for treatment of specific disorders, as well as improvement of the quality of life in such existential areas as relationships, love, sexual intimacy, addiction, and end of life questions. The particularly intransigent role of the federal government in preventing research on these substances will be developed, in detail, and the political and cultural forces that support this governmental attitude at the expense so potential health benefits will be related. In addition, the effect of substances that are definitely legal, but have a monumental negative effect on the health of Americans will be contrasted with the extremely modest risk that these promising botanical and chemical substances might have.

## REFERENCES:

1. Ketamine: Dreams and Realities by Karl Jansen M.D., Ph.D.
2. Psychedelic Perceptions by Thomas Roberts, Ph.D.

## LECTURE 9

FRIDAY, OCTOBER 3

1:30 p.m.- 3:00 p.m.

### ENHANCING THE CLINICAL EFFECTIVENESS OF PSYCHIATRIC SERVICES

Philip Wang, M.D., Ph.D., *Director, Division of Services and Intervention Research, NIMH, 6004 Executive Boulevard, Room 7151, MSC 9629, Bethesda, MD 20892-0001*

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Define and provide examples of T1 translational research, to turn basic science discoveries into new clinical innovations; and 2.) Define and provide examples of T2 translational research, to turn innovations into practice and informed decision making.

#### SUMMARY:

Translational research is urgently needed to turn basic scientific discoveries into widespread health gains. This lecture will discuss one type of translational research-called T1, which is needed to take advantage of developments in the basic neurosciences and translate them into more efficacious diagnostic, preventive, and therapeutic interventions. However, ensuring that interventions from T1 research actually benefit patients will require a second form of translational research, called T2, to turn innovations into everyday clinical practice and health decision making. Recent examples of T1 and T2 research, as well as strategies for better linking T1 and T2 research agendas will be covered.

#### REFERENCES:

1. Sung NS, Crowley WF, Jr., Genel M, et al. Central challenges facing the national clinical research enterprise. *JAMA*. 2003;289(10):1278-1287.
2. Woolf SH, Johnson RE. The break-even point: when medical advances are less important than improving the fidelity with which they are delivered. *Ann Fam Med*. 2005; 3(6):545-552.

## LECTURE 10

FRIDAY, OCTOBER 3

1:30 p.m.- 3:00 p.m.

### COLLECTIVE CONSCIOUSNESS AND ITS DISCONTENTS: COMMENTS ON THINKING SYSTEMS

Mindy J. Fullilove, M.D., *New York State Psychiatric Institute, Unit 29, 1051 Riverside Drive, New York, NY 10032-1007*

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Describe the concept of collective consciousness; 2.) List three advantages of groups working together; 3.) List three problems faced by all collecting thinking systems; and 4.) Apply these concepts to a large system, such as an organization.

#### SUMMARY:

"Distributed cognition" is widely recognized as a feature of groups that work together. The ability to pool observations and solutions make work groups formidable and has contributed to the global domination of the human species. Consideration of such systems demonstrates that they are vulnerable to failure at predictable points. These include: inattentive blindness, rate distortion, and policy/ideological foreclosure. In addition, work-groups within the US system of apartheid operate within the constraints and assumptions of its structures. These ideas have been applied to case studies of the AIDS epidemic conducted in 1989, 1995, and 1999. The implications for psychiatric practice, particularly in consult-liaison and organizational consulting, will be discussed.

#### REFERENCES:

1. R Wallace, MT Fullilove, *Collective Consciousness and Its Discontents: Institutional Distributed Cognition, Racial Policy and Public Health in the United States*, Springer, NY, 2008.
2. MT, *Root Shock: How Tearing Up City Neighborhoods Hurts America and What We Can Do About It*, One World/Ballantine Books, New York, 2004, paperback 2005.

## LECTURE 11

FRIDAY, OCTOBER 3

3:30 p.m.- 5:00 p.m.

### THE NATIONAL PARTNERSHIP: INVESTMENT, INNOVATION, AND RESULTS IN ENDING HOMELESSNESS FOR OUR MOST VULNERABLE AND DISABLED NEIGHBORS

Philip F. Mangano, *United States Interagency Council on Homelessness, Federal Center S.W., 409 Third Street, S.W., Suite 310, Washington, DC 20024*

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant will recognize the key public and private partners, new engagement and housing innovations, and quantifiable results in the National Partnership constellated by the U.S. Interagency Council on Homelessness to prevent and end homelessness, especially for people with disabilities living long-term on the streets and in shelters.

# LECTURES

## SUMMARY:

The mission of the U.S. Interagency Council on Homelessness is to create the National Partnership throughout government and the private sector to prevent and end homelessness and coordinate the Federal response to homelessness, including forwarding the goal to end the long-term homelessness of people with disabilities living on the streets and in shelters. The Council has led the creation of a National Partnership for results that now includes 20 Federal agencies, Governors of 49 states, and over 335 Mayors and County Executives, as well as the business sector, leaders in health care, treatment, law enforcement, and community and faith based organizations. Through the Council's leadership, unprecedented interagency and community collaborations have been created to ensure that jurisdictional CEO's extend political will to the issue of homelessness, resulting in the first reported national decreases in the number of people experiencing street homelessness in 20 years. The priority of the Council on the prevention of homelessness and rapid re-housing of people experiencing homelessness has focused Federal policy and encouraged local results-oriented 10 Year Plans and new investments from the public and private sectors.

## REFERENCES:

1. Gladwell, M: Million Dollar Murray: Why problems like homelessness may be easier to solve than to manage. *The New Yorker*; February 13, 2006. [http://www.gladwell.com/2006/2006\\_02\\_13\\_a\\_murray.html](http://www.gladwell.com/2006/2006_02_13_a_murray.html).
2. The 2005 Achievement Award Winners. (2005) Providing Housing First and recovery services for homeless adults with severe mental illness. *Psychiatric Services*, 56(10): 1305. <http://www.pathwaystohousing.org/Articles/Publications.html>.

## LECTURE 12

**FRIDAY, OCTOBER 3** 3:30 p.m.- 5:00 p.m.

### NEUROSCIENCE AND PUBLIC HEALTH DRUG ABUSE RESEARCH

Wilson M. Compton III, M.D., 6001 Executive Boulevard, MSC5153, Bethesda, MD 20892-9589

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to recognize the links between clinical approaches and neuroscience principles of learning and memory as they apply to drug addiction.

#### SUMMARY:

Simultaneous advances in the understanding of developmental trajectories culminating in drug abuse and addiction has been neuroscience research highlighting the role of memory, learning and executive control in the etiology of drug abuse and addiction. According to recent epidemiological evidence, the majority of individuals with drug use disorders have never been treated and treatment disparities exist among those at high risk, despite substantial disability and comorbidity. In particular, low treatment rates, despite the availability of effective treatments, indicates a need for re-examination of current treatment paradigms. The next challenge is to linking these public health drug abuse findings to work elucidating the brain pathways involved in reward and reinforcement, memory and learning, executive control, and

motivation. Recent research in genetic epidemiology has demonstrated the potential for studies of interactions of genetic and environmental factors. Now, the field needs to focus on linking basic science with epidemiology in order to make progress in understanding these complex health conditions.

#### REFERENCES:

1. Compton WM, Thomas YF, Stinson FS, Grant BF. Prevalence, correlates, disability, and comorbidity of DSM-IV drug abuse and dependence in the United States: results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Archives of General Psychiatry* 2007;64:566-576.
2. Compton WM, Thomas Y, Conway KP, Colliver JD. Developments in the epidemiology of drug use and drug use disorders. *American Journal of Psychiatry* 2005;162(8):1494-502.

## LECTURE 13

**SATURDAY, OCTOBER 4** 8:00 a.m.- 9:30 a.m.

### MENTAL HEALTH SERVICES: STILL A CHALLENGE

Mildred Mitchell-Bateman, M.D., 1016 First Avenue, Charleston, WV 25302

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Discuss the efforts set in motion to meet the crises in mental health services brought to public awareness following WW II; 2.) Recognize the national effort to establish goals for an accessible system of appropriate care; 3.) Recognize systemic crises again and see the need for revisiting goals, and fostering new commitment to bring our collective strengths to the tasks of closing the gaps in current mental health services.

#### SUMMARY:

Mental health services, nationwide, are falling short in many communities with respect to adequate psychiatric treatment. The inadequate resources for meeting the psychiatric treatment needs of returning WW II veterans and for mentally ill citizens in general led to "bold" actions to address these needs. The players were many including volunteers from lay venues, mental health professionals, non-mental health professionals, and public officials. Marvelous programs resulted, including mental health law revisions, but the most important policy and philosophical changes were not imbedded sufficiently to sustain progress with the necessary checks, balances and flexibility to allow for self-correction as developing knowledge and lessons from experience were gained. Great advances have been made in the diagnosis, treatment and rehabilitation of physical and mental illnesses, but major obstacles exist that both inhibit further improvement and cause loss of gains, causing increased morbidity and prolonged rehabilitation. If "we" fail to recognize the forces impeding our ability to deliver quality mental health services and if "we" fail to again become enthusiastic participants in planning, executing and sustaining the evolution of appropriate solutions to assure quality mental health, who will?

#### REFERENCES:

1. The President's (Carter) Commission on Mental Health, Task Panel's Reports, Executive Summary, Vol. II, 1978.

## LECTURES

2. Mental Health: A Report of the Surgeon General, 1999. Supt. of Documents, U.S. Printing Office.
3. Swartz, M.S., Swanson, J.W. Outpatient Commitment: When it improves patient outcomes. *Current Psychiat.*, Vol. 7, No. 4, 2008, 25-35.

### LECTURE 14

**SATURDAY, OCTOBER 4**                      **8:00 a.m.- 9:30 a.m.**

#### **SUICIDE IN DIVERSE POPULATIONS: IMPLICATIONS FOR A TRANSFORMED MENTAL HEALTH SYSTEM**

Sean Joe, Ph.D., M.S.W., *1080 S. University, Ann Arbor, MI 48109*

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Describe national trends in racial disparities suicide; 2.) Describe racial differences in the national 12-month and lifetime prevalence estimates of suicide ideation, planning, attempts among Americans; and 3.) Enhance participants' knowledge regarding racial differences in suicide risk and protective factors, notably among Black Americans.

#### **SUMMARY:**

Annually, suicide claims the lives of over 30,000 Americans. The Institute of Medicine and the National Strategy for Suicide Prevention reports refer to the need for an appreciation of the cultural context and the need for culturally-tailored interventions for suicidal behaviors. As suicide and non-fatal suicidal behavior among minorities has increased in the last few decades, a burgeoning research literature surrounding these phenomena has developed. This session presents data on racial differences in suicide patterns, new research on the prevalence and risk for non-fatal suicidal behavior among Black Americans (adolescents and adults), highlights factors influencing male vulnerability to suicide, and concludes with a discussion of how "personal agency" and family can be used to create effective services that are sorely needed for preventing suicide and treating suicidal males and adults. A framework for understanding cultural factors in help-seeking behavior will be discussed and directions for mental health services and future research highlighted.

#### **REFERENCES:**

1. Joe, S, Baser, R., Breeden, G., Neighbors, H., & Jackson, J (2006). Prevalence of and Risk factors of Lifetime Suicide Attempts among Blacks in the United States. *Journal of the American Medical Association*, 296 (17), 2112-2123.
2. Goldston DB, Molock SD, Whitbeck LB, Murakami JL, Zayas LH, Hall GC. Cultural considerations in adolescent suicide prevention and psychosocial treatment. *American Psychologist* 2008 63(1):14-31.

### LECTURE 15

**SATURDAY, OCTOBER 4**                      **10:00 a.m.-11:30 a.m.**

#### **RESILIENCE: A NEGLECTED ASPECT OF THERAPY - TAKING A CLOSER LOOK**

Jonathan R.T. Davidson, M.D., *3068 Baywood Drive, Seabrook Island, SC 29455*

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Define resilience and be familiar with its measurement; 2.) Identify and discuss the importance of serotonin, norepinephrine and other neurotransmitters/neuropeptides in relation to resilience; 3.) Describe at least three findings which support the distinction between resilience and neuroticism or related symptoms; and 4.) List the effects of antidepressants and other treatments on resilience.

#### **SUMMARY:**

Resilience describes the capacity to bounce back and adapt successfully following stress. It is not simply the obverse of psychiatric symptoms, disability or neuroticism, but provides "added value". Interest in resilience can be traced back to earlier work on coping, defenses, homeostasis and plasticity. We now have a reasonably good idea of what resilience is, its neurobiology and ways in which people may strengthen resilience. Less is known about the direct effects of conventional and alternative treatments on resilience, but emerging data suggest that drugs, psychotherapy (CBT) and complementary/alternative medicine (CAM) treatments can strengthen resilience within weeks ("saliostasis" or "salutogenesis"). Resilience may protect against PTSD following trauma, as well as predict recovery for PTSD and depression. It may also serve as an important moderator between genetic predisposition and symptom state after stressful events, as well as moderating the effects of early trauma on current symptoms.

#### **REFERENCES:**

1. Connor KM, Zhang W. Resilience: determinants, measurement and treatment responsiveness. *CNS Spectrums* 2006; 11 (10 Suppl), 5-12.
2. Charney DS. Psychobiological mechanisms of resilience and vulnerability: implications for successful adaptations to extreme stress. *Am J Psychiatry* 2004; 161: 195-216.

### LECTURE 16

**SATURDAY, OCTOBER 4**                      **10:00 a.m.-11:30 a.m.**

#### **DOES NATURE ABHOR A CATEGORY? THOUGHTS ON SERVICE TO GAYS AND THE DEAF?**

Richard C. Pillard, M.D., *Boston University School of Medicine, 715 Albany Street, Boston, MA 02118*

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to improve their understanding of how minority populations (in particular gays and the Deaf) can be better served by psychiatry's input in the health care system.

#### **SUMMARY:**

This talk defines two categories of people often identified as "handicapped" and/or "mentally ill." It discusses the development of cultural self-awareness within these groups and their rejection of the labels assigned by the dominant culture. Implications will be drawn for the provision of medical services to these populations highlighting the unique perspective of psychiatry.

#### **REFERENCES:**

1. Lynch PE: An Interview with Richard C. Pillard, MD. *J Gay & Lesbian Psychotherapy* 2003; 7(4):63-70.

## LECTURES

2. Pillard RC: Homosexuality from a Familial and Genetic Perspective. In RP Cabaj & TS Stein (eds.) *Homosexuality and Mental Health: A Comprehensive Textbook*. American Psychiatric Press, pages, 115-128, 1996.
3. Lane H, Pillard RC & French M: Origins of the American Deaf World. In R Schulmeister & H Reinitzer (eds.) *Progress in Sign Language Research*. Hamburg, Signum-Verlag, pages 11-30, 2002.

### LECTURE 17

**SATURDAY, OCTOBER 4 10:00 a.m.-11:30 a.m.**

#### THE APA: YOUR DUES AT WORK

James H. Scully, Jr., M.D., *American Psychiatric Association, 1000 Wilson Boulevard, Suite 1825, Arlington, VA 22209*

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Appreciate the organization of the major professional Association in psychiatry and its operation; 2.) List the distribution of the efforts and resources; and 3.) Recognize the current legislative issues affecting the practice of psychiatry.

#### SUMMARY:

This lecture will provide an overview of the organization and function of the APA and how it advocates for psychiatrists and their patients, supports education and research, and prepares the Diagnostic Manual (DSM).

#### REFERENCES:

1. How Your APA Works for You; *Psychiatric News*, December 7, 2007 Volume 42, Number 23, Page 30, American Psychiatric Association.
2. Do You Know Your APA Area? *Psychiatric News*, December 7, 2007 Volume 42, Number 23, page 41, 2007 American Psychiatric Association.

### LECTURE 18

**SATURDAY, OCTOBER 4 1:30 p.m.- 3:00 p.m.**

#### HOW TO BE A SUCCESSFUL COMMUNITY PSYCHIATRIST

Carl C. Bell, M.D., *Community Mental Health Council, Inc., 8704 S. Constance Avenue, Chicago, IL 60617-2746*

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) List the five characteristics of President Kennedy, seven additional characteristics of President Carter, and President Bell's ten visions for successful community mental health practice; 2.) Create a self-projected time so they can see how they can create their own future as a community psychiatrist; and 3.) List Dr. Dennis Kimbro's ten forms of wealth.

#### SUMMARY:

Based on his experiences as a President/C.E.O. of a \$21 million dollar comprehensive community mental health center that he helped to build from scratch, Dr. Bell will highlight the core principles of community psychiatry that have made him "success-

ful." In addition, he will outline the professional developmental pathway and time it took that got him to where he thinks he is, wherever that may be - allegedly "successful". The mundane skills of diagnosis, treatment, keeping up with a variety of current research, understanding systems thinking, strengthening or helping mentally well individuals improve their mental wellness, putting large societal systems into place to prevent psychiatric disorders from developing, studying and practicing leadership, management and business. The challenges and successes of being "successful" will be discussed regarding maintaining professional relationships with patients, understanding the complexity of human behavior, living with the inevitable errors, understanding the moral, ethical and spiritual obligations and their price, dealing with stigma of the patient and the profession, and hitting roadblocks. Finally, Dr. Bell will list and briefly discuss Dennis Kimbro's ten forms of wealth.

#### REFERENCES:

1. Bell CC. Keeping Promises: Ethics and Principles in Psychiatric Practice. In *The Art and Science of Psychiatry*. Boston: Aspatore Books, 2007, p. 7 - 38.
2. Bell CC. *The Sanity of Survival: Reflections on Community Mental Health & Wellness*. Chicago: Third World Press, 2004. [www.denniskimbro.com](http://www.denniskimbro.com).

### LECTURE 19

**SATURDAY, OCTOBER 4 1:30 p.m.- 3:00 p.m.**

#### RESEARCH AND LGBT BEHAVIORAL HEALTH: WHAT WE KNOW AND NEED TO KNOW

Robert P. Cabaj, M.D., *San Francisco Community Behavioral Health Services, 1380 Howard Street, Floor 5, San Francisco, CA 94103-2652*

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) State the impact on the expression of behavioral health problems that are a result of adjustment to stigmatization; and 2.) Describe which behavioral health issues to access and address to create an effective clinical intervention for gay men, lesbians and bisexual people seeking help.

#### SUMMARY:

Homosexuality is considered a normal variation of human sexual expression, on a continuum with heterosexuality and bisexuality. Gay men, lesbians and people who are bisexual--though not having a mental illness due to sexual orientation in and of itself--have specific mental health issues and concerns that need to be addressed for the delivery of the best possible behavioral health care. Research over the years has identified areas of concern such as higher rates of affective disorders, suicide-related behaviors, and substance abuse. There are many areas for future research such as effects of cross-cultural issues, impact of same-sex marriage on mental health, parenting effects and so on. The presentation will review the current research and future directions and was a paper that was submitted to the American Psychiatric Association's Committee to revise the DSM.

## LECTURES

### REFERENCES:

1. Cabaj RP, Stein, TS (eds). Textbook of Homosexuality and Mental Health. American Psychiatric Press, Inc. Washington, DC, 1996.
2. Drescher J, Zuker KJ (eds). Ex-gay Research: Analyzing the Spitzer Study and its Relation to Science, Religion, Politics, and Culture. Harrington Park Press, Binghamton, NY, 2006.

### LECTURE 20

**SATURDAY, OCTOBER 4** 1:30 p.m.- 3:00 p.m.

#### **AUDITORY PROCESSING ENDOPHENOTYPES: CONTRIBUTIONS TO OUR UNDERSTANDING OF SCHIZOPHRENIA**

Jose Canive, M.D., *Director, Center for Functional Brain Imaging and Psychiatry Research, New Mexico VA Health Care, 1501 San Pedro Drive, S.E., Albuquerque, NM 87108-5153*

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Identify the contributions of auditory processing intermediate phenotypes in elucidating the pathophysiology of schizophrenia; and 2.) Recognize new findings obtained via magnetoencephalography (MEG) in identifying neural generators and potential neural circuit of the auditory sensory gating phenomenon.

#### **SUMMARY:**

The lack of scientific precision of the schizophrenia diagnosis and the not-yet-fruitful search for its pathophysiology have led investigators to turn their attention to intermediate phenotypes (endophenotypes) to better identify affected brain areas and the genetic contributions to established phenomena that may be at the heart of the illness. Among the neurophysiological endophenotypes, auditory sensory gating has been considered one of the strongest. Yet we know relatively little about its neuronal mechanisms and its clinical meaning. This lecture will: (1) Define the concept of endophenotype and briefly review the neurophysiological endophenotypes; (2) Provide a critical review of mechanisms of the auditory gating deficit; (3) Describe new findings obtained via magnetoencephalography (MEG) on its neuronal sources and circuit; and (4) Discuss the clinical meaning of these findings and their importance in the development of new treatment approaches.

#### **REFERENCES:**

1. Thoma RJ, Hanlon FM, Moses SN, Edgar JC, Huang MX, Weisend MP, Irwin J, Sherwood A, Paulson K, Bustillo J, Adler LE, Miller GA, Cañive JM: Lateralization of auditory sensory gating and neuropsychological dysfunction in schizophrenia. *American Journal of Psychiatry*, 160(9):1595-1605, 2003.
2. Lu BY, Martin KE, Edgar JC, Smith AK, Lewis SF, Escamilla MA, Miller GA, Canive JM: Effect of catechol O-methyl transferase val158Met Polymorphism on the P50 gating endophenotype in schizophrenia. *Biological Psychiatry*, 62(7):822-825, 2007.

### LECTURE 21

**SATURDAY, OCTOBER 4** 3:30 p.m.- 5:00 p.m.

#### **SEXUAL MINORITY WOMEN'S DRINKING: ADVANCES AND GAPS IN CURRENT KNOWLEDGE**

Tonda L. Hughes, Ph.D., R.N., *Professor, Director of Research, National Center of Excellence in Women's Health, University of Illinois at Chicago, College of Nursing, M/C 802, 845 S. Damen Avenue, Chicago, IL 60612*

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Describe advances in understanding of the prevalence and risk factors for heavy drinking and drinking-related problems among sexual minority women; and 2.) Identify major gaps in knowledge related to sexual minority women's use of alcohol.

#### **SUMMARY:**

Although research among sexual minority women is still in its infancy, studies of alcohol use among lesbians date back to the 1960s and 1970s. Findings from these early studies led researchers to estimate that one-third of lesbians had serious alcohol problems or were alcoholic. Despite well-documented limitations of this early research (including samples that were often recruited from gay/lesbian bars), the perception that alcohol abuse is a problem of major proportions among sexual minority women persists in much of the research and clinical literature. In this presentation, Dr. Hughes will review research on sexual minority women's drinking, including findings from her work with lesbians in Chicago, to illustrate both advances and gaps in knowledge related to this important mental health issue.

#### **REFERENCES:**

1. Abbey, A.; Scott, R.O.; Oliansky, D.M.; ET AL. Subjective, social, and physical availability. II. Their simultaneous effects on alcohol consumption. *International Journal of the Addictions* 25:1011-1023, 1990.
2. Caetano, R., and Herd, D. Black drinking practices in Northern California. *American Journal of Drug and Alcohol Abuse* 10:571-587, 1984.
3. Centers for Disease Control and Prevention (CDC), National Center for Health Statistics. National Health Interview Survey, 1997-2000. Accessed 2002. Available at <http://www.niaaa.nih.gov/databases/dkpat27.txt>.

### Lecture 22

**SATURDAY, OCTOBER 4** 3:30 p.m.- 5:00 p.m.

#### **THE TROUBLE WITH TOUGH LOVE: HOW BOOT CAMPS AND OTHER TOUGH RESIDENTIAL PROGRAMS HURT FAMILIES**

Maia Szalavitz, *320 East 86th Street, #2C, New York, NY 10028*

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Identify abusive practices and dangerous, unregulated adolescent residential treatment programs and help parents avoid them; 2.) Recognize the history of unregulated "troubled teen"

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programs and their use of discredited ideas from early addiction treatment programs; and 3.) Discuss current plans for legislation and federal regulation, as well as alternatives for families.

### SUMMARY:

Tens of thousands of American adolescents are currently held in lockdown residential facilities, alternately calling themselves “boot camps,” “behavior modification programs,” “wilderness programs” and “emotional growth” or “therapeutic” boarding schools or academies. Unlike strictly-regulated psychiatric centers, these facilities commit teens indefinitely without professional evaluation other than ability of the parents to pay. They claim to be able to treat everything from Asperger’s and bipolar disorder to addiction despite lack of data and lack of professional staff to carry out appropriate care. No diagnosis, conviction or trial of less restrictive setting is required before involuntary commitment. In many states, the facilities are completely unregulated. Many programs use corporal punishment such as food deprivation, sleep deprivation, stress positions and punitive isolation and restraint. This lecture will explore the roots of these programs, discuss empirically-supported alternatives and call for federal regulation to ensure that youth with mental illness get safe, effective and humane care.

### REFERENCES:

1. Szalavitz, Maia, *Help at Any Cost: How the Troubled-Teen Industry Cons Parents and Hurts Kids*. Riverhead Books, 2006.
2. Behar L, Friedman R, Pinto A, Katz-Leavy J, Jones WG, Protecting Youth in Unlicensed, Unregulated Residential Treatment Facilities. *Family Court Review* V. 45 No. 3 July 2007 399-413.

## LECTURE 23

SUNDAY, OCTOBER 5

10:00 a.m.-11:30 a.m.

### GRADING THE STATES: AN UPDATE FROM NAMI

Anand Pandya, M.D., *UCLA Geffen School of Medicine, 1140 Sunset Vale Avenue, Los Angeles, CA 90069-1713*

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to: 1.) Describe the focus of NAMI, the National Alliance on Mental Illness; and 2.) Identify two key political issues that affect the lives of individuals with serious mental illness.

### SUMMARY:

So far in 2008, a variety of mental health crises and opportunities have developed on state, local and federal levels. Whereas the priorities at the beginning of the year included a federal parity law and reconsideration of state commitment laws in Virginia, the landscape has shifted tremendously since then. This lecture by the President of NAMI, will offer an up-to-the-minute review of the latest “hot button” issues, including the development of a special report that will grade the mental health system of all 50 states. NAMI is the National Alliance on Mental Illness, the nation’s largest grassroots organization for people with mental illness and their families. Founded in 1979, NAMI has affiliates in every state and in more than 1,100 local communities across the country.

### REFERENCES:

1. The National Alliance for the Mentally Ill: *Grading the States 2006: A Report on America’s Mental Health System for the Seriously Mentally Ill*. NAMI: Arlington 2006.
2. Pear, R: “Proposals for Mental Health Parity Pit a Father’s Pragmatism Against a Son’s Passion.” *New York Times*, March 19, 2008.

## POSTERS

### POSTER SESSION 1

THURSDAY, OCTOBER 2 8:30 a.m.-10:00 a.m.

#### THE SPECTRUM BEHAVIORAL HEALTH DISORDERS

MODERATOR: CHARLES W. HUFFINE, JR., M.D.

#### POSTER 1. BUPRENORPHINE ENHANCEMENT TO AN EXISTING SUBSTANCE ABUSE TREATMENT PROGRAM

Maninder Singh, M.D., M.B.B.S, *Department of Psychiatry, VAMC, 100 Emancipation Drive, Hampton, VA 23667*, Shelita Nicholson-Gillis, MSN, FNP-BC, Sadie Sheafe, Ph.D., LCSW, Martin Cruz, Pharm.D., CGP, Leviticus Turner, M.S.W., CSAC

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Identify how to get the training and waiver for prescribing buprenorphine; 2.) Identify how to incorporate buprenorphine treatment into an existing program; 3.) Identify issues with procurment and dispensing buprenorphine; and 4.) Identify key personnel to facilitate psychosocial treatment within the program

#### SUMMARY:

Opioid dependence is a significant problem in the United States and is under treated. Only 20 % of patients get help in spite of effective treatments being available. The United Nations report that worldwide approximately 16 million people abuse opiates, but only 7.8% receive treatment. The new office based opiate agonists improve access to patients that are otherwise reluctant to use the federally supervised Methadone or Opiate treatment programs. In 2002, the U.S. Food and Drug Administration approved two sublingual formulations of buprenorphine for treatment of opiate addiction to be used for detoxification and maintenance therapy of inpatients and outpatients under the Drug Addiction Treatment Act of 2000. The Drug Addiction Treatment Act enables physicians with eight hours of training to obtain a waiver so that they may treat opiate dependent patients in any setting they are licensed to practice in. The hope is to allow more patients to get into treatment. I will review the assessment of opiate dependence and treatment options available and present my experience to date with patients on Buprenorphine. I will discuss the initiation of a buprenorphine clinic into our facility and the four steps essential to a successful implementation. First, you must identify the need for the clinic to exist in your facility. Second, all staff that will be directly involved with the clinic must be thoroughly trained and available prior to the start date. Third, you must educate all staff on the use of buprenorphine, the primary purpose for the clinic in your facility, and the appropriate referral process in your facility. Last, it is imperative that once the patient is screened and accepted into the buprenorphine clinic that the patient is involved in some other form of substance abuse therapy to allow for the best potential treatment and outcome.

#### REFERENCES:

1. Geppert C, Toney G: Outpatient Buprenorphine treatment for opiate dependence. *Federal Practitioner* July 2005;pg 9-34.
2. Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment. Clinical Guidelines for the Use of Buprenorphine in the Treatment of Opioid Addiction, a Treatment Improvement Protocol (TIP 40).

#### POSTER 2. BUPRENORPHINE TREATMENT OF CHRONIC PAIN IN A VETERAN WITH TRAUMATIC BRAIN INJURY

Adekola Alao, M.D., *VA Polytrauma System of Care, Veterans Affairs Hospital, Syracuse, NY 13210*, Shilpa Sachdeva, M.D., Catherine Chung, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to understand the role of buprenorphine in treating chronic pain among patients with traumatic brain injury.

#### SUMMARY:

Introduction: Traumatic brain injury, or TBI, may be the signature injury of the war in Iraq. This injury may come to characterize this war just as Agent Orange did with the war in Vietnam. Pain is a common symptom of TBI and can be a significant complication for conscious patients in the period immediately following a TBI. Most patients with chronic pain are difficult to treat. Furthermore, patients with TBI may have other psychopathology and may be on medications that can negatively interact with opiates to make the use of opiates contraindicated. In this paper, we are describing the case of an Iraq veteran with chronic intractable pain and headache successfully treated with buprenorphine. Case Report: The patient is a 27 year old single Iraq veteran with no previous psychiatric history or substance dependency who sustained a blast injury from an improvised explosive device (IED) that went off right next to his truck, knocking him out unconscious. The blast wave and fragments from the explosion fractured his skull, injured his right eye, and caused a severe contusion in the left fronto-temporal area of his brain. He was medically evacuated to a combat support hospital where he had craniotomy and removal of the IED fragments. He continued to recover steadily. Initially, he had profound receptive and expressive aphasia. In addition to his language deficits, neurocognitive examinations revealed defects in reasoning, memory, and problem solving skills. In addition, he suffered from severe anxiety symptoms mainly panic attacks that occurred de-novo and was only controlled by a combination of lorazepam 2mg po tid and venlafaxine XL 375mg po q daily. More disabling however is intractable headache and shoulder pain that did not respond to adequate doses of non-steroidal anti-inflammatory drugs, tramadol, NMDA receptor antagonists (amantadine) or gabapentin.

#### REFERENCES:

1. Lahz S, Bryant RA. Incidence of chronic pain following

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traumatic brain injury Archives of physical medicine and rehabilitation 1996 Sep;77(9):889-91.

2. Sosin DM, Sniezek JE, Thurman DJ. Incidence of mild and moderate brain injury in the United States, 1991. Brain Inj. 1996 Jan;10(1):47-54.

### POSTER 3. REFERENCED-EEG GUIDED MEDICATION PREDICTIONS IN TREATMENT REFRACTORY EATING DISORDER PATIENTS

James Greenblatt, M.D., *Walden Behavioral Care, 9 Hope Avenue, Suite 500, Waltham, MA 02453*, Craig L. Sussman, F.N.P., Mariko Jameson, B.S.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to understand how Referenced-EEG may help predict more successful psychotropic medications for patients with Anorexia Nervosa, Bulimia Nervosa, and Eating Disorder Not Otherwise Specified (ED NOS).

#### SUMMARY:

Objective: Referenced EEG (rEEG) is a technology that uses quantitative EEG (QEEG) findings as the independent variable to predict medication response. rEEG provides a neurophysiological basis for the identification of psychiatric medications for patients with non-psychotic psychiatric disorders. This uncontrolled case study assessed the efficacy of rEEG predictions for patients with Eating Disorders. Method: Eight female patients with multiple in-patient or partial hospitalizations (7 inpatient, 1 partial) meeting *DSM-IV* Criteria for an Eating Disorder consented to baseline unmedicated QEEGs. The rEEG data were used to guide psychopharmacological treatment for 6-months. Clinical outcomes were assessed by the treating psychiatrist using the 21-Item Hamilton Depression Rating Scale (HDRS) and the Clinical Global Improvement (CGI) Scale. Both 8-week and 6-month follow ups were recorded. Results: All patients had between 2 to 10 prior unsuccessful medication trials and failed outpatient treatments requiring inpatient or partial hospitalization. For these patients, rEEG predicted potential efficacy for medications from the following classes: anticonvulsants, antidepressants and stimulants. HDRS scores averaged 38.8 (range 24-47) at baseline and decreased to an average of 16.5 (range 7-25) at 8 weeks and 13.5 (range 5-27) at 6 months. CGI scores improved to an average of 2.0 at 8 weeks reflecting a 'much improved' change; followed by another improvement at 6 months resulting in an average CGI of 1.38, representing a CGI category between 'very much improved' (score of 1) and 'much improved' (score of 2). Conclusion: This trial demonstrated an improvement in Eating Disorder symptoms by using medications selected through the use of rEEG predictions. Improvements in both HDRS and CGI scores were evident at 8-weeks and 6-months. Referenced-EEG may provide a critical adjunct to treating patients with Eating Disorders.

#### REFERENCES:

1. Suffin SC, Emory WH. Neurometric subgroups in atten-

tional and affective disorders and their association with pharmacotherapeutic outcome. Clin EEG Neurosci 1995; 26: 76-83.

2. Suffin SC, Emory WH, Guitierrez N, et. Al., A QEEG Method for Predicting Pharmacotherapeutic Outcome in Refractory Major Depressive Disorder, J of Physicians and Surgeons, In Press.

### POSTER 4. PREVALENCE OF IMPULSE CONTROL DISORDERS IN A COLLEGE SAMPLE

Brian Odlaug, B.A., *University of Minnesota, Department of Psychiatry, Ambulatory Research Center, 606 24th Avenue, South, Suite 602, Minneapolis, MN 55454*, Jon E. Grant, M.D., J.D., M.P.H.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be, 1.) Identify the prevalence of impulse control disorders among college students; and 2.) Recognize that certain impulse control disorders are more common in men, while others are more common in women.

#### SUMMARY:

Introduction: Impulse control disorders (ICDs), including pathological gambling, kleptomania, intermittent explosive disorder, trichotillomania, pyromania, compulsive sexual behavior, and compulsive buying, are relatively common in both clinical and inpatient psychiatric samples, however, limited information is available regarding their prevalence in the general population. The aims of the present study are to provide prevalence estimates for a college population and highlight gender differences. Methods: The Minnesota Impulsive Disorders Interview, a screening instrument with excellent classification accuracy, was modified into an anonymous self-report version and distributed to 3,945 collegiate students at two private colleges in the Midwest. All surveys were to be returned in an anonymous drop-box at one school and via campus mail at the other school. Demographic variables, including age, gender, ethnicity, and sexual orientation, were also included on the survey. Results: A total of 791 (20.1%) surveys were returned (67.9% female). Overall, 10.4% of the sample screened positive for at least one ICD. The most common ICDs were trichotillomania (3.9%), compulsive sexual behavior (3.7%), and compulsive buying (1.9%). Male students reported higher rates of gambling (2.0%), compulsive sexual behavior (6.7%), intermittent explosive (1.2%) and pyromania (1.6%). Female students endorsed higher rates of compulsive buying (2.6%), trichotillomania (4.1%), and kleptomania (0.6%). Discussion: The overall high rate of ICDs in a college sample suggests that these behaviors are common among young adults and that certain ICDs may affect males and females differently. Colleges should be aware of how common these behaviors are within the student population and provide appropriate clinical services to treatment-seeking students.

#### REFERENCES:

1. Grant JE, Levine L, Kim D, Potenza MN: Impulse control

## POSTERS

disorders in adult psychiatric inpatients. *Am J Psychiatry* 2005 Nov; 162(11):2184-2188.

2. Kessler RC, Chiu WT, Demler O, Merikangas KR, Walters EE: Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry* 2005 Jun; 62(6):617-627.

### **POSTER 5. THE SLEEP QUALITY SCALE AND THE MEDICAL OUTCOMES STUDY SLEEP SCALE IN SUBJECTS WITH FIBROMYALGIA: PSYCHOMETRIC EVALUATION AND MEDIATION EFFECTS**

*Supported by the World Psychiatric Association*

Joseph Cappelleri, Ph.D., M.P.H., *Pfizer Inc, Global Research and Development, Eastern Point Road (MS 8260-2222), Groton, CT 06340*, Andrew G. Bushmakina, M.S., Susan Martin, M.S.P.H., Charles D. Petrie, Ph.D., Ellen Dukes, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to 1.) Describe the measurement properties of two sleep scales for patients with fibromyalgia; and 2.) Recognize the differential effect of pregabalin on sleep benefit--a direct effect separate and distinct from the mediated effect through improvement in pain.

#### **SUMMARY:**

Objective: Investigate the application of the multi-domain Medical Outcomes Study (MOS) Sleep Scale and the one-item, 10-category Sleep Quality Scale in subjects with fibromyalgia (FM). Method: Data were obtained from two double-blind, controlled Phase 3 studies with pregabalin (300, 450, 600mg/d) in approximately 1500 FM subjects. For the MOS Sleep Scale, confirmatory factor analyses, Cronbach alphas, and corrected item-to-total correlations were undertaken at baseline and follow-up. Clinical important differences were estimated using the Patient Global Impression Scale. A mediation model was undertaken to identify and explicate the mechanism that underlies an observed relationship between treatment and sleep outcomes. Results: In most instances, the Bentler's Comparative Fit Index (CFI) on the MOS Sleep Scale was  $\geq 0.9$ , indicating acceptable model fit. Cronbach's alphas increased over time for the multi-item domains on Sleep Disturbance (range: 0.78-0.87), Sleep Somnolence (0.71-0.78), and Adequacy (0.36-0.77). For Sleep Quality, estimated test-retest reliability based on seven pre-treatment days was 0.91. Clinical important difference on the MOS Sleep Disturbance domain and the Sleep Quality Scale were estimated to be 7.9 and 0.83, respectively. Mediation models showed that pregabalin directly improved sleep disturbance and sleep quality. Approximately 66 to 80% of the improvement in Sleep Disturbance and 43 to 61% of the improvement in Sleep Quality were the direct result of pregabalin not related to the pain. Conclusion: The structure of the MOS Sleep Scale is confirmed in patients with FM. In general, the scale's internal consistency reliability is satisfactory except for earlier

assessments on the two-item Adequacy domain. The Sleep Quality Scale as measured has high test-retest reliability. On both scales, clinically important differences manifest themselves. Much improvement in Sleep Disturbance and in Sleep Quality comes directly from pregabalin.

#### **REFERENCES:**

1. Kline RB: Principles and Practice of Structural Equation Modeling, Second Edition. NY: the Guilford Press, 2005.
2. Arnold LM, Crofford LJ, Martin SA, et al: The Effect of Anxiety and Depression on Improvement in Pain in a Randomized, Controlled Trial of Pregabalin for Treatment of Fibromyalgia. *Pain Medicine*, 2007; 8(8):632-638.

### **POSTER 6. BEHAVIORAL PHENOTYPE WITH A DEGENERATIVE COURSE LEADING TO INSTITUTIONALIZATION**

Vivek Prasad, M.D., *IUPUI Psychiatry Department, 1111 W. 10th Street, Indianapolis, IN 46202*, Susanne Blix, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to identify different types of aggression, and medications used to treat it, as well as identify common reasons to consult for concerns of a metabolic or genetic disease associated with the behavioral phenotype.

#### **SUMMARY:**

Behavioral phenotypes are a characteristic pattern of motor, cognitive, linguistic and social abnormalities which are associated with biological disorders. In some cases, this constitutes a psychiatric disorder with aggression as a primary aspect. Aggression has a wide differential and is difficult to manage. A deeper insight into such disorders is necessary for improved care as psychiatric symptoms profoundly impact long-term quality of life. As such, the new multi-axial system proposed in the *DSM-V* Research Agenda includes an axis surrounding the behavioral phenotype of an illness.

#### **REFERENCES:**

1. Borthwick-Duffy SA, Eyman, RK. Who are the dually diagnosed? *Am J Ment Retard* 1990; 94:586-595.
2. O'Brien G. Behavioural Phenotypes in Adulthood. *Psychiatry* 2006; 9 (5): 331-336.

### **POSTER 7. CORRELATION OF POST-TRAUMATIC STRESS DISORDER (PTSD) SEVERITY WITH HOPE IN MALE MILITARY VETERANS WITH CHRONIC PTSD**

Antony Fernandez, M.D., *McGuire VAMC (116A), 1201 Broad Rock Boulevard, Richmond, VA 23249*, James Poindexter, M.S.N., Lynn Satterwhite, A.N.P., John Lynch, Ph.D., Victor Vieweg, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Examine and characterize Hope as measured by the HHI; 2.) Recognize and diagnose veterans with low hope and severe PTSD; 3.) Correlate findings of severity of PTSD

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as measured by PCL\_M. with Hope as measured by HHI; and 4.) Facilitate the identification of those who may benefit from adjunctive focused interventions.

### SUMMARY:

Methods: 39 patients enrolled in our PTSD program completed the (HHI), a self-report instrument designed to assess Hope. We calculated HHI total score. Study variables included (1) age, (2) HHI score (3) PCL\_M score, and (4) race. The Herth Hope Index (HHI) an adapted version of the Herth Hope Scale (HHS0 is a concise, simple and psychometrically sound instrument with an alpha co-efficient of 0.97 with a two week test-retest reliability of 0.91 (Herth K,1992). The Post-Traumatic Stress Disorder Checklist (PCL) is a 17-item self-report measure of the 17 *DSM-IV* symptoms of PTSD. The PCL has been used in the rating of PTSD symptoms and the reliability and validity of the PCL with a variety of samples with excellent sensitivity and specificity, internal consistency, test-retest reliability, convergent validity, and discriminant validity (Weathers F et al, 1993; Blanchard, J, 1996.) PCL-M is the military version. Results: The mean age was 58.21 ± 8.29 years. 72% of our sample was African American. The mean HHI score was 34.70 ± 6.68, suggesting low levels of hope in this veteran sample. Statistical analysis was carried out using Pearson's correlation coefficient. There was statistically significant correlation between severity of PTSD (as measured by the PCL\_M) and HHI ( $p < 0.05$ ). Discussion: In conclusion, this study makes contributions to the burgeoning literature regarding the inclusion of spirituality and hope in the panoply of domains that can be affected adversely by traumatic experiences. Veterans continue to seek mental health services to obtain answers to existential questions concerning the meaning and purpose to their traumatic combat experiences and their subsequent lives, mental health services should consider addressing spiritual losses and instill hope as an integral part of treatment. Conclusion: The HHI is a concise clear and practical tool for screening adults with PTSD for different levels of hope.

### REFERENCES:

1. Herth, K.: Abbreviated instrument to measure hope: Development and psychometric evaluation. *Journal of Advanced Nursing*, 1992; 17, 1251-1259.
2. Blanchard, E. B., Jones-Alexander, J., Buckley, T. C., Forneris, C. A.: Psychometric properties of the PTSD Checklist (PCL). *Behaviour Research and Therapy*, 1996; 34, 669-673.

### POSTER 8 PROLONGED BENZODIAZEPINE WITHDRAWAL DELIRIUM

Vasant Dhopes, M.D., *University and Woodland Avenue, Philadelphia, PA 19104*, Gregg E. Gorton, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to diagnose prolonged benzodiazepine withdrawal delirium and be able to treat it.

### SUMMARY:

While benzodiazepine withdrawal delirium lasting few days to a week is well known, prolonged and intermittent benzodiazepine withdrawal delirium is poorly known. We report in detail the history and hospital course of two patients who, in spite of treatment, developed intermittent delirium lasting four to five weeks. The literature on benzodiazepine withdrawal will be reviewed and treatment and prognosis will be discussed.

### REFERENCES:

1. Petursson H. The benzodiazepine withdrawal syndrome *Addiction*, 1994 Nov 89 (11): 1455-9.
2. Zalsman G. Hermesh H. Munitz H. Alprazolam withdrawal delirium: A case report. *Clin Neuropharmacol*. 1998 May-June 21 (3) 201-2.

### POSTER 9. CO-MORBID FACTORS FOR PATIENTS WITH HUMAN IMMUNODEFICIENCY VIRUS (HIV): A RETROSPECTIVE CHART REVIEW OF SUBSTANCE USE, NONCOMPLIANCE, AND PSYCHIATRIC DISORDERS

Rachel Houchins, M.D., *15 Medical Park, Suite 141, Columbia, SC 29203*, Kimberly B. Rudd, M.D., David Henderson, M.D., April Carpenter, M.D., Rukhsana Mirza, M.D., Divya Ahuja, M.D., Meera Narasimhan, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Identify the prevalence of substance abuse and psychiatric disorders in patients with HIV in Columbia, SC; 2.) Examine the effect of partial or non-compliance and its correlation with demographic and clinical characteristics; and 3.) Identify future needs and directions for research.

### SUMMARY:

High rates of substance abuse and psychiatric disorders among HIV-infected individuals have been documented in multiple studies. Substance abuse in this population is frequently associated with co-morbid depression, anxiety, and other severe mental disorders. A number of studies have found that active substance users are more likely to report HAART non-adherence and have lower reduction in HIV-RNA compared to former drug users or those who never used drugs. However, few studies have addressed gender or socio-demographic variables and their implications on treatment compliance. Therefore, an IRB approved retrospective chart review of 424 HIV positive patients seeking treatment at the Ryan White Clinic in Columbia, SC was completed. Data collected included age, gender, race, medical conditions, psychiatric diagnoses, substance abuse, income, medications, CD4 count, and viral load. Compliance information was recorded for medication and appointments. Results showed that the population studied was mostly male 60% and black 83%. Substance users were more likely to be male 73% and black 92.5% versus non substance abusers. High rates of substance abuse and psychiatric diagnoses were found in the population (24.9 and 19% individually and 16.4% with

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comorbid diagnosis.) Correlations showed factors associated with compliance for patients who were not substance abusers included a positive correlation between medication compliance and a higher CD4 count (CC.223-.657). Patients who were substance abusers did not have this correlation, indicating that substance abusers, even if compliant with medications, had a much poorer outcome. Correlations for compliance were not significantly different among any demographic group.

### REFERENCES:

1. Center for Disease Control and Prevention (2002). Cases of HIV infection and AIDS in the United States, 2002. HIV/AIDS Surveillance Report, 14, 1-48.
2. Lucas, G. M., Cheever, L.W., Chaisson, R. E., and Moore, R. D. (2001). Detrimental effects of continued illicit drug use on the treatment of HIV-1 infection. *Journal of Acquired Immune Deficiency Syndrome*, 27, 251-259.

### POSTER 10. BODY DYSMORPHIC DISORDER TREATED WITH HIGH DOSES OF SERTRALINE: A CASE REPORT

Mahboob Aslam, M.D., M.S., 322 Augur Street, #3, Hamden, CT 06517, Paramus, NJ 07652

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to recognize that Body Dysmorphic Disorder may respond to high doses of sertraline.

### SUMMARY:

Body Dysmorphic Disorder is a somatoform disorder characterized by excessive preoccupation with a minor or imagined defect in physical appearance. Treatment of BDD is usually a challenge. It is generally a chronic condition with waxing and waning course but rarely full remission(1). Emerging data consistently indicates(2) that SSRI are often efficacious, however several case reports indicated that after initial improvement on SSRI there was recurrence of symptoms. We report a case of BDD who responded well to high dose of sertraline and maintained the response in long-term follow-up. CM is an 18 year old Caucasian male who had been excessively worried about his distorted facial features since his early teens. He avoided social contacts because of his appearance concerns. He was brought to the ER after his neighbors complained of unbearable foul smell coming from his apartment. It was found out that his toilet was clogged and due to his preoccupation, he would not allow the plumber to enter his bathroom and hence started defecating in plastic bags. On admission, patient was started on sertraline 50 mg which was titrated up gradually to the max dose. After two months his anxiety about his appearance decreased and he started participating in social activities. After 6 months of treatment with sertraline his improvement is maintained. According to this case report we suggest sertraline at high doses could prove effective in the treatment of BDD, provided the side effects are monitored and tolerated.

### REFERENCES:

1. Phillips KA. Body dysmorphic disorder: clinical aspects and treatment strategies. *Bull Menninger Clin.* Fall 1998; 62(4 Suppl A):A33-48.
2. Hollander E, Aronowitz BR. Comorbid social anxiety and body dysmorphic disorder: managing the complicated patient. *J Clin Psychiatry.* 1999;60 Suppl 9:27-31.

### POSTER 11. THE LEGAL HALLUCINOGEN IN THE U.S.A.

Lorerky Ramirez Moya, M.D., 12769 Dunks Ferry Road, Philadelphia, PA 19154

### EDUCATIONAL OBJECTIVES:

At the conclusion of this case presentation, the participant should be able to recognize the psycho active stimulant and hallucinogenic effects of salvia divinorum (SD), an herb in the mint family from Southern Mexico, which is becoming increasingly popular among adolescents in U.S.A.

### SUMMARY:

Salvia divinorum is an herb originally used by Mazateca Indians for its hallucinogen effects for rituals of divination and healing. It is becoming increasingly popular among non traditional users. Salvia divinorum is a highly selective full agonist at the kappa opiate receptor. It is associated with depersonalization, laughter and a feeling of levitation. It also could have long-term consequences such as experiences hallucinations or other neuropsychiatry symptoms such as déjà vu. It has been banned in many countries, yet it remains legal in most states in the U.S.A. and is easily accessible by Internet. The following case report describes a 20-year old male patient with a history of cannabis and his (salvia divinorum) abuse. He presented to ER services because he was paranoid about friends and his mother and believed that two friends completed suicide when in fact they had not. This patient's presentation and constellation of symptoms suggest that use of SD could result in previously undocumented, long-term sequelae. However, laws in the U.S.A. do not prohibit cultivating nor consuming SD. Due to easy accessibility, SD is becoming popular among adolescents and, therefore, SD introduces a new substance about which health care workers should be informed and long-term effects should be investigated.

### REFERENCES:

1. Bucheler R. etc. Use of non -prohibited hallucinogenic plants: increasing relevance for Public Health? *Pharmacopsychiatry* 2005, 38: 1-5.
2. Mikkil Arent, Raben Rosenberg, Leslie Foldage, Cannabis -induced psychosis and subsequent schizophrenia-spectrum disorders: fallow-up study of incident cases, *British Journal of Psychiatry*, 2005, 187, 510-515.

### POSTER 12. GENDER IDENTITY DISORDER IN PARENT-CHILD RELATIONSHIPS

Heather Church, M.D., B.S., 92 Forbes Quay, Dublin, Ireland, Donal O'Shea M.D., FRCPI, James V. Lucey M.D., Ph.D.

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### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Assess transgendered parents' relationships with their children; 2.) Recognize how being a transgendered parent affects various aspects of their role as a parent; and 3.) Identify how being a parent affects both the time taken to transition and level of transition from one gender to another.

### SUMMARY:

About a third of people with Gender Identity Disorder (GID) are parents. They are a unique cohort in the population of people with GID as they have their child(ren) to consider. Objective: To describe the relationship between parents with GID and their child(ren) and to understand how being a parent affects transitioning from one gender to the other. Methods: Fourteen parents with GID completed the Index of Parental Attitudes (IPA). An IPA score of greater than 30 indicates parent-child relationship difficulties (range 0 to 100). The authors also conducted the SCID-I to establish other Axis I disorders. Results: We assessed 12 male to female (MtF) and 2 female to male (FtM) parents with GID residing in Ireland. In total, 14 GID parents had 28 children. Three children had no relationship with their GID parent. The other 25 children, as reported by the parent, had good relationships with their children, and these 25 children's average IPA score was 6.4 (range 0-25). Twelve GID parents (86%) believed that being a parent had no effect on their desired level of transitioning, while 2 were influenced not to transition. Eleven GID parents (79%) reported that being a parent had increased the time taken to commence transitioning, 2 have stopped transitioning altogether, while 1 cited no effect on time. Additional contributing factors affecting gender transition included their relationship with their partners, working environment, other family members, societal pressures, physical ailments preventing having hormones/surgery, religious beliefs and other Axis-I diagnosis that cause discomfort. Conclusion: Parents with GID reported either a positive relationship (n=11) or no relationship (n=3) with their children. Being a parent prolonged overall transitioning time in people with GID and affected achieved level in transitioning.

### REFERENCES:

1. Di Ceglie D, Freedman: A Stranger in my Own Body: Atypical Gender Identity Development and Mental Health. London, UK, Karnac Books, 1998.
2. Tully B: Accounting for Transsexualism and Transhomosexuality. London, Whiting & Birch 1992.

### POSTER 13. EFFECT OF LISDEXAMFETAMINE DIMESYLATE ON SLEEP QUALITY IN ADULTS WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

Supported by Shire Development, Inc.

Gregory Mattingly, M.D., *Washington University School of Medicine, 660 S. Euclid Avenue, St. Louis, MO 63110*, David Goodman, M.D., Lenard Adler, M.D., Richard Weisler, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to describe the effect of short-term treatment with lisdexamfetamine dimesylate on sleep quality in adults with attention-deficit/hyperactivity disorder.

### SUMMARY:

Introduction: Sleep problems (e.g., insomnia, sleep apnea, and nocturnal motor activity) are common in adults with attention-deficit/hyperactivity disorder (ADHD). This analysis evaluated the effect of lisdexamfetamine dimesylate (LDX) on sleep quality in adults with ADHD. Methods: This double-blind, parallel-group, 4-week forced-dose escalation trial enrolled adults with a *DSM-IV-TR* diagnosis of ADHD. Subjects were randomized to placebo, 30, 50, or 70 mg/d LDX. The Pittsburgh Sleep Quality Index (PSQI), a self-rated questionnaire, assessed sleep quality over 1 month. Seven components (sleep quality, sleep latency, sleep duration, habitual sleep efficiency, sleep disturbances, use of sleep medication, and daytime functioning) were rated from 0 (no difficulty) to 3 (severe difficulty). A global score >5 out of 21 defined poor sleep quality. A decrease in PSQI score indicates improvement in sleep quality. Results: A total of 420 subjects were randomized (62 placebo, 119 LDX 30 mg/d, 117 LDX 50 mg/d, 122 LDX 70 mg/d). The mean baseline global PSQI score was 5.77 for LDX and 6.27 for placebo. At endpoint, least squares (LS) mean change from baseline global PSQI scores was not significantly different between LDX and placebo (LDX -0.8 vs. placebo -0.5,  $P=.327$ ). Baseline scores for the 7 PSQI components ranged from 0.1 to 1.3, and none was significantly different from placebo. At endpoint, the daytime functioning component (trouble staying awake/loss of enthusiasm) showed a significant improvement in LS mean change from baseline to endpoint for LDX compared with placebo (LDX -0.4 vs. placebo 0.0,  $P<.005$ ). LS mean changes from baseline to endpoint for the other 6 PSQI components ranged from -0.2 to 0.0, and none was significantly different from placebo. Conclusions: LDX was not associated with detrimental effects on overall sleep quality and it significantly improved daytime functioning in adults with ADHD. Supported by funding from Shire Development Inc.

### REFERENCES:

1. Philipsen A, Hornyak M, Riemann D: Sleep and sleep disorders in adults with attention deficit/hyperactivity disorder. *Sleep Med Rev* 2006; 10:399-405.
2. Kooij JJS, Middelkoop HAM, van Gils K, Buitelaar JK: The effect of stimulants on nocturnal motor activity and sleep quality in adults with ADHD: an open-label case-control study. *J Clin Psychiatry* 2001; 62:952-956.

### POSTER 14. PATHOLOGICAL GAMBLING AND COMORBID SUBSTANCE DEPENDENCE: A SHARED DISORDER OR SEPARATE ADDICTIVE PROCESSES

Dwight Smith, M.D., *Boston Medical Center, Dowling 7, 850 Harrison Avenue, Boston, MA 02118*, Elvin Hernandez, M.D., Deyadira Baez-Sierra, M.D., John A. Renner, M.D.

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### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Describe how the diagnostic criteria for pathological gambling were modeled after those of substance dependence, and recognize the common and unique features of each; 2.) List personality traits shared in substance dependence and pathological gambling; and 3.) Recognize the differing roles that affective states play in cravings and subsequent relapse in substance dependence and pathologic gambling.

### SUMMARY:

Background: Pathological gambling and substance dependence have many common features and are frequently regarded together in a continuum of addictive or impulse control disorders. The *DSM-IV* criteria for each of these syndromes emphasize similar features, with the criteria for pathological gambling being largely modeled after substance dependence. The shared criteria and frequently similar clinical presentations, and the repeated finding that the prevalence of pathologic gambling is greatly elevated in individuals with substance dependence has led many clinicians to conclude that both syndromes are manifestations of a common underlying disorder with similar risk factors and etiology. Methods: A literature review of Medline from 1990 to 2007 was conducted with the keywords substance dependence, pathological gambling, and comorbidity. The results were reviewed for articles which pertained directly to shared features or dissimilarities between pathologic gambling and substance dependence. Results: The majority of the articles emphasized similarities between the two disorders suggesting a common underlying pathology. Shared personality traits, most notably heightened impulsivity and sensation seeking with difficulties accepting delayed reinforcement were noted by several authors. Affective states and related subsequent cravings which drive both substance dependence and pathologic gambling may be different in each of these disorders, with lack of positive affect implicated in cravings for gambling activity and avoidance of negative affect of greater importance in substance use. Conclusions: Recognition of the common pathologic processes and risk factors underlying substance dependence and pathological gambling is important in treatment planning and therapy. Equally as important is the recognition of the potential differences in the affects and circumstances surrounding cravings and relapse, which are frequently at the core of these disorders.

### REFERENCES:

1. de Castro, V., Fong, T., Rosenthal, R. J., & Tavares, H. (2007). A comparison of craving and emotional states between pathological gamblers and alcoholics. *Addictive behaviors*, 32(8), 1555-64. doi: S0306-4603(06)00347-9.
2. Petry, N. M. (2006). Should the scope of addictive behaviors be broadened to include pathological gambling? *Addiction (Abingdon, England)*, 101 Suppl 1, 152-60. doi: ADD1593.

### POSTER 15: ARE ATYPICAL ANTIPSYCHOTICS ABUSEABLE OR ADDICTIVE? A FOCUS ON QUETIAPINE.

Dwight Smith, M.D., *Boston Medical Center, Dowling 7, 850 Harrison Avenue, Boston, MA 02118*, Ronald Bugaoan, M.D., John A. Renner, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Compare the pharmacologic properties and effects of quetiapine to those of known addictive and abuseable drugs; 2.) List the common forms of quetiapine misuse by itself and in combination with other drugs; and 3.) Identify several risk factors and potential warning signs associated with quetiapine misuse.

### SUMMARY:

Background: Quetiapine, a second generation antipsychotic approved for the treatment of schizophrenia and bipolar disorder, is currently widely used not only for these conditions but also for its sleep-promoting and anxiolytic properties. Quetiapine is not a controlled substance and in pre-clinical studies it did not show any addictive properties. This has led to its common use in the treatment of substance abusing populations. However, a number of case reports and anecdotal clinical experiences have emerged in which quetiapine is misused through either intranasal or intravenous administration, or in combination with other illicit drugs. Recent articles have called for further studies examining quetiapine's subjective effects and its use in combination with other drugs to evaluate its potential for misuse and dependence. Methods: A literature review of Medline from 1996 – 2007 was conducted with the keywords quetiapine, abuse, misuse, and dependence. Online sources in which individuals describe recreational experiences with quetiapine were reviewed. Manufacturer's data regarding the abuse potential of quetiapine was evaluated. Results: Five case reports and one article describing the misuse of quetiapine at a correctional institution were found. There were 24 online "testimonials" describing recreational use of quetiapine. Three of the five case reports involved incarcerated individuals. The majority of testimonials described their attempted recreational experiences with quetiapine as being unpleasant and dysphoric. Conclusions: Quetiapine does not have the euphorigenic or reinforcing properties commonly associated with drugs of abuse or dependence. In certain individuals it may have hallucinogenic effects, either by itself or in combination with other drugs. Given its widespread availability there exists some potential for diversion and misuse, especially among the incarcerated, however, true abuse or addiction is unlikely.

### REFERENCES:

1. Pinta, E. R., & Taylor, R. E. (2007). Quetiapine addiction? *The American journal of psychiatry*, 164(1), 174-5. doi: 164/1/174.
2. Waters, B. M., & Joshi, K. G. (2007). Intravenous quetiapine-cocaine use ("Q-ball"). *The American journal of psychiatry*, 164(1), 173-4. doi: 164/1/173-a.

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### **POSTER 16. THE INCIDENCE OF SUBSTANCE ABUSE AMONG ADULTS WITH DISABILITIES COMPARED WITH THAT IN THE GENERAL U.S. RESIDENTIAL POPULATION**

Dwight Smith, M.D., *Boston Medical Center, Dowling 7, 850 Harrison Avenue, Boston, MA 02118*, Raymond E. Glazier, Ph.D., Ryan Kling, M.A., John A. Renner, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Define psychiatric and physical disability in both practical and legal terms; 2.) Describe the National Survey on Drug Use and Health and the methodology of this study with its inherent strengths and limitations; and 3.) Recognize the differences in incidence rates of substance abuse among disabled and non-disabled adults and discuss possible explanations for these findings.

#### **SUMMARY:**

**Background:** There are published reports that alcohol and other substance abuse (SA) are more common among persons with disabilities than in the general population. In fact, a number of studies have asserted that the incidence is twice as high. Yet hard data are difficult to obtain because surveys like the Current Population Survey (CPS) that have clear markers for disability status do not track SA. **Methods:** We examined data from the 2006 National Survey on Drug Use and Health (NSDUH) to compare the incidence of four SA factors – habitual cigarette smoking, binge drinking, frequent marijuana use, and frequent abuse of several drugs (cocaine, heroin, and methamphetamine) – for adults with disabilities compared with the non-disabled adult residential population, as well as younger persons (18-29) compared against all adults with disabilities. While the NSDUH does not have a question set on Disability, we created a Disability marker by pooling all persons who: 1.) Reported a work disability; 2.) Were under 65 (non-aged) and Medicare-eligible; or 3.) Were adults under 65 receiving SSI benefits (for poor and disabled). **Results:** Persons with disabilities were found to be much less likely to engage in any of the 4 SA behaviors than the non-disabled adult population, and these findings were statistically significant for all but marijuana use. Similarly, adults with disabilities were less likely than younger non-disabled persons to engage in any of the 4 SA behaviors, though the finding was statistically significant only for alcohol abuse. **Discussion:** The results of this investigation, showing a lower than expected incidence of SA in individuals with disability, differ significantly from earlier studies. Either: a.) Previous estimates may be exaggerated; b.) Adults with disabilities living with their families may be less prone to SA, or c.) The NSDUH recording process does not accurately capture these data. Travel funding from Abt Associates Inc.

#### **REFERENCES:**

1. Center for Substance Abuse Treatment. (1999). Substance use disorder treatment for people with physical and cognitive disabilities Treatment Improvement Protocol (TIP) Series, Number 29. DHHS Pub. 942078.2.

- Washington, DC; U.S. Government Printing Office, 1998.
2. Moore, D., & Li, L. (1998). Prevalence and risk factors of illicit drug use by people with disabilities. *American Journal on Addictions*, 7, 93–102.

### **POSTER 17. OBSTACLES TO CREATING A SCREENING PROGRAM FOR POST-TRAUMATIC STRESS DISORDER IN THE NEW YORK CITY HOMELESS SHELTER SYSTEM**

Elizabeth Streicker, B.A., *450 Clarkson Avenue, Box 163, Brooklyn, NY 11203*, Danielle Baek, B.A., Ava Liberman, B.A.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Consider the impact of other participating organization's administrative issues on your project; 2.) Recognize the differences between a top-down and bottom-up approach in working in the community setting; and 3.) Appreciate the importance of input from the workers in the community who are working with the underserved.

#### **SUMMARY:**

Of the estimated 34,465 people in New York City homeless shelters, as many as 25% have mental illnesses. In order to help address these high rates of psychiatric illness, we designed a screening program for post-traumatic stress disorder and substance abuse in the homeless population using funding we obtained from the American Psychiatric Foundation's Helping Hands Grant. In our first attempt, we contacted a not-for-profit organization in Brooklyn that provided a continuum of employment, education, and housing to 30,000 homeless individuals yearly. This group oversees a 70-bed women's shelter and has ties to PPOH, a group of psychiatrists offering on-site psychiatric services at 37 different agencies throughout New York City. We worked with the director of the organization for four months but eventually the organization stated they were no longer interested in the project and withdrew. Aware that we would lose our funding if we did not find another site, we proceeded to establish a relationship with another affiliate of PPOH. This second group focuses primarily on foster-care and housing placement for the homeless; two of their facilities work specifically with the mentally ill. In this second model, we began our discussions early with on-site staff. We found that speaking directly with all levels of staff at the two shelters secured a stronger relationship with the organization as a whole. Our close communication allowed the shelters' case managers to give us feedback about the clients who they felt were in most need of our screening assessments and allowed us to understand the needs of their clients. Recognizing the errors in our first approach to setting up a study, we took a more proactive leadership role on our second attempt. In the community setting, a bottom-up grassroots approach rather than a top-down approach was necessary to properly identify the needs of the organization, implement our project, and help the underserved.

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### REFERENCES:

1. Tolin DF and Foa EB: Sex Differences in Trauma and Posttraumatic Stress Disorder: A Quantitative Review of 25 Years of Research. *Psychological Bulletin* 2006; 132 (6): 959-992.
2. Milford JL: Lifetime trauma and associated mental health symptoms in homeless women. *Dissertation Abstracts International: Section B: The Sciences and Engineering*. 68(7-B), 2008, 4836.

### POSTER 18. THE DEVELOPMENT OF THE PROGNOSTIC PROPENSITY SCORE: A METHOD TO IDENTIFY THE OPTIMAL TREATMENT WHEN HETEROGENEOUS TREATMENT EFFECTS ARE PRESENT

Dana Stafkey-Mailey, Pharm.D., 1722 Esplanade, #3, Redondo Beach, CA 90277

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to understand the use of the Prognostic Propensity Score (PPS) and the significant advances this method can provide to evidence-based medicine.

### SUMMARY:

Objective: Clinical evidence is often reported as an average treatment effect across a large population. This is appropriate if all patients experience the same effect from a treatment. However, more often, different patients experience different outcomes on the same medication. If this is true, then averaging the effects of treatment obscures the outcomes received by most patients. It also makes it difficult for physicians to utilize this evidence to select the most appropriate treatment for their individual patients. An essential step towards optimizing therapy is to provide evidence that recognizes inter-individual differences in drug response. Methods: A prognostic propensity score (PPS) method is introduced. The PPS is defined as the expected outcome (on control) given the individual's covariates. To calculate the PPS we regress the outcome of interest on the covariates for only those patients treated with the control (Drug A). Using the coefficients from this model and the patient characteristics, we then compute the PPS for each patient assuming that every patient is a member of the control group. We identify if treatment effects vary across subgroups by partitioning patients by PPS into strata and calculating the treatment effect within each stratum. We repeat this analysis using the alternative treatment (Drug B) as the control. Identifying and comparing the stratum that receives the optimal benefit from each treatment we determine which patient characteristics are uniquely associated with success for the individual treatments. Results: To demonstrate the use of the PPS, we use a sample of California Medicaid beneficiaries diagnosed with schizophrenia. Results of this study indicate that it is possible to identify unique predictors of treatment success for the individual antipsychotics. Conclusions: The outlined approach will allow physicians to more accurately prescribe the most beneficial antipsychotic treatment for each and every patient.

### REFERENCES:

1. Horowitz RI, Singer BH, Makuch RW, and Viscoli CM (1996). Can Treatment That is Helpful on Average Be Harmful to Some Patients? A Study of the Conflicting Information Needs of Clinical Inquiry and Drug Regulation. *Journal of Clinical Epidemiology*. 49(4):395-400.
2. Zarin DA, Yound JL, and West JC (2005). Challenges to Evidence-Based Medicine: A Comparison of Patients and Treatments in Randomized Controlled Trials with Patients and Treatment in a Practice Research Network. *Social Psychiatry and Psychiatric Epidemiology*. 40(1):27-35.

### POSTER 19. POSSIBLE BIOMARKER FOR SUBSTANCE USE DISORDER IN AD/HD PATIENTS: MANAGING RISK AND MAXIMIZING BENEFIT

Arnold Mech, M.D., *Clinical Research Manager, The Mech Center, 7500 San Jacinto Place, Plano, TX 75024*

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to propose QEEG testing when selecting therapeutic agents used in managing AD/HD in patients.

### SUMMARY:

Patients with AD/HD are at greater risk for developing Substance Use Disorders (SUDs) as compared to the general population. AD/HD remains both under-diagnosed and controversial. There are legitimate concerns about treating such patients with amphetamine and related Schedule II stimulants and most recently a call for EKG testing of all pediatric patients selected to receive stimulant medication. A bio-marker for response to non-DA treatment of AD/HD would be highly desirable. This subtype could avoid the risk of exposure to such DA agents as amphetamine and yet have a high probability of both success and safety. QEEG testing demonstrates 90% selectivity in differentiating "stimulant-responsive" AD/HD patients from normal controls. Normal theta-to-beta ratio (TBR) in AD/HD may identify a subset of AD/HD patients who may not benefit or may have adverse events from typical stimulants. Identifying patients with normal TBRs may reduce the risk of AD/HD treatment in patients at risk for SUD. Avoidance of amphetamine in favor of agents characterized by an alternative proposed mechanism of action such as Schedule IV modafinil could lower the risk of such exposure for perhaps 1/3 of AD/HD patients showing a normal TBR on QEEG testing.

### REFERENCES:

1. Monastra, V.J., Lubar, J.F. and Linden, M. The development of a quantitative Electroencephalographic Scanning Process for Attention Deficit Hyperactivity Disorder: reliability and Validity Studies. *Neuropsychology*, 15(1):136-144-2001.
2. Atisposter: The Mech Center; Clinical Pearls, Inc, Plano Texas, USA; University of Texas at Arlington, Arlington, Texas, USA.

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### POSTER 20. EVALUATION OF CARDIOVASCULAR EFFECTS OF LISDEXAMFETAMINE DIMESYLATE TREATMENT IN ADULTS WITH ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

Supported by Shire Development, Inc.

Richard Weisler, M.D., *University of North Carolina at Chapel Hill, Campus Box 7160, Chapel Hill, NC 27599*, Timothy E. Wilens, M.D., David Goodman, M.D., Lenard Adler, M.D., Gwendolyn Niebler, D.O., Joseph Biederman, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Evaluate the effects on systolic blood pressure, diastolic blood pressure, and pulse after 4 weeks of treatment with lisdexamfetamine dimesylate (LDX) in adults with attention-deficit/hyperactivity disorder (ADHD); and 2.) Evaluate the effects on electrocardiogram parameters from 4 weeks of treatment with LDX in adults with ADHD.

#### SUMMARY:

**Introduction:** We assessed the cardiovascular effects of the prodrug stimulant lisdexamfetamine dimesylate (LDX) in adults with attention-deficit/hyperactivity disorder (ADHD). **Methods:** Adults aged 18 to 55 years with ADHD were randomized to placebo (n=62), or 30 (n=119), 50 (n=117), or 70 (n=122) mg/d LDX, respectively, for 4 weeks, with the latter 2 groups undergoing forced-dose titration. ECGs and measurements of systolic (SBP) and diastolic (DBP) blood pressure and pulse were performed pretreatment and weekly thereafter. **Results:** In the placebo, 30, 50, and 70 mg/d LDX groups, LS mean (95% confidence interval [CI]) SBP changes from baseline to endpoint were -0.5 (-2.6, 1.5), 0.8 (-0.7, 2.3), 0.3 (-1.2, 1.8), and 1.3 (-0.2, 2.7) mm Hg, respectively, and LS mean (95% CI) DBP changes were 1.1 (-0.5, 2.7), 0.8 (-0.4, 2.0), 1.1 (-0.1, 2.3), and 1.6 (0.4, 2.7) mm Hg, respectively. There were 3 SBP ( $\geq 150$  mm Hg from  $< 150$  mm Hg) outliers (1 in the 30 and 2 in the 70 mg/d groups) and 15 DBP ( $\geq 95$  mm Hg from  $< 95$  mm Hg) outliers (1, 5, and 9 in the 30, 50, and 70 mg/d groups, respectively). LS mean (95% CI) changes in pulse from baseline to endpoint for the 4 groups were 0.0 (-2.2, 2.2), 2.8 (1.2, 4.4), 4.2 (2.6, 5.9), and 5.2 (3.6, 6.8) bpm, respectively, and there were 4, 31, 43, and 26 pulse outliers, respectively, defined as  $\geq (\text{mean} + 2 \cdot \text{SD})$  or  $\leq (\text{mean} - 2 \cdot \text{SD})$ . LS mean (95% CI) changes in ECG QTc-F interval were -0.3 (-4.1, 3.4), 4.0 (1.3, 6.8), -1.8 (-4.6, 0.9), and 2.7 (0.0, 5.4) msec, respectively. No QTc-F interval exceeded 480 msec or changed  $\geq 60$  msec on treatment. There were no clinically meaningful ECG abnormalities. LS mean differences were significant for pulse ( $P < .05$  vs. placebo), but not for any SBP, DBP, or QTcF comparisons. **Conclusion:** Small increases in LS mean pulse were observed with LDX in a dose-dependent fashion. LDX had no clinically meaningful effects on SBP, DBP, or ECG parameters. Supported by funding from Shire Development Inc.

#### REFERENCES:

1. Biederman J, Krishnan S, Zhang Y, McGough JJ, Findling

RL: Efficacy and tolerability of lisdexamfetamine dimesylate (NRP-104) in children with attention-deficit/hyperactivity disorder: a phase III, multicenter, randomized, double-blind, forced-dose, parallel-group study. *Clin Ther* 2007; 29:450-463.

2. Biederman J, Boellner SW, Childress A, Lopez FA, Krishnan S, Zhang Y: Lisdexamfetamine dimesylate and mixed amphetamine salts extended-release in children with ADHD: a double-blind, placebo-controlled, crossover analog classroom study. *Biol Psychiatry* 2007; 62:970-976.

### POSTER 21. INHIBITING HIV BRAIN ENTRY

Ajay Bhatia, M.D., *1670 Upham Drive, OSUMC, Neurosciences Building, Columbus, OH 43210*

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to: 1.) Recognize the importance of blood brain barrier (BBB) integrity loss in contributing to CNS pathology during HIV infection; 2.) Identify the role of NMDA-mediated glutamate signaling in HIV neuropathogenesis and in BBB integrity; and 3.) Assess the potential for memantine, an NMDA inhibitor, to lower CNS complications from HIV.

#### SUMMARY:

**Introduction:** Two CNS sequelae of HIV, a) HIV-associated dementia (HAD) and b) Minor Cognitive Motor Disorder (MCMD) are related to BBB impairment. Low-risk prophylactic treatment with memantine may mitigate the course of a) and b) by strengthening BBB integrity. **Methods:** Literature analysis. **Results:** Presynaptic neurons regulate astrocytic control of CNS microcirculation and thereby BBB integrity. HIV infection compromises that integrity: 1] Basal levels of HIV infected CD4+ cells cross the BBB and 2] activate perisynaptic astrocytes which then enhance synaptic glutamate by reduced reuptake; 3] here, it binds NMDA receptors on presynaptic neurons, which in turn release glutamate themselves [glutamate amplification path]; this glutamate binds to astrocyte metabotropic glutamergic receptors (mGluR) releasing dilation factors at astrocytic endfeet surrounding CNS capillaries, and glutamate here binds to NMDA receptors on interneurons, releasing nitric oxide (NO); 4] released dilation factors and NO dilate capillaries, increasing BBB porosity, and 5] more HIV infected cells can enter the brain, leading to a second positive feedback cycle. Excess, prolonged dilation results in BBB disruption, allowing increased HIV brain entry, and ultimately a) and b). **Discussion:** It may be possible to strengthen BBB integrity in HIV with memantine. Memantine displaces and occupies Mg<sup>2+</sup>'s site at the external Ca<sup>2+</sup> channel opening of the NMDA receptor, forming a tighter plug than the more easily displaced Mg<sup>2+</sup>. This impedes Ca<sup>2+</sup> entry per channel opening. By NMDA inhibition (step 3] above), memantine may help break both feedback loops, helping maintain BBB integrity. **Conclusion:** Psychiatrists should be aware of HAD and MCMD in HIV, that astrocytes are critical to BBB integrity, that memantine may represent benign prophylactic treatment helping to maintain BBB integrity.

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### REFERENCES:

1. Avison MJ, Nath A, Green-Avison R, et al: Neuroimaging correlates of HIV-associated BBB compromise. *J Neuroimmunol* 2004; 157: 140-6.
2. Zonta M, Angulo MC, Gobbo S, et al.: Neuron-to-astrocyte signaling is central to the dynamic control of brain microcirculation. *Nat Neurosci* 2003; 6: 43-50.

### POSTER 22. A RANDOMIZED CONTROLLED TRIAL EVALUATING THE EFFICACY OF ACUPUNCTURE AS A TREATMENT FOR POST-TRAUMATIC STRESS DISORDER IN A MILITARY POPULATION

Charles Engel, M.D., M.P.H., *Uniformed Services University of the Health Sciences, Department of Psychiatry, 4301 Jones Bridge Road, Bethesda, MD 20814*, Elizabeth Harper Cordova, M.A., David Benedek, M.D., D.F.A.P.A., Kristie Gore, Ph.D., Elizabeth Osuch, M.D., Thomas Grieger, M.D., D.F.A.P.A., Christine Choate, Ph.D., Wayne Jonas, M.D., Robert Ursano, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Explain the background and rationale for the study; 2.) Describe the methodology and sample; and 3.) Identify the results, limitations, and future directions for research.

### SUMMARY:

Introduction: Post-Traumatic Stress Disorder (PTSD) is a debilitating condition affecting approximately 7%-8% of the adult population. It is associated with social and occupational impairment, co-morbid diagnoses, and increased health care utilization. Evidence suggests that 10-17% of soldiers returning from the Iraq War experience PTSD in the year following deployment, and many others have subthreshold PTSD symptoms. Yet soldiers often do not seek care because of stigma and lack of confidence in existing treatment options. Acupuncture, if effective, may be a more accepted form of PTSD treatment. It has been successfully used to treat stress, anxiety, and pain in a variety of settings, but remains unstudied in war veterans. We sought to assess the efficacy of acupuncture (versus usual care) for PTSD among military personnel. Methods: Four weeks of twice weekly manualized Chinese medicine acupuncture were administered. Soldiers diagnosed with PTSD were randomized to acupuncture (ACU) or usual care (UC) with 12 weeks of follow-up. Primary outcome was PTSD symptom severity measures by the PTSD Checklist (PCL). Secondary outcomes were depression (BDI) and functioning (SF-36). 42 of 55 (76%) randomized soldiers provided complete follow-up data. Results: Compared to UC, the mixed regression model found ACU was associated with a significantly greater decrease in PTSD symptoms, which was maintained through the 12-week follow-up (treatment X time,  $F(3, 128) = 10.92, p < .001$ ). Mean PCL decreases were 19.4 ( $\pm 11.7$ ) at end treatment and 19.8 ( $\pm 13.6$ ) at 12-week follow-up in ACU vs. 4.0 ( $\pm 12.3$ ) at end treatment and 9.7 ( $\pm 13.1$ ) at 12-week follow-up in UC. Similar patterns of improvement were seen with symptoms of depression and psychological functioning. Conclusion: Brief acupuncture

offers short-term benefit over usual care for military personnel with PTSD. Future studies should evaluate longer follow-up and acupuncture components.

### REFERENCES:

1. Hollifield, M, Sinclair-Lian, N, Warner, TD, Hamerschlag, R: Acupuncture for Posttraumatic Stress Disorder: A Randomized Controlled Pilot Trial. *J Nerv Ment Dis* 2007; 195:504-513.
2. Spence, DW, Kayumov, L, Chen, A, Lowe, A, Jain, U, Katzman, MA, Shen, J, Perelman, B, Shapiro, CM: Acupuncture increases nocturnal melatonin secretion and reduces insomnia and anxiety: A preliminary report. *J Neuropsychiatry Clin Neurosci* 2004; 16:19-28.

### POSTER 23. PREDICTORS OF IMPROVEMENT IN FUNCTIONAL DISABILITY IN ADOLESCENT PSYCHIATRIC INPATIENTS

Philip Harvey, Ph.D., *Professor of Psychiatry and Behavioral Sciences, Emory University School of Medicine, Woodruff Memorial Building, 101 Woodruff Circle, Suite 4000, Atlanta, GA 30032*, David L. Pogge, Ph.D., Liza Maldari, Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant will have an increased understanding of: 1.) The predictors of improvement in functional disability associated with inpatient treatment in adolescents; and 2.) The relative importance of clinical as compared to cognitive improvements associated with antipsychotic treatment

### SUMMARY:

Background: Functional disability in psychotic disorders is correlated with cognitive impairments and treatment of cognitive impairments have been hypothesized to potentially improve functional outcomes. These relationships hold up in both adults and adolescent populations. Much less is known about these relationships in nonpsychotic conditions and there is essentially no information about the relative importance of treatment of cognitive impairments, relative to symptomatic changes, for improving functional outcomes. Methods: Hospitalized adolescent inpatients ( $n=106$ ) who received their first treatment with antipsychotic medications were examined with clinical (depression, psychosis, mania, and disruptive behaviors), cognitive, and intellectual assessments, and ratings on a scale of functional disability (The HONOSCA) at the time of admission and 120 days after discharge. Results: Statistically significant ( $p < .05$ ) improvements were found for clinical symptoms, functional disability, and cognitive performance from baseline to endpoint. Regression analyses, controlling for IQ scores, found that a composite measure of clinical change accounted for 37% of the variance in functional improvements from admission to 120 day follow-up ( $p < .001$ ), while cognitive changes accounted for 1% of the variance in those change scores. Adjusting scores for medication adherence and subjective satisfaction with treatment did not influence these results. Conclusions: In nonpsychotic

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adolescent patients with low levels of cognitive impairments at baseline, improvements in cognitive functioning were much less important than clinical changes for improving functional disability.

### REFERENCES:

1. Harvey PD, Patterson TL, Potter L, Zhong K, & Brecher M. Improvement in Social Competence with Short-Term Atypical Antipsychotic Treatment: A randomized, double-blind comparison of Quetiapine vs. Risperidone for Social Competence, Social Cognition, and Neuropsychological Functioning *Am J Psychiatry* 2006; 163: 1918-1925.
2. Gowers, S.G., Harrington, R.C., Whitton, A., Lelliott, P., Beevor, A., Wing, J. et al. Brief scale for measuring the outcomes of emotional and behavioral disorders in children: Health of the Nation Outcome Scales for Children and Adolescents (HoNO-SCA). *Br J Psychiatry* 1999; 174: 413-416.

### POSTER 24. AN OPEN LABEL TRIAL OF OXCARBAZEPINE FOR EATING DISORDERS: CASE SERIES AND REVIEW OF THE LITERATURE

Parinda Parikh, M.D., *New York Presbyterian Hospital-Payne Whitney Westchester Division, Weill Cornell Medical College, 21 Bloomingdale Road, White Plains, NY 10605*, Elinore Kelly, R.N., Saurabh Kaushik, M.D., Dennis McNabb, M.S.W, Katherine Halmi, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Identify and understand the recent research on the association between impulsivity and eating disorders (anorexia nervosa and bulimia nervosa); 2.) Assess the treatment options that would benefit patients with eating disorders and comorbid impulsivity and the risks of treating this patient subgroup.

### SUMMARY:

Oxcarbazepine is effective in treating bipolar disorder and in controlling impulsive behavior and mood instability in patients with borderline personality disorder. The mechanism of action includes hippocampal serotonergic stimulation. There is an association between subthreshold bipolar disorder and eating disorders in adolescents and between hypomania and binge eating behavior in adults. As bulimia nervosa (BN) and anorexia nervosa binge/purge type (AN-b/p) are associated with impulsivity and serotonergic dysregulation, we hypothesized that oxcarbazepine will improve these symptoms. This study describes a multidimensional assessment of impulsivity in patients with eating disorders: 6 with BN and 2 with AN-b/p. All patients and parents of adolescents provided informed consent to take oxcarbazepine and have study evaluations. The self-report questionnaire Barratt's Impulsiveness Scale-version 11 (BIS-11) and Clinical Global Impression (CGI) (noted by the first author) were administered at baseline and then every 4 weeks for 12 weeks. Four adolescents and four adult patients, ages 15-35 years received 12 weeks of flexible dose oxcarbazepine (dose range 300-1200 mg/day) with weekly psychotherapy. The primary outcome measure was

impulsivity using the BIS-11. Safety, tolerability and adverse effects were assessed on a weekly basis. Statistical analysis was done using SPSS 13 with repeated measures ANOVA. There was statistically and clinically significant improvement between baseline and endpoint CGI and BIS-11 total scores and its subscales: Self-Control scores, Cognitive Stability scores, Attentional Impulsivity scores, Motor Impulsivity scores and Nonplanning Impulsivity scores. Oxcarbazepine is generally well tolerated and efficacious for impulsivity related symptoms in BN and AN-b/p. These findings warrant confirmation by randomized, double-blind, placebo-controlled studies for its efficacy in treatment of eating disorder patients with bingeing/purging symptoms.

### REFERENCES:

1. Klein M, Bardone-Cone A, Peterson C, Joiner T, Mitchell JE, Steiger H. Impulsivity and compulsivity in bulimia nervosa. *Int J Eat Disord.* 2005 Oct 6.
2. McElroy SL, Kotwal R, Keck PE Jr, Akiskal HS. Comorbidity of bipolar and eating disorders: distinct or related disorders with shared dysregulations? *J Affect Disord.* 2005 Jun;86(2-3):107-27.

### POSTER 25. ADAPTING AND EVALUATING DIALECTICAL BEHAVIOR THERAPY FOR TRANSITIONAL YOUTH WITH SEVERE MENTAL ILLNESS IN A RESIDENTIAL SETTING

Vanessa Vorhies, B.A., M.S.S.W., *4101 N. Ravenswood, Chicago, IL 60613*, Teresa Hardin, LCPC, CRC, CADC

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to describe DBT and its tenants, understand how DBT was effectively adapted for transitional youth with SMI, learn preliminary outcomes of the pilot study, and acquire knowledge of best practices that can be applied to this unique population.

### SUMMARY:

Introduction: Dialectical Behavior Therapy (DBT) is recognized as an evidenced-based treatment for borderline personality disorder (BPD). DBT emphasizes problem-solving and change with acceptance strategies. With transitional youth in residential settings, DBT is associated with decreases in self-injurious behaviors and hospitalizations (Sunseri, 2004), as well as increases in social networks, intentionality, and over-all functioning (Radfeldt, 2005). DBT was further adapted for female transitional youth with mental illness living in 2 supported residences, the majority of who are African American and Latina females, wards of the state, and some of whom are parenting. The DBT pilot study hypotheses include: 1.) Increases in distress tolerance, mindfulness, problem solving skills, service utilization, and independent living skills; and 2.) Decreases in hospitalizations, life-interfering behaviors, and childcare issues. Methods: The pilot study employs a retrospective review of data starting 3 months prior to DBT participation, in addition to, a quantitative review of behavioral outcomes and psychosocial assessment scores

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over 6 months of DBT participation. Clinical records, diary cards, and scales, such as the Kentucky Mindfulness Scale are used. Results: The pilot study is in the initial stages of data collection as the implementation of the adapted DBT model is the primary focus of the clinical teams. As of September 2008, data from a small sample of DBT participants (approx. n=12) will be analyzed. Process measures reveal challenges and opportunities for DBT implementation with transitional youth. Discussion: The adaption and implementation of DBT in a residential setting posed a number of challenges, but appears to have had a positive influence on participants. Best-practice suggestions include emphasis in gaining administrative and staff buy-in, consistent and continual trainings, and the use of creativity in engaging youth in services.

### REFERENCES:

1. Rakfeldt, J. (2005). Dialectical behavior therapy with transitional youth: Preliminary findings. *Best Practices in Mental Health*, 1(2), 61-76.
2. Sunseri, P.A. (2004). Preliminary outcomes on the use of dialectical behavior therapy to reduce hospitalization among adolescents in residential care. *Residential Treatment for Children and Youth*, 21(4), 59-76.

### POSTER 26. DELIRIUM WITH CATATONIC FEATURES: A NEW SUB-TYPE?

Antonio Lopez-Canino, M.D., 2414 Preston Road, Denison, TX 75020, Brenda Garro, M.D., Maria German, M.D., Steven A. Cole, M.D., Laura Kunkel, M.D., Christopher Burke, M.D., Andrew Francis, M.D., Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to identify common catatonic signs that have been seen in delirious patients, and discuss possible precipitants and management options.

### SUMMARY:

Background: The authors have observed delirious patients who appear to have catatonic features and sought evidence to support the validity of a new sub-type: delirium with catatonic features. Methods: We used four approaches: review of the delirium literature; re-analysis of case reports of delirium using the Bush-Francis Catatonia Rating Scale (BFCRS); re-assessment of 20 clinical reports of drug-induced catatonia for signs of concurrent delirium [Lopez-Canino and Francis, 2004]; and evaluation of 3 of our own recent cases of delirium with the BFCRS. Results: An 18-year English language PubMed search using the terms 'hypoactive delirium' and review of all reference lists, yielded 47 articles, only 1 of which noted the presence of catatonic features in delirium. However, 6 case reports of delirium were found with sufficient detail to determine the presence of multiple catatonic signs on the BFCRS (mean 4.7, range 2-7). In all 6 cases, the catatonia was attributed to recent benzodiazepine cessation. Twenty published cases of drug-induced catatonia were carefully analyzed for signs of delirium, yielding 7 cases [meeting Bush-Francis catatonia criteria] where delirium and

catatonia co-occurred. Of these, 6 were induced by disulfiram and 1 by steroids. Finally, 3 patients seen on the psychiatry consultation service with *DSM-IV* delirium were identified. They had 5, 7, and 11 BFCRS catatonic signs respectively, meeting both Bush-Francis and *DSM-IV* criteria for catatonia. Conclusion: To date, 16 cases have been identified with concurrent delirium and catatonia (13 from the literature and 3 new cases) supporting the existence of a catatonic sub-type of delirium. Further study of this sub-type is warranted as to its prevalence, validity, and careful testing whether established treatments of catatonia (e.g., benzodiazepines) are useful in management.

### REFERENCES:

1. Lopez-Canino, A., Francis, A. "Drug-Induced Catatonia." in Caroff, S., Mann, S., Francis, A., Fricchione, G. Co-editors. *Catatonia* American Psychiatric Press Inc., Washington, DC, 2004, 129-140.
2. Hauser P, Devinsky O, DeBellis M, et al. Benzodiazepine withdrawal delirium with catatonic features *Arch Neurol* 1989; 46: 696-699.

### POSTER 27. COURT ORDERED ASSISTED OUTPATIENT TREATMENT FOR MANAGEMENT OF SEVERE EATING DISORDERS

Ami Norman, M.S.W., *New York Presbyterian Hospital, 21 Bloomingdale Road, White Plains, NY 10605*, Parinda Parikh, M.D., Steven D. Roth, M.D, J.D, Nancy Pepe. J.D., M.S.W, Saurabh Kaushik, M.D., Katherine Halmi, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to learn about court ordered mandatory outpatient treatment for severe eating disordered patients; its clinical, legal and social perspectives.

### SUMMARY:

Anorexia and bulimia are associated with considerable morbidity and mortality, yet patients suffering from these disorders are often non-compliant with treatment, placing their lives at risk. In 2000, New York State instituted a program of assisted outpatient treatment ("AOT") for psychiatric patients for whom non-compliance with treatment had resulted in hospital admission. Initially conceptualized to assist patients suffering from psychotic disorders resulting in violence towards others, AOT has been utilized for patients with non-psychotic illnesses, including mood disorders and personality disorders. Involuntary treatment of eating disorders has always been controversial. Patients with eating disorders are often free of the psychosis or major mood symptoms for which compliance with psychotropic medication is thought to be critical, raising clinical and ethical concerns about the appropriateness of AOT in this population. Nevertheless, patients with eating disorders engage in restricting and purging behaviors that have the potential to cause life-threatening medical problems or even death, making treatment compliance imperative. Over the past two years, our eating disorders program has referred six patients for AOT. Follow-up shows decreased frequency

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and length of inpatient hospitalization, improved medical stability and improvement in quality of life, indicating that AOT has a place in the treatment of eating disorders.

### REFERENCES:

1. Watson TL, Bowers WA, Andersen AE. Involuntary treatment of eating disorders. *Am J Psychiatry*. 2000 Nov;157(11):1806-10.
2. Perlin ML. Therapeutic jurisprudence and outpatient commitment law: Kendra's Law and case study. *Psychol Public Policy Law*. 2003 Mar-Jun;9(1-2):183-208.

### POSTER 28. TAKOTSUBO CARDIOMYOPATHY- PSYCHOSOMATIC CONSIDERATIONS

George Costin, M.D., 900 S. Durkin, Springfield, IL 62704, David Resch, M.D., Vaskar Mukerji, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Recognize the clinical presentation and prognosis of Takotsubo cardiomyopathy (TC); 2.) Discuss proposed pathophysiologic mechanisms, diagnostic criteria and treatment of TC; and 3.) Promote further studies of the emotional triggers associated with TC and to propose an approach to the condition for psychiatrists.

#### SUMMARY:

Takotsubo cardiomyopathy (TC), also known as apical ballooning, stress cardiomyopathy or broken heart syndrome, is a reversible heart condition which was initially described in the Japanese literature in the 1990's. Many cases have now been reported worldwide. The typical presentation may mimic acute coronary syndrome. Frequently it occurs in elderly females in the context of emotional or physical stress. The ECG is abnormal and there may be elevation of cardiac enzymes. The echocardiogram and heart catheterization show regional wall motion abnormalities extending beyond a single epicardial vascular distribution. There is no evidence of obstructive coronary disease. Although there are no treatment guidelines, the symptoms usually resolve in a few days and the echocardiographic changes in a few weeks. A case of TC seen by both Cardiology and Psychiatry services is presented and the literature regarding the epidemiology, clinical presentation, laboratory tests, the proposed diagnostic criteria, approach to treatment and prognosis of TC is reviewed. The association between onset of TC and emotional triggers is striking. Although the pathophysiology of TC is still not clear, the hypothesis of catecholamine mediated myocardial stunning is suggested. TC is a psychosomatic condition that has received little attention in the psychiatric literature. Research on the psychiatric issues involved in the condition is necessary for a better understanding of this newly recognized important cardiac entity.

#### REFERENCES:

1. Prasad A. et al. Apical ballooning syndrome (Tako-Tsubo or stress cardiomyopathy): a mimic of acute myocardial infarction, *Am Heart J*. 2008 Mar;155(3):408-17.

2. Monica Giani et al. Apical ballooning syndrome or Takotsubo cardiomyopathy: a systematic review, *European Heart Journal*, (2006) 27, 1523- 1529.

### POSTER 29. PATTERNS AND PREVALENCE OF OPIOID DEPENDENCE, CHRONIC PAIN AND OPIATE USE: PANACEA OR THE PROBLEM

Farha Abbasi, M.D., 3806 Crooked Creek, Okemos, MI 48864, Jimmie Harris, D.O., Dale D'Mello, M.D., Carol Smith,

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to identify patterns of opiate dependence.

#### SUMMARY:

Opioid dependence is an increasingly common societal problem. The National Survey on Drug Use and Health reported that 2.5 million Americans used prescription opioids for non-medical purposes in the year 2002. These figures are possibly an under-estimate of the growing problem faced by primary care physicians involved in the management of chronic pain. A recent preliminary study found that a third of inpatients on a detoxification unit were abusing prescription opioids. Objective: The present study sought to examine trends in the prevalence of opioid dependence in an inpatient detoxification setting. Method: We examined the discharge diagnostic data for patients admitted to the Detoxification Unit at Sparrow/St Lawrence Hospital between the years 2002 and 2005. Results: The percent of patients who received detoxification treatment for opioid dependence doubled from 12.8 in 2002 to 25.5 in 2005. During the same period the percent of patients who received treatment for alcohol dependence remained relatively constant, ranging from 61 to 71 percent. Discussion: While alcohol dependence continues to be the discharge diagnosis for the majority of patients admitted to the addiction unit at St Lawrence/Sparrow Hospital, the incidence of opioid dependence displayed an upward trend. In face of the growing evidence it is imperative that caution be exercised in the prescription of opioid agents in the management of patients with chronic pain disorders. Clinical tools such as the Opioid Withdrawal Scale could aid in the early diagnosis of opioid dependence. New office based treatments now available for opioid dependence using opioid receptor agonists have improved treatment options and outcome. Opioid maintenance therapies have proven to be more effective than detoxification alone.

#### REFERENCES:

1. Emlyn S. Jones et al., Diagnosis and Pharmacological management of Opioid Dependency. *Hosp Physician*: Oct 2007, vol 43, Number 10.
2. Dworkin RH, et al. Advances in neuropathic pain: diagnosis, mechanisms, and treatment recommendations. *Arch Neurol*. 2003;60:1524-1534.

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### POSTER 30. IMPULSIVITY, SENSATION SEEKING AND AGGRESSION IN PATIENTS WITH BIPOLAR I AND II DISORDER

Lola Peris, M.D., *European Neuroscience Institute IDN, S Antonio M. Claret 135, Barcelona, Spain, 28002*, Pilar Sierra, M.D., Nestor Szerman, M.D., Lorenzo Livianos, M.D., Luis Rojo, M.D., Pablo Vega, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to acknowledge the differences in impulsivity between bipolar I and II patients without the bias of substance use and its proposed relations to polarity.

#### SUMMARY:

Introduction: Impulsivity seems to be a core feature in bipolar disorder as much as in substance use disorders. Almost 50% of bipolar patients abuse substances, a situation that may increase impulsivity and related features facilitating comorbidity, the strongest predictor of poor compliance and, therefore, worse prognosis. Very few studies have directly measured impulsivity in bipolar patients, most of them without excluding substance use. With this aim, we studied the relationship between impulsivity and aspects probably related to it as sensation seeking and aggression, and different clinical variables of bipolar disorder. Method: Sixty seven bipolar outpatients (type I= 42, type II= 27) in clinical remission and without substance use for at least six months completed Barratt Impulsiveness Scale (BIS), Sensation Seeking Scale (SSS) and Buss-Durkee Hostility Inventory (BDHI). Sociodemographic and clinical data were also obtained. Results: Type II bipolar patients scored significantly higher on BIS and BDHI physical aggression subscale. Patients with predominant depressive polarity also obtained significantly higher global scores on BDHI, while predominant manic polarity scored higher only on SSS experience seeking subscale. No differences were found relating to prior suicide attempts or psychiatric admissions. Smoking patients scored significantly higher on BIS non-planning subscale and SSS disinhibition subscale. Conclusions: Impulsivity and aggression are relevant aspects of bipolar disorders and show some differences in euthymic bipolar I and II patients without substance abuse. They could significantly increase comorbidity and, according to our results, especially in type II.

#### REFERENCES:

1. Swann AC, Dougherty DM, Pazzaglia PJ et al. Impulsivity: a link between bipolar disorder and substance abuse. *Bipolar Disord* 2004, 6 (3), 204-12.
2. Najt P, Perez J, Sanches M et al. Impulsivity and bipolar disorder. *Eur Neuropsychopharmacol* 2007, 17 (5), 313-20.

### POSTER 31. INCREASED DEEP SLEEP WITHOUT COGNITIVE OR PSYCHOMOTOR EFFECTS IN HEALTHY SUBJECTS AFTER AM OR PM DOSING WITH EPLIVANSERIN, A NOVEL SLEEP AGENT

*Supported by Sanofi-Aventis, Inc.*

Neil Stanley, Ph.D., *Clinical Research and Trials Unit, Medical Building, University of East Anglia, Norwich, Norfolk, NR4 7TJ, United Kingdom*, Ian Hindmarch, Ph.D., B.Sc., Stéphane Saubadu M.D., Astrid Delfolie, Aurélie Brunet Pharm.D, Jean-Louis Pinquier M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to understand the effects of eplivanserin, a novel sleep agent developed for treating chronic insomnia characterized by nighttime awakenings (CINA), that is an Antagonist of Serotonin Two A Receptors (ASTAR), on sleep, psychomotor activity, attention, short-term memory and alertness.

#### SUMMARY:

Introduction/hypothesis: We examined the effects of the novel sleep agent eplivanserin (EPL), a 5HT<sub>2A</sub> antagonist, on sleep architecture and daytime functioning in 16 healthy subjects [1,2]. Methods: Double-blind, double-randomized, placebo (PBO)-controlled, 4-period, cross-over study with a 1–2-week washout between each period. Single oral doses of EPL 1, 10 and 40 mg and PBO were given to healthy male subjects in either the evening or the morning. Sleep was assessed objectively by EEG and subjectively by Leeds Sleep Evaluation Questionnaire. Psychomotor function, memory and arousal were measured objectively via Critical Flicker Fusion (CFF), Choice Reaction Time, Compensatory Tracking and Sternberg memory-scanning tasks pre-dose and 2, 4, 6, 8, 10, 12, 24, 26 and 28h post-dose. Subjective assessment of drug activity was performed using Line Analogue Rating Scales. Results: Compared with PBO, EPL significantly increased 'deep'/slow wave sleep (SWS) time and decreased Stage 2 (light) sleep irrespective of dose or dosing time (P=0.0001 for each). Sleep efficiency (time asleep/time in bed; P=0.0004) and number of awakenings  $\geq$  120s were significantly reduced (P=0.03) with EPL. Time to sleep onset and total sleep time were unaffected. There were no detrimental effects on objective psychomotor function or memory, subjective ratings of 'hangover' or central nervous system (CNS) sedation, regardless of dose or dosing time. There was an apparent reduction in arousal (CFF thresholds) with EPL that was not dose related and, therefore, unlikely to indicate either a drug-related impairment or a decrease in CFF due to pupillary constriction (a known effect of 5HT<sub>2A</sub> receptor antagonists). No serious or severe treatment-emergent AEs were reported. Conclusion: Regardless of dose or dose timing, doubled SWS in healthy subjects without impairing daytime psychomotor function, short-term memory or inducing CNS impairment and hangover. This study was funded by Sanofi-Aventis, Inc.

#### REFERENCES:

1. Sanger DJ, Soubrane C, Scatton B: New perspectives for the treatment of disorders of sleep and arousal. *Ann Pharm Fr* 2007; 65(4):268–274.
2. Edinger JD, Glenn DM, Bastian LA, Marsh GR: Slow-wave sleep and waking cognitive performance II: Findings among middle-aged adults with and without insomnia complaints. *Physiol Behav* 2000; 70(1-2):127–134.

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### POSTER SESSION 2

THURSDAY, OCTOBER 2 3:00 p.m.-4:30 p.m.

#### BIOLOGIC APPROACHES TO TREATMENT: PART I

MODERATOR: ALTHA J. STEWART, M.D.

#### POSTER 32. PRESCRIBING FOR BETTER OUTCOMES: PROVIDING CLINICIANS WITH A RESOURCE FOR EVIDENCE-BASED PRESCRIBING INFORMATION

Leah Ranney, Ph.D., *University of North Carolina At Chapel Hill, 725 Martin Luther King Jr Boulevard, CB#7590, Chapel Hill, NC 27599*, Cathy L. Melvin, Ph.D, Tim Carey, M.D., Erin McClain, M.P.H.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should learn how drug effectiveness reviews are interpreted for clinical practice. Participants will also discover how evidence-based dissemination strategies can accelerate incorporation of available evidence into practice.

#### SUMMARY:

There have been major advances in the number and types of medications for psychiatric illness. However, as the number of medications within a class increases, so does the complexity of decision-making for the provider. While a systematic review of a medication class can inform the prescription of appropriate and effective treatments, reports generated by these reviews are often cumbersome and not used by physicians to inform prescribing. The purpose of our presentation is to help physicians utilize drug effectiveness reviews to improve patient care and reduce drug expenditures. A case study approach was used based on the May 2006 Drug Effectiveness Review Project of the use of antiepileptic drugs (AEDs) for treating bipolar mood disorder. The process of moving from a more than 700 page report on AEDs to 10 key concepts and 4 key messages relevant to AED prescribing will be described. We will discuss our use of proven marketing strategies to increase the likelihood that this and other drug class reviews are understood and used by physicians. We will describe our product development and report on audience research findings. Our results will help conference participants gain an understanding of how the echo-chamber of multiple case studies and pharmaceutical marketing strategies can produce prescribing patterns based on poor quality research. Participants will learn how drug effectiveness reviews are interpreted for clinical practice. They will discover how evidence-based dissemination strategies can accelerate incorporation of available evidence into practice. With an increasing number of agents available within a therapeutic class for many conditions, there is an expectation that clinicians be able to utilize drug reviews to improve patient care. This presentation addresses the dual challenge of interpreting available evidence from drug reviews and disseminating and incorporating this evidence into practice.

#### REFERENCES:

1. Goodman F, Glassman P, Maglione M, et al. Drug class review on antiepileptic drugs in bipolar mood disorder, neuropathic pain, and fibromyalgia. Portland: Oregon Evidence-based Practice Center; 2006. (Available online at either [www.prescribingforbetteroutcomes.com](http://www.prescribingforbetteroutcomes.com) or [http://www.ohsu.edu/drugeffectiveness/reports/documents/AED%20Final%20Report%20Update%201\\_unshaded.pdf](http://www.ohsu.edu/drugeffectiveness/reports/documents/AED%20Final%20Report%20Update%201_unshaded.pdf)).
2. Steinman MA, Bero LA, Chren MM, et al. Narrative review: The promotion of gabapentin: An analysis of internal industry documents. *Ann Intern Med* 2006;145:284-93.

#### POSTER 33. METHADONE MORTALITY: MYTH AND MATTER

Chandresh Shah, M.D., *Los Angeles VA Ambulatory Care Center, University of Southern California, 351 E. Temple Street, Los Angeles, CA 90012*

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to recognize extent of use of prescribed psychotropic medications as well as illicit drugs among patients receiving methadone; and its implication on potential risk for adverse outcome.

#### SUMMARY:

Disease, disability and death of celebrities often highlight the plea for help. Anna Nicole Smith's tragic death was sensationalized as Methadone Death. But the coroner's office had concluded that the cause of death might not be methadone alone, but methadone in combination with other drugs. Patients who have been actively participating in Methadone Maintenance Program for at least 180 days were evaluated for use of other prescription psychotropic drugs as well as of illicit drugs. There were 165 male patient (age = 57.22+7.36 years) receiving 62.26+25.59 mg of methadone daily. There were 120 patients receiving some psychotropic medications of which 30 receiving other opioids, 15 receiving benzodiazepines, 70 receiving antidepressants, 41 receiving antipsychotics, and 8 patients receiving mood-stabilizers. It was also noted that while 47.50% of patients received only one concomitant medication and 37.50% received 2 medications; 2.50% had received 5 concomitant medications. Review of urine toxicology results showed that only 45 patients (27.27%) were drug-free. Of those remaining 120 patients still using illicit drugs; 78 were using opioids, 56 benzodiazepines, 56 cocaine and 11 patients were using amphetamine. While almost half (48.33%) of these patients were positive for only one drug; 37.5% were for two drugs, 10% for three drugs and 4.17% for four drugs. More than half (55.15%) of the patients were receiving methadone and a psychotropic medication; and were abusing illicit drug at the same time during their treatment. These data show that prescription of concomitant psychotropic drugs and continued illicit drug use while receiving methadone is more of a norm rather than exception. Providers as well as patients need to recognize the high potential for an accident with serious and grave consequences. Judicial use of concomitant psychotropic

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drugs and complete abstinence from use of illicit drugs can minimize the risk adverse outcome.

### REFERENCES:

1. Fingerhut Lois A: Increases in Methadone-Related Deaths: 1999-2004. <http://www.cdc.gov/nchs/products/pubs/pubd/hestats/methadone1999-04/methadone1999-04.htm>.
2. Karch SB, Stephen BG: Toxicology and pathology of deaths related to methadone - retrospective review. *West J Med* 2000 Jan; 172 (1):11-4.

### POSTER 34. EXTENDED RELEASE QUETIAPINE FUMARATE (QUETIAPINE XR) MONOTHERAPY FOR MAJOR DEPRESSIVE DISORDER (MDD): A DOUBLE-BLIND, PLACEBO-CONTROLLED STUDY

*Supported by AstraZeneca Pharmaceuticals*

Richard Weisler, M.D., *Department of Psychiatry, University of North Carolina at Chapel Hill, 700 Spring Forest, Suite 125, Raleigh, NC 27609*, Mark Joyce, M.D., Lora McGill, M.D., Arthur Lazarus, M.D., M.B.A., Hans Eriksson, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to demonstrate knowledge and understanding of the efficacy and safety of once-daily extended release quetiapine fumarate (quetiapine XR) monotherapy in the treatment of patients with MDD as demonstrated by the results of a double-blind, randomized, placebo-controlled study.

### SUMMARY:

Objective: MDD is highly prevalent (U.S. lifetime prevalence estimate 13.2%). 1 Antidepressant treatment results in full remission in just 39% of patients with MDD. 2 This study (D1448C00001) evaluated the efficacy of once-daily extended release quetiapine fumarate (quetiapine XR) monotherapy compared with placebo in patients with MDD. Methods: 6-week randomized phase (2-week post-treatment phase) multicenter, double-blind study. Inclusion criteria: *DSM-IV* single episode or recurrent MDD, HAM-D total score  $\geq 22$ , HAM-D item 1 (depressed mood) score  $\geq 2$  at enrolment and randomization. Patients were randomized to quetiapine XR 50, 150 or 300mg/day or placebo. Primary endpoint: change from randomization to Week 6 in MADRS score. Other assessments included: HAM-D; CGI-S. Adverse events (AEs) were recorded throughout the study. Results: 723 patients were randomized: 182, 178, 179, and 184 to quetiapine XR 50, 150, 300mg/day, and placebo, respectively. Mean scores at baseline were: MADRS 30.9, 30.9, 30.6, and 30.5; HAM-D 25.6, 25.5, 25.7, and 25.5; HAM-A 19.6, 19.4, 19.7, and 19.3, respectively. At Week 6, all quetiapine XR groups significantly reduced mean MADRS score vs. placebo (-11.07): -13.56 ( $p < 0.05$ ) for 50mg, -14.50 ( $p < 0.001$ ) for 150mg, -14.18 ( $p < 0.01$ ) for 300mg. By Day 4, all quetiapine XR groups significantly reduced mean MADRS score vs. placebo (50 mg  $p < 0.01$ ; 150mg and 300mg  $p < 0.001$ ). Change in HAM-D at Week 6 was -12.35, -12.84, and -12.65 for quetiapine XR groups and -10.93 for placebo. Change in CGI-S at Week 6 was -1.43, -1.50 and -1.49 for quetiapine XR 50, 150 and

300mg/day vs. -1.11 for placebo ( $p < 0.05$ ). Most common AEs ( $> 10\%$  Weeks 1-6) in all groups were dry mouth, sedation, somnolence, headache, dizziness. Conclusion: In patients with MDD, quetiapine XR monotherapy (50, 150 and 300mg/day) is effective and generally well tolerated with symptom improvement seen as early as Day 4.

### REFERENCES:

1. Hasin DS, Goodwin RD, Stinson FS, Grant BF: Epidemiology of major depressive disorder: results from the National Epidemiologic Survey on Alcoholism and Related Conditions. *Arch Gen Psychiatry* 2005; 62:1097-1106.
2. Kennedy SH, Eisfeld BS, Meyer JH, Bagby RM: Antidepressants in clinical practice: limitations of assessment methods and drug response. *Hum Psychopharmacol* 2001; 16:105-114.

### POSTER 35. QUETIAPINE OR LITHIUM VERSUS PLACEBO FOR MAINTENANCE TREATMENT OF BIPOLAR I DISORDER AFTER STABILIZATION ON QUETIAPINE

*Supported by AstraZeneca Pharmaceuticals*

Richard Weisler, M.D., *University of North Carolina at Chapel Hill, Department of Psychiatry and Behavioral Science, 700 Spring Forest, Suite 125, Raleigh, NC 27609*, Willem A Nolen, M.D., Anders Neijber, M.D., Åsa Hellqvist, M.Sc., Björn Paulsson, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to evaluate the efficacy and safety of maintenance treatment with quetiapine monotherapy compared with switching to lithium or placebo, based on a large, long-term study of patients with bipolar I disorder whose acute episodes were stabilized on quetiapine.

### SUMMARY:

Introduction: Quetiapine combined with lithium or divalproex is an effective maintenance treatment for bipolar I disorder (1,2). This double-blind, randomized trial (D1447C00144) investigated quetiapine monotherapy as maintenance treatment, versus switching to placebo or lithium. Methods: Adults experiencing manic, depressed, or mixed episodes of bipolar I disorder received open-label quetiapine. Patients achieving stabilization (YMRS =12 and MADRS =12, 4 consecutive weeks) were randomized to continue quetiapine (300-800 mg/d) or to switch to placebo or lithium (target serum 0.6-1.2 mEq/L) for up to 104 weeks or a recurrent mood event. The primary endpoint was time to recurrence of any mood event. The study was terminated when interim analysis provided positive results. Results: Of 2438 patients starting open-label quetiapine, 1226 (50.3%) were randomized to study medication with 1172 (96%) in the ITT population. Mean median quetiapine dose was 546 mg/d; mean median lithium serum level was 0.63 mEq/L. Mean treatment duration at study termination was 191 days (quetiapine), 130 days (lithium), and 118 days (placebo). Time to recurrence of any

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mood event was significantly longer in patients continuing quetiapine versus switching to placebo (HR 0.29; 95% CI 0.23-0.38;  $P < 0.0001$ ), in patients switching to lithium versus placebo (HR 0.46; 95% CI 0.36-0.59;  $P < 0.0001$ ), and in patients continuing quetiapine versus switching to lithium (HR 0.66; 95% CI 0.49-0.88;  $P = 0.005$ ). Quetiapine and lithium significantly reduced time to recurrence of manic or depressed events compared with placebo. Safety findings were consistent with known profiles. Conclusions: In patients stabilized on quetiapine, continued quetiapine significantly decreased time to recurrence of any mood event versus switching to placebo. Switching to lithium was also more effective than placebo but conferred no additional benefit versus continuing quetiapine. Supported by funding from AstraZeneca Pharmaceuticals LP.

### REFERENCES:

1. Suppes T, Liu S, Paulsson B, Brecher M.: Maintenance treatment in bipolar I disorder with quetiapine concomitant with lithium or divalproex: a North American placebo-controlled, randomized multicenter trial. Poster presented at the 46th Annual Meeting of the American College of Neuropsychopharmacology, 9-13 December 2007; Boca Raton, Florida, USA.
2. Vieta E, Eggens I, Persson I, Paulsson B, Brecher M.: Efficacy and safety of quetiapine in combination with lithium or divalproex as maintenance treatment for bipolar I disorder. Poster presented at the 20th European College of Neuropsychopharmacology Congress, 13-17 October 2007; Vienna, Austria.

### POSTER 36. POST-HOC ANALYSIS OF A 6-MONTH POLYSOMNOGRAPHY STUDY OF RAMELTEON 8 MG USING 50% REDUCTION IN LATENCY TO PERSISTENT SLEEP AS A MEASURE OF EFFICACY

*Supported by Takeda Pharmaceuticals North America, Inc.*

Sherry Wang-Weigand, M.D., Ph.D., *Takeda Global Research and Development Center, Deerfield, IL 60015*, Francis Ogrinc, Ph.D., Maggie McCue, M.S., R.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to describe the effects of long-term ramelteon treatment in adults with chronic insomnia, using a 50% reduction in LPS as a measure of treatment efficacy.

### SUMMARY:

Introduction: Chronic insomnia is a condition that may require long-term treatment. Ramelteon is a selective MT1/MT2 melatonin receptor agonist indicated for the treatment of insomnia. This analysis evaluated long-term treatment of ramelteon in adults, using a 50% reduction in latency to persistent sleep (LPS) as an indicator of efficacy. Methods: Adults (18–79 years) with chronic insomnia received ramelteon 8 mg ( $n = 225$ ) or placebo ( $n = 222$ ) 30 minutes before bed every night for 6 months in a randomized, double-blind study. LPS was measured by polysomnography on the first 2 consecutive nights of Week 1, the last 2 nights of Months 1, 3, 5, and 6, and Week 1 of a 2-week, single-blind,

placebo run-out. Adverse events were monitored throughout the study. Next-day residual effects were measured at each office visit, and rebound insomnia and withdrawal effects were evaluated during the placebo run-out. In this post-hoc analysis, the primary endpoint was the percentage of patients with at least a 50% reduction in LPS from baseline during 6 months of ramelteon treatment versus placebo. Results: More subjects in the ramelteon group achieved at least 50% reduction in LPS at Week 1 (60.7% vs. 39.6%;  $P < 0.001$ ), Month 1 (64.0% vs. 51.4%;  $P = 0.005$ ), Month 3 (61.8% vs. 51.4%;  $P = 0.009$ ), Month 5 (60.9% vs. 51.4%;  $P = 0.017$ ), and Month 6 (61.8% vs. 53.2%;  $P = 0.047$ ), compared with the placebo group. Most adverse events were mild or moderate in severity. No statistically significant next-day residual effects were detected during ramelteon treatment, and no withdrawal symptoms or rebound insomnia were detected during the placebo run-out. Conclusions: Over 60% of adults with chronic insomnia experienced =50% reduction in LPS while on long-term ramelteon treatment without significant next-day residual effects. No rebound insomnia or withdrawal symptoms were detected after discontinuation of ramelteon. Financial Support: This study was supported by the Takeda Pharmaceutical Company.

### REFERENCES:

1. Wang-Weigand S, Mayer G, Roth-Schechter B. Long-term efficacy and safety of ramelteon 8 mg treatment in adults with chronic insomnia: results of a six-month, double-blind, placebo-controlled, polysomnography trial. *Sleep Biol Rhythms* 2007;5(Suppl 1):A156.
2. Roth T, Roehrs T. Insomnia: epidemiology, characteristics, and consequences. *Clin Cornerstone* 2003;5(3):5-15.

### POSTER 37. WITHDRAWN

### POSTER 38. RELATIONSHIP BETWEEN TREATMENT WITH RISPERIDONE LONG-ACTING THERAPY AND PSYCHIATRIC HOSPITALIZATION

*Supported by Ortho-McNeil Janssen Scientific Affairs, LLC*

Concetta Crivera, Pharm.D., M.P.H., *Ortho-McNeil Janssen Scientific Affairs, LLC, 1125 Trenton-Harbourton Road, Titusville, NJ 08560*, Chris M. Kozma, Ph.D., Riad Dirani, Ph.D., Lian Mao, Ph.D., Stephen C. Rodriguez, M.S., Wayne Macfadden, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to understand the association between hospitalizations for patients before and after being initiated on risperidone long-acting injection (RLAI) and adherence using data collected in a naturalistic setting.

### SUMMARY:

Introduction: We evaluated the relationship between treatment with risperidone long-acting injection (RLAI) and hospitalization. Methods: Data from a 2-year observational study of schizophrenia patients initiated on RLAI were

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analyzed for those with at least 2 subsequent visits, 2 or more RLAI injections and hospitalization data. Up to 1 year of data before and after baseline visit were analyzed. After initiation of RLAI, hospitalization was evaluated by using independent logistic regression models for each adherence measure with prior hospitalization, age, gender, duration of observation, age at first diagnosis, and baseline Clinical Global Impression scores as covariates. Adherence measures: medication persistence, consistence, medication possession ratio (MPR) and maximum gap (MG) in therapy. Model fit was evaluated with the Hosmer-Lemeshow statistic. Results: 345 patients met inclusion criteria. Mean (SD) age was 42.1 (12.8) years, 66.7% were male, and patients were observed for an average of 45.1 weeks (range: 4–52). The mean (SD) RLAI persistence was 92.9% (19.4%) and the mean (SD) consistence was 85.1% (16.1%); the mean (SD) MPR was 78.4% (22.3%); and the mean (SD) MG while using RLAI was 18.6 days (22.6). A significantly lower percentage of patients were hospitalized in post-RLAI vs. pre-RLAI (20.3% vs. 34.5%;  $P < 0.0001$ ). Upon initiating RLAI, MG, MPR, persistence and prior hospitalization were found to be significant predictors of hospitalization; 10 days of MG (while on RLAI) predicted a 13.2% increase in hospitalization, and a 10% increase in MPR predicted a 12.5% decrease in hospitalization. The model fit was acceptable. Conclusion: Patients switched to RLAI treatment experienced lower hospitalization rates than before RLAI treatment. Upon initiation of RLAI, greater adherence to treatment was a predictor of a lower percentage of hospitalizations. Supported by funding from Ortho-McNeil Janssen Scientific Affairs, LLC.

### REFERENCES:

1. Leal A, Rosillon D, Mehnert A, Jarema M, Remington G: Healthcare resource utilization during 1-year treatment with long-acting, injectable risperidone. *Pharmacoepidemiol Drug Saf* 2004; 13(11):811-816.
2. Ehret MJ, Fuller MA: Long-acting injectable risperidone. *Ann Pharmacother* 2004; 38(12):2122-2127.

### POSTER 39. THE METABOLIC PROFILE OF ILOPERIDONE: SUMMARY OF PHASE III SCHIZOPHRENIA TRIALS

*Supported by Vanda Pharmaceuticals*

John Feeney, M.D., 9605 Medical Center Drive, Suite 300, Rockville, MD 20850, Stephen Stahl, M.D., Paolo Baroldi, M.D., Ph.D., Curt D. Wolfgang, Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Demonstrate an understanding of the metabolic changes associated with antipsychotic therapy; and 2.) Recognize the effects of iloperidone treatment on metabolic parameters and body weight in patients with schizophrenia.

### SUMMARY:

Background: Many atypical antipsychotics are associated with adverse effects on metabolic parameters that may increase diabetes and cardiovascular risk. Iloperidone is a mixed D2/5-

HT2 antagonist for the treatment of schizophrenia. Body weight, blood glucose, cholesterol, triglyceride, and prolactin level changes were assessed in a pooled analysis. Methods: Four 4- to 6-week, phase III, double-blind, placebo-controlled trials of adults with schizophrenia were included in the analysis. Changes in weight and metabolic parameters were evaluated. Results: A total of 2505 patients (iloperidone 4-24 mg/day,  $n=1344$ ; haloperidol 5-20 mg/day,  $n=118$ ; risperidone 4-8 mg/day,  $n=306$ ; ziprasidone 160 mg/day,  $n=150$ ; placebo,  $n=587$ ) were included. Mean change from baseline to endpoint in body weight was +2.0 kg in the iloperidone group, -0.1 kg in the haloperidol group, +1.5 kg in the risperidone group, +1.1 kg in the ziprasidone group, and 0.1 kg in the placebo group, and the respective rates of meaningful weight gain (defined as =7% increase) from baseline to endpoint were 13.5%, 5.1%, 11.9%, 5.4%, and 4.3%. Mean change at endpoint in blood glucose levels was +9.0 mg/dL with iloperidone, +14.4 mg/dL with haloperidol, +1.8 mg/dL with risperidone, +9.0 mg/dL with ziprasidone, and 0.0 mg/dL with placebo. Respective mean changes at endpoint in total cholesterol were 0.0, +3.9, -3.9, +3.9, and -7.7 mg/dL, and respective mean changes at endpoint in triglycerides were -17.7, -8.8, -26.5, +8.8, and -26.5 mg/dL. Mean change at endpoint in prolactin levels in patients on iloperidone was -1.8  $\mu\text{g/L}$ ; on haloperidol, +23.1  $\mu\text{g/L}$ , on risperidone, +34.5  $\mu\text{g/L}$ ; on ziprasidone, +2.0  $\mu\text{g/L}$ ; and on placebo, 8.0  $\mu\text{g/L}$ . Conclusions: Pooled analysis results indicate that iloperidone has a favorable short-term metabolic profile, with values similar to or better than the comparator antipsychotics used in these clinical trials. Vanda Pharmaceuticals sponsored this study.

### REFERENCES:

1. Kalkman HO, Feuerbach D, Lotscher E, Schoeffter P: Functional characterization of the novel antipsychotic iloperidone at human D2, D3, 2C, 5-HT6, and 5-HT1A receptors. *Life Sci* 2003; 73:1151-1159.
2. Newcomer JW: Metabolic considerations in the use of antipsychotic medications: a review of recent evidence. *J Clin Psychiatry* 2007; 68(suppl 1):20-27.

### POSTER 40. ASSESSMENT OF CROSS-COUNTRY DIFFERENCES IN BIPOLAR PATIENTS IN THE UNITED STATES AND INDIA AND THE EFFICACY OF RISPERIDONE LONG-ACTING INJECTABLE

*Supported by Ortho-McNeil Janssen Scientific Affairs*

Norris Turner, Pharm.D., Ph.D., 1125 Trenton-Harbourton Road, Titusville, NJ 08560, Wayne Macfadden, M.D., Ibrahim Turkoz, M.S., J. Thomas Haskins, Ph.D., Reuven Ferziger, M.D., Larry Alphas, M.D., Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant will recognize how cross-country differences in baseline demography and psychiatric history between bipolar patients in the United States and India affect the efficacy of risperidone long-acting injectable adjunctive to treatment as usual in delaying time to relapse in patients with bipolar disorder who relapse frequently.

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### SUMMARY:

**Introduction:** This multinational (United States [USA], India) study is the first controlled trial of a long-acting, injectable atypical antipsychotic in patients with bipolar disorder who relapse frequently. Baseline demographics, psychiatric history, disposition and primary efficacy data for patients from both countries were compared. **Methods:** A double-blind (DB) placebo (PBO)-controlled study was conducted to assess adjunctive risperidone long-acting injectable (RLAI) to treatment as usual (TAU) in patients with bipolar disorder who relapse frequently ( $\geq 4$  mood episodes in the past 12 months). After a 16-week, open-label (OL) stabilization phase with RLAI+TAU, patients who remitted were eligible to enter the 52-week, DB, relapse-prevention phase in which they received RLAI+TAU or PBO+TAU. A post-hoc analysis stratified data by country and assessed relapse rates and other endpoints. **Results:** Of the 275 patients who entered the OL phase, 98 were from the USA and 177 were from India. Patient variables at OL baseline that differed between the USA and India included gender, race, weight, most recent mood episode, lifetime suicide attempts and past hospitalizations. A total of 23 patients in the USA and 116 in India achieved remission in the OL phase and entered the DB phase. In the USA, relapse rates were 23.1% (3/13) with RLAI+TAU and 60.0% (6/10) with PBO+TAU. Rates in India were 22.0% (13/59) and 45.6% (26/57), respectively. Patients in the PBO+TAU group were  $>2$  times more likely to experience a relapse compared with the RLAI+TAU group ( $P=0.004$ ). The hazard of relapse for country was 0.62, which was not significant (95% confidence interval: 0.30, 1.27;  $P=0.190$ ). **Conclusion:** Despite differences in demographic features, aspects of psychiatric history and remission rates, the relapse rates and estimated delay in time to relapse appeared similar between the countries, with no unexpected patterns in safety results. Supported by Ortho-McNeil Janssen Scientific Affairs.

### REFERENCES:

1. Han C, Lee MS, Pae CU, et al. Usefulness of long-acting injectable risperidone during 12-month maintenance therapy of bipolar disorder. *Prog Neuropsychopharmacol Biol Psychiatry*. 2007;31(6):1219-1223.
2. Patel V, Andrade C. Pharmacological treatment of severe psychiatric disorders in the developing world: lessons from India. *CNS Drugs*. 2003;17(15):1071-1080.

### POSTER 41. ADJUNCTIVE RISPERIDONE LONG-ACTING INJECTABLE DELAYS RELAPSE TO A MOOD EPISODE IN PATIENTS WITH BIPOLAR DISORDER WHO RELAPSE FREQUENTLY

*Supported by Ortho-McNeil Janssen Scientific Affairs*

Larry Alphs, M.D., Ph.D., 1125 Trenton-Harbourton Road, Titusville, NJ 08560, Wayne Macfadden, M.D., Norris Turner, Ph.D., Ibrahim Turkoz, Ph.D., Cynthia Bossie, Ph.D., Dean Najarian, Pharm.D., J. Thomas Haskins, Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant will recognize the role of adjunctive risperidone long-acting

injectable with treatment as usual in delaying recurrence of mood episodes in patients with bipolar disorder who relapse frequently.

### SUMMARY:

**Introduction:** Bipolar disorder is characterized by periodic episodes of mood disturbance and presents in some patients as frequent relapses, resulting in a significant health care burden. We hypothesized that risperidone long-acting injectable (RLAI) given adjunctively to treatment as usual (TAU) would delay relapse in patients with bipolar disorder who relapse frequently. **Methods:** A randomized, double-blind, placebo-controlled study assessed TAU, with and without adjunctive RLAI, in patients with bipolar disorder who relapse frequently ( $\geq 4$  episodes in the past 12 months). After a 16-week, open-label (OL) stabilization phase with RLAI+TAU, patients who achieved stable remission were eligible to enter the 52-week, double-blind (DB), relapse-prevention phase. The primary efficacy measure was time to relapse of a mood episode, as determined by a blinded, independent relapse monitoring board. **Results:** 275 patients entered the OL phase; 139 of those patients remitted and entered the DB phase in which they continued TAU and were randomized to receive adjunctive treatment with RLAI (25-50 mg intramuscular) ( $n=72$ ) or intramuscular placebo ( $n=67$ ). Mean age was 39.1 $\pm$ 11.8 and 71.9% were male. Completion rates were 59.7% with RLAI+TAU and 43.3% with placebo+TAU. Time to relapse was significantly longer with RLAI augmentation than with placebo ( $P=0.004$ , log-rank test). The relative risk of relapse was 2.4-fold higher with placebo+TAU than with RLAI+TAU; relapse rates were 47.8% ( $n=32$ ) and 22.2% ( $n=16$ ), respectively ( $P<0.01$ ). Most common adverse events (RLAI+TAU vs. placebo+TAU): tremor (23.6% vs. 16.4%), insomnia (19.4% vs. 23.9%), muscle rigidity (11.1% vs. 6.0%), weight increase (6.9% vs. 1.5%) and hypokinesia (6.9% vs. 0.0%). **Conclusion:** In patients with bipolar disorder who relapse frequently, use of adjunctive RLAI with TAU significantly delays the time to mood episode relapse, with no unexpected safety or tolerability trends. Supported by Ortho-McNeil Janssen Scientific Affairs.

### REFERENCES:

1. Rendell JM, Geddes JR. Risperidone in long-term treatment for bipolar disorder. *Cochrane Database Syst Rev*. 2006;18(4):CD004999.
2. Han C, Lee MS, Pae CU, et al. Usefulness of long-acting injectable risperidone during 12-month maintenance therapy of bipolar disorder. *Prog Neuropsychopharmacol Biol Psychiatry*. 2007;31(6):1219-1223.

### POSTER 42. PRIAPISM ASSOCIATED WITH QUETIAPINE DOSE INCREASE: A CASE REPORT AND REVIEW OF THE LITERATURE

Xiangyang Zhao, M.D., M.S., 11732 Lake Ave #105, Lakewood, OH 44107, Sherif Soliman, M.D., Aashish Patel M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be

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able to: 1.) Decide that priapism is an infrequent adverse effect of quetiapine, as well as other atypical antipsychotic medications, with possible, severe sequela; and 2.) Evaluate patient education of priapism to ensure that its justified before administration and dose adjustment of quetiapine.

### SUMMARY:

Background: Priapism is a persistent, painful penile or clitoral erection or engorgement not associated with sexual stimuli. Priapism is a rare side effect of quetiapine. Only a few of cases were reported before. Objective: 1.) To report one case of priapism associated with quetiapine dose increase; 2.) To review the mechanism of psychotropic-induced low-flow priapism; and 3.) To review the literature regarding quetiapine induced priapism. Methods: 1.) Case report and review of the literature; 2.) Medline search with the keywords: quetiapine and priapism. Conclusion: 1.) We report possibly the first case of quetiapine dose-related priapism; 2.) Priapism is an infrequent adverse effect of quetiapine, as well as other atypical antipsychotic medications, with possible, severe sequela; and 3.) Adequate patient education of priapism is justified before administration and dose adjustment of quetiapine.

### REFERENCES:

1. Compton, M.T. and A.H. Miller, Priapism associated with conventional and atypical antipsychotic medications: a review. *J Clin Psychiatry*, 2001. 62(5): p. 362-6.
2. Pais, V.M. and P.J. Ayvazian, Priapism from quetiapine overdose: first report and proposal of mechanism. *Urology*, 2001. 58(3): p. 462.

### POSTER 43. METABOLIC EFFECTS OF ARIPIPRAZOLE ADJUNCTIVE THERAPY IN THE SUBPOPULATIONS WITH MAJOR DEPRESSIVE DISORDER (CN138-139 AND CN138-163)

Ross Baker, Ph.D., M.B.A., *Bristol-Myers Squibb, 777 Scudders Mill Road, Plainsboro, NJ 08536-1615*, Maurizio Fava, M.D., Robert M. Berman, M.D., Quynh-Van Tran, Pharm.D., Robert D. McQuade, Ph.D., Ying Qi, Ph.D., Berit X. Carlson, Ph.D., Ronald N. Marcus, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to understand the metabolic effects of aripiprazole augmentation of standard antidepressant therapy in patients diagnosed with major depressive disorder.

### SUMMARY:

Objective: To evaluate the metabolic effects of aripiprazole adjunctive to standard antidepressant therapy (ADT) versus adjunctive placebo in the treatment of patients with major depressive disorder. Methods: Data were pooled from two identical aripiprazole augmentation studies (1, 2) both consisting of an 8-week prospective ADT phase and a 6-week randomized phase (adjunctive aripiprazole or placebo) in order to evaluate metabolic changes. Mean changes from baseline were compared for waist circumference (WC) and the following metabolic parameters: fasting total cholesterol (C), high-density lipoprotein cholesterol (HDL-C), low-

density lipoprotein cholesterol (LDL-C), fasting triglycerides (TG), fasting plasma glucose, and hemoglobin A1C (HbA1C). Baseline was the mean level at completion of the prospective ADT phase. Statistical comparisons were made using ANCOVA. Correlation was calculated between changes in body weight and changes in fasting TG and between dose level and pooled change in body weight. Results: Adjunctive aripiprazole produced no significant change versus placebo in mean total WC, C, HDL-C, LDL-C, fasting plasma glucose, or HbA1C. After adjusting for baseline differences in TG (aripiprazole 142.7 mg/dL; placebo 160.1 mg/dL,  $p < 0.04$ ), there was no significant difference for fasting TG in the median change from baseline (4 mg/dL aripiprazole and 0 mg/dL placebo;  $p = 0.128$ ). Mean weight changes were as follows: +1.89 kg in patients receiving doses  $< 7.5$  mg ( $n = 111$ ); +1.36 kg in those receiving 7.5-to-12.5 mg ( $n = 89$ ); and +1.86 kg in those receiving  $> 12.5$  mg ( $n = 146$ ). Change in body weight did not correlate with change in fasting TG levels. Conclusions: Overall, the short-term metabolic effects of adjunctive aripiprazole versus adjunctive placebo were not significant, with the exception of weight gain. Changes in body weight appeared to be non-dose-related and did not correlate in either group with changes in TG levels.

### REFERENCES:

1. Berman RM, Marcus RN, Swanink R, et al: The efficacy and safety of aripiprazole as adjunctive therapy in major depressive disorder: a multicenter, randomized, double-blind, placebo-controlled study. *J Clin Psychopharmacol* 2007;68:843-853.
2. Marcus RN, Berman RM, McQuade RD, et al: The efficacy and safety of aripiprazole as adjunctive therapy in major depressive disorder: a second multicenter, randomized, double-blind, placebo-controlled study. *J Clin Psychopharmacol* 2008;28:156-165.

### POSTER 44. A LITERATURE REVIEW OF USE OF ELECTROCONVULSIVE THERAPY FOR CHILDHOOD PSYCHOPATHOLOGY: AN UPDATE ON 60-YEARS OF USE

Crystal Manuel, M.D., *Department of Psychiatric Medicine, Brody School of Medicine at ECU, Brody Health Sciences Building, Suite 4E-100, 600 Moye Boulevard, Greenville, NC 27834*, Marcus Carden, M.S., Sy Saeed, M.D., Richard Bloch, Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Summarize the current evidence regarding the use of ECT in cross-cultural pediatric populations; 2.) Recognize that literature from around the world has documented use of ECT in many pediatric psychiatric disorders, including depression, bipolar disorder, schizophrenia, catatonia, etc; and 3.) Recognize that while ECT in the younger population appears to have similar effectiveness and side effects to ECT in adults, there is a lack of controlled, systematic evidence which warrants more research.

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### SUMMARY:

**Introduction:** Since the 1930s, ECT has been an effective treatment option for adults with mood and psychotic disorders. However, ECT has not been generally used as a treatment option for children and adolescents, despite guidelines published by the American Psychiatric Association and the UK Royal College of Psychiatrists for its use. **Objective:** Pharmacological treatment for certain psychiatric disorders in pediatric populations are limited, often ineffective, or may cause significant adverse effects. Hence, it is valuable to consider the efficacy and safety of other available somatic treatments, such as electroconvulsive therapy. A comprehensive 50-year systematic review of ECT for childhood psychopathology suggested that safety and efficacy was similar to that in adults, but that the evidence base was thin. This review provides an update to see if the last 10 years have added significantly to the evidence base and if reluctance to use ECT has changed. **Method:** We reviewed the English literature databases on the efficacy and safety of ECT use, for any psychiatric indication, in pediatric populations around the world. We also examined the evidence for or against the notion that ECT may be used inappropriately in children and adolescents. **Conclusion:** Publications regarding the use of ECT in children and adolescents goes back over six decades. While there is an overall lack of controlled, systematic evidence, the use of ECT in youth continues to appear to be as effective and safe as in adults. Authors contend the major drawback to using it more frequently, however, has both an educational and ethical component. Most psychiatrists are not introduced to nor trained in pediatric ECT use during their years of formal training. Also, there is anxiety that child and adolescent brain development could be adversely affected, although there is no clear evidence suggesting this to be the case. These concerns have, however, slowed systematic and randomized control.

### REFERENCES:

1. Rey, Joseph M. and Walter, Garry. Half a Century of ECT Use in Young People. *Am J Psychiatry* 1997; 154:595–602.
2. Hegeman, J.M.; Doesborgh, S.J.C.; van Niel, M.C.; and van Megen, H.J.G.M. The efficacy of electroconvulsive therapy in adolescents. A retrospective study. *Dutch Journal of Psychiatry* 50 (2008) 1, 23-31.

### POSTER 45. ECT FOR VIOLENCE, AGGRESSION AND AGITATION IN STATE HOSPITAL AND FORENSIC PATIENTS WITH PSYCHOTIC DISORDERS: A PROGRAM EVALUATION

Katherine Maloy, M.D., *Bellevue Hospital, 462 1st Avenue, NB20 N11, New York, NY 10016*, Yanina Brayman, M.D., Anzalee Khan, Ph.D., Jean-Pierre Lindenmayer, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to recognize the potential utility of ECT as a treatment for violence, aggression and agitation in patients with chronic psychotic disorders.

### SUMMARY:

Patients with treatment resistant Schizophrenia and Schizoaffective Disorder who have symptoms of violence, aggression and agitation present a unique challenge for treatment. Violent, difficult to manage patients are frequently those referred for long-term state hospitalization. Only clozapine has been shown to reduce violent behavior (1), and many patients are either unable to tolerate the medication or remain with significant symptoms despite it. There is a robust literature and experience with ECT as a treatment for depression, suicidality and mania, but much less experience with ECT in patients with primary psychotic disorders (2). Our investigation is a retrospective evaluation of the ECT program at Manhattan Psychiatric Center and Kirby Forensic Psychiatric Center for the years 2005-2007, specifically examining the treatment of 16 treatment-resistant patients with schizophrenia or schizoaffective disorder who were referred to ECT for treatment of violent behavior, aggression and/or agitation. Outcome measures were number of restraint episodes, seclusion episodes, assaults and “as needed” (prn) medication episodes in the 6 months after the treatment period, as compared to during the treatment period and 6 months before the treatment period. 56.25% of the patients had prior trials of clozapine and 68.75% had prior trials of lithium and valproate plus another mood stabilizer, indicating a severely refractory population. There was a statistically significant reduction in the number of seclusion episodes and PRN episodes post-treatment, but no significant change in number of assaults or restraint episodes. Given these results, ECT should be considered in treatment-refractory patients who have significant symptoms of violence, agitation or aggression who have failed to respond to pharmacologic treatment.

### REFERENCES:

1. Glazer WM, Dickson RA: Clozapine Reduces Violence and Persistent Aggression in Schizophrenia. *J. Clin Psychiatry* 1998; 59(suppl. 3) 8-14.
2. Konig P, Glatzer-Gotz U: Combined Electroconvulsive and Neuroleptic Therapy in Schizophrenia refractory to neuroleptics. *Schizophrenia Res* 1990; 3:351-354.

### POSTER 46. LITHIUM: DURATION ON TREATMENT AND CORRELATION WITH RENAL IMPAIRMENT

Susan Moore, M.D., *4 Cenacle Grove, Killiney, Co. Dublin, Ireland*, Vidis Donnelly M.D., Mary Anderson, B.A., Niamh Farrelly, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation the participant should be able to recognize the importance of regular monitoring of renal function regardless of age and duration on lithium treatment.

### SUMMARY:

**Introduction:** Impaired renal function is a well established effect of lithium treatment. However, the evidence linking duration of lithium exposure and renal impairment is less well

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documented. This study aims to determine the length of time on lithium and risk of renal impairment. Methods: Computer records of all patients on lithium attending St. Patrick's psychiatric hospital, Dublin in 2006 (in/out patients) were evaluated (n=1281). Creatinine levels were obtained and an eGFR calculated using the abbreviated MDRD (sex, gender). Normal renal function was taken as eGFR > 80ml/min/1.73m<sup>2</sup>, mild renal impairment 60-80, moderate 30-59, severe <30. Duration of lithium exposure was obtained through a targeted chart review and assigned lithium reference number. Correlation coefficients were calculated using Microsoft Excel. Results: N=1280, male=45.6%. Duration on lithium, (eGFR): >10years n=353 (eGFR<30, severe=1.7%, 30-59, moderate=49.3%, 60-80, mild=45%, >80, normal=4%). 6-10years n= 235 (eGFR <30, severe=0.8%, 30-59, moderate=33.6%, 60-80, mild=57.4%, >80, normal=8.1%). 3-6 years n= 212 (eGFR <30, severe=0.5%, 30-59, moderate=34.4%, 60-80, mild =54.3%, >80, normal=10.8%). 18 months-3years n= 149 (eGFR <30, severe=0%, 30-59, moderate=30.2%, 60-80, mild =53.7%, >80, normal=16.1%). 0-18 months n= 331 (eGFR <30=0%, 30-59=33.5%, 60-60-80=53.5%, >80=13%). Normal renal function was found in 9.7% of total, mild renal impairment 52%, moderate 37.7%, severe 0.6%. Pearson value between duration and eGFR was -0.23 (p=0.000). Age had a moderate negative correlation with eGFR (Pearson value -0.557, p=0.000). There was an absence of correlation between eGFR and duration. Conclusion: Our study showed a moderate correlation between age and eGFR. We did not find a correlation between duration and eGFR. This confirms the importance of regular monitoring of renal function regardless of duration on lithium. Frequency of monitoring needs to be further established.

### REFERENCES:

1. Levey AS, Greene T, Kusek J and Beck G: A simplified equation to predict glomerular filtration rate from serum creatinine. *J Am Soc Nephrol.* 2000; 11:155.
2. Lepkifker E, Iancu I, Horesh N, Strous RD, Kotler M: Renal insufficiency in long-term lithium treatment. *J Clin Psychiatry.* 2004; 65(6):850-6.

### POSTER 47. DO EARLY CHANGES IN TRIGLYCERIDES PREDICT LATER CHANGES DURING OLANZAPINE TREATMENT FOR SCHIZOPHRENIA AND SCHIZOAFFECTIVE DISORDER?

*Supported by Eli Lilly and Company*

Vicki Hoffmann, Pharm.D., *Lilly Corporate Center, Indianapolis, IN 46285*, Michael G. Case, M.S., Virginia Stauffer, Pharm.D., Jennie Jacobson, Ph.D., Robert Conley, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to use early changes in fasting serum triglyceride concentrations during olanzapine treatment to assess risk of clinically significant changes in triglyceride concentrations after 6 months of treatment.

### SUMMARY:

Purpose: To characterize changes in fasting serum triglycerides during olanzapine treatment and determine if changes in triglyceride concentrations early in treatment predict clinically significant changes at 6 months. Methods: Fasting triglyceride data were from three 6-month, active-comparator, clinical trials for treatment of schizophrenia or schizoaffective disorder. Minimum age = 18 years for all trials. Maximum age = 75, 60 and 55 years for Trials 1, 2, and 3 respectively. Analyses included only patients with fasting triglyceride data at all protocol-specified time-points. In Trials 1, 2 and 3 respectively, 277, 202 and 281 patients were randomized to olanzapine; 127, 46 and 125 patients met analysis criterion. Patients were categorized according to change from baseline in triglycerides at Weeks 5-13 and Weeks 22-30. Cut-points of 20, 30, 40 and 50mg/dL change in triglycerides from baseline were used for Weeks 5-13. Positive and negative predictive values (PPV, NPV) were calculated for all cut-off points. Results: Mean baseline fasting triglyceride concentrations (SD; standard deviation) were 133.5mg/dL (98.1), 210.4mg/dL (214.8) and 147.1mg/dL (96.8), respectively for trials 1, 2 and 3. Mean changes from baseline at endpoint (SD) were 41.0mg/dL (115.7), 9.1mg/dL (124.4), and 37.2mg/dL (97.1) for Trials 1, 2 and 3. In all trials, the largest change was seen in first 9 weeks of treatment. Given a <20mg/dL early change in triglycerides, probability of a =50mg/dL change at 6 months ranged from 12% to 17%. NPVs ranged from 83.3 to 87.7%. PPVs ranged from 40.0 to 46.2%. Results for other cut-points will also be presented. Conclusions: Early assessment of fasting triglyceride concentrations can help identify patients who may be at risk for clinically significant changes with longer treatment. While NPV values are informative, risk of triglyceride increase is still present. Clinicians should continue to monitor serum triglycerides. Funded by Eli Lilly and Company.

### REFERENCES:

1. Kinon BJ, Lipkovich I, Edwards SB, Adams DH, Ascher-Svanum H, Siris SG. A 24-week randomized study of olanzapine versus ziprasidone in the treatment of schizophrenia or schizoaffective disorder in patients with prominent depressive symptoms. *J Clin Psychopharmacol.* 2006 Apr;26(2):157-62.
2. Breier A, Berg PH, Thakore JH, Naber D, Gattaz WF, Cavazzoni P, Walker DJ, Roychowdhury SM, Kane JM. Olanzapine versus ziprasidone: results of a 28-week double-blind study in patients with schizophrenia. *Am J Psychiatry.* 2005 Oct;162(10):1879-87.

### POSTER 48. THE RELATIONSHIP BETWEEN ANTIPSYCHOTIC MEDICATION ADHERENCE AND MEDICAL CHARGES AMONG INDIVIDUALS DIAGNOSED WITH BIPOLAR DISORDER

*Supported by AstraZeneca Pharmaceuticals*

Mariam Hassan, Ph.D., *Brandywine B3B-711B, 1800 Concord Pike, Wilmington, DE 19850*, Maureen J Lage, Ph.D.

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### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should gain increased awareness of the impact of adherence to an antipsychotic medication regime on total medical charges.

### SUMMARY:

Objective: To examine the impact of medication adherence on direct, mental health (MH)- and bipolar (BP)-related medical charges among individuals diagnosed with bipolar disorder. Methods: Claims data from patients aged 18 to 64 years who were diagnosed with bipolar disorder, receiving an antipsychotic (with first use identified as the index date), and continuously insured from 6 months prior to and through 12 months after the index date, were obtained from the PharMetrics Database (January 2000 to December 2006). Patients with a diagnosis of dementia or schizophrenia were excluded. Adherence was measured by the medication possession ratio (MPR). Logistic stepwise regressions were used to test the association between achievement of various adherence goals and charges, while controlling for demographic and clinical characteristics. Results: The mean MPR for this cohort (N=7769) was 41.7%, with 61.7% of patients having an MPR <50%. Patients who were adherent to their medication at least 25% of the time had additional total medical charges (inpatient, outpatient, emergency room, and outpatient prescription drug charges) of US \$12,546 (P<0.05), while patients who were adherent at least 95% of the time had additional total charges of \$7334 (P<0.05). Similarly, improvements in antipsychotic medication adherence from at least 25% to at least 95% were also associated with decreased marginal MH-related charges (from \$12,283 [P<0.05] to \$7331 [P<0.05]), as well as decreased marginal BP-related charges (from \$9808 [P<0.05] to \$6857 [P<0.05]). Despite the relationship of adherence with higher total or MH-related charges, the marginal cost associated with improved adherence declined. Conclusions: These findings support a relationship between adherence and decreased marginal total, MH- and BP-related medical charges among patients with bipolar disorder, and suggest cost-offsets associated with improved medication adherence. Supported by funding from AstraZeneca Pharmaceuticals.

### REFERENCES:

1. Mattke S, Jain A, Sloss EM, Hirscher R, Bergamo G, O'Leary JF. Effect of disease management on prescription drug treatment: What is the right quality measure? *Dis Manag* 2007; 10:91-100.
2. Sajatovic M, Valenstein M, Blow FC, Ganoczy D, Ignacio RV. Treatment adherence with antipsychotic medications in bipolar disorder. *Bipolar Disord* 2006; 8:232-241.

### POSTER 49. PET-MEASURED OCCUPANCY OF THE NOREPINEPHRINE TRANSPORTER BY EXTENDED RELEASE QUETIAPINE FUMARATE (QUETIAPINE XR) IN BRAINS OF HEALTHY SUBJECTS

*Supported by AstraZeneca Pharmaceuticals LP*

Svante Nyberg, AstraZeneca, Sodertalje SE-151 85, Sweden, Akihiro Takano, M.D., Ph.D., Aurelija Jucaite, M.D., Per Karlsson, M.D., Dennis McCarthy, Ph.D., Matts Kågedal,

M.Sc., Chi-Ming Lee, Ph.D., Christer Halldin, Ph.D., Lars Farde, M.D., Ph.D., Scott Grimm, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, participants should be aware that norquetiapine (the major active quetiapine metabolite) demonstrates high occupancy of the norepinephrine transporter and that this occupancy may contribute to the broad range of efficacies demonstrated for quetiapine.

### SUMMARY:

Introduction: Quetiapine offers a broad spectrum of efficacy in psychiatric disorders that was not predicted from its preclinical in-vitro pharmacology. Recent research shows that quetiapine and its major active human metabolite, norquetiapine, have moderate/high affinity in vitro for neuroreceptors, including D2 dopamine and 5HT2A receptors, as well as the norepinephrine transporter (NET) (1). A positron emission tomography (PET) study in non-human primates found that quetiapine and norquetiapine induced dose-dependent occupancy of D2 and 5HT2A receptors and norquetiapine but not quetiapine induced high occupancy at the NET, even at low plasma concentrations (2). The aim of the current study was to measure NET occupancy during exposure to clinically relevant doses of extended release quetiapine fumarate (quetiapine XR) in healthy subjects. Methods: Nine volunteers (20-45 years) were examined with PET using the radioligand (S,S)[18F]FMeNER-D2 for the NET, before and after quetiapine XR treatment (150-300 mg/d for 6-8 days). Regions of interest were defined for the thalamus, using the caudate as a reference region. Receptor occupancy was calculated with a late time ratio method. Plasma levels of quetiapine and norquetiapine were monitored. Results: Maximal norquetiapine levels were ~90 and ~30 ng/mL, respectively, with quetiapine XR doses of 300 and 150 mg/d. Treatment with quetiapine XR produced a dose-dependent reduction of radioligand uptake. Mean NET occupancy in the thalamus was 35% and 19%, respectively, with quetiapine XR doses of 300 and 150 mg/d. Conclusions: Data in humans support previous findings in monkeys of dose-dependent NET occupancy by norquetiapine at clinically relevant quetiapine XR doses. Inhibition of NET is accepted as a mechanism of antidepressant activity. Our findings suggest NET occupancy during quetiapine treatment may provide an explanation for the broad spectrum of efficacy of quetiapine. Supported by AstraZeneca Pharmaceuticals LP.

### REFERENCES:

1. Goldstein J, Christoph G, Grimm S, et al.: Quetiapine's antidepressant properties: direct and indirect pharmacologic actions on norepinephrine and serotonin receptors. *Eur Neuropsychopharmacol* 2007;17(suppl 4):S401. Abstract P.2.h.006.
2. Nyberg S, Takano A, Grimm S, et al.: PET-measured D2, 5-HT2, and norepinephrine transporter (NET) occupancy by quetiapine and N-desalkyl-quetiapine in non-human primates. *Eur Neuropsychopharmacol* 2007;17(suppl 4):S254-S255. Abstract P.1.c.022.

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### POSTER 50. ILOPERIDONE VERSUS HALOPERIDOL AS LONG-TERM MAINTENANCE TREATMENT FOR PATIENTS WITH SCHIZOPHRENIA OR SCHIZOAFFECTIVE DISORDER

*Supported by Vanda Pharmaceuticals Inc.*

Rosarelis Torres, Ph.D., *Vanda Pharmaceuticals Inc., 9605 Medical Center Drive, Rockville, MD 20850*, Henry A. Nasrallah, M.D., Paolo Baroldi, M.D., Ph.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to; 1.) Understand the long-term efficacy results for iloperidone as treatment for patients with schizophrenia or schizoaffective disorder; and 2.) Discuss the use of time to relapse for assessment of long-term antipsychotic effectiveness.

#### SUMMARY:

**Introduction:** This analysis compared long-term (46-weeks) maintenance of antipsychotic effect of the mixed D2/5-HT2 antagonist iloperidone vs. haloperidol in patients with schizophrenia or schizoaffective disorder. Haloperidol has a well-defined long-term efficacy profile, making it a suitable comparator. **Methods:** Data were pooled from 3 prospective, multicenter, double-blind, parallel-group studies with an initial 6-week, double-blind phase followed by a 46-week long-term, double-blind phase. Patients were randomized to iloperidone (4-16 mg/day) or haloperidol (5-20 mg/day). Patients were included in the efficacy analysis if they completed the initial 6-week phase with  $\geq 20\%$  reduction from baseline in the PANSS-T score at weeks 4 and 6, had a CGI-I score  $< 4$ , and had  $\geq 1$  efficacy assessment and took at least 1 dose of study medication during the long-term phase. The primary efficacy variable was time to relapse, defined as  $\geq 25\%$  and 10-point increase in PANSS-T score, discontinuation due to lack of efficacy, worsening psychosis with hospitalization, or 2-point increase in CGI-C score after week 6. **Results:** Of 1644 patients (iloperidone 1239; haloperidol 405) entering and 1326 (iloperidone 1014; haloperidol 312) completing the initial 6-week phase, 489 (iloperidone 371; haloperidol 118) qualified for inclusion in the long-term phase, and 359 (iloperidone 359; haloperidol 114) were included in the analysis population. Relapse rates were 43.5% with iloperidone and 41.2% with haloperidol. Iloperidone was shown to be statistically noninferior to haloperidol on the primary endpoint of time to relapse. At week 52, iloperidone and haloperidol showed similar improvement in PANSS-T and all subscales scores. **Conclusions:** Iloperidone demonstrated noninferior efficacy to that of haloperidol in this study of long-term maintenance treatment for patients with schizophrenia or schizoaffective disorder. Vanda Pharmaceuticals sponsored this analysis.

#### REFERENCES:

1. Kalkman HO, Subramanian N, Hoyer D: Extended radioligand binding profile of iloperidone: a broad spectrum dopamine/ serotonin/norepinephrine receptor antagonist

for the management of psychotic disorders. *Neuropsychopharmacol* 2001; 25:904-914.

2. Lieberman JA, Stroup TS, McEvoy JP, Swartz MS, Rosenheck RA, Perkins DO, Keefe RS, Davis SM, Davis CE, Lebowitz BD, Severe J, Hsiao JK: Effectiveness of antipsychotic drugs in patients with chronic schizophrenia. *N Engl J Med* 2005; 353:1209-1223.

### POSTER 51. COMPARISON OF SWITCHING STRATEGIES FROM RISPERIDONE TO ARIPIPRAZOLE IN PATIENTS WITH SCHIZOPHRENIA AND INSUFFICIENT EFFICACY (CN138-169)

Vincent Rykmans, M.D., *Cabinet de Consultations, Avenue Van Haelen, Brussels, 1160, Belgium*, Jean-Pierre Kahn, M.D., Ph.D., Linda Hanssens, M.S., Sieglinde Modell, M.D., Wendy Kerselaers, M.S., Jean-Yves Loze, M.D., Sheila Assuncao-Talbot, M.D., Ph.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to understand the similar safety and tolerability profiles of two different aripiprazole dose initiation strategies in switching patients from risperidone to aripiprazole.

#### SUMMARY:

**Objective:** To evaluate the safety, tolerability and overall effectiveness of switching from risperidone using two different aripiprazole dose initiation strategies. **Methods:** This was a 12-week, multicenter, open-label study of patients with schizophrenia (DSM-IV-TR) who experienced insufficient efficacy and/or safety/tolerability issues while receiving risperidone for  $\geq 6$  weeks. Patients were randomized to titrated aripiprazole (5 mg/day week 1, 10 mg/day Weeks 2-3, 15 mg/day weeks 4-5, flexibly dosed [10-30 mg/day] Weeks 6-12) or fixed aripiprazole dose (15 mg/day weeks 1-5, flexibly dosed [10-30 mg/day] Weeks 6-12). Risperidone down titration regimen was similar in both aripiprazole dosing strategies (risperidone current dose Weeks 1-2, half dose Weeks 3-4, discontinued at Week 5). **Primary endpoint:** proportion of patients discontinuing due to adverse events (AEs) at Week 12. **Secondary endpoints:** Positive and Negative Syndrome Scale (PANSS), Clinical Global Impressions-Improvement (CGI-I), Preference of Medication (POM) questionnaire, Subjective Well-being under Neuroleptics (SWN) and social cognition (GEOPTe) scales. **Results:** 400 patients entered the study (200 in each group); 359 (90%) patients completed the study. Discontinuation due to AEs was similar between dosing strategies (3.5% vs. 5.0%;  $p=0.448$ ). The AE most frequently leading to discontinuation was worsening of schizophrenia ( $n=4$ , 1%). Treatment-emergent AEs with an incidence  $\geq 5\%$  in either group were insomnia, anxiety, and headache. Patients in both aripiprazole strategies showed significant improvement (Week 12, LOCF) in the mean change PANSS Total scores (-14.8 vs. -17.2 from baseline) and mean CGI-I scores at endpoint (2.9 vs. 2.8). Improvement from baseline was also seen in the GEOPTe and SWN scales. **Conclusion:** Switching to aripiprazole from risperidone can be safely achieved with a

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slow down-titration of risperidone and a titrated- or fixed-dose initiation strategy for aripiprazole.

### REFERENCES:

1. Casey DE, Carson WH, Saha AR, et al: Switching patients to aripiprazole from other antipsychotic agents: a multicenter randomized study. *Psychopharmacology (Berl)*. 2003;166(4):391-399.
2. Edlinger M, Baumgartner S, Eltanaihi-Furtmüller N, et al: Switching between second-generation antipsychotics: why and how? *CNS Drugs*. 2005;19(1):27-42.

### POSTER 52. ANALYSIS OF POTENTIAL DRUG-DRUG INTERACTION PAIRS ASSOCIATED WITH ANTIPSYCHOTICS AMONG MEDICAID PATIENTS WITH SCHIZOPHRENIA OR BIPOLAR DISORDER

*Supported by the World Psychiatric Association*

Jeff J. Guo, Ph.D., 3225 Eden Avenue, Cincinnati, OH 45267, Yonghua Jing, Ph.D. Candidate, Nick C. Patel, Pharm.D., Ph.D., Jasmanda Wu, Ph.D., Christina M.L. Kelton, Ph.D., Huihao Fan, Ph.D. Candidate, Paul E. Keck, Jr., M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to describe the risk factors of receiving potential drug-drug interaction pairs associated with commonly used antipsychotics among Medicaid adult patients with schizophrenia, schizoaffective disorder, or bipolar disorder.

### SUMMARY:

**Introduction:** Since many antipsychotics are metabolized by cytochrome P450 (CYP450) isoenzymes (1A2, 2D6, and 3A4), we proposed to assess the risk of receiving potential drug-drug interaction (DDI) pairs associated with the inhibition or induction of CYP450 isoenzymes. **Methods:** Using the Ohio Medicaid claims database from 1/1/2001 to 12/31/2003, a total of 44,511 patients (18=age=65) with a schizophrenia or bipolar disorder diagnosis and receiving at least one study antipsychotic were selected for this study. Any clinically significant (moderate or severe) DDI pair was defined to have concomitant exposure if any of the days supply for an antipsychotic prescription overlapped with the days supply of an interacting medication by at least one day. Patients with schizophrenia and bipolar disorder were analyzed separately. Multivariable logistic regression analysis was used to assess risk factors associated with the receipt of a potential DDI pair. **Results:** Of the 44,511 study patients, potential DDI pairs were received by 12.1% (11.9% in schizophrenia, 12.9% in schizoaffective, and 11.8% in bipolar sub-cohorts) as same-day prescriptions dispensed and by 24.5% (24.7% in schizophrenia, 26.5% in schizoaffective, and 24.5% in bipolar sub-cohorts) as prescriptions with at least a one-day overlap. The most frequent DDI pairs were observed with olanzapine (45.0%), risperidone (23.5%), and quetiapine (13.4%). A higher risk of receiving a potential DDI pair was associated with being white (odds ratio [OR]=1.27, 95% confidence interval [CI]: 1.21-1.34), treatment duration over 12 months (OR=1.13, 95% CI: 1.07-1.19), depression (OR=1.20, 95%

CI: 1.14-1.27), impulse control disorder (OR=1.53, 95% CI: 1.30-1.79), diabetes mellitus (OR=1.12, 95% CI: 1.05-1.20), cerebrovascular disease (OR=1.34, 95% CI: 1.13-1.59). **Conclusion:** The potential drug-drug interactions should be considered when treating patients with some antipsychotics and long-term maintenance use.

### REFERENCES:

1. Sandson NB, Armstrong SC, Cozza KL. Med-psych drug-drug interactions update: an overview of psychotropic drug-drug interactions. *Psychosomatics* 2005;46(5):464-494.
2. Sharif ZA. Pharmacokinetics, metabolism, and drug-drug interactions of atypical antipsychotics in special populations. *Primary Care Companion J Clin Psychiatry* 2003;5 (suppl 6)22-25.

### POSTER 53. A 28-WEEK, RANDOMIZED, DOUBLE-BLIND STUDY OF OLANZAPINE VERSUS ARIPIPRAZOLE IN THE TREATMENT OF SCHIZOPHRENIA

*Supported by Eli Lilly and Company*

Virginia Stauffer, Pharm.D., Lilly Corporate Center, Drop Code 4133, Indianapolis, IN 46285, John M. Kane, M.D., Olawale Osuntokun, M.D., Ludmila A. Kryzhanovskaya, M.D., Wen Xu, Ph.D., Susan B. Watson, Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to describe the relative effectiveness of olanzapine and aripiprazole in the treatment of schizophrenia.

### SUMMARY:

**Objective:** Olanzapine (OLZ) has demonstrated efficacy in schizophrenia and has been reported superior to other atypical antipsychotics on time to all-cause discontinuation, a proxy for treatment effectiveness. The current study was designed to evaluate the effectiveness of OLZ compared with aripiprazole (APZ) in patients with schizophrenia. **Methods:** Patients with a diagnosis of schizophrenia (N=566) aged 18 to 65 were randomized to either OLZ (n=281) or APZ (n=285) for 28 weeks of double-blind treatment. The primary outcome measure was time to all-cause discontinuation. Symptom efficacy was measured by Positive and Negative Syndrome Scale (PANSS) total change from baseline (LOCF). Time-to-event data were analyzed via the Kaplan Meier method. **Results:** Treatment groups did not differ significantly in time to all-cause discontinuation (p=.067) or in discontinuation rates (OLZ 42.7%, APZ 50.2%, p=.053). The OLZ group had a significantly greater mean decrease in the PANSS (-30.2) than the APZ group (-25.9, p=.014). Mean weight change (kg) was +3.4 for OLZ and +0.3 for APZ (p<.001), with 40.3% of OLZ patients (vs. 16.4% of APZ patients, p<.001) gaining  $\geq 7\%$  body weight. Fasting mean glucose change (mg/dL) was +4.9 for OLZ and +0.9 for APZ (p=.045). Percentage of patients with baseline glucose <100 and  $\geq 126$  at any time was 1.7% for OLZ and 0.6% for APZ (p=.623). Fasting mean total cholesterol change (mg/dL) was +4.1 for OLZ and -

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9.8 for APZ ( $p < .001$ ). Percent of patients with baseline total cholesterol  $< 200$  and  $\geq 240$  at any time was 9.2% for OLZ and 1.5% for APZ ( $p = .008$ ). Fasting mean triglycerides change (mg/dL) was +25.66 for olanzapine and -17.52 for aripiprazole ( $p < .001$ ). Conclusion: The OLZ and APZ groups did not differ significantly on the primary outcome; however, the OLZ group had significantly greater symptom improvement. Significantly greater increases in weight, glucose, and total cholesterol were observed in OLZ-treated patients. Research supported by Eli Lilly and Company.

### REFERENCES:

1. Lieberman JA, Stroup TS, McEvoy JP, Swartz MS, Rosenheck RA, Perkins DO, Keefe RS, Davis SM, Davis CE, Lebowitz BD, Severe J, Hsiao JK; Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) investigators: Effectiveness of antipsychotic drugs in patients with chronic schizophrenia. *N Engl J Med* 2005; 353:1209-1223.
2. McQuade RD, Stock E, Marcus R, Jody D, Gharbia NA, Vanveggel S, Archibald D, Carson WH: A comparison of weight change during treatment with olanzapine or aripiprazole: results from a randomized, double-blind study. *J Clin Psychiatry* 2004; 65(Suppl 18):47-56.

### POSTER 54. QUETIAPINE MONOTHERAPY UP TO 52 WEEKS IN PATIENTS WITH BIPOLAR DEPRESSION: CONTINUATION PHASE DATA FROM THE EMBOLDEN I AND II STUDIES

*Supported by AstraZeneca Pharmaceuticals LP*

Allan Young, Ph.D., *UBC Institute of Mental Health, 2255 Wesbrook Mall, Detwiller Pavilion, Vancouver, British Columbia, V4C 4K1 Canada*, Susan McElroy, M.D., Bengt Olausson, M.D., William Chang, Ph.D., Björn Paulsson, M.D., Arvid Nordenhem, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to understand that continued treatment with quetiapine may prevent the recurrence of mood events in patients with bipolar depression responding to an 8-week course of quetiapine monotherapy.

### SUMMARY:

Introduction: The aim of this analysis was to determine whether the acute findings of the Efficacy of Monotherapy Seroquel in BipOLar DEpressioN (EMBOLDEN) studies (1,2) extend long-term by examining the continuation efficacy of quetiapine monotherapy in a preplanned pooling of data from EMBOLDEN I and II. Methods: Following completion of the 8-week acute phases of EMBOLDEN I and II, patients who had received quetiapine (300 or 600 mg/d) and achieved remission (MADRS and YMRS scores  $\leq 12$ ) at Week 8, were randomized to the same dose of quetiapine (double-blind) or placebo for at least 26 weeks and up to 52 weeks, or until mood event recurrence. The primary outcome variable was time from randomization (Week 8) to recurrence of any predefined mood event. Results: 584 patients were included in the continuation

phase. Risk for recurrence of a mood event was significantly lower in the quetiapine group relative to placebo (HR, 0.51 [95% CI, 0.38-0.69];  $P < 0.001$ ). A lower risk for recurrence of depressive (HR, 0.43 [95% CI, 0.30-0.62];  $P < 0.001$ ) and manic events (HR, 0.75 [95% CI, 0.45-1.24]) was also seen for quetiapine but statistical significance was achieved only for depressive events. Individually, both doses significantly delayed mood event recurrence (HRs, 0.59 [95% CI, 0.41-0.84] and 0.45 [95% CI, 0.30-0.67] for 300 and 600 mg/d, respectively), with a numerical advantage for the 600 mg/d dose. A similar advantage was apparent for recurrence of depressive (HRs, 0.48 [95% CI, 0.30-0.75] and 0.39 [95% CI, 0.24-0.63]) and manic events (HRs, 0.89 [95% CI, 0.49-1.63] and 0.62 [95% CI, 0.32-1.21]). Safety data were consistent with the recognized profile of quetiapine. Conclusions: The acute efficacy of quetiapine in bipolar depression is maintained in continuation treatment for at least 26 and up to 52 weeks compared with placebo among patients responding to acute treatment. Quetiapine was generally well tolerated.

Supported by funding from AstraZeneca Pharmaceuticals LP.

### REFERENCES:

1. Young AH, McElroy S, Chang W, Olausson B, Paulsson B, Brecher M: A double-blind, placebo-controlled study with acute and continuation phase of quetiapine in adults with bipolar depression (EMBOLDEN I). Poster presented at the 3rd Biennial Conference of the International Society for Bipolar Disorders; January 27-30, 2008; Delhi, India.
2. McElroy S, Olausson B, Chang W, Nordenhem A, Paulsson B, Brecher M, AH Young: A double-blind, placebo-controlled study with acute and continuation phase of quetiapine in adults with bipolar depression (EMBOLDEN II). Poster presented at the 3rd Biennial Conference of the International Society for Bipolar Disorders, January 27-30, 2008; Delhi, India.

### POSTER 55. QUETIAPINE IN THE MAINTENANCE TREATMENT OF BIPOLAR I DISORDER: COMBINED DATA FROM TWO LONG-TERM PHASE III STUDIES

*Supported by AstraZeneca Pharmaceuticals*

Guy Goodwin, D.Phil., *1800 Concord Pike, Wilmington, DE 19850*, Trisha Suppes, M.D., Eduard Vieta, M.D., Sherry Liu, Ph.D., Björn Paulsson, M.D., Willie Earley, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to understand that quetiapine, when given in combination with lithium or divalproex, may prevent the recurrence of mania or depression mood events in patients with bipolar I disorder, regardless of the polarity of the index episode.

### SUMMARY:

Introduction: Data are presented from 2 long-term studies (D1447C00126; D1447C00127) that examined the efficacy and safety of quetiapine (QTP) in combination with lithium (Li) or divalproex (DVP) in the prevention of mood events (manic, mixed, or depressed) in bipolar I disorder. Methods:

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The studies consisted of pre-randomization and randomized phases. Pre-randomization, patients received open-label QTP (400-800 mg/d; flexible, divided doses) with Li or DVP (target serum concentrations 0.5-1.2 mEq/L and 50-125 µg/mL, respectively) for a manic, mixed, or depressed event to achieve =12 weeks of clinical stability. Thereafter, patients were randomized to double-blind treatment with QTP (400-800 mg/d; flexibly dosed)+Li/DVP, or placebo+Li/DVP for up to 104 weeks. The primary endpoint was the time to recurrence of any mood event; defined by medication initiation, hospitalization, YMRS or MADRS scores =20 at 2 consecutive assessments, or study discontinuation due to a mood event. Results: 3414 patients entered the pre-randomization phase and 1326 were randomized and received =1 dose of study medication. Rates of recurrence were 19.3% versus 50.4% for QTP and placebo groups, respectively. The risk of recurrence of a mood event was significantly reduced in the QTP+Li/DVP relative to the placebo+Li/DVP group (HR, 0.30, P<0.001). The same effect was observed for recurrence of depressed and manic events (HRs, 0.30, P<0.001). Safety data were consistent with the recognized profile of QTP. The incidence density of a single-emergent fasting blood glucose value =126 mg/dL was higher in patients randomized to QTP+Li/DVP (10.7%, 18.03 patients per 100 patient-years) than in patients randomized to placebo+Li/DVP (4.6%, 9.53 patients per 100 patient-years). Conclusions: QTP+Li/DVP is significantly more effective than placebo+Li/DVP alone in increasing the time to recurrence of any mood event in patients with bipolar I disorder. Supported by funding from AstraZeneca Pharmaceuticals.

### REFERENCES:

1. Suppes T, Dennehy EB, Hirschfeld RM, Altshuler LL, Bowden CL, Calabrese JR, Crismon ML, Ketter TA, Sachs GS, Swann AC: The Texas Implementation of Medication Algorithms: update to the algorithms for the treatment of bipolar disorder. *J Clin Psychiatry* 2005; 66:870-886.
2. Chengappa KNR, Williams P: Barriers to the effective management of bipolar disorder: a survey of psychiatrists based in the UK and USA. *Bipolar Disord* 2005; 7(suppl 1):38-42.

### POSTER 56. ACUTE EFFICACY AND TOLERABILITY OF ARIPIPRAZOLE FOR THE TREATMENT OF BIPOLAR I DISORDER IN PEDIATRIC PATIENTS

*Supported by Bristol-Myers Squibb Company and Otsuka Pharmaceutical Co, Ltd.*

Andrei Pikalov, M.D., Ph.D., 2440 Research Boulevard, Rockville, MD 20850, S. Mathew, B.S., M. Nyilas, M.D., R.A. Forbes, Ph.D., N. Jin, M.S., B. Johnson, M.S., R. Owen, M.D., R.D. McQuade, Ph.D., T. Iwamoto, Ph.D., W.H. Carson, M.D., K. Chang, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to assess the efficacy and safety of aripiprazole in the treatment of pediatric bipolar I disorder.

### SUMMARY:

**Objective:** The purpose of this study was to assess the efficacy and safety of aripiprazole in the treatment of pediatric bipolar I disorder. **Methods:** 296 youths, ages 10-17 with a *DSM-IV* diagnosis of bipolar I disorder, manic or mixed episode with or without psychotic features were randomized to receive placebo or a fixed dose of aripiprazole 10 mg or 30 mg reached after a 5 or 13 day titration, respectively. This 4-week multi-center, double-blind trial was conducted on an outpatient basis (with option for inpatient hospitalization, if needed). The primary efficacy endpoint was change from baseline to week 4 on the YMRS total score. Secondary efficacy endpoints included change from baseline on the CGAS score, CGI-BP severity score, CRRS-R score, GBI and ADHD-RS-IV. Patient response (>50% improvement in YMRS total score) was also assessed. Tolerability assessments included AE frequency and severity; BARS, SAS, AIMS, as well as blood chemistries, body weight change and prolactin. **Results:** 80% of patients completed this study. At week one, aripiprazole 10 mg and 30 mg groups were superior to placebo (p< .05) on the primary endpoint. Efficacy was sustained through the end of the four week trial (p< .0001). Both doses demonstrated significant improvement on the CGAS, CGIS-BP severity score, GBI, and ADHD-RS-IV. Response rates for 10 mg and 30 mg doses were 45% and 64%, respectively, which were significantly higher (p< .01 and p< .0001) than placebo (26%). Seven percent of aripiprazole treated patients discontinued due to adverse events, compared to 2% for placebo. Most common adverse events were somnolence, extrapyramidal disorder and fatigue. Weight gain in aripiprazole treated patients was not significantly different from placebo. **Conclusions:** Aripiprazole 10 mg and 30 mg doses were superior to placebo in the acute treatment of pediatric patients with bipolar I disorder. Aripiprazole was generally well tolerated and weight gain was minimal. Supported by Bristol-Myers Squibb Company and Otsuka Pharmaceutical Co, Ltd.

### REFERENCES:

1. Bebbington P, Ramana R. The epidemiology of bipolar affective disorder. *Soc Psychiatry Epidemiol.* 1995;30(6): 279-292.
2. Lish JD, Dime-Meenan S, Whybrow PC, et al. The National Depressive and Manic-Depressive Association (DMDA) survey of bipolar members. *J Affect Disorders.* 1994;31(4):281-294.

### POSTER 57. LONG-TERM EFFICACY OF ARIPIPRAZOLE IN PEDIATRIC PATIENTS WITH BIPOLAR I DISORDER

*Supported by Bristol-Myers Squibb Company and Otsuka Pharmaceutical Co, Ltd.*

Andrei Pikalov, M.D., Ph.D., 2440 Research Boulevard, Rockville, MD 20850, S. Mathew, B.S., M. Nyilas, M.D., C. Aurang, B.S., N. Jin, M.S.; R. Owen, M.D., R.A. Forbes, Ph.D., T. Iwamoto, Ph.D., R.D. McQuade, Ph.D., W.H. Carson, M.D., G. Carlson, M.D. R.L. Findling, M.D.

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### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to assess the long-term efficacy of aripiprazole in the treatment of pediatric bipolar I disorder.

### SUMMARY:

Background: There is a shortage of published data from controlled trials with which to guide treatment decisions. The efficacy and safety of aripiprazole was assessed in this long-term study. Methods: 296 youths, ages 10-17 year-old with a *DSM-IV* diagnosis of bipolar I disorder w/wo psychotic features were randomized 1:1:1 to receive either placebo or aripiprazole (10mg or 30mg) in a 4-week double-blind trial. Completers continued randomly assigned treatments for an additional 26 weeks (double-blind). Efficacy endpoints included mean change from the pretreatment baseline to Week 30 on the Young-Mania Rating Scale (Y-MRS); Children's Global Assessment Scale (CGAS), Clinical Global Impressions Scale-Bipolar Version (CGI-BP) severity score, Children's Depression Rating Scale-Revised (CDRS-R) score, General Behavior Inventory Scale (GBI) score, Attention Deficit Hyperactivity Disorders Rating Scale (ADHD-RS-IV) score, time to discontinuation due to all reasons, and response rate (defined as > 50% reduction from baseline in the YMRS total score). The study was conducted on an outpatient basis with the option for inpatient hospitalization, if needed. A 5-member, independent, Data Safety Monitoring Board (DSMB) provided frequent assessment of patient safety. Results: In the double-blind continuation phase of this study, aripiprazole 10 mg and 30 mg groups demonstrated significant superiority to placebo at all scheduled visits through Week 30 on mean change from baseline in the Y-MRS total score ( $p < .0001$ , all visits). Significant improvements were observed on the CGAS, CGI-BP, ADHD-RS-IV total score, time to discontinuation (10 mg vs. placebo,  $p < 0.0001$ ; 30 mg vs. placebo,  $p = 0.0124$ ), and response rate (10 mg (50%) vs. placebo (27%),  $p < .0001$ ; and 30 mg (56%) vs. placebo (27%),  $p < .0001$ ). Conclusions: Aripiprazole 10mg and 30mg doses were superior to placebo in the long-term treatment (up to 30 weeks) of pediatric bipolar patients. Supported by Bristol-Myers Squibb Company and Otsuka Pharmaceutical Co, Ltd.

### REFERENCES:

1. Post RM, Kowatch RA. The healthcare crisis of childhood -onset bipolar illness: some recommendations for its amelioration. *J Clin Psychiatry*. 2006 Jan;67(1):115-25.
2. Bebbington P, Ramana R. The epidemiology of bipolar affective disorder. *Soc Psychiatry Psychiatr Epidemiol*. 1995;30(6):279-92.

### POSTER 58. OLANZAPINE LONG-ACTING INJECTION: PHARMACOKINETIC AND DOSE CORRESPONDENCE DATA RELATIVE TO ORAL OLANZAPINE

*Supported by Eli Lilly and Company*

Angela Gulliver, Pharm.D., *Lilly Research Laboratories, Indianapolis, IN 46285*, David McDonnell, M.D., Richard Bergstrom, Ph.D, Daniel Lin, Ph.D, Holland Detke, Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Describe the pharmacokinetic properties of olanzapine long-acting injection (OLAI) and the implications for dosing; and 2.) Describe the relative risk of relapse for patients with schizophrenia when switching to OLAI from various stabilized oral doses.

### SUMMARY:

Objective: Pharmacokinetic and efficacy data for olanzapine long-acting injection (OLAI) were assessed to determine dose correspondence relative to oral olanzapine. Methods: Patients with schizophrenia (N=1065) on a stabilized dose of oral olanzapine for at least 4 weeks were randomized to double-blind treatment with OLAI or to continued treatment on their same dose of oral olanzapine for up to 24 weeks. Oral antipsychotic supplementation was not allowed. Cox proportional hazard models were used to calculate relative risk of relapse. Periodic sampling of plasma olanzapine concentrations was performed in a subset of 346 patients. Results: OLAI doses of 150mg/2 wks, 405mg/4 wks, and 300mg/2 wks produced 10th-90th percentile steady-state plasma concentrations (5-41, 8-51, 7-73 ng/mL) similar to those for 10, 15, and 20mg/day oral olanzapine (13-48, 21-63, 21-85 ng/mL). Steady-state concentrations were achieved after approximately 3 months of treatment. The relative risk of relapse over 24 weeks indicated a correspondence between OLAI and oral dosing regimens. Patients stabilized on 10 mg/day oral who were randomized to 405mg/4 wks OLAI showed approximately equal risk as those who remained on a 10mg/day oral dose (hazard ratio [HR]=1.03). Patients stabilized on 15 or 20mg/day oral who were randomized to 300mg/2 wks OLAI showed lower or approximately equal risk relative to staying on oral (HR=0.68 and HR=1.13, respectively). The percentage of patients experiencing relapse by 24 weeks ranged from 1.5% (switched from 10mg/day oral to 300mg/2 wks OLAI) to 18.8% (switched from 20mg/day oral to 150mg/2 weeks OLAI). Conclusions: Pharmacokinetic and efficacy data suggest a correspondence between available oral doses and proposed OLAI doses. Data also indicate that patients can be switched directly from oral olanzapine to OLAI without oral supplementation and with a low risk of relapse if switched to an appropriate corresponding dose. This work was funded by Eli Lilly and Co.

### REFERENCES:

1. Callaghan JT, Bergstrom RF, Ptak LR, Beasley CM: Olanzapine. Pharmacokinetic and pharmacodynamic profile. *Clin.Pharmacokinet*. 1999; 37:177-193.
2. Mauri MC, Volonteri LS, Colasanti A, Fiorentini A, De Gaspari IF, Bareggi SR: Clinical pharmacokinetics of typical antipsychotics: a critical review of the relationship between plasma concentrations and clinical response. *Clin. Pharmacokinet*. 2007; 46:359-388.

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### POSTER 59. ASSESSMENT OF THE DOSE PROPORTIONALITY OF PALIPERIDONE PALMITATE, A LONG-ACTING INJECTABLE ANTIPSYCHOTIC, FOLLOWING DELTOID OR GLUTEAL ADMINISTRATION

*Supported by Johnson & Johnson Pharmaceuticals Services*

Joris Berwaerts, M.D., *Johnson & Johnson Pharmaceutical Research and Development. 1125 Trenton-Harbourton Road, Titusville, NJ 08560*, Adriaan Cleton Ph.D., Stefaan Rossenu, Ph.D., David Hough M.D., Herta Crauwels Ph.D., Sri Gopal M.D., An Vandebosch Ph.D., Clara María Rosso Fernández M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should have an understanding of the dose proportionality of 25–150 mg eq. paliperidone palmitate, a new long-acting injectable antipsychotic agent, following administration into either the deltoid or gluteal muscle.

#### SUMMARY:

**Introduction:** Dose proportionality of paliperidone palmitate injected into deltoid or gluteal muscle was assessed. **Methods:** Single-dose, open-label, parallel-group study randomized 201 schizophrenia pts (safety set) into 8 groups: paliperidone palmitate 25 (n=48), 50 (n=50), 100 (n=51) or 150 (n=52) mg eq. injected into deltoid or gluteal muscle. Paliperidone dose proportionality was assessed by linear regression model for each injection site, with log-transformed dose-normalized AUC<sub>∞</sub> and C<sub>max</sub> as dependent variables and log-transformed dose as predictor, respectively. AUC<sub>∞</sub> and C<sub>max</sub> ratios of enantiomers [R078543(+)/R078544(-)] were recorded. **Results:** AUC<sub>∞</sub> slopes were not significantly different from 0 for deltoid (slope -0.06;p=0.36) and gluteal injections (slope -0.02;p=0.76), indicating dose proportional increase in AUC<sub>∞</sub>. T<sub>max</sub> was comparable for doses, but slightly earlier for deltoid (13–14d) vs. gluteal injection (13–17d). Median C<sub>max</sub> (range:5.1–11.0ng/mL) was higher for deltoid vs. gluteal injection except 100mg eq. dose. C<sub>max</sub> slopes were significantly different from 0 for deltoid (slope -0.22;p=0.0062) and gluteal (slope -0.31;p<0.0001) injection, indicating less than proportional increase in C<sub>max</sub> with dose. Median (+)/(-) C<sub>max</sub> and AUC<sub>∞</sub> ratios were ~1.7. After a single dose of paliperidone palmitate, pts received permitted concomitant oral antipsychotics. Treatment-emergent AEs (TEAEs) included tachycardia (10%), headache (7%), schizophrenia (6%), insomnia (5%), weight gain (5%); 2% discontinued due to TEAEs. **Conclusion:** Data indicate AUC<sub>∞</sub> increased proportionally with increasing paliperidone palmitate doses (25–150mg eq.) regardless of deltoid or gluteal injection. C<sub>max</sub> after a single injection was less than dose proportional for doses >50mg eq. Overall, deltoid injection was associated with higher C<sub>max</sub> (except 100mg eq.) and slightly earlier t<sub>max</sub> vs. gluteal injection. Funded by Johnson & Johnson Pharmaceutical Services, LLC and J&J PRD.

#### REFERENCES:

1. Kane J, Canas F, Kramer M, Ford L, Gassman-Mayer C, Lim P, Eerdeken M: Treatment of schizophrenia with paliperidone extended-release tablets: a 6-week placebo-controlled trial. *Schizophr Res* 2007; 90(1–3):147–161.
2. Davidson M, Emsley R, Kramer M, Ford L, Pan G, Lim P, Eerdeken M: Efficacy, safety and early response of paliperidone extended-release tablets (paliperidone ER): results of a 6-week, randomized, placebo-controlled study. *Schizophr Res* 2007; 93(1–3):117–130.

### POSTER 60. EVALUATION OF THE PHARMACOKINETIC PROFILE OF GLUTEAL VERSUS DELTOID INTRAMUSCULAR INJECTIONS OF PALIPERIDONE PALMITATE IN SCHIZOPHRENIA PATIENTS

*Supported by Johnson & Johnson Pharmaceutical Services*

Joris Berwaerts, M.D., *Johnson & Johnson Pharmaceutical Research and Development. 1125 Trenton-Harbourton Road, Titusville, NJ 08560*, Adriaan Cleton M.D., Stefaan Rossenu Ph.D., David Hough M.D., Herta Crauwels Ph.D., An Vandebosch Ph.D., Mariëlle Eerdeken Ph.D., Igor Francetic M.D., Ph.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should have an understanding of the pharmacokinetic profile of a 100 mg eq. dose of paliperidone palmitate, a long-acting injectable antipsychotic agent, following administration into either the deltoid or gluteal muscle.

#### SUMMARY:

**Introduction:** The aim of this study was to compare the PK profile of paliperidone palmitate 100 mg eq. administered into the deltoid (n=24) or gluteal muscle (n=25). **Methods:** In this multiple-dose, open-label, parallel-group study, patients with schizophrenia were randomized to receive 4 consecutive intramuscular injections (Days 1, 8, 36 and 64). **Results:** The median C<sub>max</sub> was higher in the deltoid vs. gluteal muscle after the 2nd (31.3 vs. 24.1 ng/mL, respectively) and 4th (23.7 vs. 22.3 ng/mL, respectively) injections. After 4 injections, the median fluctuation index (FI) was higher (71.9 vs. 56.2%, respectively), with a larger intersubject variability for deltoid vs. gluteal injection. Median T<sub>max</sub> was similar between injection sites after the 2nd (10 vs. 10 days, respectively) and 4th (5 vs. 6.5 days, respectively) injections. The median concentration–time profile was higher following deltoid injection. After 4 injections, median AUC<sub>∞</sub> was similar for both injection sites; C<sub>max</sub> and AUC<sub>∞</sub> for paliperidone were 30% (90% CI;100.56–168.93) and 20% (90% CI;93.09–154.69) higher in deltoid vs. gluteal muscle, respectively. Increased median predose plasma concentrations on Days 8, 36 and 64 suggested patients were not completely at steady state after 4 injections. Most commonly reported adverse events (combined injection sites) were orthostatic hypotension (24%), hypotension (14%), diastolic hypertension (12%) and injection site pain (14%). 4 patients discontinued due to psychosis. Paliperidone palmitate was well tolerated, with a mean injection site pain VAS score

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of 3.3 for gluteal vs. 10.8 for deltoid muscle (Day 1, 8 hours after injection). Conclusion: Paliperidone palmitate 100 mg eq. had an increased AUC&Tau, higher Cmax and greater FI when injected into the deltoid vs. gluteal muscle, although similar Tmax was noted for both injection sites. Paliperidone palmitate 100 mg eq. was well tolerated. Supported by Johnson & Johnson Pharmaceutical Services LLC., and J&J PRD.

### REFERENCES:

1. Marder SR, Kramer M, Ford L, Eerdeken E, Lim P, Eerdeken E, Lowy A: Efficacy and safety of paliperidone extended-release tablets: results of a 6-week, randomized, placebo-controlled study. *Biol Psychiatry* 2007; 62(12): 1363–1370.
2. Kane J, Canas F, Kramer M, Ford L, Gassman-Mayer C, Lim P, Eerdeken M: Treatment of schizophrenia with paliperidone extended-release tablets: a 6-week placebo-controlled trial. *Schizophr Res* 2007; 90(1–3):147–161.

### POSTER 61. USE OF CARIPRAZINE IN THE TREATMENT OF SCHIZOPHRENIA: A PROOF-OF-CONCEPT TRIAL

*Supported by Forest Laboratories, Inc.*

Robert Litman, M.D., 9605 Medical Center Drive, Suite 270, Rockville, MD 20850, Kelly Papadakis, M.D., M.H.Sc, Suresh Durgam, M.D., Jingdong Xie, Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to compare the tolerability and efficacy of low-dose cariprazine, high-dose cariprazine, and placebo in patients with acute exacerbation of schizophrenia.

### SUMMARY:

Objective: Cariprazine (RGH-188) is a novel atypical antipsychotic with potent dopamine D3/D2 receptor antagonism/partial agonism. Methods: In this 6-week double-blind, flexible-dose, proof-of-concept study conducted in 34 US sites, patients with acute exacerbation of schizophrenia (mean baseline PANSS score=95) were randomized to placebo (N=129), cariprazine low dose (1.5-4.5 mg/day; N=127), or cariprazine high dose (6-12 mg/day; N=133). Hospitalization was mandatory during screening and the first three weeks of double-blind treatment. Primary efficacy parameter was change in PANSS total score from baseline to endpoint using LOCF. Results: For each group, 54% of patients completed treatment. The change from baseline to Week 6 in PANSS total score was -9.7, -14.5, and -12.6 for the placebo, cariprazine low-dose, and high-dose groups, respectively (LOCF). Pairwise comparison between the low-dose group and placebo was statistically significant (P=0.033); for high-dose group vs. placebo, P=0.2. For PANSS negative subscale, pairwise comparisons yielded significant improvements (P<0.05) in the cariprazine low-dose group at Week 1 and continued to Week 6. Adverse events leading to discontinuation were 15%, 9%, and 8% for placebo, low-dose, and high-dose groups, respectively; primarily worsening of schizophrenia. Cariprazine treatment was generally well tolerated, with no clinically meaningful

changes in metabolic parameters, including mean fasting serum glucose and serum lipid levels and the prolactin level. Conclusion: This proof-of-concept study suggested clinical efficacy for cariprazine in the treatment of acute exacerbation of schizophrenia that warrants further investigations. Overall, cariprazine dosed up to 12 mg was safe and well tolerated. This study and its presentation were supported by Forest Laboratories, Inc.

### REFERENCES:

1. Schwartz J-C, Diaz J, Pilon C, Sokoloff P: Possible implications of the dopamine D3 receptor in schizophrenia and in antipsychotic drug actions. *Brain Res Rev* 2000; 31:277-287.
2. Leriche L, Diaz J, Sokoloff P: Dopamine and glutamate dysfunctions in schizophrenia: role of the dopamine D3 receptor. *Neurotox Res* 2004; 6:63-72.

### POSTER SESSION 3

FRIDAY, OCTOBER 3

8:30 a.m.-10:00 a.m.

### MOOD PROBLEMS

MODERATOR: DANIEL CHAPMAN, PH.D.

### POSTER 63. AN IMPROVED METHOD OF SUICIDE RISK EVALUATION

Robert Drye, M.D., *Clinical Assistant Professor, University of Arizona College of Medicine, 2620 S. Azalea Drive, Tempe, AZ 85282*

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Recognize the difference between the no-suicide decision method and “no-harm contracts;” and 2.) Use the method in evaluating suicidal risk in emergent situations and ongoing practice.

### SUMMARY:

Although great attention has been focused on the high rates of suicide of both active duty and returning military personnel from Iraq, and Afghanistan, there has been no rapid and reliable way to evaluate actual risk, with suicides occurring often months after discharge. The Veterans Administration currently requires an extensive screening with each new applicant for VA services, but this is cumbersome, questionnaire based, and of unproved reliability. It is usually administered by intake counselors, usually not experienced mental health personnel. Military discharge procedures vary, and are currently under considerable criticism for not picking up risk. Current APA practice guidelines emphasize the relationship between assessor and patient, exactly what is missing in these situations of rapid screening. In an effort to clarify the final guideline recommendation against using “no harm contracts” as screening, former APA President, Marcia Goin, M.D., (2003) recalled the system I and the Gouldings had presented and published in 1973. At the 2004 Annual Meeting, the NO-Suicide Decision: Patient Monitoring of Risk was the subject of a workshop including co-authors of the guidelines, and

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30 years of experience using the method internationally was reported with only four fatalities. This method was recognized by the co-authors as substantially different from the “no harm contracts”, professionally responsible, and further publication encouraged. The possible use of this method is currently under discussion with the Department of Defense and the Veteran’s Administration.

### REFERENCES:

1. Drye R, Goulding RL, Goulding ME The no-suicide decision: patient monitoring of risk. *Am J of Psychiatry* 130: 171-74 1973.
2. Practice Guidelines for Assessment and Treatment of Suicidal Behavior. Am Psychiatric Assn Press. Washington DC, 2004.

### POSTER 64. THE DARK SIDE OF THE INTERNET: SUICIDE ATTEMPT

Abosede Alao, B.S.N., R.N., *SUNY Upstate Medical University, Syracuse, NY 13210*, Adekola O Alao M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to understand the impact of the Internet on suicidal patients and the need to screen for Internet use.

### SUMMARY:

The Internet as a widespread source of communication is already having a significant influence in medicine and psychiatry. Although the Internet has great potential in psychiatric education, clinical care and research, its impact on social issues should not be underestimated. Firstly, the Internet as a means of communication may encourage suicidal behavior by depicting ways by which suicide may be committed. Secondly, some Internet web-sites may discourage people with mental illness from seeking psychiatric help, condone suicide and forbid entry to anyone offering to discourage users from committing suicide. However, the Internet could be a resource to help a potentially suicidal person get help and can be used to identify those at risk for suicide, communicate with them and potentially prevent suicide. In this study, we will describe 5 reported cases of patients in which the Internet was used as the source of information by patients who attempted suicide (Table 1). Method: A literature review was performed using several databases such as Cochrane, CINAHL and MEDLINE to research articles and cases that have been published describing suicide attempts using the Internet as the source of information for the method used. The Internet is a rapid method of communication. With significant advances being made in communication technology, there lies potential hazards and potential benefits. Clinicians and practitioners dealing with mentally ill patients should be well acquainted with all the hazards, as well as the potential rescue afforded by the Internet.

### REFERENCES:

1. Milton P. Huang, M.D, Norma E. Alessi, M.D. The Internet and the Future of Psychiatry. *American Journal of Psychiatry* 1996; 153:861-869.

2. Alao AO, Soderberg M, Pohl EL, Alao AL. Cybersuicide: review of the role of the internet on suicide *Cyberpsychol Behav.* 2006 Aug;9(4):489-93. Links.

### POSTER 65. SUICIDAL BEHAVIOR IN THE PATIENTS OF OBSESSIVE COMPULSIVE DISORDER

Jitendra Trivedi, M.D., M.R.C., *Professor, Department of Psychiatry, C.S.M. Medical University (earlier K.G. Medical University), Lucknow, 226003 India*, Mohan Dhyani M.B.B.S., J.K Trivedi M.D., Anil Nischal M.D., PK Sinha M.Sc.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to assess the suicidal behavior in patients of Obsessive Compulsive Disorder (OCD).

### SUMMARY:

Suicidal behavior is defined as an act through which an individual harms himself (self aggression) whatever may be the degree of lethal intention or recognition of genuine reason for their action. Suicidal behavior is the result of a complex interaction of biological, genetic, psychological, sociological, environmental factors. Well identified demographic and biopsychosocial risk factors consistently associated with completed suicide include male gender, older age, white race, widowed status and poor health (especially if painful and serious illness is present) OCD is chronic distressing anxiety disorder associated with significant functional impairment. Major depression has been the most common disorder with a prevalence of up to 67% OCD has a significant negative impact on the sufferer, his family, social life and health related quality of life (Steeketee, 1993). There is a reasonable probability that the patient of OCD have suicidal thoughts, plans or actually attempt suicide. The present work is a single point non-invasive, cross sectional, clinical study of new and follow-up cases of Obsessive Compulsive Disorder, (OCD) attending psychiatric outpatient section, which involves the assessment of suicidal behavior in the patients. Informed consent was taken from all the subjects. 52 patients with a diagnosis of OCD were assessed for suicidal behavior. Conclusion: A significant number (19.23%) of patients had a history of past suicidal attempt. This finding is important as past suicidal attempt is considered to be a strong predictor for future suicidal attempt. Hopelessness, a predictor of future suicidal risk, was significantly high in 25% of the patients on the Beck Hopelessness Scale. 26.9% of patients had a significantly high degree of suicidal ideation, with a score of 6 or more on the Scale of Suicidal Ideation.

### REFERENCES:

1. O’Carroll PW, Berman AL, Maris RW, Moscicki EK, Tanneyt BL, Silverman MM. Beyond the tower of Babel: a nomenclature for suicidology. *Suicide Life-Threat Behav.* 1996;26:237-252.
2. Fawcett J, Scheftner WA, Fogg L, Clark DC, Young MA, Hedeker D, Gibbons R. Time-related predictors of suicide

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in major affective disorder. *American Journal of Psychiatry*, 1990; 147:1189-1194.

### **POSTER 66. SUICIDES AND GENDER: CHARACTERIZATION USING RADARS® SYSTEM POISON CENTER DATA**

Meredith Kirtland, B.A., *Rocky Mountain Poison & Drug Center, Denver Health, 777 Bannock Street, MC 0180, Denver, CO 80204*, Sonya Heltshe, Ph.D., J. Elise Bailey, M.S.P.H., Richard Dart, M.D., Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, a participant should be able to: 1.) Identify gender differences in suicides involving prescription opioids; and 2.) Recognize that while suicide by poisoning is reportedly the most common method of suicide for females, RADARS System data show that only some prescription opioid rates and means are significantly higher for females.

#### **SUMMARY:**

Introduction: Self harm poisoning, the 2nd highest cause of nonfatal injuries in the U.S., is the most common suicide completion method for females, while firearm use is the most common for males. Prescription opioids have not been examined alone to determine their role in poisoning suicides. The RADARS System Poison Centers (PC) collected suicide data from 43 of 60 U.S. PC. Using these data, we hypothesize that females have higher suicide rates and means for all opioids combined and each individual opioid. Methods: PC use a standard electronic system to record spontaneous calls from the public and health professionals; quality checks are performed to verify coding accuracy. Intentional suspected suicides (ISS), which include attempts and completions, involving buprenorphine, fentanyl, hydrocodone, hydromorphone, methadone, morphine, oxycodone and tramadol were analyzed (2006). In 3-digit ZIP codes (3DZ) with at least 1 ISS, the difference between male and female ISS rates (ISS/1,000 Unique Recipients of Dispensed Drug [URDD, number of individuals who filled a prescription]) and means were examined. Results: The mean ISS number in a given 3DZ for all opioids combined was significantly higher for females (2.1 vs. 1.3,  $p < 0.05$ ). The mean ISS number for oxycodone (2.3), hydrocodone (5.5), morphine (0.6) and tramadol (1.9) were all significantly higher for females ( $p < 0.05$ ). While not significant, methadone was higher for males (0.8 vs. 0.7). The ISS rate for all opioids combined was significantly higher for females (0.22 vs. 0.18,  $p < 0.05$ ). Rates for oxycodone (0.1), hydrocodone (0.1) and tramadol (0.2) were all significantly higher for females ( $p < 0.05$ ). Again, while not significant, methadone was higher for males (0.60 vs. 0.58). Conclusion: Mean ISS numbers and rates were higher for females when all opioids were combined. However unique gender differences were found with individual opioids. Additional data and analyses are recommended to further understand these differences.

#### **REFERENCES:**

1. National Center for Injury Prevention and Control. Web-

based Injury Statistics Query and Reporting System (WISQARS), (2006). Centers for Disease Control and Prevention. Available from: URL: <http://www.cdc.gov/ncipc/wisqars>.

2. Suicide in the U.S.A. Based on Current 2004 Statistics. American Association of Suicidology. Available from: URL: <http://www.suicidology.org/associations/1045/files/SuicideInTheUS.pdf>.

### **POSTER 67. MINDFULNESS-BASED DEPRESSION TREATMENT THROUGH WEB AND TELEPHONE GROUPS**

Michael Compton, M.D., M.P.H., *Emory University School of Medicine, Department of Psychiatry and Behavioral Sciences, 49 Jesse Hill Jr. Drive, S.E., Room #333, Atlanta, GA 30303*, Nancy J. Thompson, Ph.D., M.P.H., Elizabeth Reisinger, M.P.H.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) List barriers to diagnosis and treatment of depression for persons with epilepsy and other chronic health conditions; 2.) Discuss the importance of group therapy for treating depression in persons with chronic conditions; 3.) Describe at least one activity used in a program based on CBT and mindfulness for treating depression; and 4.) Compare two distance methods of delivering CBT with mindfulness to people with epilepsy.

#### **SUMMARY:**

Introduction: Depression is a particular problem among people with chronic diseases such as epilepsy. Issues that affect these people, like driving restrictions or other mobility limitations, create barriers to accessing depression screening and treatment. Stigma may further dissuade some from seeking care. This paper describes the development and formative evaluation of small-group depression treatment delivered by telephone or Internet to reach people with epilepsy at home. Methods: Beck and colleagues' cognitive therapy of depression with Segal and colleagues' mindfulness modifications guided the development of the Project UPLIFT (Using Practice and Learning to Increase Favorable Thoughts) protocol. Three focus groups of people with epilepsy assessed the appropriateness of the information, activities, and measures proposed for inclusion in the intervention. Results: The final protocol was comprised of 8 hour-long sessions including discussions, instruction, and skill-building activities on such topics as cognitive restructuring, relaxation techniques, and meditation. Focus group participants particularly valued the group delivery, responded favorably to the cognitive and mindfulness activities, and provided suggestions for improvement. Based upon input from experts and the focus groups, activities were selected and modified to best serve the target population. Discussion: While group treatment was valued, the listlessness accompanying depression, especially when combined with illness, makes it difficult to get out and attend a group. Home-based group therapy via telephone and Internet is cost effective and allows more individuals to be

## POSTERS

reached and treated. It also provides relative anonymity for persons who may feel embarrassed by their physical and/or mental health; thus, distance settings may ease some of the stigma associated with both depression and other diseases.

### REFERENCES:

1. Hermann, B. P., Seidenberg, M., & Bell, B. (2000). Psychiatric comorbidity in chronic epilepsy: Identification, consequences, and treatment of major depression. *Epilepsia*, 41 Suppl 2, S31-41.
2. Ma, S. H., & Teasdale, J. D. (2004). Mindfulness-based cognitive therapy for depression: Replication and exploration of differential relapse prevention effects. *J Consult Clin Psychol*, 72(1), 21-40.

### POSTER 68. GEOGRAPHICAL TRENDS IN FREQUENT MENTAL DISTRESS

Daniel Chapman, Ph.D., *Centers for Disease Control and Prevention, 4770 Buford Highway, N.E., Mailstop K-67, Atlanta, GA 30308*, James B. Holt, David G. Moriarty, Matthew M. Zack

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to identify trends in the prevalence of frequent mental distress in the United States between 1993 and 2006.

#### SUMMARY:

Introduction: Frequent mental distress (FMD) is a construct enumerating diverse psychiatric symptomatology. Despite the utility of this measure as a barometer of psychopathology, little is known about spatial-temporal trends in the prevalence of FMD in the U.S. Methods: To assess geographically-based time trends in FMD throughout the U.S., we compared the percentage of adults reporting FMD in 1993-2001 with 2003-2006. Data were obtained from the Behavioral Risk Factor Surveillance Survey, an ongoing, state-based, random-digit-dialed telephone survey of the noninstitutionalized U.S. population aged 18 years and older. Responses to the FMD question were aggregated by states and counties and analyzed in a geographic information system. Results: The mean state prevalence of FMD for 1993-2001 was 9.0%, the mean prevalence for 2003-2006 was 10.2%. During 2003-2006, 23 states remained within a percentage point of their 1993-2002 FMD prevalence, while the prevalence in remaining states and DC increased by one or more percentage points. In Oklahoma, Mississippi, and West Virginia, FMD increased by 3 or more percentage points. Prominent geographic patterns were evident within and across state borders, such as low prevalence in the upper Midwest and high prevalence in California, Nevada, Appalachia, and the Mississippi River Valley. Temporal changes in FMD varied across state borders, such as decreased prevalence in the upper Midwest and increased prevalence in Appalachia, Oklahoma, and the Mississippi River Valley. Conclusions: Comparisons of geographic patterns across two time periods highlight areas of consistently high and low FMD, as well as substantial changes in states. Continued surveillance of FMD

will be useful in identifying regions characterized by unmet needs and disparities, targeting interventions, and evaluating programmatic performance over time.

### REFERENCES:

1. Barry MM, Zissi A. Quality of life as an outcome measure in evaluating mental health services: A review of the empirical evidence. *Soc Psychiatry Psychiatric Epidemiol* 1997;32:38-47.
2. Langeland E, Wahl AK, Kristoffersen K, Nortvedt MW, Hanestad BR. Quality of life among Norwegians with chronic mental health problems living in the community versus the general population. *Community Mental Health Journal* 2007;43:321-339.

### POSTER 69. DIVALPROEX ER VERSUS RISPERIDONE FOR BIPOLAR DISORDER WITH COMORBID SUBSTANCE USE DISORDER

*Supported by Abbott Laboratories*

Lori Davis, M.D., *VA Medical Center (151), 3701 Loop Road East, Tuscaloosa, AL 35213*, X Li, M.D. Ph.D., Crystal Garner, M.S., Jennifer Biladeau, M.S., Yuriy Ustinov, M.A., Akihito Uezato, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Recognize the similarities and differences in substance use disorder outcome during a 12-week treatment of either divalproex or risperidone in dual-diagnosed bipolar patients; 2.) List the doses for divalproex and risperidone in treatment; 3.) Treat the bipolar patient with concurrent substance use disorder with either divalproex or risperidone; and 4.) Identify features of a randomized clinical trial.

#### SUMMARY:

Introduction: This study evaluated divalproex extended release (DVPX-ER) versus risperidone (RISP) in the treatment of bipolar disorder with active substance use disorder. The primary efficacy outcome was the number of days until heavy relapse with substances. Research Methods: Subjects with bipolar disorder and active substance use disorder, confirmed by SCID-I, were prospectively randomized (1:1) into a double-blind, 12-week outpatient trial of DVPX-ER vs. RISP. No other mood stabilizers or neuroleptics were allowed. Bi-weekly assessments included a calendar of self-reported SUD and the following secondary outcomes: Schedule for Affective Disorders and Schizophrenia Change (SADS-C); Clinical Global Impression Scale for Bipolar – Severity; Clinical Global Impression Scale for Bipolar – Improvement; Clinician Drug Use Scale; Clinician Alcohol Use Scale; and Obsessive Compulsive Drinking Scale-Self Report. Results: Twenty-eight evaluable subjects were considered in the efficacy analysis (n= 17 RISP; n= 11 DVPX-ER). Ten subjects (36%) completed the entire study. In a survival analysis, no differences were found between groups in number of days until heavy relapse with substances. Nor were differences found between groups in the time to relapse, the percent days of substance use, the percent days of heavy substance use, or

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the percent days sober. While both groups showed significant change in the SADS-C Total, SADS-C depression subscale, and SAD-C mania subscale, there were no group differences for change from baseline to endpoint. Only one subject from each treatment group remained abstinent during the 12-week study. Conclusion: Although showing no group differences in SUD and mood outcomes, DVPX-ER and RISP were beneficial in reducing mood symptoms in this small sample of dual-diagnosed bipolar patients. This study demonstrates the difficult challenge of treating dual diagnosed bipolar patients. Support: Investigator-initiated grant; Abbott Laboratories.

### REFERENCES:

1. Brady KT, Myrick H, Henderson S, Coffey SF. The use of divalproex in alcohol relapse prevention: a pilot study. *Drug and Alcohol Dependence* 67:323-330, 2002.
2. Davis LL, Williams R, Cates M. Divalproex sodium in the treatment of adults with bipolar disorder. *Expert Rev Neurotherapeutics* 4:3:349-362, 2004.

### POSTER 70. INCREASE IN SUICIDE RATES IN PUERTO RICO, SEASONALITY OR THE ECONOMY?

Jose Nieves, M.D., 203 Fairfield Drive, Yorktown, VA 23692, Kathleen M. Stack M.D., D.F.A.P.A., Angel Rossy

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Identify how environmental factors (finances) may influence suicidal ideation; 2.) Recognize seasonal variations in sociality; and 3.) Assess complete suicide rates in Puerto Rico, a Commonwealth of the United States.

### SUMMARY:

The relationship between completed suicide, mental illness and substance abuse is well established. However, a feeble economy and its repercussions on the individual have been shown to contribute to suicide rates. Increase personal debt and bankruptcy contributed to a wave of suicides in Japan in 2003. During that year the Aokigahara woods at the base of Mt. Fuji became known as the "suicide forest" due to the large number of suicides by hanging that took place in the area. In this instance, the demographics of those that completed suicide included primarily individuals without an established mental health diagnosis. The "seasonality of suicide" has been examined and completed suicides attributed to economic difficulties happening mainly in winter months (1). In the last 2 to 3 years, Puerto Rico (PR) has been suffering the impact of a worldwide sluggish economy aggravated by local factors. During the recent winter months of January and February 2008, local PR media drew attention to the suicide rates in prominent articles. Most citizens blame the phenomenon on the economy. In 2002, PR suicide rate was 6.2 per 100,000. In 2007, the rate was 7.4 per 100,000 a 17% increase. During January 2008, there were 23 completed suicides (2). While we will not be able to obtain any demographics on these completed suicides at the time of this writing it appears that both economic woes and the season may have contributed to

this. Local health authorities should systematically investigate contributing factors and focus on prevention.

### REFERENCES:

1. Seasonality of Suicide: Relationship with Reason for Suicide Rocchi MB, Sisti D, Miotto P, Pretti A; *Neuropsychobiology* 2007 56 (2-3): 86-92.
2. World Health Organization, Data and Statistics, Country Reports and Charts, updated 2007. [http://www.who.int/mental\\_health/prevention/suicide/country\\_reports/en/index.html](http://www.who.int/mental_health/prevention/suicide/country_reports/en/index.html) accessed on 5/19/2008.

### POSTER 71. EFFICACY AND SAFETY OF FLIBANSERIN IN PREMENOPAUSAL WOMEN WITH HYPOACTIVE SEXUAL DESIRE DISORDER: RESULTS FROM THE RANDOMIZED WITHDRAWAL ROSE STUDY

Supported by Boehringer Ingelheim

Evan Goldfischer, M.D., Hudson Valley Urology, 1 Columbia Street, Suite 390, Poughkeepsie, NY 12601, Jeffrey Breaux, M.D., Molly Katz, M.D., Joel Kaufman, M.D., William B. Smith, M.D., Pinakin Patel, M.D., Jaromir Mikl, M.S.P.H., Michael Sand, M.D., Robert Pyke, M.D., Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should understand that the ROSE (Researching Outcomes on Sustained Efficacy) study showed that flibanserin has a good safety and tolerability profile in premenopausal women with Hypoactive Sexual Desire Disorder (HSDD) over 48 weeks and that no withdrawal reactions were seen on switching from flibanserin to placebo.

### SUMMARY:

Introduction: The ROSE (Researching Outcomes on Sustained Efficacy) study was a randomized withdrawal trial of flibanserin, a novel 5-HT<sub>1A</sub> agonist/5-HT<sub>2A</sub> antagonist, in premenopausal women with generalized acquired Hypoactive Sexual Desire Disorder (HSDD). Methods: 738 women were treated with open-label, flexible-dose flibanserin (50 mg or 100 mg/day) for 24 weeks. At week 24, patients meeting enrichment criteria (increase of =2 satisfying sexual events [SSEs] or =4 desire days from baseline to weeks 21–24) were randomized to 24 weeks' continued flibanserin therapy at optimized dosage (n=163) or placebo (n=170). Results: During open-label treatment, SSEs and desire score doubled, moderate-strong desire days tripled, and Female Sexual Distress Scale-Revised® (FSDS-R®) score decreased by 31.5%. Of the 525 completers (71%), 95% preferred 50–100 mg qhs to 50 mg bid. From weeks 25 (randomization) to 48, flibanserin-maintained patients had less deterioration in HSDD symptoms than those switched to placebo: with 28% more SSEs (p<0.01), less decrease in desire score (p<0.05), and less increase in FSDS-R score (p<0.05). 87% of patients completed this phase. Overall safety and tolerability were favorable; no withdrawal reactions occurred. Conclusions: In this randomized withdrawal trial of premenopausal HSDD patients, flibanserin was superior to placebo and well-tolerated,

## POSTERS

without withdrawal reactions. Financial support: The ROSE study was funded by Boehringer Ingelheim.

### REFERENCES:

1. Borsini F, Evans K, Jason K, et al.: Pharmacology of fli-banserin. *CNS Drug Rev* 2002; 8: 117-142.
2. DeRogatis L, Clayton A, Lewis-D'Agostino D, et al.: Validation of the female sexual distress scale-revised for assessing distress in women with hypoactive sexual desire disorder. *J Sex Med* 2008; 5: 357-364.

### POSTER 72. TREATMENT HISTORY AND THE IMPACT OF ALTERNATIVE TREATMENTS ON POST TREATMENT COSTS FOR PATIENTS WITH BIPOLAR DISORDER

Jeffrey McCombs, Ph.D., *Department of Clinical Pharmacy and Pharmaceutical Economics and Policy School of Pharmacy, University of Southern California, Los Angeles, CA 90089-9004*, Vaidy Ganapathy, M.S., Dana Stafkey-Mailey, Pharm.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to recognize the impact of the patient's drug treatment history on the effectiveness of alternative antipsychotics in treating bipolar disorders.

#### SUMMARY:

**Objective:** To compare post-treatment costs across alternative antipsychotics in the treatment of bipolar disorder (BD). **Methods:** Data from a commercial health plan from 7/1/03 to 6/30/06 were used to identify non-institutionalized patients with bipolar disorder (ICD-9 296.4-296.8) but no history of schizophrenia (ICD-9 295.xx). Patients initiating treatment using a typical antipsychotic (TAP), atypical antipsychotic (AAP: aripiprazole, olanzapine, quetiapine, risperidone or ziprasidone), mood stabilizer or antidepressant were included. Episodes were divided into three categories: restarting treatment after a break in drug therapy > 15 days with the drug used in the previous episode, switching therapy with or without a break in treatment, and augmentation therapy. First observed episodes were excluded from the analysis due to uncertainty concerning the patient's prior treatment history. A total of 105,440 episodes were included in the analyses using ordinary least squares (OLS) regression models of post-treatment cost adjusting for age, gender, geographic region, drug use history, prior medical care use, bipolar disorder diagnosis and co-morbid medical conditions. **Results:** Average total post-treatment cost measured across all episode types ranged from \$18,983 (olanzapine) to \$24,059 (ziprasidone). OLS results found augmentation episodes to be significantly more costly than restart episodes (+\$6,461,  $p < 0.0001$ ) or switching episodes (+\$4,285,  $p < 0.0001$ ). AAPs were found to be more costly relative to TAP in patients restarting therapy and these estimates were significant for quetiapine (+\$2,353,  $p < 0.05$ ). Patients initiating augmentation episodes with an AAP were also consistently more costly relative to TAP, again significantly so for quetiapine (+\$3,043), ziprasidone (+\$3,505), risperidone (+\$2,003) and aripiprazole (+\$2,813).

However, most AAPs achieved significantly lower total costs relative to TAP for switching episodes ranging from -\$1,488 for ziprasidone.

### REFERENCES:

1. Chen L, McCombs JS and Park JX. The impact of atypical antipsychotic medications on the use of health care by patient with schizophrenia. *Value in Health* 2008, 11(1): 34-43.
2. Chen L, McCombs JS and Park JX. Duration of psychotic drug therapy in real world practice: A comparison with CATIE trial results. *Value in Health* 2008 11(3): 487-496.

### POSTER 73. PLACEBO-CONTROLLED STUDY OF QUETIAPINE FUMARATE MONOTHERAPY IN BIPOLAR SPECTRUM DISORDER WITH MODERATE-TO-SEVERE HYPOMANIA OR MILD MANIA

*Supported by AstraZeneca Pharmaceuticals*

Brian Martens, M.S., B.S., *University of Cincinnati, Department of Psychiatry, 231 Albert Sabin Way, Cincinnati, Ohio 45267-0559*, Susan L. McElroy, M.D., Ryan Creech B.A., Jeffrey Welge Ph.D., Paul E. Keck, Jr., M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to recognize the spectrum of ambulatory bipolar hypomanic and manic states and be familiar with the use of quetiapine fumarate in the treatment of patients with such states.

#### SUMMARY:

Despite increasing awareness of "soft spectrum" or "ambulatory" bipolar spectrum disorder with mild manic/hypomanic symptoms as a public health problem, there are extremely few systematic treatment studies of this condition. Because of its efficacy in mania and its efficacy in bipolar depression, we hypothesized that quetiapine represented a promising treatment for ambulatory bipolar spectrum disorder with moderate-to-severe hypomanic or mild manic symptoms, including when accompanied by mild to marked depressive symptoms. **Methods:** Eight-week, double-blind, placebo-controlled, randomized clinical trial of quetiapine (begun at 50mg/day and titrated to a maximum of 800 mg/day) in bipolar spectrum outpatients with moderate-to-severe hypomania or mild mania defined as a Young Mania Rating Scale (YMRS) score =10, but <21 at baseline and at least one other study visit at least 3 days apart over the 2 weeks before baseline. **Results:** Of 41 subjects randomized, 39 received at least one post-baseline assessment. Twenty-five subjects completed the 8-week trial and 16 subjects terminated prematurely. Data entry is ongoing. The major outcome measure is the rate of change in the total score of the YMRS; and the Inventory of Depressive Symptoms (IDS). This investigator-initiated study was funded in-part by a grant from AstraZeneca. AstraZeneca also partially funded poster production costs and author's travel expenses.

## POSTERS

### REFERENCES:

1. Merikangas KR, Akiskal HS, Angst J, et al.: Lifetime and 12-month prevalence of bipolar spectrum disorder in the National Comorbidity Survey replication. *Arch Gen Psych* 2007; 64(5):543-52.
2. Derry S, Moore RA: Atypical antipsychotics in bipolar disorder: systematic review of randomized trials. *BMC Psychiatry* 2007; 7:40.

### POSTER 74. SECONDARY SELF-HARM IN A DELIBERATE SELF-HARM PATIENT: THE RISK OF CUMULATIVE RADIATION EXPOSURE IN MANAGING REPEAT DELIBERATE FOREIGN BODY INGESTION

Lisa Norelli, M.D., M.P.H., *Capital District Psychiatric Center, 75 New Scotland Avenue, Albany, NY 12208*, Andrew D. Coates, M.D., Beatrice Kovaszny, M.D., M.P.H., Ph.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Define the novel term secondary self-harm (SSH) as it relates to deliberate self-harm (DSH) patients; 2.) Recognize the high-risk of all cause morbidity and mortality in DSH patients; and 3.) Recognize the potential unintended health risks of SSH in DSH patients from the medical management of their deliberate injuries, including cumulative radiation exposure due to multiple radiological tests.

#### SUMMARY:

We report a case of a 29 year old woman with deliberate self-harm (DSH) by repeated foreign body ingestion over many years. Due to this behavior, the patient has undergone numerous diagnostic procedures, including at least 400 radiographs in the past 6 years, resulting in significant cumulative radiation exposure. Some of the radiation exposure has occurred as a result of procedures needed to evaluate injury or other sequelae due to the ingestions, such as esophageal tears and ulceration. Compared to the general population, DSH patients have an increased risk of morbidity and mortality due to intentional and accidental suicide, other accidents, and a variety of non-psychiatric disorders. It is plausible that the excess mortality is partly due to unforeseen collateral complications, injury or illness associated with DSH behaviors. We propose use of the novel term "secondary self-harm" (SSH) to describe the phenomenon of unintended medical risks associated with intentional harming behaviors in these patients. This includes inherent health risks resulting from diagnostic testing, medical management and invasive procedures employed to address the injuries of deliberate self-harm. For example, epidemiological evidence of excess risk of cancer in people exposed to low-dose radiation, especially at younger ages, demonstrates the risk of the radiation dose of diagnostic CT scans. SSH may thus greatly impact the patient's overall health, for it can dramatically increase the risk of suffering an unintended adverse outcome from diagnostic and/or therapeutic interventions, including cancer. Clinicians should be aware of the under-recognized risk of SSH in DSH patients and carefully evaluate the risks and benefits of

medical management over the long term.

### REFERENCES:

1. Hawton K, Harriss L, Zahl D: Deaths from all causes in a long-term follow-up study of 11,583 deliberate self-harm patients. *Psychol Med* 2006; 36:397-405.
2. Hall EJ, Brenner DJ: Cancer risks from diagnostic radiology. *Br J Radiology* 2008; 81:362-378.

### POSTER 75. SECOND-GENERATION ANTIPSYCHOTICS AND HOSPITALIZATION IN BIPOLAR DISORDER: A CLAIMS DATA ANALYSIS

Edward Kim, M.D., Ph.D., *Bristol-Myers Squibb, 777 Scudders Mill Road, Plainsboro, NJ 08536-1615*, Edward Kim, M.D., M.B.A.; Andrei Pikalov, M.D., Ph.D.; Diane Ammerman, Pharm.D; Russell Knoth, Ph.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to understand the impact of antipsychotic choice on hospitalization in bipolar disorder.

#### SUMMARY:

Introduction: Up to 75% of patients with bipolar disorder report at least one lifetime hospitalization; patients treated with second-generation antipsychotics (SGAs) and mood stabilizers (MS) are hospitalized more frequently than those treated with MS monotherapy. It is not clear whether various SGAs differentially reduce the risk of hospitalization in this at-risk population. The objective of this study was to characterize hospitalization rates in patients treated with adjunctive SGA-MS combination therapy. Methods: A retrospective propensity score-matched cohort study was conducted in the LabRx integrated claims database from January 2003 through December 2006. Patients aged 18–65 years with bipolar disorder and 180 days of pre-index enrollment without SGA therapy and 90 days post-index enrollment were eligible for inclusion. MS therapy was initiated within 30 days prior to or following index SGA prescription. Multivariate logistic regression was used to estimate the risk of hospitalization in patients treated with aripiprazole, olanzapine, quetiapine, risperidone, or ziprasidone during the 90-day follow-up period. Results: Of 7,134 patients meeting inclusion criteria, 920 patients on aripiprazole were matched to 920 on olanzapine, quetiapine, or risperidone, whereas 518 aripiprazole patients were matched to 518 on ziprasidone. Hospitalization rates in the first 90 days following index prescription was 9.3% (range 7.1–12.8%). Compared with aripiprazole, patients on adjunctive SGAs demonstrated statistically significantly greater risks of hospitalization (olanzapine OR 1.8, 95%CI 1.3, 2.7; quetiapine OR 1.5, 95%CI 1.1, 2.2; risperidone OR 1.8, 95%CI 1.3, 2.6; ziprasidone OR 1.7, 95%CI 1.1, 2.7). Conclusions: Hospitalization in the first 90 days following initiation of combination mood stabilizer-SGA therapy is relatively common and influenced by choice of SGA. This difference may be due to dosing and titration under real-world conditions.

## POSTERS

### REFERENCES:

1. Guo JJ, Keck PE, Li H et al: Treatment costs and health care utilization for patients with bipolar disorder in a large managed care population. *Value Health* 2008:[Epub ahead of print].
2. Vieta E, T'joen C, McQuade RD et al: Efficacy of adjunctive aripiprazole to either valproate or lithium in bipolar mania patients partially nonresponsive to valproate/lithium monotherapy: a placebo-controlled study. *Am J Psychiatry* 2008:[Epub ahead of print].

### POSTER 76. GLIOBLASTOMA MULTIFORME PRESENTING AS TREATMENT RESISTANT DEPRESSION: A CASE REPORT

Faiz Cheema, M.D., 1-14 Lyons Avenue, Fair Lawn, NJ 07410

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation the participant should be able to recognize that psychiatric symptoms may be the only clue to the presence of an intracranial neoplasm.

#### SUMMARY:

Brain tumors may present with multiple psychiatric symptoms such as depression, personality changes, psychotic symptoms, and mania or panic attacks. Because the number of patients with psychiatric symptoms who have brain tumors is relatively small, it is a matter of debate among psychiatrists and neurologists whether all patients with newly recognized psychiatric symptoms should undergo neuroimaging studies. On the other hand, review of literature suggested that some patients with silent brain tumors may mistakenly carry a diagnosis of primary psychiatric disorder for months or years before the presence of intracranial neoplasm's is revealed. In this report, we describe a patient who presented with treatment resistant depression and minimal, non localizing neurological signs and was finally promptly diagnosed with the help of brain imaging. The patient was a 53 year old Caucasian male who presented with depressed mood anhedonia, low energy and insomnia. The patient had been diagnosed with depression since the age of 43. Prior to that he did not have any formal psychiatric history, but he reported a history of grand mal seizures which started at the age of eight. The patient was hospitalized due to suicidal ideation and inability to care for self. Because of the poor response to antidepressants and the history of seizure disorder, a CT scan followed by an MRI of the brain were done, and revealed a left frontal and temporal lobe mass. Biopsy confirmed the diagnosis of Glioblastoma Multiforme. We hypothesize that the patient might have had an astrocytoma earlier in life which presented with the seizure disorder and then it could have evolved into its more malignant form, the Glioblastoma Multiforme. Left frontal lobe lesion have been proven to cause depression, and hence the treatment resistant depression in this patient could be a consequence of the frontal lobe mass. We conclude that it is important for physicians to have a high index of suspicion of brain tumor in patients with new onset psychiatric symptoms. Early detection is of paramount importance for the treatment and quality of life of those patients.

### REFERENCES:

1. Filley, CM and Kleinschmidt-DeMasters, BK (1995) Neurobehavioral presentations of brain neoplasms. *West J Med* 163:1 , pp. 19-25.
2. Habermeyer B, Weiland M, Mager R, Wiesbeck GA, Wurst FM. A clinical lesson: glioblastoma multiforme masquerading as depression in a chronic alcoholic. *Alcohol*. 2008 Jan-Feb;43(1):31-3.

### POSTER 77. ECONOMIC CONSEQUENCES OF BIPOLAR DISORDER PATIENTS WHO RELAPSE FREQUENTLY IN A LARGE HEALTH CARE DATABASE

Supported by Ortho-McNeil Janssen Scientific Affairs, LLC  
Concetta Crivera, Pharm.D., M.P.H., Ortho-McNeil Janssen Scientific Affairs, LLC, 1125 Trenton-Harbourton Road, Titusville, NJ 08560, Kenneth Gersing, M.D., Bruce Burchett, Ph.D., Seina Lee, Pharm.D., M.S., Riad Dirani, Ph.D., Wayne Macfadden, M.D., J. Thomas Haskins, Ph.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to understand the long-term ( $\geq 1$  year) economic consequences of patients with bipolar disorder who relapse frequently in the Duke Health Care System.

#### SUMMARY:

Introduction: This study evaluates the economic consequences associated with the resource use of patients with bipolar disorder who relapse frequently, but may not fit the *DSM-IV* definition of having a rapid-cycling course. Methods: This was a retrospective analysis of electronic medical records for patients treated in the Department of Psychiatry at Duke University Center for  $\geq 1$  year from 1999 to 2005. Patients with bipolar disorder who relapse frequently were defined as those with bipolar disorder type I or II who experienced  $\geq 4$  mood episodes in the past 12 months that required clinical intervention (emergency room [ER] visit, hospitalization or change in psychotropic medication). Resource utilization (ER visits, inpatient hospitalizations, outpatient visits and medication use) was measured. Continuous variables were analyzed by analysis of variance; categorical variables were analyzed by chi-square. Published literature provided 2004 unit costs of resources inflated to 2007 unit costs associated with bipolar disorder. No inferential statistics were computed for the cost variables. Results: Patients who relapse frequently ( $n=332$ ) used more psychiatric resources than those who did not ( $n=300$ ), including ER visits, hospitalizations, outpatient visits and psychiatric medications ( $P<0.01$ ). Mean direct per-patient per-year costs were \$28,746 for patients who relapse frequently and \$9,910 for those who did not, with differences in ER visits (\$2,461 vs. \$605) hospitalization (\$22,722 vs. \$7,282), outpatient visits (\$2,036 vs. \$947) and medications (\$1,527 vs. \$1,076). Conclusions: Patients with bipolar disorder who relapse frequently used more health care resources and may pose a significant burden to the health care system. Supported by Ortho-McNeil Janssen Scientific Affairs, LLC.

## POSTERS

### REFERENCES:

1. Kupka RW, Luckenbaugh DA, Post RM, Leverich GS, Nolen WA: Rapid and non-rapid cycling bipolar disorder: meta-analysis of clinical studies. *J Clin Psychiatry* 2003; 64(12):1483-1494.
2. Stensland MD, Jacobson JG, Nyhuis A: Service utilization and associated direct costs for bipolar disorder in 2004: an analysis in managed care. *J Affect Disord* 2007; 101(1-3):187-193.

### POSTER 78. FIXED-DOSE COMPARISON OF ESCITALOPRAM AND DULOXETINE IN SEVERELY DEPRESSED PATIENTS

*Supported by Forest Laboratories, Inc.*

Gregory M. Asnis, M.D., *111 East 210 Street, Bronx, NY 10467*, Joyce Tsai, Ph.D., Yongcai Mao, Ph.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to compare the safety and efficacy of escitalopram 20 mg/day relative to duloxetine 60 mg/day following initial nonresponse to escitalopram 10 mg/day in patients with severe depression.

#### SUMMARY:

**Objective:** To compare escitalopram 20 mg/day with duloxetine 60 mg/day after initial nonresponse to escitalopram 10 mg/day. **Methods:** A randomized, parallel-group, multicenter, fixed-dose study was conducted in outpatients (18-65 years) with severe MDD (MADRS baseline  $\geq 30$ ), with or without generalized anxiety disorder. After 1-week drug-free screening, patients initiated a 2-week, single-blind lead-in escitalopram 10 mg/day. Nonresponders (<50% MADRS improvement) were randomized to an 8-week, double-blind escitalopram 20 mg/day or duloxetine 60 mg/day, followed by a 1-week down-titration. **Primary outcome:** days from first dose of double-blind medication to all-cause premature discontinuation (nonparametric survival analysis); **secondary efficacy:** MADRS change from baseline to double-blind Week 8 (study Week 10) (LOCF, ANCOVA). **Safety** was assessed via AE reports. **Results:** 571 patients (average age, 42.4 years; overall mean baseline MADRS, 34.7) received escitalopram 10 mg/day; 474 patients were randomized and received  $\geq 1$  dose of double-blind escitalopram (N=229) or duloxetine (N=245). 375 (79.1%) patients completed 8-week double-blind treatment; 47 (20.5%) escitalopram and 52 (21.2%) duloxetine patients prematurely discontinued. Time to premature discontinuation was not different between groups (HR escitalopram/duloxetine=0.95; P=.727). Escitalopram showed significant MADRS improvement vs. duloxetine at Week 1 of double-blind treatment; significance persisted through Week 8 (P=.034) except for Week 6 (P=.051). Serious AEs were reported by 4 (1.7%) escitalopram and 5 (2.0%) duloxetine patients. Following the switch, AEs led to the discontinuation of 5.7% escitalopram and 5.3% duloxetine patients. **Conclusion:** In patients with severe MDD who do not respond to escitalopram 10 mg/day, escitalopram 20 mg/day is an effective and tolerable alternative to switching to

duloxetine 60 mg/day. This study and its presentation were supported by Forest Laboratories, Inc.

### REFERENCES:

1. Khan A, Bose A, Alexopoulos GS, Gommoll C, Li D, Gandhi C: Double-blind comparison of escitalopram and duloxetine in the acute treatment of major depressive disorder. *Clin Drug Investig* 2007;27:481-492.
2. Nierenberg AA, Greist JH, Mallinckrodt CH, Prakash A, Sambunaris A, Tollefson GD, Wohlreich MM. Duloxetine versus escitalopram and placebo in the treatment of patient with major depressive disorder: onset of antidepressant action, a non-inferiority study. *Curr Med Res Opin* 2007;23: 401-416.

### POSTER 79. CONTROL OF IMPULSIVENESS WITH ARIPIPIRAZOLE IN PERSONALITY DISORDERS-CLUSTER B.

*Supported by Bristol-Myers Squibb Company*

Juan Carlos Navarro-Barrios, M.D., M.S.C., *Department of Psychiatry- Hospital of Motril (Granada-SPAIN), Motril (Granada), 18007 Spain*, Juan Carlos Navarro-Barrios, M.D., M.Sc. Cristina Quesada, M.D., María Luisa Gonzalez, Dolores Carretero, Anselmo Canabate-Prados, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to identify the probable utility of Aripiprazole in control of impulsiveness in patients with Personality Disorders Cluster B.

#### SUMMARY:

Personality Disorders are defined by the American Psychiatric Association as "an enduring pattern of inner experience and behavior that deviates markedly from the expectations of the culture of the individual who exhibits it". Personality Disorders (PD) type Cluster B (dramatic, emotional, or erratic disorders) are: Antisocial, Borderline, Histrionic and Narcissistic Personality Disorder. The dimension Impulsiveness - Aggressiveness is a frequent motive of consultation in the patients with Personality Disorders. This study shows the probable utility of the Aripiprazole (a novel atypical antipsychotic drug) in this field. **Objectives:** To evaluate the effectiveness of Aripiprazole in the control of the impulsiveness in Personality Disorders Cluster B. **Methods:** Aripiprazole was used as pharmacological treatment in 9 subjects, with diagnosis of Borderline Personality Disorder (n=7), and Histrionic Personality Disorder (n=2), with ages between 18 and 59 years, associated with bosses of acting-out. The average dose of the Aripiprazole was of 15 mg/day. In some moment of the treatment 75 % of the patients received benzodiazepines, and 41,6 % received an SSRI. The instrument utilized to evaluate the impulsiveness was Barratt's Scale in the beginning and to 20 weeks of treatment. For this study, we valued as improvement for the control of the symptoms the reduction of 20 % of the total punctuation of the subscales, to 20 weeks of treatment, with relation to the basal. **Results:** We found improvement in Barratt's Scale at week 20 of

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treatment, in 58.3 % of the subjects (n=7). The subscale with more improvement was the Motorboat Subscale. Conclusions: Aripiprazole can be useful for control of the acting-out in the Personality Disorders, needing open study and double-blind. Supported in part by an unrestricted educational grant from Bristol-Myers Squibb, Spain.

### REFERENCES:

1. Kellner M: Aripiprazole in a therapy-resistant patient with borderline personality and post-traumatic stress disorder. *Pharmacopsychiatry* 2007; 40(1):41.
2. Nickel MK, Loew TH, Pedrosa GilF: Aripiprazole in treatment of borderline patient, part II: a 18-month follow-up. *Psychopharmacology* 2007;191 (4):1023-6.

### POSTER 80. FEMALE HYPERSEXUALITY AND PATHOGENIC MASTURBATIONS IN BIPOLAR MANIA

Rashmi Ojha, M.D., B.S., *Creighton University/University of Nebraska Program, Department of Psychiatry, 985582, Nebraska Medical Center, Omaha, NE 68198-5582*

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to recognize hypersexuality and pathologic masturbation as presenting symptoms of bipolar mania and distinguish it from persistent sexual arousal syndrome.

### SUMMARY:

Case Presentation: A 51 year old female presented to the emergency department complaining that she has been unable to eat, sleep, shower or go to work for the last 10 days. On further questioning, she revealed that she has been continuously watching Internet pornography and masturbating almost 24 hours a day. She did not feel the need to sleep or eat because of this behavior. She was fully awake during her acts and had both libido and sexual pleasure associated with it. She had been spending more time and money on Internet pornography for the last 2 years, but this masturbating spree started only 10 days ago. She became exhausted and frustrated at the end and started getting depressed, anxious and tearful. She did have a history of multiple episodes of depression and suicidal ideation in the past starting in her twenties and was known to have at least one or two episodes of hypomania. She had been on Zoloft, but stopped taking it 2 weeks ago. She has an undergraduate college degree and currently works at a public library. Discussion: This illustrates a case of heightened sexuality as a presentation of bipolar mania. Some features of this presentation distinguish it from persistent sexual arousal syndrome (PSAS). In PSAS, patients have persistent genital arousal without significant sexual desire and they are usually distressed by it. Their symptoms usually do not go away with orgasm or may require multiple orgasms to relieve. Our patient had sexual desire and was viewing pornographic material to enhance it. The sense of heightened sexual energy and the lack of need for sleep or food are more consistent with presentation of bipolar mania than with sexual arousal disorder. Conclusion: In a patient presenting with excessive

and pathological masturbation causing significant life distress, it is important to detect the presence or absence of sexual desire. Persistent masturbation with heightened sexual energy and sexual desire could be the presentation of bipolar mania.

### REFERENCES:

1. Stein DJ, Black DW, Shapira NA, Spitzer RL Hypersexual disorder and preoccupation with internet pornography *Am J Psychiatry* 158:1590-1594, October 2001.
2. Sandra Leiblum PhD, Candace Brown PharmD, Jim Wan PhD, Leslie Rawlinson (2005) Persistent Sexual Arousal Syndrome: A Descriptive Study *The Journal of Sexual Medicine* 2 (3) , 331–337.

### POSTER 81. MULTICENTER OBSERVATIONAL RESEARCH WITH BIPOLAR PATIENTS IN CLINICAL PSYCHIATRY: THE ROCK STUDY

Ricardo Teijeiro, M.D., *TweeSteden Ziekenhuis, PO 90107, Tilburg, 5000 LANetherlands*, Ed van Gent, M.D., Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to recognize the effects of quetiapine in treating the acute manic phase of bipolar disorder in the real psychiatric world.

### SUMMARY:

Objectives: Determining the effect of quetiapine (Seroquel) in bipolar disorder patients' (acute) manic phase. Also monitored are: degree of day-night rhythm recovery; estimate of patient compliance; adverse events rate. Method: Multicenter patients diagnosed with bipolar disorder and passing through moderate to grave manic phase. Demographical and social status was determined at patient's first visit; also weight, length, current medication, etc., CGI BP, and sleep rhythm. These parameters, plus adverse events and compliance estimate were checked at 2nd, 3rd, and closing visits (after 1-3-12 weeks). The sole contraindication for inclusion were severe somatic illnesses such as cancer, hepatic or renal insufficiency. Analysis: Analysis was made on the basis of the ITT (Intention to Treat) principle. Primary endpoint was the proportion of patients with a 1/3 score on the CGI BP at the closing visit. The secondary endpoints were CGIBP alterations between the 1st and 3rd week, and sleep rhythm alterations after 1 - 3 - 12 weeks. Results: 366 patients were included. At the end of the run, 79 % of the patients had a score from normal to slightly ill for mania, against 7, 9% at the initial point of the study. 65% of the patients had a score from normal to light for the BPS as a whole, against 9, 8 % at the initial point. Both changes demonstrate a significant amelioration. The scores for depression remained more or less the same throughout. The most effective dosage for quetiapine was 400 mg dd and up. At the closing visits, 74% of the patients reported a change for the better and 68 % reported no sleep reduction. The reported adverse events are the known a.e. for quetiapine. Compliance was estimated at 80 % and had decreased slightly at the closing visit, as is usual. Conclusion: Quetiapine, in proper dosage, is an effective and safe profile remedy for the acute manic phase of a bipolar disorder.

## POSTERS

### REFERENCES:

1. Treatment of Bipolar Disorder: A Complex Treatment for a Multi-faceted Disorder.
2. Fountoulakis KN, Vieta E, Siamouli M, Valenti M, Magirias S, Oral T, Fresno D, Giannakopoulos P, Kaprinis GS. *Ann Gen Psychiatry* 2007, 6:27.

### POSTER 82. WITHDRAWN

#### POSTER 83. IMPACT OF SOCIODEMOGRAPHIC VARIABLES ON SUICIDE RATES

Yilmaz Yildirim, M.D., *Child and Adolescent Psychiatry, Department of Psychiatric Medicine, Brody School of Medicine, Greenville, NC 27834*

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Recognize the sociodemographic factors related to suicide risk; and 2.) Identify the factors best related to county suicide rates in North Carolina.

#### SUMMARY:

**Introduction:** In the U.S., suicide is the 11th leading cause of death and 3rd within the 10 – 24 age group (1). Several studies have shown that suicide rates are related to sociodemographic variables (2). For example, unemployment, poverty and rurality are frequently associated with increased suicide rates. This study seeks to measure the extent to which county suicide rates in North Carolina are related to similar variables. **Method:** County suicide data for 2000 – 2005 was obtained from N.C. Department of Health Statistics and averaged over the 5 years. The U.S. Census Bureau and North Carolina State Data Center web sites provided 23 sociodemographic indicators for the 100 counties. Descriptive statistics, bivariate correlation analysis and stepwise regression analysis was done by SPSS (V 15.0). **Results:** Contrary to previous findings (2) unemployment and poverty were inversely related to suicide rate. Percent of each county's population that is white (white%) had the highest correlation with suicide rate ( $r=.61$ ), while black% ( $r = -.57$ ) and other-minority% ( $r=-.32$ ) had the highest negative correlations. Elderly%, churches per 1000 pop., divorced-separated%, and mentally disabled% also had significant positive correlations with suicide rate, whereas poverty%, hospital/nursing home%, 10-24 age%, unemployed%, and arrested% were significantly inversely related. In the stepwise regression, only white%, divorced/separated%, and mentally disabled% were independently predictive ( $R=.735$ ) and accounted for 54% of the variance in county suicide rate. **Conclusion:** Some variables reported in other studies to predict suicide rate positively did not do so while others replicated their positive relationships. This modeling study of county suicide rates found a three factor model which explained over 50% of the variance in suicide rate, but differed from models found in other studies.

#### REFERENCES:

1. National Suicide Prevention Week-September 9-15, 2007; Morbidity and Mortality Weekly Report, 2007: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5635a1.htm>.

2. Gunnell DJ: Relation Between Parasuicide, Suicide, Psychiatric Admissions, and Socioeconomic Deprivation. *BMJ* 1995; 311: 226 - 230.

#### POSTER 84. ANALYSIS OF SUICIDALITY IN POOLED DATA FROM TWO DOUBLE-BLIND, PLACEBO-CONTROLLED ARIPIPRAZOLE ADJUNCTIVE THERAPY TRIALS IN MAJOR DEPRESSIVE DISORDER

Richard Weisler, M.D., *University of North Carolina School of Medicine, Chapel Hill, NC and Duke University Medical Center, Durham, NC 27599*, Rene Swanink, M.S., Andrei Pikalov, M.D., Ph.D., Robert D. McQuade, Ph.D., Berit X. Carlson, Ph.D., Ronald N. Marcus, M.D., Robert M. Berman, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should understand the low risk of suicidality in the treatment of major depressive disorder with adjunctive aripiprazole in data pooled from two trials.

#### SUMMARY:

**Objective:** To assess the clinical impact of adjunctive aripiprazole versus adjunctive placebo on suicidality using pooled data from two 6-week, double-blind, randomized trials in patients with major depressive disorder. **Methods:** Data from two identical studies of aripiprazole augmentation, consisting of an 8-week prospective antidepressant treatment (ADT) phase and a 6-week randomized controlled trial phase were pooled to evaluate efficacy in patients with major depression without psychotic features. Patients with an inadequate response ( $<50\%$  reduction HAM-D17 Total; HAM-D17  $\geq 14$  and CGI-I  $\geq 3$  at the end of the ADT phase) were randomized to adjunctive placebo or adjunctive aripiprazole (2–20 mg/day) for 6 weeks. Adverse events (AE) related to suicidality were identified in the AE database by using the text term MedDRA preferred term. Treatment-emergent suicidal ideation was defined on outcome scales using item 10 (suicidality) of the Montgomery-Asberg Depression Rating Scale (MADRS) or item 18 (suicidality) of the Inventory of Depressive Symptomatology (IDS). **Results:** There were 737 patients in the safety database: aripiprazole ( $n=371$ ); placebo ( $n=366$ ). There were no suicides in these two trials. There were no treatment-emergent, suicide-related AEs in the aripiprazole group; two patients in the placebo group had  $\geq 1$  AE related to suicide. The IDS-SR item 18 scores showed a low incidence of suicidal ideation, 0.3% in the aripiprazole group and 0.6% in the placebo group ( $p=0.616$ , Fisher's Exact test). Adjunctive aripiprazole significantly improved the MADRS suicidality line item at all time points from Week 2 onwards as compared to adjunctive placebo ( $p<0.001$ ). **Conclusions:** The current analysis demonstrated that treatment-emergent suicidality was low and there was no evidence that the use of adjunctive aripiprazole in a depressed population is associated with an increased rate of suicidal ideation.

#### REFERENCES:

1. Berman RM, Marcus RN, Swanink R, et al: The efficacy

## POSTERS

and safety of aripiprazole as adjunctive therapy in major depressive disorder: a multicenter, randomized, double-blind, placebo-controlled study. *J Clin Psychiatry* 2007;68(6):843–853.

2. Marcus RN, McQuade RD, Carson WH, et al: The efficacy and safety of aripiprazole as adjunctive therapy in major depressive disorder: a second multicenter, randomized, double-blind, placebo-controlled study. *J Clin Psychopharmacol* 2008;28(2):156–165.

### **POSTER 85. PSYCHIATRIC MISDIAGNOSIS AMONG ADULTS HOSPITALIZED ON A MOOD DISORDERS UNIT**

David Muzina, M.D., 9500 Euclid Avenue, P57, Cleveland, OH 44195, Roman M. Dale, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Recognize the prevalence of misdiagnosis among patients hospitalized with a pre-admission diagnosis of a primary mood disorder; 2.) Recognize the importance of considering anxiety as the primary diagnosis for patients admitted for a presumed mood disorder; and 3.) Identify the importance of diagnostic accuracy as part of overall evidence-based practice.

#### **SUMMARY:**

**Introduction:** Increasing emphasis is appropriately being placed on the importance of evidence-based medicine in psychiatric practice. The majority of this emphasis has been placed on treatment interventions for specific diagnoses. However, evidence-based treatment first must be informed by correct and accurate diagnosis. Yet little is known about the prevalence and characteristics of misdiagnosis among psychiatric patients. The bulk of the available literature on this topic addresses misdiagnosis of bipolar disorder and relies on retrospective chart reviews or subjective patient reporting. Misdiagnosis of mood disorders has been linked to higher rates of psychiatric hospitalization, medical utilization and costs. Methodical investigation of misdiagnosis is warranted as a first step in the process of evidence-based psychiatric practice. **Methods:** The first 100 adults admitted to the Cleveland Clinic Mood Disorders Unit (MDU) at Lutheran Hospital in 2008 underwent structured research diagnostics after consent was obtained by a research assistant using the Mini-International Neuropsychiatric Interview (MINI-Plus). Results of the MINI-Plus were then compared to the clinical diagnosis on admission to the MDU. **Results:** Among these patients admitted to the MDU, 26% carried a primary psychiatric diagnosis that was inconsistent with the diagnostic results obtained from MINI-Plus interview as conducted by a blinded research assistant and verified by clinician. A primary anxiety disorder was missed in 10% of admitted patients previously thought to have a primary mood disorder. 16% of admitted patients had other primary diagnoses (schizoaffective disorder, personality disorder). **Conclusions:** Misdiagnosis is common among adult patients admitted to the hospital with a suspected primary mood disorder. Further study is necessary

in order to better understand the factors that place patients at risk for misdiagnosis and its associated potential negative treatment implications.

#### **REFERENCES:**

1. Bowden CL: Strategies to reduce misdiagnosis of bipolar depression. *Psychiatr Serv* 2001; 52(1):51-5.
2. Stensland MD, Schultz JF, Frytak JR: Diagnosis of Unipolar Depression Following Initial Identification of Bipolar Disorder: A Common and Costly Misdiagnosis. *J Clin Psychiatry* 2008:e1-e10.

### **POSTER 86. EFFICACY OF MILNACIPRAN IN THE TREATMENT OF THE FIBROMYALGIA AMONG PATIENTS WITH VARYING DEGREES OF DEPRESSED MOOD**

*Supported by Forest Laboratories, Inc.*

R. Michael Gendreau, M.D., Ph.D., 4350 Executive Drive, Suite 325, San Diego, CA 92121, Daniel J. Clauw, M.D., Robert H. Palmer, M.D., Kim Thacker, M.D., Olivier Vitton, M.D., Philip Mease, M.D., Tobie Escher, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to: 1.) Identify key symptoms of fibromyalgia (FM), understand the clinical relevance of composite responder analyses; and 2.) Recognize the role of milnacipran in the treatment of FM in patients with or without depressive symptomatology at baseline.

#### **SUMMARY:**

**Introduction:** Milnacipran, a dual NE and 5-HT reuptake inhibitor, is effective in treating fibromyalgia (FM). FM is often associated with comorbid depressive symptoms. This analysis evaluated the relationship between depressed mood and overall response to treatment. **Methods:** This was a 6-month trial with a pre-defined 3-month primary endpoint. 888 FM patients were randomized to placebo (n=223), milnacipran 100 (n=224), or 200 mg/d (n=441). As a result of revised FDA guidelines for the approval of FM treatments, the 2 pre-specified composite responder definitions were changed to: 1) treatment of FM pain, i.e., individuals concurrently having  $\geq 30\%$  improvement in pain (electronic diary), and a rating of 1="very much improved" or 2="much improved" on PGIC; and 2) treatment of FM, i.e., individuals meeting the pain response criteria plus a concurrent  $\geq 6$ -point improvement on the SF-36 Physical Component Summary score. Subset analyses of patient cohorts stratified by baseline Beck Depression Inventory (BDI) scores were performed. **Results:** Both doses of milnacipran were statistically significant on the FM composite analysis at 3 months (100 mg/d, P=.028; 200 mg/d, P=.017). For the composite pain analysis, milnacipran 200 mg/d was significant at 3 months (P=.032) and 6 months (P=.034). Among 3-month completers, PGIC response rates were significantly higher with both doses of milnacipran than placebo (100 mg/d: 53% vs. 37%, P=.007; 200 mg/d: 55% vs. 37%, P<.001). PGIC responder rates analyzed by baseline BDI score groupings were similar in all subgroups (BDI 0-9: 61% and 49% vs. 33%; 10-18: 52% and 61% vs.

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42%; >18: 43% and 52% vs. 38% for milnacipran 100 mg/d, 200 mg/d, and placebo, respectively). Commonly reported AEs were nausea, headache, and constipation. Conclusions: Milnacipran is safe and effective in treating the multiple symptoms of FM. The efficacy was independent of baseline depressive symptomatology. Funded by Forest Laboratories, Inc. and Cypress Bioscience, Inc.

### REFERENCES:

1. Clauw DJ: Fibromyalgia: update on mechanisms and management. *J Clin Rheumatol.* 2007; 13:102-109.
2. Gendreau RM, Thorn MD, Gendreau JF, Kranzler JD, Ribeiro S, Gracely RH, Williams, DA, Mease PJ, McLean SA, Clauw DJ: Efficacy of milnacipran in patients with fibromyalgia. *J Rheumatol.* 2005; 32:1975-1985.

### POSTER 87. OUTCOMES AND COSTS OF A BIPOLAR DISORDER SCREENING PROGRAM IN PRIMARY CARE SETTINGS

*Supported by AstraZeneca Pharmaceuticals.*

Joseph Menzin, Ph.D., 20 Fox Road, Waltham, MA 02451, Matthew Sussman M.A., Eskinder Tafesse Ph.D., Mark Friedman M.D., Peter Neumann Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to appraise the potential cost benefits associated with the implementation of a bipolar disorder screening program among patients presenting with symptoms of a major depressive episode.

### SUMMARY:

Introduction: Many patients presenting in primary care with a major depressive episode (MDE) suffer from unrecognized bipolar disorder (BPD) which may lead to delayed diagnosis, inappropriate treatment, and excess costs. This hypothetical study assessed the cost-effectiveness of BPD screening among adults presenting for the first time with a MDE. Methods: A decision-analysis model was used to evaluate the outcomes and cost over 5 years of screening for BPD versus not screening for BPD. Screening was assumed to consist of one-time administration of the Mood Disorder Questionnaire (MDQ) at the initial visit followed by referral to a psychiatrist for patients with a positive MDQ screen. Health states included correctly diagnosed BPD, unrecognized BPD, and correctly diagnosed MDEs. Each year a proportion of patients with unrecognized BPD receive a correct diagnosis. Model outcomes included rates of correct diagnosis and discounted costs (\$US 2006) of screening and treating BPD and MDEs. Results: According to the model, 1,000 adults in a health plan with 1 million members annually present with a MDE. Without screening, 201 of these patients would be correctly diagnosed with a MDE or BPD. With one-time MDQ screening, 21 additional patients would be correctly diagnosed. The 5-year discounted costs per patient were estimated at \$18,923 without screening and \$17,807 with screening for a saving of \$1,116, substantially higher than the cost of administering the MDQ (approximately \$10). This would result in a total budgetary savings of \$1.1 million

over 5 years. Results were sensitive to the ratio of treatment costs for unrecognized BPD to MDEs, the prevalence of BPD in patients with depressive symptoms and MDQ test characteristics. Conclusion: A one-time screening program for BPD at the time of a MDE diagnosis can be an effective means for improving the rate of correct BPD diagnosis and saving costs to managed-care plans. Supported by funding from AstraZeneca Pharmaceuticals.

### REFERENCES:

1. Awad AG, Rajagopalan K, Bolge SC, McDonnell DD. Quality of life among bipolar disorder patients misdiagnosed with major depressive disorder. *Prim Care Companion J Clin Psychiatry* 2007; 9:195-202.
2. McCombs JS, Ahn J, Tencer T, Shi L. The impact of unrecognized bipolar disorders among patients treated for depression with antidepressants in the fee-for-services California Medicaid (Medi-Cal) program: a 6-year retrospective analysis. *J Affect Disord* 2007; 97:171-179.

### POSTER 88. THE ROLE OF MOOD ELEVATION AND LABILITY AS CONTRIBUTORS TO SUICIDE IDEATION, RISK, AND CURRENT DEPRESSION

Anthony Tucci, B.A., Northern Illinois University, Department of Psychology, PM 400, DeKalb, IL 60115, Matthew Schumacher, M.A.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to recognize the value of assessing for hypomanic/manic symptoms regardless of diagnostic categories and understand that both mood lability and elevation are positively related to suicide risk and current depressive states.

### SUMMARY:

Objective: Individuals with bipolar spectrum disorders have higher rates of suicide when compared to those with major depression. However, mood elevation and related lability are often underexamined as significant contributors to depressive suicidal symptoms. The aim of this study was to explore the role of mood lability and mood elevation in suicidal behavior among young adults. Methods: 435 undergraduate participants were administered the General Behavior Inventory to determine trait depression, elevation, and mood lability. Participants were also assessed for current depression, lifetime suicidal ideation and risk. Results: Participants high on measures of both trait depression and trait elevation reported the most severe current depression. When controlling for current depressive state, trait depression, trait elevation and mood fluctuation were positively related to suicidal behavior. Additionally, mood lability predicted trait depression. However, the association between mood lability and suicide was fully mediated by trait depression. Conclusions: Regardless of mood diagnosis, mood elevation and lability are more common than expected and are significant contributors to suicidality. Higher suicide rates among bipolar spectrum disorder individuals may be due to mood lability and elevation. Since the relationship between mood lability and suicide were fully mediated by

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trait depression, mood lability may cause the trait depression associated with suicidal behavior. Assessing and treating mood elevation and lability may reduce the heightened risk of suicide across diagnostic categories.

### REFERENCES:

1. Cassano GB, Rucci P, Frank E, Fagiolini A, Dell'Osso L, Shear MK, Kupfer, DJ: The mood spectrum in unipolar and bipolar disorder: Arguments for a unitary approach. *Am J Psychiatry* 2004; 161: 1264-1269.
2. Balazs J, Benazzi F, Rihmer Z, Rihmer A, Akiskal KK, Akiskal KK: The close link between suicide attempts and mixed (bipolar) depression: Implications for suicide prevention. *Journal of Affective Disorders* 2006; 91: 133-138.

### POSTER 89. THE EXAMINATION OF THE RELATIONSHIP BETWEEN DEPRESSION AND OBESITY IN AFRICAN AMERICAN WOMEN

Stephanie Sturgis, M.P.H., *Centers for Disease Control and Prevention, 4770 Buford Highway, N.E., Mailstop K-67, Atlanta, GA 30341*, Laurie D. Elam-Evans, Ph.D., M.P.H., Daniel P. Chapman, Ph.D., Geraldine S. Perry, Dr.P.H., R.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Identify the prevalence of depression and obesity among various subgroups of African American women; 2.) Explain the magnitude of the association between depression and obesity among African American women; and 3.) Demonstrate their understanding of the variation in the magnitude of association between depression and obesity by demographic and behavioral characteristics.

### SUMMARY:

Introduction: Depression, a mental illness affecting 18.2 million U.S. adults, is associated with a myriad of chronic diseases, including obesity. We analyzed data for 9,343 African American women to determine if there was an association between depression and obesity and to determine whether or not this association varied by selected demographic (age, education, marital status, number of children in the household) and behavioral (physical activity, smoking, drinking) characteristics. Methods: We used data from the 2006 Behavioral Risk Factor Surveillance System survey in 36 states and territories that administered the Patient Health Questionnaire-8 Anxiety and Depression module. Depression was defined as  $> 10$  on depression severity scale; obesity was defined as  $BMI > 30\text{kg}/\text{m}^2$ . Analyses were conducted using SAS and SUDAAN. Univariate, bivariate, and multiple logistic regression analysis were used to examine associations between depression and obesity. Results: Over 13% of African American women were depressed and over 40% were obese. Women who were depressed were 1.41 times more likely to be obese than their non-depressed counterparts ( $OR=1.41$ ; 95% CI 1.14-1.74). The magnitude of this association varied by demographic and behavioral characteristics and was significantly higher among women with a college degree ( $OR$

$= 2.75$ ; 95% CI 1.49-2.05) and those who were moderate drinkers ( $OR = 2.09$ ; 95% CI 1.08-4.05). The association was not significant among any other subgroups of African American women. Discussion: Obese African American women should be screened for depression during routine visits. Additionally, research should be conducted in collaboration with the African American community to jointly identify strategies and implement culturally-tailored interventions.

### REFERENCES:

1. Carrington CH: Clinical Depression in African American Women: Diagnoses, Treatment, and Research. *J Clin Psychol* 2006; 62:779-791.
2. Stunkard AJ, Faith MS, and Allison KC: Depression and obesity. *Biological Psychiatry* 2003; 54:330-337.

### POSTER 90. CONVERGENT VALIDITY OF THE BECK DEPRESSION INVENTORY, 2ND EDITION (BDI-II) AND THE NEUROLOGICAL DISORDERS DEPRESSION INVENTORY IN EPILEPSY (NDDI-E) Supported by GlaxoSmithKline

James M. Miller, Pharm.D., *Manager, Epilepsy Clinical Development, GlaxoSmithKline, 5 Moore Drive, MAI-C.2419.2A, Research Triangle Park, NC 27709*, Frank G. Gilliam, M.D., Bruce P. Hermann, Ph.D., Andres M. Kanner, M.D., Kimford J. Meador, M.D., Anne E. Hammer, B.S., John J. Barry, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to evaluate the convergent validity between the Beck Depression Inventory (BDI-II) and the Neurological Disorders Depression Inventory in Epilepsy (NDDI-E), an epilepsy-specific self-report depression screening questionnaire, following antiepileptic drug therapy.

### SUMMARY:

Background: The BDI-II is a self-report measure of depression in which scores  $\geq 16$  indicate mild to moderate severity. The 6-item NDDI-E has been validated against the Structured Clinical Interview for *DSM-IV* Axis I Disorders (SCID 1-research version) with scores of  $\geq 15$  indicating a likely major depressive episode. It is expected that these psychometric tools measure comparable levels of depression and would respond to effective treatment in a similar fashion. Methods: One hundred fifty-eight patients with epilepsy participated in a 36-week, open-label trial evaluating mood changes after lamotrigine was added to a stable antiepileptic drug regimen. Mood changes were measured by self-report scores on the BDI-II and NDDI-E. Observed scores are reported. Results: A total of 96 patients completed the 19 week adjunctive phase and 66 patients completed monotherapy. Mean BDI-II and NDDI-E scores were 17.4 and 13.5 respectively at baseline; 11.6 and 12.0 at Week 19; 7.7 and 10.5 at Week 36. The effect size for the BDI-II was 0.58 at Week 19 and 1.06 at Week 36. Effect sizes for the NDDI-E were 0.41 and 0.83 in the same period. Between baseline and Week 19, the mean decrease in BDI-II score was 7.3 ( $p < 0.0001$ ) and the mean decrease in NDDI-E

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score was 2.0 ( $p < 0.0001$ ); mean decreases between baseline and Week 36 for each instrument were 12.4 ( $p < 0.0001$ ) and 4.0 ( $p < 0.0001$ ). Spearman Correlation was 0.59 ( $p < 0.0001$ ) for the adjunctive treatment period and 0.66 ( $p < 0.0001$ ) for monotherapy. Conclusions: This study provides evidence for convergent validity between the BDI-II and the NDDI-E. Funded by a research grant from GlaxoSmithKline.

### REFERENCES:

1. Fakhoury TA, Barry JJ, Miller JM, et al. Lamotrigine in patients with epilepsy and comorbid depressive symptoms. *Epilepsy Behav* 2007;10:155-62.
2. Gilliam FG, Barry JJ, Hermann BP, et al. Rapid detection of major depression in epilepsy: a multicentre study. *Lancet Neurol* 2006;5:399-405.

### POSTER SESSION 4

FRIDAY, OCTOBER 3

3:00 p.m.-4:30 p.m.

### SERVICES AND TRAINING

MODERATOR: STEPHEN M. GOLDFINGER, M.D.

### POSTER 91. WITHDRAWN

### POSTER 92. ASSESSMENT OF COMPREHENSION OF INFORM CONSENT IN BIPOLAR MANIA

Jitendra Trivedi, M.D., M.R.C., *Professor, Department of Psychiatry, C.S.M. Medical University (earlier K.G. Medical University) Lucknow-226003 India*, Vivek Sharma, M.B.B.S., Harjeet Singh, M.D., J. S. Srivastava, M.D., D.M.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to: 1.) Assess the comprehension of informed consent in the patients of bipolar mania; and 2.) Compare the comprehension of informed consent according to the severity of bipolar mania.

### SUMMARY:

It is commonly acknowledged that psychiatric patients do not have a sound mind, but whether this unsoundness of mind precludes their ability to give informed consent is a moot point. A number of studies have already been done to assess the consenting capability of the psychiatric population. Bipolar patients, especially in the mania phase, have not been a focus of any such study. This was a single-point, non-invasive study of new and follow-up cases of bipolar affective disorder currently in mania. It involves administration of a standardized competence assessment to assess the performance on closely related abilities viz. understanding (comprehension), appreciation, reasoning, and ability to express a choice, which are determinants of decision making. 45 patients of bipolar mania were included. Conclusion: The analysis revealed that the severity of current episodes had significant inverse correlation while educational attainments had significant positive correlation with measures of competence-related abilities. Impaired comprehension was found in 76.19% of mania without psychosis and 100% of psychotic mania.

### REFERENCES:

1. Appelbaum P. S., Grisso T. (1988): Assessing patients' capacities to consent to treatment. *New England Journal of Medicine*, 319, 1635-1638.
2. Martinez-Aran, A. Eduard Vieta, María Reinares et al. (2004). Cognitive Function Across Manic or Hypomanic, Depressed, and Euthymic States in Bipolar Disorder. *Am J Psychiatry* 161:262-270.

### POSTER 93. CLINICAL AND ETHICAL CONSIDERATIONS IN PSYCHOPHARMACOGENETIC TESTING: VIEWS OF EARLY ADOPTERS

Jinger Hoop, M.D., M.F.A., *Department of Psychiatry and Behavioral Medicine, Medical College of Wisconsin, 8701 Watertown Plank Road, Milwaukee, WI 53226*, Maria I. Lapid, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Assess when and how psychiatrists who are "early adopters" of pharmacogenetic testing use these tests; and 2.) Define how early adopters assess the psychosocial risks of such testing and the need for patient safeguards such as informed consent, confidentiality, and pre- and post-test counseling.

### SUMMARY:

Introduction: Pharmacogenetic testing (PGT) for polymorphisms affecting drug response and metabolism is now clinically available, and its use in psychiatry is expected to become more widespread. Currently, there are few clinical and ethical standards for the use of these new laboratory tests, which may carry some of the psychosocial risks of other types of genotyping. As a step toward building professional consensus about PGT, we assessed the attitudes and practices of psychiatrists at three academic departments of psychiatry where PGT is routinely available. We hypothesized that PGT would be used primarily in the case of treatment-resistant illness, and that clinicians would feel that such tests carried little risk. Methods: Physicians at three academic departments of psychiatry considered to be "early adopters" of PGT were invited to complete an Internet-based 67-item survey, including short-answer, yes/no, and 4-point Likert scale items regarding clinical practices and opinions about PGT, including perceptions of its utility, risks and benefits, necessary safeguards. Results: Of 75 respondents, there were similar proportions of men and women and of faculty and residents. Respondents had ordered PGT a mean of 20.86 times in the previous 12 months. Most had ordered CYP450 (76% 2D6, 68% 2C19, 61% 2C9), and fewer had ordered serotonin (31% 5-HTT, 16% 5-HTR) genotyping. PGT was believed more useful in cases of treatment-resistant depression and medication intolerance than in new onset illness, cognitive impairment, or chronic schizophrenia, though PGT was judged useful in all situations. Women were more likely than men to believe that PGT carries psychosocial risks. Respondents endorsed the use of several safeguards

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for PGT testing, including confidentiality, pre- and post-test counseling, and informed consent. Conclusion: Physicians at “early adopting” departments of psychiatry endorsed the clinical utility of pharmacogenetic testing and the need for safeguards.

### REFERENCES:

1. De Leon J, Armstrong SC, Cozza KL. Clinical guidelines for psychiatrists for the use of pharmacogenetic testing for CYP450 2D6 and 2C19. *Psychosomatis* 2006; 47: 75-85.
2. Serretti A, Artioli P. Ethical problems in pharmacogenetic studies of psychiatric disorders. *Pharmacogenomics J*. 2006 Sep- Oct; 6(5): 289-95.

### POSTER 94. AN INNOVATIVE MODEL FOR THE MANAGEMENT OF CO-OCCURRING MEDICAL CONDITIONS IN PATIENTS WITH SEVERE AND PERSISTENT MENTAL ILLNESS

Gladys Tiu, M.D., 671 Hoes Lane, Room C-205, Piscataway, NJ 08854, Cheryl Graber, M.D., Anthony Tobia, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Recognize the importance of addressing co-occurring medical illness in individuals afflicted with severe and persistent mental illness; 2.) Identify important goals pertaining to physical health status that need to be addressed by the psychiatrist; and 3.) Discuss how the application of the specialized medication group model improves coordination of care leading to improvements in physical health.

### SUMMARY:

Objective: To study the impact of a specialized medication group on the physical health status of individuals with severe and persistent mental illness (SPMI) and co-occurring medical conditions attending a partial hospital program. Methods: At the Acute Partial Hospital (APH) program in Monmouth Junction, NJ, patients have their medications monitored in a medication group setting. Approximately 50 patients with schizophrenia and co-occurring medical conditions took part in this pilot study to test if participation in a group comprised of patients with similar medical illness resulted in more efficient coordination of care and improvement in physical health status. Patients met inclusion criteria if they attended the APH, and if they carried a diagnosis of either a) viral hepatitis infection, b) obstructive sleep apnea, or c) diabetes mellitus. Baseline data were taken for general knowledge of their particular medical illness and a checklist of items considered to be the standard of care. At 12 months, data were collected on all patients to evaluate the impact of this specialized medication group on the identified parameters. Results: After 12 months of participating in the specialized medication group, patients were found to have greater knowledge of their medical illness and improved global functioning. Their clinical psychiatric stability was unaffected or improved as measured by Clinicians' Rating Scales. The impact of nursing and case management resulted in more efficient coordination of care with primary providers and specialists which was reflected in the number and quality of diagnostic tests and routine (per

treatment guidelines) assessments obtained. Conclusions: The assignment of mentally ill patients to a medication group according to their physical illness is a unique and efficient model leading to improved quality of care, patient satisfaction and overall well being.

### REFERENCES:

1. Centers for Disease Control and Prevention. Recommendations for prevention and control of hepatitis C virus infection and HCV-related chronic disease. *MMWR Recomm Rep*. 1998; 47: 1-39.
2. Yaggi, HK, et al.: Obstructive Sleep Apnea as a Risk Factor for Stroke and Death. *N Eng J Med* 2005; 353(19): 2034-2041.

### POSTER 95. PSYCHO-TRAUMATOLOGY (THE ART AND SCIENCE OF DISASTER PSYCHIATRY)

Omar Mohamed, M.D., 810 Washington Avenue, # 919, Memphis, TN 38105

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to: 1.) Include types of disasters, the mental health effects of disasters, high-risk population, and the role of psychiatrists before, during and after disasters; and 2.) Discuss the field of psychiatric trauma, namely, psychological first aid and the healing environment.

### SUMMARY:

Many people survive disasters without developing significant psychological symptoms. Others, however, may have a difficult time coping. Survivors of trauma have reported a wide range of psychiatric problems, including depression, alcohol and drug abuse, lingering symptoms of fear and anxiety that make it hard to work or go to school, family stress, and marital conflicts. Post-Traumatic Stress Disorder (PTSD) and Acute Stress Disorder (ASD) are probably the best-known psychiatric disorders following a traumatic event. The effects of trauma are not limited to those affected directly by the events. Others may also suffer indirect effects from trauma (secondary traumatization). Those at risk include spouses and loved ones of trauma victims; people who try to help victims, such as police or firemen, and health care professionals. The Psychiatrist as a Healer: In the aftermath of a disaster, the medical skills of the psychiatrist are most valuable. A calm, professional approach helps prevent panic. Assistance at triage stations and leadership to coordinate an organized response may prove life saving. The ability to distinguish between common reactions of hyper arousal from pathological ones ensures appropriate management of individuals/resources. Knowledge of pharmacology and experience with chemical agents is valuable in responding to threats, whether delivered by terrorist attacks or through industrial accidents. Psychiatrists enjoy special psychotherapeutic skills useful in disasters. Similarly, psychiatrists' ability to deal with issues of death is an advantage in disaster work. Psychological First Aid: Is an evidence-informed modular approach to help victims in the immediate aftermath of disaster and terrorism. It is designed to reduce the initial distress caused by traumatic events and to

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foster short- and long-term adaptive functioning and coping. It also addresses the provider self-care (in order to prevent burn-out/compassion fatigue).

### REFERENCES:

1. Harvard Program in Refugee Trauma.
2. National Child Traumatic Stress Network.

### POSTER 96. DEVELOPING A SMOKE-FREE SYSTEM OF CARE: EIGHT BUILDING BLOCKS FOR SUCCESS

Jeanne Steiner, D.O., *CMHC/Yale University, Park Street, New Haven, CT 06519*, Allison Ponce, Ph.D., Donna LaPaglia, Ph.D., Andrea Weinberger, Ph.D., Stephanie O'Malley, Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, participants will be able to: 1.) Identify eight key domains in the development and implementation of a smoke-free system of care; and 2.) Apply this practical information within other settings in order to improve the health of the individuals they serve.

### SUMMARY:

Introduction: The CT Mental Health Center is an urban, academic, community mental health facility that provides inpatient and ambulatory mental health and substance abuse services under the auspices of the State of CT and Yale University. The Center set a goal and developed plans to improve the health of the individuals it serves by reducing smoking rates and becoming a smoke-free campus. Method: We identified 8 key building blocks for implementing the plans within the center and its community partners. Results: Successful implementation was achieved by outlining and completing steps within 8 key domains: 1.) Patient education and incentive programs; 2.) Staff training; 3.) assistance for staff who smoke; 4.) Policy development; 5.) effective communication strategies; 6) Physical environment enhancements; 7) Collaboration with affiliated social, vocational and residential programs; and 8.) Leadership and advocacy. Discrete elements of each of these steps are presented. Conclusion: Smoking-cessation strategies can be implemented successfully within inpatient and ambulatory settings. Practical steps within 8 key domains are identified that can be utilized widely.

### REFERENCES:

1. Schroeder SA: We can do better – Improving the health of the American people. *N Engl J Med*, 2007; 357:1221-1227.
2. Tobacco-Free Living in Psychiatric Settings: A best-practices toolkit promoting wellness and recovery. National Association of State Mental Health Program Directors, 2007. [http://www.nasmhpd.org/general\\_files/publications/NASMHPD.toolkitfinalupdated90707.pdf](http://www.nasmhpd.org/general_files/publications/NASMHPD.toolkitfinalupdated90707.pdf).

### POSTER 97. TEACHING PSYCHOPATHOLOGY IN THE DSM ERA: MINDING THE GAPS

Robert Hierholzer, M.D., *VA Central California Healthcare System, IIR&E, 2615 E. Clinton Avenue, Fresno, CA 93703*

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Recognize that the *DSM* criteria for any psychiatric disorder does not necessarily embody all the critical features of that disorder; 2.) Articulate how such gaps reify an incomplete view of psychiatric disorders; 3.) Describe ways a didactic course or seminar might address these deficiencies; and 4.) Discuss why it is important to be cognizant of these gaps and why it is important to address them.

### SUMMARY:

The *Diagnostic and Statistical Manual-IV* has important clinical and research uses. The editors of the *DSM-IVTR* also recognize that the *DSM-IV* is an “educational tool for teaching psychopathology.” Given its widespread clinical use, it is not surprising that the *DSM-IV* informs notions about the essential features of psychiatric disorders, implicitly or explicitly. It is important to recognize, however, that the criteria set for any given psychiatric disorder does not necessarily delineate all, or even the most important, clinical features of that disorder. The criteria for schizophrenia, for example, emphasize positive and negative symptoms but do not highlight cognitive symptoms, nor mood symptoms (other than as a potential exclusionary factor). Such gaps can be identified for other *DSM* diagnoses as well. This presentation features the development of a course in Psychopathology for psychiatry residents which specifically considers what is missing from the *DSM-IV* constructs for the major mental disorders, while also emphasizing the importance of knowing the *DSM-IV* criteria. The identified gaps are addressed by facilitated discussions of specific scientific readings and by first person accounts written by those with major mental disorders. The importance of recognizing these gaps in the diagnostic system for the conception and treatment of the major mental disorders is discussed. Handouts of suggested readings and sample reading guides for selected articles will be available.

### REFERENCES:

1. Hyman SE, Ivleva E: Cognition in Schizophrenia. *Am J Psychiatry* 2008; 165: 312.
2. Tucker GJ: Putting DSM-IV in Perspective. *Am J Psychiatry* 1998; 155: 159-161.

### POSTER 98. FEASIBILITY AND DIAGNOSTIC VALIDITY OF A BRIEF, SELF-RATED SCREEN FOR DEPRESSIVE, BIPOLAR, ANXIETY, AND POST-TRAUMATIC STRESS DISORDERS IN PRIMARY CARE

Bradley N. Gaynes, M.D., M.P.H., *CB # 7160, School of Medicine, Chapel Hill, NC 27599-7160*, Joanne DeVeauh-Geiss, M.A., Hongin Gu, Ph.D., David Rubinow, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Recognize the accuracy and feasibility of a new screen for bipolar, depression, anxiety, and post-traumatic stress disorders in a primary care setting; and 2.) Compare the number of potential diagnoses captured by this broad spectrum

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screen that would have been missed by use of a single disorder screen.

### SUMMARY:

Introduction: Mood and anxiety are the two most common psychiatric disorders seen in primary care, yet they remain under-detected and under-treated. Screening tools can improve identification, but available instruments are limited by the number of disorders assessed. Our aim was to assess the feasibility and diagnostic validity of the M-3 checklist, a new one-page, patient-rated, 27-item tool developed to screen for multiple psychiatric disorders in primary care. Methods: In 2007-2008, 647 patients at the University of North Carolina Family Medicine Clinic were enrolled. Patients filled out the M-3 checklist in the waiting room prior to a doctor visit. After visit completion, experienced diagnostic interviewers blinded to M-3 results contacted patients by phone (mean 9 days) and administered the MINI Neuropsychiatric Interview. Using ROC analysis, optimal diagnostic thresholds for sensitivity and specificity were estimated with 80% of the cohort, and validated with the remaining 20%. Results: In this setting, 15% of patients had a depressive disorder (with or without comorbid anxiety disorders), 11% had an anxiety disorder alone, and 10% had bipolar spectrum illness. For each diagnosis, sensitivity and specificity for the model fitting and validation samples were equivalent. Results for the full cohort(n=647):

	Depression	Anxiety	PTSD	Bipolar
Sensitivity	.87	.81	.90	.82
Specificity	.80	.81	.78	.76

80% of clinicians read the checklist in =30 seconds, and none reported that the checklist was too complicated. 80% felt the M-3 was helpful in reviewing patients' emotional health. Conclusion: The M-3 is a valid, efficient, and feasible tool for screening multiple common psychiatric illnesses in primary care. Its accuracy is equivalent to existing single disorder screens with the benefit of being combined into a one page tool. It has the potential to reduce missed psychiatric diagnoses and assure proper treatment of those identified. Funded by M-3 Information.

### REFERENCES:

1. Spitzer RL, Kroenke K, Williams JB. Validation and utility of a self-report version of PRIME-MD: the PHQ primary care study. Primary Care Evaluation of Mental Disorders. Patient Health Questionnaire. *Jama*. 1999;282:1737-1744.
2. Kroenke K, Spitzer RL, Williams JB, Monahan PO, Löwe B. Anxiety disorders in primary care: prevalence, impairment, comorbidity, and detection. *Ann Intern Med*. 2007 Mar 6;146(5):317-25.

### POSTER 99. KEEPING MEDICAL STUDENTS AWAKE: UTILIZING POWERPOINT FOR A JEOPARDY-STYLE REVIEW SESSION

Brian Cooke, M.D., 701 W. Pratt Street, Baltimore, MD 21201

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to: 1.) Recognize the benefit of using PowerPoint for an interactive Jeopardy-style review session; 2.) Discuss example Jeopardy questions and categories; and 3.) Explain how to create a similar PowerPoint lecture.

### SUMMARY:

Medical student education continuously evolves. As research advances our knowledge, curriculums must adapt. Opportunities for teaching must also utilize technological developments. Medical students on their clinical rotations are exposed to an array of teaching methods including didactics, web-based exercises, and patient interviews. A quiz show class following a Jeopardy-style format provides an interactive environment for students to review psychiatric topics. This format has been used in other areas, but to my knowledge has not been discussed in the literature. Objectives: The purpose of this report is to illustrate the Jeopardy-style PowerPoint presentation that has been used as a review session for medical students on their Psychiatry clerkship. I will review the structure of the class, provide examples of questions, and describe how to create this type of lecture. Rules: The rules of the review session are similar to those of the game show "Jeopardy!" Two teams of students answer questions in order to gain the most number of points. There is a single round of Jeopardy with one "Daily Double" and a "Final Jeopardy" question at the end. Examples: Questions test students' knowledge of *DSM-IV* diagnoses, psychotropics, and laboratory findings. Category headings group the questions by topic and may include geriatrics, substance abuse, or neuropsychiatry. Creating a Jeopardy-Style Lecture: PowerPoint templates are readily available online. The templates are a series of slides that have hyperlinks connecting them to subsequent slides. To modify a template, educators should use their own creativity. Pictures and audio clips can easily be inserted into the PowerPoint slides. Discussion: A Jeopardy-style, PowerPoint class provides an excellent opportunity for medical students to review psychiatric topics at the conclusion of their clinical rotation. With creativity and enthusiasm, the educator will keep students awake and engaged.

### REFERENCES:

1. Niamtu J 3rd: The power of PowerPoint. *Plast Reconstr Surg* 2001; 108: 466-484.
2. Kerfoot BP, Masser BA, Hafler JP: Influence of new educational technology on problem-based learning at Harvard Medical School. *Med Educ* 2005; 39: 380-387.

### POSTER 100. RETROSPECTIVE STUDY OF HEALTH DISPARITIES IN DEPRESSION FOR ETHNIC AND RACIAL MINORITIES AT MASSACHUSETTS GENERAL HOSPITAL

Nhi-Ha T. Trinh, M.D., M.P.H., Wang 812, 15 Parkman Street, Boston, MA 02114, Albert Yeung, M.D., ScD.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able

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to recognize and understand the factors underlying disparities in the diagnosis and treatment of depression in minorities in a primary care population of a large urban hospital.

### SUMMARY:

**Introduction:** Although depression can be reliably diagnosed and treated in primary care, fewer than 25% of those affected have access to effective treatments, and these disparities are seen in ethnic and racial minorities. The Surgeon General's report on mental health made addressing these disparities a top priority. We investigate disparities in recognition of depression diagnoses for minorities at Massachusetts General Hospital (MGH). **Hypotheses:** We hypothesize that depression is under-recognized for minority populations at MGH. Specifically, as compared to the Caucasian population, we will find lower rates of reported diagnoses of *Diagnostic and Statistical Manual IV (DSM-IV)* Axis I depressive disorders in minority populations. **Methods:** We performed a retrospective analysis using electronic medical records database at MGH. Subjects included all MGH primary care outpatients seen in 2007. We defined minority groupings: African American, Asian/Pacific Islander, Hispanic American, and Native American compared to the Caucasian population. We performed multivariate analyses of the data to compare rates of reported *DSM-IV* Axis I depression diagnoses, adjusted for socioeconomic status. This study was approved by the MGH IRB. **Results:** A total of 325,292 outpatients were seen at MGH in 2007, 55% were female, and 45% were male. Reported rates of depression in minority patients were statistically significantly lower as compared to the Caucasian population, particularly for Asian American and African American groups, even adjusted for socioeconomic status. Gender differences suggested lower rates of reported depression for men. **Discussion:** Disparities in depression diagnosis are significant for minority populations. Our results serve as a springboard for both further research into the nature of barriers to care, as well as the development of psychiatric disorders screening and other programs to better serve minority communities.

### REFERENCES:

1. US Department of Health and Human Services (1999). *Mental Health: A Report of the Surgeon General*. US Department of Health and Human Services: Rockville, MD.
2. Yeung AS, Kung WW, Chung, H, Rubenstein G, Roffi P, Mischoulon D, Fava M. Integrating psychiatry and primary care improves treatment acceptability among Asian Americans. *General Hospital Psychiatry* 26: 256-260, 2004.

### POSTER 101. PUBLISHING AS RESIDENT EDUCATION: THE ASCP MODEL PSYCHOPHARMACOLOGY CURRICULUM

Vishal Madaan, M.D., M.B.B.S., 3528, Dodge Street, Omaha, NE 68131, Christopher J. Kratochvil, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able: 1.) Develop and update a standardized psycho-

pharmacology curriculum for the residents, by a resident; 2.) Enhance collaboration and contact between resident and senior faculty; and 3.) Improve understanding of the publishing process, including planning, authoring, reviewing, and editing, at a resident level.

### SUMMARY:

The Accreditation Council of Graduate Medical Education (ACGME) has defined six core competencies for residents, including medical knowledge, practice-based learning and improvement, professionalism, and interpersonal and communication skills. Additionally, the ACGME requires residents to participate in research and scholarly projects as an important aspect of their training. While clinical learning and experience contribute to improving interpersonal skills, professionalism, and general medical knowledge, residents and training programs struggle with educational models that help address more rigorous education in evidence-based medicine and scholarly projects. In this regard, we developed a collaborative academic project for a resident and faculty member that exemplifies these ACGME requirements in a practical and purposeful manner. This project was aimed to enhance the resident's psychopharmacology knowledge, learn evidence based child psychiatry, and develop writing and editing skills; a means to improve clinical as well as academic abilities. One senior faculty member and one child psychiatry resident were invited to become section editors for the child and adolescent section of the American Society of Clinical Psychopharmacology Model Psychopharmacology Curriculum for psychiatry residents. Authors from various university programs nationally, prepared or revised lectures based on their expertise and areas of interest. The authors were provided with as much support and assistance as they desired from the section editors. The resident author/editor met in person with the faculty to plan the project and routinely throughout the process, with frequent e-mail communication throughout the writing and editorial work. After submission of lectures, the section was again reviewed and revised by the resident and faculty editors. The final series of lectures was sent for final approval by the overall project editors and submission to the publishers.

### REFERENCES:

1. ASCP Model Psychopharmacology Curriculum for psychiatric residency programs, training directors and teachers of psychopharmacology. Fourth edition. A committee of the ASCP. ASCP Inc., Glen Oaks, NY: 2006.
2. Swick S, Hall S, Beresin E. Assessing the ACGME Competencies in Psychiatry Training Programs. *Academic Psychiatry* 2006; 30:4.

### POSTER 102. RESEARCH INTO THE THERAPEUTIC EFFECTS OF THE PHOTO-INSTRUMENT

Jan Sitvast, M.A., Postbus 2003, Warnsveld, 7230 GCNetherlands, Rene de Veen, M.D., Anne Lenderink

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### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Recognize how the intervention works in practice; 2.) Enumerate what the results are in terms of patient outcomes; and 3.) Enumerate what the results are in terms of empowerment.

### SUMMARY:

Background: This study investigates the photo-instrument, an intervention in mental health care using the medium of photography. The photo-instrument aims at providing meaningfulness to the experience of consumers taking photos of their life world. It consists of sixteen group meetings. The participants receive a disposable camera and an assignment leading them to take photographs. Objectives: Research is aimed at the subjective experiencing of (the consequences of) impairments and also at measuring positively labeled therapeutic effects of the photo-instrument; consumer empowerment and the enforcement of cognitions concerning acceptance of being ill. Methods: The self-image of the consumer is the central issue in this research. This self-image is reflected in the photographs and the verbal expression of subjective experiences elicited by the therapists. Results: Qualitative data show that 46 % of all participants in photo groups explore in depth emotions and meaningful experiences, 65 % of all participants mentioned illness experiences explicitly and reflected on them. 55 % Of all participants tended to evaluate their lives as told in their stories. Quantative data show that the perception of the impact of illness changes due to participation in a photo group. (Photo-) storytelling contributes to a reduction of the perceived impact of psychiatric illness on the 'normal' functioning in daily life (as experienced by consumers themselves). The instrument was successfully used in various therapeutic settings. Conclusion: It does so, we assume, by reducing a sense of shame by restoring trust in own beliefs, by making transparent what is valuable in life (focusing on strengths and values). These effects are related to empowerment. Reconstruction of life stories is a powerful therapeutic tool facilitating acceptance of illness.

### REFERENCES:

1. Sitvast J, Abma T, Widdershoven GAM, Lendemeijer HGM, in press, Photo-stories, Ricoeur and Experiences from Practice: a hermeneutic dialogue, *Advances in Nursing Science*.
2. Widdershoven GAM. The Story of Life. Hermeneutic Perspectives on the Relationship between Narrative and Life History, In: Josselson R, Lieblich A, eds. *The Narrative Study of Lives*. Thousand Oaks: California: Sage Publications; 1993; 1: 1-20.

### POSTER 103. TRANSFORMING A STATE HOSPITAL: STAFF ATTITUDES AND PERCEPTIONS DURING A PERIOD OF CHANGE

David Mayerhoff, M.D., *Greystone Park Psychiatric Hospital, 50 Ellis Drive, Greystone Park, NJ 07950*, Steven J. Schleifer, M.D., Russell Smith, M.S., L.C.P.C., Jeffrey R. Nurenberg, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to better understand the effects of change and strain in long-term hospital units on staff attitudes and perceptions and how such effects may affect patient care and staff retention.

### SUMMARY:

To facilitate discharge from a State Hospital, a 20 patient unit was established in 2003 focusing on "difficult to discharge", long-term patients. The unit increasingly utilized wellness/recovery principles and involved a State-University affiliation. Transforming a traditional hospital unit can challenge long-established systems of extended patient care and we had the opportunity to monitor the course of change. The unit underwent a period of strain in early 2007 when, partly in anticipation of moving to a new facility, dramatic increases occurred in both patient discharges and staff turnover. The strain on the unit, which was evident to administrative staff, appeared to normalize later in the year. Using measures collected periodically, we assessed, retrospectively, whether the overt change in milieu was reflected in ongoing measures of staff attitudes and perceptions. Method: Staff had completed the Psychiatric Rehabilitation Attitudinal Survey (PsyR), a measure of attitudes concerning psychiatric rehabilitation, wellness and recovery, the Moos S Ward Atmosphere Scale, and the Greystone Intrusiveness Measure (GIM), an indicator of staff perceptions of patient intrusiveness. Scores in mid-2007 were compared with the preceding measure in 2006 and, for PsyR and GIM, with measures in November, 2007 (ANOVA). Result: PsyR decreased from March, 2006 to June, 2007 ( $p < 0.05$ ) as did MOOS items such as staff encouragement of patient independence ( $p < 0.02$ ). PsyR increased in November, 2007 ( $p < 0.02$ ), becoming indistinguishable from the 2006 score. GIM showed a corresponding pattern, albeit not reaching statistical significance, increasing transiently in mid-2007. Discussion: Adverse changes in several dimensions of staff attitudes and perceptions coincided with the temporary disruption in unit stability. During periods of change, monitoring attitudes and perceptions may help identify staff in need of support, as well as interventions to maintain wellness orientation.

### REFERENCES:

1. Birkmann, J.C., Spurduto, J., Smith R.C., Gill, K.J. A Collaborative Rehabilitation Approach to the Improvement of Inpatient Treatment for Persons with a Psychiatric Disability. *Psychiatric Rehabilitation Journal*, 2006: 29:157-165.
2. Talbott, JA, & Robinowitz, CB: Working together: State-University collaboration in mental health. Washington,DC, American Psychiatric Press, Inc.,1986.

### POSTER 104. DEVELOPING AND ENGAGING A PATIENT COUNCIL IN A REGIONAL MENTAL HEALTH FACILITY

Kristine Diaz, R.N., M.Ed., *850 Highbury Avenue, London, ON Canada, N6A 4H1*, Sandy Whittall, R.N., M.B.A., Christian Daboud, M.Ed., B.A.

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### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant will demonstrate an understanding of how patient councils can be involved in organizational decision making and planning.

### SUMMARY:

A publicly funded regional mental health facility undertook a model of care change in 2003. Part of this shift toward a psychosocial rehabilitation model of care included the development and support of a Patient Council. An external report defined the scope and recommendations for this project. These recommendations included among others the following: 1.) The hiring of a Patient Council Facilitator; 2.) Sponsorship from mental health leadership; 3.) Annualized funding; 4.) A work plan that included capacity building for members; and 5.) Links to provincial patient councils. Our intent is to summarize the evolution of this Patient Council and its impact on our organization's transformation. Success and challenges will be identified and discussed.

### REFERENCES:

1. Linhorst DM, Eckert A., Hamilton G. Promoting Participation Social Work, Vol 50(1), Jan 2005, 21-30, organizational decision making by clients with severe mental illness.
2. Rutter D., Manley C., Weaver T., et al Social Science Medicine, 2004 May; 58 (10), 1973-84, Patients or Partners? Case studies of user involvement in the planning and delivery of adult mental health services in London.

### POSTER 105. INCORPORATING COMMUNITY PSYCHIATRY INTO MEDICAL STUDENT EDUCATION

Amelia Botsford, M.D., 446 E. Ontario Street, Suite 7-100, Chicago, IL 60611, Tom Allen, M.D., Sonya Rasminsky, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to recognize the need for Community Psychiatry in medical student education, identify the necessary components for implementing a Community Psychiatry elective into a medical school curriculum, and understand students' learning goals for the elective.

### SUMMARY:

Introduction: Medical Students often lack exposure to the treatment of chronic mental illness in an outpatient, community setting. Instead, medical students most commonly experience psychiatry in an inpatient setting with acute pathology. Students are often left wondering whether or not patients' needs are addressed on a community level, whether proper community care could prevent hospitalization, and what the outpatient care is like after discharge. It was out of these concerns that a 4th year medical student Community Psychiatry elective was formed. Methods: A month long, fourth year medical student Community Psychiatry elective was implemented into the curriculum with the following educational goals: 1.) To evaluate, diagnose, and formulate

treatment plans for psychiatric patients in community-based settings, with particular attention to the challenges faced by patients with chronic and disabling mental illness; and 2.) To increase exposure to and understanding of outpatient substance-abuse treatment, through participation in group therapy, alcoholics anonymous groups, and methadone clinics. Results: Educational sites of the elective included a community psychiatry outpatient clinic, a rehabilitation clinic, a student-run community psychiatry free clinic, a mental health clinic serving survivors of trauma and refugees from other countries, a VA hospital substance abuse treatment program, a state hospital, and a homeless shelter. This was a pilot elective with one student participating. Conclusion/ Discussion: While this fourth year elective was done as a pilot experience with n=1, it is now integrated into the medical school curriculum. This Community Psychiatry curriculum is translatable to other medical schools either as part of the third year psychiatry clerkship, or as its own fourth year elective. More exposure to Community Psychiatry would provide an enriched psychiatry experience, applicable to students going into many areas of medicine.

### REFERENCES:

1. Christensen, Richard C. Community Psychiatry and Medical Student Education. *Psychiatr Serv* 2005; 56:608-9.
2. Walters K, Buszewicz M, Raven P: An Integrated Model for Teaching Psychiatry in the Community. *Acad Med* 2001; 76:563-4.

### POSTER 106. ILLINOIS PSYCHIATRISTS' REACTIONS TO CHANGES IN THE CIVIL COMMITMENT STANDARDS IN THE ILLINOIS MENTAL HEALTH CODE

Elizabeth Joseph, D.O., 901 W. Jefferson Street, P.O. Box 19642, Springfield, IL 62794, Philip Pan, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Identify the reactions of Illinois psychiatrists when the state implemented a change in the civil commitment standards in the Illinois Mental Health Code; 2.) Review the changes that were implemented in the Illinois Mental Health Code in June 2008; and 3.) Recognize some of the new concerns that Illinois psychiatrists will face in their daily practice.

### SUMMARY:

On June 1st, 2008 the Illinois Mental Health Code changed its criteria in regards to "persons subject to involuntary admission". In May 2008 a questionnaire was mailed to 712 psychiatrists in the state of Illinois asking their reactions to the new code and how they felt it would impact their decision making process in regards to involuntary admission. Included were questions regarding type of practice setting and county practiced in, how each psychiatrist felt the change would impact their decision making process for admitting a patient to a psychiatric unit on an involuntary basis, and how each psychiatrist felt about the changes in the Illinois mental

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health code. The results of this questionnaire will be gathered during the month of June 2008 and included in the poster presentation.

### REFERENCES:

1. Appelbaum, Paul S: Involuntary commitment of the mentally ill: Civil liberties and common sense, in *Almost a Revolution Mental Health Law and the Limits of Change*. Oxford University Press, 1994, pp 17-70.
2. Chodoff, Paul: Involuntary hospitalization of the mentally ill as a moral issue. *Am J Psychiatry* 141:3: 384-389, March 1984.

### POSTER 107. MOTIVATIONAL INTERVIEWING AND TREATMENT ADHERENCE AMONG DUALY DIAGNOSED PATIENTS

Stanislav Grabylnikov, M.D., *Bergen Regional Medical Center, 230 East Ridgewood Avenue, Paramus, NJ 07652*, M.Haghour M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to recognize beneficial effects of motivational interviewing on treatment adherence in substance abuse/dually diagnosed patients with potential incorporation of motivational interviewing in clinical practice.

#### SUMMARY:

There are little data on whether behavioral therapies can be implemented in standard clinical practice and whether incorporation of such techniques is associated with improved outcomes. The effectiveness of integrating motivational interviewing (MI) techniques into the initial psychiatric evaluation was investigated. Participants were 103 dually diagnosed patients hospitalized to BRMC and referred to outpatient clinic for follow-up treatment after discharge, who were randomized to receive either the standard evaluation session or the same session in which MI was integrated. We used case-control study design. Outcome of interest was appearance for initial follow-up appointment. We selected patients in emergency room and performed motivational interview on the next day with repeated augmentation interview before discharge. Patients were traced down using medical record numbers. After discharge we estimated the effect by checking records of follow-up appointments. Control group did not receive motivational interview. Total sample size was 53 patients in study group and 50 patients in control group. Criteria for inclusion in study group: diagnosis of substance dependence with physiological dependence as primary diagnosis. Of the 57 randomized participants 53 participated in an MI after randomization. 50 patients completed both interview sessions. Three patients signed AMA and completed only one session. We attempted to follow-up all 53 participants. 22 participants (40 %) appeared at least once for follow-up. Of the 50 randomized control group 8 participants (15 %) were followed up at least once by OPC. There was a 25 % increase in compliance with follow-up appointments by interview group compared to control group.

Motivational interviews can be used for improvement of the outpatient treatment adherence in dually diagnosed patients population.

### REFERENCES:

1. Mullins SM, Suarez M, Ondersma SJ, Page MC. The impact of motivational interviewing on substance abuse treatment retention: a randomized control trial of women involved with child welfare. *Journal of Substance Abuse Treatment* 2004.
2. Carroll KM, Ball SA, Nich C, Martino S, Frankforter TL, Farentinos C, Kunkel LE, Mikulich-Gilbertson SK, Morgenstern J, Obert JL, Polcin D, Snead N, Woody GE; Motivational interviewing to improve treatment engagement and outcome in individuals seeking treatment for substance abuse: a multisite effectiveness study. *Drug and Alcohol Dependence*. 2006.

### POSTER 108. MENTAL HEALTH SERVICES IN AN ISOLATED SETTING: NEVIS (SAINT KITTS AND NEVIS)

Gurprit Lamba, M.D., *99 Pond Avenue, Apt 201, Brookline, MA 02445*, Vijay Aswani, M.D., Ph.D., Michael E. Henry, M.D, Mandeep Rana, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to know the salient features of the Mental Health Services provided on the Caribbean island of Nevis. They would learn the unique elements and challenges of providing mental health care in an isolated setting with limited resources. They should be able to extrapolate to or inform the provision of mental health services in other isolated settings, particularly the involvement and collaboration between various health care providers.

#### SUMMARY:

The mental health burden of disease, epidemiology and management infra-structure on the Caribbean island of Nevis is described as a model of providing psychiatric services in an isolated setting. Mental health services on the island of Nevis is provided primarily under the umbrella of community health services, free of cost to all residents. There is no dedicated inpatient facility or resident psychiatrist on the island. Primary mental health care is provided by a psychiatrist who visits the island twice a week and by a resident psychiatric nurse. Local primary care providers at the island's only hospital are important providers of emergency and urgent psychiatric care. The practice of Rastafarianism on the island affects local attitudes to marijuana use. This connects with substance abuse and drug-induced psychosis being the second largest psychiatric cause of admission to the hospital. The most common psychiatric diagnosis for admission is schizophrenia. Experience from the delivery of psychiatric care on the island is extrapolated and compared with other isolated settings. Incorporating intensive mental health courses within primary care general practitioners training will be an asset for the local population.

## POSTERS

### REFERENCES:

1. Kisely S, Campbell LA. (2007) Taking consultation-liaison psychiatry into primary care. *Int J Psychiatry Med.* 2007; 37(4):383-91.
2. Ryan-Nicholls KD, Haggarty JM (2007). Collaborative mental health in rural and isolated Canada: stakeholder feedback. *J Psychosoc Nurs Ment Health Serv.* 2007 Dec;45(12):37-45.

### POSTER 109. WHAT DO WOMEN PSYCHIATRISTS REALLY WANT? THE FIRST TWENTY-FIVE YEARS OF THE ASSOCIATION OF WOMEN PSYCHIATRISTS

*Supported by the Association of Women Psychiatrists*

Tana A. Grady-Weliky, M.D., *University of Rochester Medical Center, Department of Psychiatry, 300 Crittenden Boulevard, Box PSYCH/Geri-Neuro, Rochester, NY 14642*, Eva Szigethy, M.D., Ph.D., Patricia Ordorica, M.D., Frances R. Bell, Leah Dickstein, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to 1.) Identify the mission, goals and objectives of the Association of Women Psychiatrists (AWP); 2.) Recognize key clinical practice issues that women psychiatrists believe are essential in today's health care climate; and 3.) Differentiate role model and mentor and recognize the role that both categories have played for women psychiatrist leaders involved in AWP.

#### SUMMARY:

The Association of Women Psychiatrists (AWP) was founded in 1983 by Dr. Alexandra ("Allie") Symonds with the goal of advancing women psychiatrists and promoting women's mental health. Women psychiatrists have played important roles within American psychiatry from community and private clinical practice to teaching, research and leadership in academic institutions. Of the total number of APA members 35% are women. Are women psychiatrists satisfied with where things are in their personal and professional lives and what do they see as important issues facing women psychiatrists today? A recent survey of women psychiatrist members of AWP found significant differences between women psychiatrists with children and those without children (Olarate, 2004). AWP is completing an updated survey of its more than 2,000 members that addresses not only their personal and professional satisfaction, but also their views about the role the organization has played in their career development and the influence that women psychiatrists have had on women's mental health and wellness and the clinical practice of psychiatry. Research in this area is needed in order to improve our understanding of those issues of greatest importance to women psychiatrists. This poster will address historical perspectives on women in psychiatry, in general, and our organization, in particular, over the past 25 years, as well as include the results of the 2008 survey of AWP members.

#### REFERENCES:

1. Olarte SW: Women Psychiatrists: Personal and

Professional Choices-- A Survey. *Acad Psychiatry.* 28: 321-324, 2004.

2. Dickstein LJ: Dr. Alexandra Symond's Legacy of Advancing Women Psychiatrists and Promoting Women's Mental Health. *Am J Psychoanalysis.* 60: 215-228, 2000.

### POSTER 110. MINDFUL PRACTICE CURRICULUM FOR PSYCHIATRY RESIDENTS: EXPERIENCE AS PART OF A UNIVERSITY-WIDE PROGRAM

Tana A. Grady-Weliky, M.D., *University of Rochester Medical Center, Department of Psychiatry, 300 Crittenden Boulevard, Box PSYCH/Geri-Neuro, Rochester, NY 14642*, Sue K. DiGiovanni, M.D., Scott McDonald, M.D., Jennifer Richman, M.D., Anola Tanga, M.D., David Garrison, M.D., Christopher Mooney, M.S., Ronald Epstein, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Define mindful practice and its role in the clinical care of patients; 2.) List at least two components of mindfulness; and 3.) Identify at least two new educational methods for teaching mindful practice to psychiatric residents.

#### SUMMARY:

Mindful practice refers to our ability to be aware, in the moment, on purpose, with the goal of providing better care to patients and to take better care of ourselves. The University of Rochester School of Medicine and Dentistry developed a program designed to give medical students, residents and practicing physicians tools that will assist them in becoming more mindful during daily clinical practice. The explicit aim of the curriculum is to help participants develop self-awareness and self-care skills so that they can be attentive and present in clinical settings. Self-awareness is an essential component of communication, technical skill, professionalism, teamwork, and life-long learning. All of these attributes are included among the ACGME core competencies and are critical to training all residents, and perhaps, psychiatrists, in particular. Because of the importance of the development of these attributes in resident physicians, the general psychiatry program elected to have its residents participate in the university-wide program. General psychiatry residents from across the four years are required to attend the Mindful Practice curriculum sessions, which include the following sessions: 1.) Noticing and Attention; 2.) Professionalism; 3.) How Doctors Think; 4.) Physician Self-Care and Burnout; and 5.) Dealing with Medical Errors. Several educational methods are used throughout the curriculum including brief meditation exercises, written narratives and "appreciative inquiry" interviews. This poster will describe further details of the curriculum and include resident feedback about the course.

#### REFERENCES:

1. Epstein RM: Mindful Practice. *JAMA.* 282: 833-839, 1999.
2. Epstein RM: Mindful Practice in Action: Cultivating Habits of Mind. *Families, Systems and Health.* 21: 11-17, 2003.

## POSTERS

### POSTER 111. DEVELOPING PSYCHIATRIC RESIDENTS AS CRITICAL CONSUMERS OF THE PSYCHIATRIC LITERATURE

Tana A. Grady-Weliky, M.D., *University of Rochester Medical Center, Department of Psychiatry, 300 Crittenden Boulevard, Box PSYCH/Geri-Neuro, Rochester, NY 14642*, Linda H. Chaudron, M.D., M.S., Jeffrey M. Lyness, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Identify common residency program requirements that incorporate research literacy and scholarly activity; 2.) Describe at least three components of a journal club and their role in enhancing research literacy; and 3.) Describe the advantages and disadvantages of having two core faculty facilitators for a general resident journal club.

#### SUMMARY:

With the rapid pace of advances in psychiatric research and treatments, it is essential for psychiatric residents to be critical consumers of the literature. If future clinicians are unable to differentiate strong from weak evidence for a new diagnostic test or innovative treatment, psychiatric patients will not receive the best care. The importance of developing these skills during residency is underscored by common residency program requirements such as training in evidence-based medicine and demonstrated research literacy. With these factors in mind we implemented a monthly journal club with a primary goal of developing general psychiatric residents as careful and thoughtful consumers of the literature. General psychiatry residents (PGY-1 through PGY-4) are required to attend a monthly journal club, which is facilitated by two senior psychiatrists. Initial sessions are devoted to understanding the components of a good paper including journal choice (its impact factor and what that means), type of research funding and how that might influence how one reads the paper, as well as an overview of the hierarchy of evidence in evidence-based medicine. After the initial sessions, each section of a journal article, i.e. abstract, introduction, methods, results and discussion, are discussed. Subsequent sessions address various types of papers, e.g. systematic reviews and randomized clinical trials. A standard procedure exists for each journal club. There is an assigned facilitator and resident for each topic. The facilitator is responsible for creating a 5-7 minute overview of the topic. The resident selects an article that is relevant for the topic and works with the facilitator in the development of questions for the large group to consider prior to the meeting. Our poster will describe journal club topics and process in detail. Additionally, qualitative and quantitative data from the first two years of our journal club curriculum will be presented.

#### REFERENCE:

1. Accreditation Council on Graduate Medical Education. General Psychiatry Residency Training Requirements. July 2007.

### POSTER 112. THE ROLE OF INTEGRATING MEDICAL CARE IN THE IMPROVEMENT OF THE QUALITY OF LIFE IN GERIATRIC PATIENTS WITH MENTAL ILLNESS: A RETROSPECTIVE STUDY

Gulam Noorani, M.D., M.P.H., *230 E. Ridgewood Avenue, Paramus, NJ 07652*, Asad Amir M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to recognize the possible correlation between integrating the medical care for geriatric patients with mental illness and the improvement in their quality of life.

#### SUMMARY:

There is a high prevalence of co-morbid medical conditions in geriatric patients with mental illness. The variety of presenting symptoms of these co-morbidities in these patients not only complicates the psychiatric diagnosis during initial evaluation, but also confers worse long-term prognosis and increased length of stay in the hospital: 1.) It has been observed that symptoms of cognitive limitation and lack of motivation in this group combined with physician discomfort in treating Axis III conditions may impede sufficient medical care, resulting in overlooked medical conditions; and 2.) In this study we intended to identify possible risk factors associated with the increased incidence of under diagnosing conditions in Geriatric patients with mental illness and its possible impact on their quality of life. Retrospective chart review of patients admitted to the acute geriatric unit (age > 65 y) at BRMC from (6/1/2006- 6/30/2007) (n=55) was done and evaluated with regard to *DSM IV* Axis I and Axis III diagnoses on admission and at the time of discharge. We also recorded the age, gender, race and length of stay for each patient. We found that 56% of these patients had medical co- morbidities that had been overlooked, including hypothyroidism, coronary artery disease, hyperlipidemia and glaucoma. Patients with dementia, psychotic disorders and mood disorders had 36 %, 23 % and 36% overlooked medical diagnosis respectively. The length of stay for these patients in the hospital was an average of 14-20 days longer compared to the other groups. We conclude that for geriatric patients with mental illness treated in the public sector, specialty mental health clinics are likely to be the first and often the only points of contact with the health care system resulting in unrecognized medical illnesses. We would suggest that community health care centers may consider programs geared towards integrating medical and behavioral treatment with hopes of having better treatment.

#### REFERENCES:

1. Grayson Norquist, Thomas G. McGuire, Susan M. Essock: Cost-Effectiveness of Depression Treatment for Adolescents. *Am J Psychiatry* 2008; 165: 549-552.
2. Rani A. Desai, Elina A. Stefanovics, Robert A. Rosenheck: The role of psychiatric diagnosis in satisfaction with primary care: data from the department of veterans affairs. *Med Care*; 43(12):1208-16.

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### POSTER 113. CONSUMER EXPERTISE IN DUTCH MENTAL HEALTH CARE

René De Veen, M.D., *Kottenhof 6, Enschede, 7522 RBNetherlands*

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to have a general overview on Dutch initiatives concerning the implementation of consumer expertise.

#### SUMMARY:

Introduction: In the Netherlands the participation of consumers in mental health care is an important issue emerging in the slipstream of recent health care initiatives on the reduction of seclusion and restraint. Patientboards and councils, as well as consumer organizations have a long tradition in The Netherlands, but the actual participation of consumers, as experts, in the daily process of organizing care within mental health care institutions is rather new. This presentation discusses a number of initiatives throughout the Netherlands, presenting successes and pitfalls. Most of these initiatives started recently and only a few have some success. Many have only a secondary role for the consumer, while a few allow the consumer to function as a professional within the organization (Lammers & Happel, 2003). Method: Data were gathered by sending a survey to 34 hospitals in The Netherlands that participate in a national program aiming at reducing restraint and seclusion. Results: In the poster session the response and data will be presented. Discussion: The main conclusion is that consumer participation is subject to a number of circumstances, among which organizational difficulties at different levels. Complex Dutch legislation and funding play a role, as are the psychiatric disorders of the individual consumers, functioning between professionals. We focus mainly on the difficulties at ward and hospital level. Several of these issues are known from former initiatives elsewhere (Kent & Read, 1998), some seem new. Implications for further research will be presented.

#### REFERENCES:

1. Kent H, Read, J. Measuring Consumer Participation in Mental Health Services: Are Attitudes Related To Professional Orientation? *International Journal of Social Psychiatry*, Vol. 44, No. 4, 295-310 (1998).
2. Lammers, J, Happel B. Consumer participation in mental health services: looking from a consumer perspective. *Journal of Psychiatric and Mental Health Nursing* 10 (4), 385-392, 2003.

### POSTER 114. SERVICE USERS AS AGENTS OF CHANGE

Rosie Cameron, B.A., M.B.A., *West House, Gartnavel Royal Hospital, 1055 Great Western Road, Glasgow, G12 0XH United Kingdom*, Robert Hunter, M.B., John Norrie

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to identify with the therapeutic advantages of enabling service users to assess their own needs and utilize this information

within the clinical care management of their patient.

#### SUMMARY:

Introduction: Patient involvement appears to improve outcomes of care. The Scottish Schizophrenia Outcomes Study (SSOS) recruited 1,015 participants with schizophrenia in 2002 who went on to annually complete a self-assessment of their own health / social needs using Avon Mental Health Measure (Avon)(1). SSOS confirmed that involving service users with schizophrenia improves outcomes(2). In a further study of the SSOS cohort we addressed a number of questions: What was the experience of patients in SSOS? Was the Avon self-assessment easy to use to express needs? What improvements would participants suggest for the Avon tool? Methods: 5 focus groups for service users with ICD10 schizophrenia who participated in SSOS were held across Scotland. A random 10% sample of SSOS cohort participated using standard focus group methodology. Qualitative analysis was applied to transcripts of discussion; results disseminated to patients and health professionals. Results: Most participants used the focus groups constructively and commented favorably on involvement in SSOS model of needs assessment. Many participants said that by using Avon they had been able to articulate concerns to clinicians. Suggestions from patients were collated on improving Avon, by reducing ambiguities and identifying new areas that participants felt should be included. Discussion: SSOS demonstrates the utility of using both clinician and patient rated outcome measures in routine psychiatric practice (2). In this focus group, research participants reported that Avon was useful in helping to articulate their needs to staff and carers. Feedback from service users can help improve patient reported assessments such as Avon, and contribute positively to service improvements.

#### REFERENCES:

1. Hunter et al (2004). *Journal of Mental Health* 13(1),93-105.
2. Hunter et al (2007). How Useful are patient reported assessments in improving outcomes in schizophrenia? APA 59th IPS, New Orleans.

### POSTER 115. THE DUMBING DOWN OF AMERICA: EVEN NEWSPAPER COMICS HAVE DECLINED

Lawrence K. Richards, M.D., *714 S. Lynn Street, Champaign, IL 61820*

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to understand some of the historical evolution of cartooning, feel some of the psychological significance of same, and authoritatively compare and contrast the quality of cartoons from the past with the simplistic, 'dumbed down', sparsely drawn versions extant following the turn into the 21st Century.

#### SUMMARY:

This poster is a follow-up to the one presented at a previous Chicago Psychiatric Institute held in the mid-1990's. Some newspaper comics from that presentation will be contrasted

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with those of current publications. Some reproductions from the United States Smithsonian Institution's published text will be included as reference points covering comics from the first third of the 20th Century, which was when cartoons and comics began an ascendancy, primarily in the newspapers. The past ten years' decline in creativity and artistry includes poorer artwork, changes in coloring, smaller picture panels, and minimization of reality in the drawing of human figures particularly, and even animals and inanimate objects. Associated with this are themes and pictures showing increases in crudeness, rudeness and violence, decreases in creativity, a lack of and sometimes a reversal of constructiveness, and a demeaning of the human condition. There are less and less positive features with which to teach preschoolers if one were to sit with a child and read the comics. Parenting by reading to the child is great quality time which motivates the child to read, think, and study later. Poorer comics yield a less motivating event. More and more such readings would force the parent to analyze the negative. Comics used to serve to call the child's attention to how these picture stories speak of the full range of interpersonal behavior, reveal hints of psychopathology versus normalcy, bespeak under-lying thought probabilities, and disclose honorable ways to live a life: "I will tell you how he lived." (Line from closing scenes of film "The Last Samurai.") Correlations with the well described decline in reading newspapers and the psychosocial process being called "Dumbing Down" will be offered. "A picture is worth a thousand words." (Attributed generally to Confucius; possibly a 1921 advertising extolment about an alleged Chinese proverb.)

### REFERENCES:

1. The Smithsonian Collection of Newspaper Comics. The Smithsonian Institution, Blackbeard, B. and Williams, M. Eds; H.N.Abrams, New York, 1984.
2. The Comics Since 1945. Walker, Brian. H.N.Abrams, New York, 2002.

### POSTER 116. NORTH AMERICAN PSYCHIATRIC RESIDENT WELLNESS SURVEY

Paul O'Leary, M.D., 1225 50th Street, South, Birmingham, AL 35222, Vincent J. Blanch, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to list the most prevalent stressors contributing to resident burnout and understand the consequences of these stressors on resident wellness.

#### SUMMARY:

Background: A burned-out health care worker often provides a lower quality of patient care than does a colleague who is satisfied with his or her job, according to multiple studies of job stress and burnout. Several studies have focused on health care providers, but medical residents were rarely included. Remarkably, even with the implementation of the 80-hour work week for residents, few have investigated if the change has decreased resident stress or improved patient care, as hoped, and still fewer studied resident well-being. Hence,

little is known about how "well" psychiatric residents are, what their main stressors are, and how they cope with them. Methods: The North American Resident Wellness Survey is a pilot study to investigate how psychiatry residents handle stress, the level and cause of their stress, and what coping strategies they use to deal with stress. The online survey was distributed using American Psychiatric Association's member database. 887 residents (17% of North American psychiatry residents) responded. Results: Seven percent of residents are either dissatisfied or very dissatisfied with their life in general, 14% are either dissatisfied or very dissatisfied with their mental health and 19% are either dissatisfied or very dissatisfied with their physical health. Sixteen percent wanted to change residency programs, and 19% wanted to change careers. Fifty-seven percent of psychiatric residents rated their life of as either very stressed or stressed, with time pressure and workload being the most frequent cause of stress. Additionally, stressed residents work longer hours and use different coping mechanisms than do less-stressed residents.

### REFERENCES:

1. Woodside J, Miller M, Floyd M, McGowen R, Pfortmiller D: Observations on Burnout in Family Medicine and Psychiatry Residents. *Academic Psychiatry* 2008; 32:13-19.
2. Keim SM, Mays MZ, Williams JM, Serido J, Harris RB: Measuring wellness among resident physicians. *Medical Teacher*, Vol. 28, No. 4, 2006, pp. 370-374.

### POSTER 117. PREJUDICE AGAINST PSYCHIATRY IN JUNIOR DOCTORS: THE GULF TRAINING FAILED TO BRIDGE

Rehan Siddiquee, M.B.B.S., M.R.C., *Queen Elizabeth Psychiatric Hospital, Mindelsohn Way, Birmingham, WI B15 2QZ, United Kingdom*, Mehran Javeed, M.B.B.S, Sabira Kanani, M.B.B.S

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to get an insight into what junior doctors perception of psychiatry and of a career in psychiatry are. Attendees will also learn what prejudices junior doctors have against psychiatry and what percentage of junior doctors are not considering a career in psychiatry and their reasons for doing so.

#### SUMMARY:

Introduction: The growth of any medical specialty depends on the number and quality of trainees that choose to pursue a career in it. It is of vital importance that psychiatrists understand the reasons why doctors at the beginning of their careers choose to pursue or not to pursue a career in psychiatry. In doing so, psychiatrists will be able to address any prejudices that might turn a potential psychiatrist away from the field. Hypothesis: Prejudice against psychiatry in junior doctors is likely to mirror prejudice in the general population. Current training methods in psychiatry does not dispel these prejudices. Methods: Doctors about to choose a specialty as their career were surveyed. Surveys were

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conducted in Birmingham and Manchester to eliminate bias due to local training methods and resources. Doctors were asked if they were considering a career in psychiatry and the reasons for their choice. Results: Of 56 responses collected, 19% were considering a career in psychiatry and the bias reflected misinformation and prejudice even after completing a placement in psychiatry. West Midlands respondents were more likely to choose psychiatry compared to their North-west peers (25% V 16%). 48% of the respondents made uninformed or misinformed assumptions about psychiatry. Of the respondents not considering psychiatry 51% were misinformed, but 36% of those considering psychiatry were misinformed. Conclusions: Trainers should work harder at eliminating prejudices against psychiatry not only in the general population but also in medical students. This will encourage more doctors to take up the field and also improve understanding of psychiatry in doctors who take up other specialties. Discussion: In not working towards addressing medical students prejudices towards psychiatry during their training we are perhaps losing high quality doctors that graduate from medical schools. Addressing these prejudices will ensure a healthy future for psychiatry.

### REFERENCES:

1. Katharina Manassis, Mark Katz, Jodi Lofchy, Stephanie Wiesenthal: Choosing a Career in Psychiatry: Influential Factors Within a Medical School Program. *Academic Psychiatry* 2006; 30:325-329.
2. Sundararajan Rajagopal, Kamaljit Singh Rehill, Emma Godfrey: Psychiatry as a career choice compared with other specialties: a survey of medical students. *Psychiatric Bulletin* 2004; 28: 444-446.

### POSTER 118. IMPACTS OF LOCAL NEGATIVE EVENTS ON MENTAL HEALTH VISITS TO A REMOTE EMERGENCY ROOM

Xiangyang Zhao, M.D., M.S., 11732 Lake Avenue, #105, Lakewood, OH 44107, Toni Love Johnson, M.D., Robert Taylor Segraves, M.D., Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Discuss local negative events such as MBC and VTM have that measurable impacts on the MHVs to an ER geographically remote to the events; 2.) Explain that MBC and VTM have different impacts on the MHVs to an ER remote to the events; and 3.) Recognize that more studies are needed to elucidate the confounded relationship between MHVs to ER and negative events.

### SUMMARY:

Objective: To study the impacts of the Minnesota Bridge Collapse (MBC) and Virginia Tech Massacre (VTM) on MHV to an ER of an urban medical center, which is remote to the places where these two events took place. Methods: Site of the study: The ER of MetroHealth Medical Center (Metro), Cleveland, OH. Design: A retrospective chart review. Based on patient's complaint, ER visits exclusively and partially for

mental health reasons were identified and counted as MHV. Substance Use related Visits (SUV) to the ER were counted as MHV in this study. Average daily MHV, Adult MHV (male and female, age >18yr) and Ped MHV (male and female, age = 18) during the acute phase (from day 1 to 7 of the individual event) of the negative events were calculated and compared with that of the rest of the month when the individual event took place. Also average daily SUV in the acute phase of each event was compared with that of the rest of the month. Results: In the VTM, average daily Ped MHVs in the acute phase were significantly more frequent than that of the rest of the month ( $2.1 \pm 0.6$  vs.  $1.0 \pm 0.2$   $p=0.0286$ ). In the MHVs of pediatric population, significant increase in average daily visits to the ER were seen in male subgroup in the acute phase, compared with the rest of that month ( $1.6 \pm 0.6$  vs.  $0.5 \pm 0.2$   $p=0.0205$ ), while no change was seen in female subgroup ( $0.6 \pm 0.3$  vs.  $0.5 \pm 0.1$   $p=0.7578$ ). No change of average daily SUVs between the acute phase and rest of the month ( $0.4 \pm 0.1$  vs.  $0.4 \pm 0.2$   $p=0.8813$ ). In the MBC, average daily MHVs in the acute phase had no significant difference compared with that of the rest of the month ( $10.57 \pm 0.9$  vs.  $10.4 \pm 0.7$   $p=0.913$ ). Average daily SUVs in the acute phase were significantly more than that of the rest of the month ( $2.4 \pm 1.1$  vs.  $0.7 \pm 0.2$   $p=0.0144$ ). Conclusion: Local negative events such as MBC and VTM have measurable impacts on the MHVs to an ER geographically remote to the events.

### REFERENCES:

1. Catalano Ralph A. Ph.D et al Psychiatric emergency after the terrorist attacks of September 11, 2001 *Psychiatric Service* 2004 Vol 55 #2 page 163.
2. Hazlett Sara B. M.D., et al Epidemiology of Adult Psychiatric visits to U.S. Emergency Department. *Acad Emerg Med* 2004 Vol 44 #2 page 193.

### POSTER 119. NEEDS ASSESSMENT IN MENTAL HEALTH SERVICES AND POLICIES

Yilmaz Yildirim, M.D., *Child & Adolescent Psychiatry, Department of Psychiatric Medicine, Brody School of Medicine, Greenville, NC 27834*, Smitha Murthy, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Recognize the importance of Needs Assessment for Mental Health Services; 2.) Identify the data sources for Needs Assessment; and 3.) Recognize the importance of linking needs assessment with other phases of mental health services such as implementation, monitoring and evaluation.

### SUMMARY:

Introduction: Mental disorders are one of the leading causes of mortality and disability all over the world (1). Thus it is imperative to establish promotion and preventive services beside treatment. Establishing such services needs a thorough needs assessment (NA) process that comprises identification of problem(s) and data resources, prioritization of resources, making decisions and policies regarding implementation and evaluation phases. NA can be defined as a systematic

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set of procedures to reach the desired state of affair (2). The purpose of this study is to provide guidelines for NA and other phases of Mental Services at community, organizational and individual levels. Method: Literature search was done under topics “needs assessment”, “mental health services”, “mental health policies”, “mental health policy implementation”, “program evaluation”, “organizational change”, “case management”, and “cost-effectiveness of mental health services”. Around 300 articles and book chapters were reviewed and finally 33 were used. A graph was depicted to show guidelines for needs assessment, and other phases of mental health services. Results: In the literature, mental health policies and services are mainly approached as one phase and with a narrow perspective. Epidemiological approaches are the main methods used to identify problems and to prioritize resources. Most of the policies and services lack a comprehensive NA as well as implementation, monitoring and evaluation phases. Organizational level and especially individual level interventions are not given importance. Conclusion: A well-planned and executed NA is vital to establish mental health services in most cost-effective way to promote both individuals’ and communities’ qualities of life. A comprehensive Needs Assessment should include all stakeholders and use all available information sources. Needs Assessment also has to provide guidelines for implementation, monitoring and evaluation of the policies.

### REFERENCES:

1. A Report of the Surgeon General, 1999, [www.surgeongeneral.gov/library/mentalhealth/chapter1/sec1.html](http://www.surgeongeneral.gov/library/mentalhealth/chapter1/sec1.html).
2. Witkin R., Altschuld J.: Planning and Conducting Needs Assessments; 1995; Sage Publications.

### POSTER 120. MENTAL HEALTH SCREENING AND RAISING AWARENESS FOR AT-RISK HOMELESS POPULATIONS

Yasmin Owusu, B.A., *Baylor College of Medicine, Office of Student Affairs, One Baylor Plaza, Houston, TX 77030*, Yasmin Owusu, M.S., Toi B. Harris, M.D., Mark E. Kunik, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Appreciate the importance of psycho-educational outreach initiatives as a strategy to reduce mental health disparities and improve access to care in the homeless community; and 2.) Recognize the value of implementing shelter-based mental health screening interventions.

### SUMMARY:

Objective: The identification of mental health and substance misuse disorders in a culturally diverse homeless population is a complex issue that warrants further attention. The authors explore the benefits of administering a mental health screening tool within a shelter or clinic setting. This initiative also investigates the role of educating Houston’s clergy, homeless shelter and clinic staff about key concepts of psychiatric illness to the end of improving access to care. Methods: Staff

and clergy participate in a 90-minute, psycho-educational seminar addressing psychiatric disorders, substance misuse, community mental health services, and cultural competency. Pretest and posttest questionnaires are administered to all participants to measure knowledge gained from this educational outreach experience. One hundred homeless or at-risk persons were recruited from these same shelters and clinics and were given an electronic quick psychodiagnostics (QPD) panel to assess for nine psychiatric disorders and substance misuse disorders. If a subject screens positive they are referred to appropriate mental health service partners in the community and followed up by the investigative team after one month. Results: When data has been collected by summer 2008, quantitative statistical analysis will be utilized to establish levels of improvement in knowledge of seminar participants as well as the success rate in homeless clients accessing follow-up referral services. Conclusion: Staff and clergy must be knowledgeable about community mental health in order to increase the likelihood that their clientele will access available services. Homeless individuals benefit from free shelter and clinic based screening and referral services. This model is an important agent in achieving the goals of reducing mental health disparities and improving access to care.

### REFERENCES:

1. Strategic plan to address homelessness Houston/Harris County, Blue Ribbon Commission to end chronic homelessness Houston/Harris County, May 2006.
2. LoboPrabhu, S: A cultural sensitivity training workshop for psychiatry resident. *Academic Psychiatry* 2000; 24: 77-84.

### POSTER 121. EFFECTIVENESS OF PSYCHODYNAMICALLY ORIENTED, OPEN ENDED GROUP THERAPY WITH PHARMACOTHERAPY ON OUTPATIENTS WITH CHRONIC MAJOR PSYCHIATRIC DISORDERS

Tereza Lukasova, M.D., *Resident, Masaryk’s University in Brno, Komenskeho nam. 2, Brno 62000 Czech Republic*, C.D. Hanson, M.D., Julie B. Zhao, Jake Duker

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to recognize the benefits of group therapy in conjunction with pharmacological treatment in helping patients with different psychiatric diagnoses.

### SUMMARY:

Objectives: to review the recent research assessing the efficacy of group psychotherapy; and to complete an open case study, without control group or observer blinding, analyzing the effects of a long-term, open ended outpatient psychotherapy group with pharmacotherapy of patients diagnosed with chronic major psychiatric disorders. Hypothesis: Due to previous research indicating that a combination of group therapy and medication is effective in alleviating symptoms of psychiatric disorders, it is predicted that patients will find a benefit from group therapy. Methods: The study group

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included 13 patients between the ages of 27 and 66 years old (mean 42.2), evenly distributed between gender, who had displayed varying degrees of depressive and psychotic symptoms and substance abuse. Patients post-hospitalization received maintenance pharmacotherapy monitored within the group in the setting of a private psychiatric practice, and attended weekly 75-minute long psychodynamically oriented psychotherapy group sessions. Group membership ranged from 5 to 8 patients and in the treatment duration extended up to four years. Severity of symptomatology was assessed at the beginning and end of the study according to a list of fifty symptoms. Changes in symptomatology were correlated with patient diagnosis, duration of patient participation in the group, and pattern of each patient's attendance. Results: A high rate of maintenance of remission for patients undergoing the treatment was observed. Data suggested that group therapy as defined along with pharmacological treatment may provide effective maintenance of remission from chronic psychiatric illness. Conclusion: Group therapy in conjunction with medication may be effective in the treatment of chronic major psychiatric disorders. In the nature of case-studies, this result helps to clarify unanswered questions by providing further insight and recommendations for future projects that may yield more conclusive answers.

### REFERENCES:

1. Gonzalez JM, Prihoda, TJ: A case study of psychodynamic group psychotherapy for bipolar disorder. *Am J of Psychotherapy* 2007; 61(4): 405-22.
2. Burnand Y, Andreoli, A, Kolatte E, Venturini A, Rosset N: Psychodynamic Psychotherapy and Clomipramine in the Treatment of Major Depression. *Psychiatr Serv* 2002; 53: 585-590.

### POSTER SESSION 5

SATURDAY, OCTOBER 4 8:30 a.m.-10:00 a.m.

#### BIOLOGIC APPROACHES TO TREATMENT: PART II

MODERATOR: ANITA S. EVERETT, M.D.

#### POSTER 122. EFFICACY AND SAFETY OF EXTENDED RELEASE QUETIAPINE FUMARATE (QUETIAPINE XR) MONOTHERAPY IN PATIENTS WITH GENERALIZED ANXIETY DISORDER (GAD)

*Supported by AstraZeneca Pharmaceuticals*

Arifulla Khan, M.D., *Northwest Clinical Research Center, Bellevue, Washington, and Duke University Medical School, Durham, North Carolina*, Mark Joyce, M.D., Sarah Atkinson, M.D., Ivan Eggens, M.D., Ph.D., Irina Baldytcheva, Ph.D., Hans Eriksson, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to demonstrate a knowledge and understanding of the efficacy and safety of once-daily, extended release quetiapine fumarate (quetiapine XR) in patients with generalized anxiety disorder. They should also become familiar with results of

a double-blind, randomized, placebo-controlled study of quetiapine XR in this patient population.

### SUMMARY:

Introduction: GAD is a highly prevalent condition<sup>1</sup> and is one of the most frequent anxiety disorders seen in primary care<sup>2</sup>. This study (D1448C00009) evaluated the efficacy, safety and tolerability of once-daily extended release quetiapine fumarate (quetiapine XR) as monotherapy in patients with GAD. Methods: 10 week (8-week active treatment, randomized phase; two-week post-treatment drug-discontinuation/tapering phase) multicentre, double-blind, placebo-controlled, parallel-group study (D1448C00009). Primary endpoint: change from baseline to Week 8 in HAM-A total score. Secondary endpoints included response ( $\geq 50\%$  reduction from randomization in HAM-A score) and remission (HAM-A total score  $\leq 7$ ). Adverse events (AEs) were recorded throughout the study. Results: 951 patients were randomized: quetiapine XR 50mg/day (n=234); 150mg/day (n=241); 300mg/day (n=241); placebo (n=235). HAM-A total score mean change from baseline (overall baseline mean 24.6) to Week 8 was significantly greater for 50mg/day (-13.3,  $p < 0.001$ ), and 150mg/day (-13.5,  $p < 0.001$ ) but not 300mg/day (-11.7,  $p = 0.24$ ) vs. placebo (-11.1). Significant change from placebo (-5.3) in HAM-A total score was seen at Week 1 for 50mg/day (-6.8,  $p = 0.001$ ), 150mg/day (-7.5,  $p < 0.001$ ), and 300mg/day (-6.5,  $p < 0.01$ ). HAM-A response was significantly higher for 50mg/day (60.3%,  $p < 0.05$ ), 150 mg/day (61.5%,  $p < 0.05$ ) but not for 300mg/day (54.9%,  $p = 0.37$ ) vs. placebo (50.7%). HAM-A remission was significantly higher for 150mg/day vs. placebo (37.2% vs. 27.6%,  $p < 0.05$ ) and was 36.1% ( $p = 0.08$ ) and 28.6% ( $p = 0.96$ ), for 50mg/day and 300mg/day doses, respectively. Most common AEs ( $> 10\%$ ) were dry mouth, somnolence, sedation, dizziness, headache and fatigue. The incidence of serious AEs was low ( $< 2.5\%$ ) in all groups. Conclusion: Quetiapine XR (50 and 150mg/day) monotherapy is effective and was generally well tolerated in patients with GAD, with symptom improvement observed from Week 1 and at Week 8. Supported by AstraZeneca Pharmaceuticals.

### REFERENCES:

1. Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE: Lifetime prevalence and age-of-onset distributions of *DSM-IV* disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry* 2005; 62:593-602.
2. Anseau M, Fischler B, Dierick M, Mignon A, Leyman S: Prevalence and impact of generalized anxiety disorder and major depression in primary care in Belgium and Luxembourg: the GADIS study. *Eur Psychiatry* 2005; 20:229-235.

#### POSTER 123. HEALTH CARE RESOURCE UTILIZATION BEFORE AND AFTER INITIATION OF RISPERIDONE LONG-ACTING THERAPY AMONG MEDICAID BENEFICIARIES

*Supported by Ortho-McNeil Janssen Scientific Affairs, LLC  
Concetta Crivera, Pharm.D., M.P.H., Ortho-McNeil Janssen*

## POSTERS

*Scientific Affairs, LLC, 1125 Trenton-Harbourton Road, Titusville, NJ 08560*, Tyler Knight, M.S., Mirko Sikirica, Pharm.D., Stacey J. Ackerman, M.S.E., Ph.D., Kathryn Anastassopoulos, M.S., Riad Dirani, Ph.D., Stephen M. Stahl, M.D., Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to better understand patterns of medical resource use in Florida Medicaid beneficiaries with schizophrenia or schizoaffective disorder taking risperidone long-acting therapy.

### SUMMARY:

**Introduction:** Long-acting injection therapy provide an option to help improve adherence and possibly decrease resource use. Mental health (MH) utilization upon initiation of risperidone long-acting injection (RLAI) was evaluated among Medicaid beneficiaries with schizophrenia or schizoaffective disorder. **Methods:** Florida Medicaid pharmacy and medical claims were used to identify adult patients who had 2 or more RLAI prescriptions between December 2003 and June 2006, continuous eligibility, and one or more claim associated with schizophrenia or schizoaffective disorder (ICD-9-CM 295.XX). Patients were excluded if they had evidence of RLAI therapy during the previous 12 months. MH utilization levels were compared for the 12 months before and after RLAI initiation. **Results:** A total of 1267 patients were identified. Mean (SD) age was 43.2 (13.2) years, 53.1% were male, and 44.9% were Caucasian. After RLAI initiation, among hospitalized patients the mean (SD) number of MH hospitalizations per patient decreased from 3.15 (2.65) to 2.76 (2.23) ( $P=0.0076$ ). Mean (SD) total MH hospital days declined from 23.86 (20.69) to 21.60 (23.63) days ( $P=0.0119$ ). Although there was no difference in the number of MH outpatient visits, overall (MH plus non-MH) number of outpatient visits per patient declined significantly ( $P=0.0415$ ) upon initiation of RLAI. There was no difference in the number of MH physician (MD) office visits; however, the overall number of MD visits per patient decreased significantly ( $P=0.0471$ ) due to a significant reduction in non-MH MD visits ( $P=0.0178$ ) upon initiation of RLAI. Mean RLAI adherence, as measured by the medication possession ratio, was 0.81. **Conclusion:** Results show that patients had high levels of adherence with RLAI therapy, fewer MH hospitalizations, reduced total hospital days, and due to a decrease in non-MH MD visits, a reduction of overall MD visits after initiation of RLAI. Supported by Ortho-McNeil Janssen Scientific Affairs, LLC.

### REFERENCES:

1. Leal A, Rosillon D, Mehnert A, Jarema M, Remington G: Healthcare resource utilization during 1-year treatment with long-acting, injectable risperidone. *Pharmacoevidence-miol Drug Saf* 2004;13(11):811-816.
2. Gilmer TP, Dolder CR, Lacro JP, Folsom DP, Lindamer L, Garcia P, Jeste DV: Adherence to treatment with antipsychotic medication and health care costs among Medicaid beneficiaries with schizophrenia. *Am J Psychiatry* 2004;

161: 692-699.

### POSTER 124. EVALUATION OF EFFECTIVENESS MEASURES FOR PATIENTS WITH SCHIZOPHRENIA WHO INITIATED THERAPY WITH RISPERIDONE LONG-ACTING THERAPY

*Supported by Ortho-McNeil Janssen Scientific Affairs, LLC*

Concetta Crivera, Pharm.D., M.P.H., *Ortho-McNeil Janssen Scientific Affairs, LLC, 1125 Trenton-Harbourton Road, Titusville, NJ 08560*, Chris M. Kozma, Ph.D., Riad Dirani, Ph.D., Lian Mao, Ph.D., Stephen C. Rodriguez, M.S., Wayne Macfadden, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to identify and discuss potential patterns of change in schizophrenia effectiveness measures following initiation of risperidone long-acting injection (RLAI).

### SUMMARY:

**Introduction:** The purpose of this study was to assess effectiveness outcomes in patients treated with risperidone long-acting injection (RLAI) using data from a 2-year observational study in patients with schizophrenia. **Methods:** This study included data from the Schizophrenia Outcomes Utilization Relapse and Clinical Evaluation (SOURCE) study, a 2-year observational study of patients initiated on RLAI. Effectiveness data were collected every 3 months for 2 years and included Clinical Global Impressions–Severity (CGI-S), Global Assessment of Functioning (GAF), Personal and Social Performance (PSP) scale, Strauss-Carpenter Levels of Functioning (LOF) scores, Short Form-36 (SF-36) and satisfaction with therapy. Data were analyzed using repeated-measures models with age, gender and follow-up time as factors/covariates. An unstructured covariance matrix was used to model correlations among repeated measurements within each patient. **Results:** A total of 532 subjects were enrolled in the SOURCE study; 305 completed 1 year and 209 completed 2 years. For every effectiveness measure, with the exception of the physical summary score from the SF-36, all post-baseline mean values showed improvements over baseline ( $P<0.001$ ). The PSP, CGI-S and GAF all showed improvements over the previous assessment through 9 months ( $P<0.05$ ). The LOF showed improvements over the previous assessment through 6 months. All improvements over baseline were maintained for the entire study period. **Conclusion:** Results of this open-label analysis showed improvement in effectiveness measures within three months. Improvement was maintained during the 2-year study period. Supported by Ortho-McNeil Janssen Scientific Affairs, LLC.

### REFERENCES:

1. Kane JM, Eerdeken M, Lindenmayer JP, Keith SJ, Lesem M, Karcher K: Long-acting injectable risperidone: efficacy and safety of the first long-acting atypical antipsychotic. *Am J Psychiatry* 2003; 160(60):1125–1132.
2. Ehret MJ, Fuller MA: Long-acting injectable risperidone. *Ann Pharmacother* 2004; 38(12):2122-2127.

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### POSTER 125. EFFICACY AND SAFETY OF THREE DOSES OF PALIPERIDONE PALMITATE, AN INVESTIGATIONAL LONG-ACTING, INJECTABLE ANTIPSYCHOTIC IN SCHIZOPHRENIA

*Supported by Johnson & Johnson Pharmaceuticals Services*

Jorge Quiroz, M.D., 1125 Trenton-Harbourton Road, Titusville, NJ 08560, Henry A. Nasrallah, M.D., Srihari Gopal, M.D., Jorge A. Quiroz, M.D., Cristiana Gassmann-Mayer, Pilar Lim, Ph.D., Mariëlle Eerdeken, M.D., M.B.A., David Hough, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to describe the effect of the three fixed doses of the long-acting, injectable, investigational antipsychotic, paliperidone palmitate, compared with placebo, on measures of symptom control in patients with schizophrenia, as well as describe its safety and tolerability.

#### SUMMARY:

Objective: Long-acting, injectable antipsychotic formulations can improve treatment adherence and simplify the medication regime for patient and caregivers (1). Paliperidone palmitate (PP) is an investigational long-acting, injectable formulation of the recently approved antipsychotic paliperidone for treatment of schizophrenia (2-4). This Phase III trial was designed to assess the efficacy, safety, and tolerability of paliperidone palmitate in adults with symptomatic schizophrenia. Methods: Consenting eligible patients were randomized (1:1:1:1) to paliperidone palmitate 25, 50, or 100 mg eq. or placebo (pbo) in this multicenter, 13-wk trial. During the double-blind phase, a total of 4 gluteal injections were given: days 1 and 8, and then every 4 weeks (days 36, 64). The last study assessment was on day 92. Results: The ITT population (N=514; mean age = 41 yrs) was 67% men and 67% white. Mean baseline PANSS total score was 91 (SD:12.0; range 70-120). All 3 PP groups showed significant ( $p \leq 0.017$ ) improvement vs. pbo in mean change in total PANSS score from baseline to endpoint (primary variable). More pbo-treated patients (35%) discontinued due to lack of efficacy vs. PP: 24% (25 mg eq. 50 mg eq.); and 16% (100 mg eq.). Treatment-emergent adverse events (AE) that occurred more frequently in PP treated patients (33% difference between any active group and pbo) were agitation, somnolence, weight increase, dizziness and dry mouth. Discontinuations due to AE occurred in: 6% of pbo and 4% of overall PP groups. Serious AEs occurred in: 18% of pbo and 12% of overall PP groups. Local injection-site tolerability was good: investigators reported injection-site pain during the study as absent (86-100%), mild (0-12%), or moderate/severe (0-2%) for PP-treated patients. Conclusion: All three doses of long-acting injectable paliperidone palmitate, vs. pbo, were efficacious and well-tolerated, both locally and systemically, in adults with symptomatic schizophrenia. Funded by Johnson & Johnson.

#### REFERENCES:

1. Kane JM: Review of treatments that can ameliorate non-adherence in patients with schizophrenia. *J Clin Psychiatry* 2006; 67Suppl 5:9-14.

2. Davidson M, Emsley R, Kramer M, Ford L, Pan G, Lim P, Eerdeken M: Efficacy, safety and early response of paliperidone extended-release tablets (paliperidone ER): Results of a 6-week, randomized, placebo-controlled study. *Schizophr Res* 2007; 93:117-130.

### POSTER 126. LONG-TERM SAFETY OF ILOPERIDONE VERSUS HALOPERIDOL FOR PATIENTS WITH SCHIZOPHRENIA OR SCHIZOAFFECTIVE DISORDER

*Supported by Vanda Pharmaceuticals*

Curt Wolfgang, Ph.D., Vanda Pharmaceuticals Inc., 9605 Medical Center Drive, Rockville, MD 20850, Jennifer Hamilton, M.S., Paolo Baroldi, M.D., Ph.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Recognize the long-term safety issues related to current atypical antipsychotics used to treat schizophrenia and schizoaffective disorder; and 2.) Demonstrate an understanding of the long-term results for iloperidone as maintenance treatment for patients with schizophrenia or schizoaffective disorder.

#### SUMMARY:

Introduction: This analysis compared long-term safety of the mixed D2/5-HT2 antagonist iloperidone vs. haloperidol in patients with schizophrenia or schizoaffective disorder. Haloperidol has an established long-term profile, making it a suitable comparator. Methods: Data were pooled from 3 prospective, multicenter, double-blind, parallel-group studies with 6-week short-term and 46-week long-term double-blind phases. Patients were randomized to iloperidone 4-16 mg/day or haloperidol 5-20 mg/day. Patients were included in the long-term safety analysis if they completed the initial 6-week phase with  $\geq 20\%$  reduction from baseline in PANSS-T score at weeks 4 and 6, had a CGI-I score  $< 4$ , took  $\geq 1$  dose of study medication, and had a safety assessment during the long-term phase. Results: Of 1,644 patients entering and 1,326 completing the 6-week phase, 489 (iloperidone 371; haloperidol 118) were included in the long-term safety analysis. Both iloperidone and haloperidol had 36.4% of patients discontinued in the long-term phase, including 3.8% and 7.6%, respectively, due to AEs. During this time, 73.3% of iloperidone and 68.6% of haloperidol patients had  $\geq 1$  AE; the most common were insomnia (18.1%), anxiety (10.8%), and schizophrenia aggravated (8.9%) for iloperidone, and insomnia (16.9%), akathisia (14.4%), tremor (12.7%), and muscle rigidity (12.7%) for haloperidol. ESRS improved for iloperidone and worsened for haloperidol at endpoint. Weight gain was 2.6 and 0.6 kg during the 6-week phase and an added 1.2 and 1.7 kg at endpoint for iloperidone and haloperidol, respectively. Both groups had minimal metabolic parameter changes. Mean changes in QTcF were 10.3 msec for iloperidone and 9.4 msec for haloperidol at endpoint. Conclusions: Iloperidone has a favorable long-term safety profile with respect to EPS/akathisia, weight gain, and metabolic parameters that may make it a suitable

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option as maintenance therapy for schizophrenia. Vanda Pharmaceuticals sponsored this analysis.

### REFERENCES:

1. Kalkman HO, Subramanian N, Hoyer D: Extended radioligand binding profile of iloperidone: a broad spectrum dopamine/ serotonin/norepinephrine receptor antagonist for the management of psychotic disorders. *Neuropsychopharmacology* 2001; 25:904-914.
2. Lieberman JA, Stroup TS, McEvoy JP, Swartz MS, Rosenheck RA, Perkins DO, Keefe RS, Davis SM, Davis CE, Lebowitz BD, Severe J, Hsiao JK: Effectiveness of antipsychotic drugs in patients with chronic schizophrenia. *N Engl J Med* 2005; 353:1209-1223.

### POSTER 127. EFFECT OF LONG-ACTING INJECTABLE RISPERIDONE ON CLINICAL OUTCOMES IN RECENTLY DIAGNOSED, STABLE SCHIZOPHRENIA PATIENTS

*Supported by Ortho-McNeil Janssen Scientific Affairs, LLC*

Wayne Macfadden, M.D., 1125 Trenton-Harbourton Road, Titusville, NJ 08560, Cynthia Bossie, Ph.D., Ibrahim Turkoz, Ph.D., Judith Kando, Pharm.D., J. Thomas Haskins, Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be aware of the effects of treatment with long-acting injectable risperidone on relapse, symptoms and tolerability in recently diagnosed, stable schizophrenia patients.

### SUMMARY:

Introduction: Early and persistent treatment is important for better long-term outcomes in schizophrenia. Early in the illness course, patients tend to be responsive to treatment but poorly compliant with medications. We hypothesized that treatment with a long-acting injectable atypical antipsychotic would be associated with improved clinical outcomes in recently diagnosed patients compared with those having a longer duration of illness. Methods: We conducted post-hoc analyses from a study of stable patients receiving risperidone long-acting injectable (RLAI) (25 mg or 50 mg every 2 weeks) for up to 52 weeks. Outcome measures were compared in patients recently diagnosed with schizophrenia ( $\leq 3$  years prior to study entry [ $\leq 3$  years group]) and in those diagnosed  $> 3$  years prior to study entry ( $> 3$  years group) and included relapse, Positive and Negative Syndrome Scale (PANSS), Clinical Global Impressions–Severity (CGI-S) scale and adverse events (AEs). Results: Fifty-seven patients were included in the  $\leq 3$  years group and 266 patients were included in the  $> 3$  years group; mean (SD) baseline PANSS scores were 64.8 (14.1) and 66.8 (16.9), respectively. Relapse rates were 10.5% and 21.8% ( $P=0.053$ ). Both groups improved significantly at endpoint in mean PANSS total and CGI-S scores ( $P<0.01$ ). The  $\leq 3$  years group showed greater improvement vs. the  $> 3$  years group in adjusted mean [SE] PANSS total ( $-10.2$  [2.0] vs.  $-3.8$  [0.9];  $P=0.004$ ) and CGI-S ( $-0.5$  [0.1] vs.  $-0.2$  [0.1];  $P=0.002$ ) scores. Most common AEs ( $\leq 3$  years vs.  $> 3$  years groups) included insomnia (31.6% vs. 26.7%), psychiatric

disorder (19.3% vs. 20.7%), headache (15.8% vs. 19.2%) and anxiety (12.3% vs. 17.3%). Conclusion: In stable patients treated with RLAI, these findings suggest that patients who were recently diagnosed with schizophrenia had comparable tolerability but more clinical improvement vs. patients with a longer duration of illness. Supported by Ortho-McNeil Janssen Scientific Affairs, LLC.

### REFERENCES:

1. Chue P, Emsley R: Long-acting formulations of atypical antipsychotics: time to reconsider when to introduce depot antipsychotics. *CNS Drugs*. 2007;21(6):441-448.
2. Simpson GM, Mahmoud RA, Lasser RA, et al. A 1-year double-blind study of 2 doses of long-active risperidone in stable patients with schizophrenia or schizoaffective disorder. *J Clin Psychiatry*. 2006;67(8):1194-1203.

### POSTER 128. EFFECT OF QUETIAPINE VERSUS PLACEBO ON RESPONSE TO TWO VIRTUAL PUBLIC SPEAKING EXPOSURES IN SOCIALLY PHOBIC INDIVIDUALS

*Supported by AstraZeneca Pharmaceuticals*

David Adson, M.D., 2450 Riverside Avenue, 2 A West, Minneapolis, MN 55454, Christopher B. Donahue, Ph.D., Matt G. Kushner, Ph.D., Paul D. Thuras, Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Discuss the prevalence and burden of social anxiety disorder; 2.) Recognize that a virtual reality speech task is a potent elicitor of social anxiety symptoms; and 3.) Explain that low dose quetiapine does not appear to effect the symptoms of acute social anxiety in the VR environment.

### SUMMARY:

Objective: Pharmacological and behavioral treatments are only moderately effective in alleviating the symptoms of social anxiety disorder (SAD) indicating that better treatments are still required. Based on preliminary investigations, quetiapine holds promise as a treatment for SAD (Schutters, et al., 2005). The purpose of this study was to determine the efficacy of 25 mg of quetiapine in diminishing the cue-induced symptoms of SAD using a standardized public speaking challenge with a Virtual Reality (VR) audience. Method: Twenty participants who met *DSM-IV* criteria for SAD with significant public speaking anxiety were exposed in a cross-over design, to two 4-minute VR speech scenarios. Each completed subjective and physiological measures of distress pre-, during, and post-exposure. One hour prior to each VR exposure subjects were administered single doses of quetiapine or placebo. Results: There was no drug effect for quetiapine on the primary outcome measure. However, drug effects were noted with significantly elevated heart rates, sleepiness, and non-significant lowering of blood pressure. Conclusion: Study findings suggest that 25 mg quetiapine is not effective in alleviating acute SAD symptoms in response to a speaking challenge. The drug dosing used in this study was potentially too low to affect SAD symptoms. Clinical Trials Registration: ClinicalTrials.

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gov identifier NCT00407199. Supported by AstraZeneca Pharmaceuticals.

### REFERENCES:

1. B.F. Grant, D.S. Hasin, C. Blanco, et al. The epidemiology of social anxiety disorder in the United States: Results from the National Epidemiological survey on alcohol and related conditions. *Journal of Clinical Psychiatry*, Nov. 2005; 66: 1351-1361.
2. B.R. Cornwell, L. Johnson, L. Berardi, C. Grillon. Anticipation of public speaking in virtual reality reveals a relationship between trait social anxiety and startle reactivity. *Biological Psychiatry*, Dec. 1, 2006; 59: 664-666.

### POSTER 129. LONG-TERM SAFETY AND TOLERABILITY OF OPEN-LABEL ARIPIPRAZOLE AUGMENTATION OF ANTIDEPRESSANT THERAPY IN MAJOR DEPRESSIVE DISORDER (STUDY CN138-164)

Robert Berman, M.D., *Bristol-Myers Squibb, 5 Research Parkway, Wallingford, CT 06492*, Stephen Kaplita, B.S., Robert D. McQuade, Ph.D., William H. Carson, M.D., Michele Preminger, M.D., Ronald N. Marcus, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to understand the long-term safety of aripiprazole augmentation of standard antidepressants in patients with major depressive disorder.

### SUMMARY:

Objective: To evaluate the long-term safety and tolerability of adjunctive aripiprazole to standard antidepressant therapy (ADT) in the treatment of outpatients with major depressive disorder. Methods: Patients completing one of two identical trials of aripiprazole that included an 8-week prospective ADT phase followed by a 6-week randomization (adjunctive aripiprazole or placebo) phase were enrolled in this open-label, safety and tolerability trial and followed for up to one year. De novo patients were enrolled if they had an inadequate response (<50% reduction in depressive symptom severity as assessed by the Massachusetts General Hospital Antidepressant Treatment Response Questionnaire) to current ADT. Data were collected from ongoing patients from September 2004 to November 2007. The incidence of Treatment Emergent Adverse Events (TEAEs), weight, and laboratory measurements were assessed during the 52-week study. Results: The incidence of new onset TEAEs was lower for prior aripiprazole patients as compared to rollover placebo and de novo patients. Across the whole population, the mean weight change from baseline ( $88.7 \pm 0.8$  kg,  $n=756$ ) after 52 weeks of treatment was  $2.9 \pm 0.2$  kg (LOCF). There were no clinically important changes in median percent change from baseline in fasting cholesterol, high-density lipoproteins, low-density lipoproteins, triglycerides, and glucose. There were no reports of neuroleptic malignant syndrome, completed suicides or deaths. Conclusions: Aripiprazole demonstrated an acceptable long-term safety and tolerability profile when used as augmentation of ADT in patients with major depressive disorder.

### REFERENCES:

1. Berman RM, Marcus RN, Swanink R, et al: The Efficacy and Safety of Aripiprazole as Adjunctive Therapy in Major Depressive Disorder: A Multicenter, Randomized, Double-blind, Placebo-controlled Study. *J Clin Psychiatry* 2007;68:843–853.
2. Marcus RN, McQuade RD, Carson WH, et al: The Efficacy and Safety of Aripiprazole as Adjunctive Therapy in Major Depressive Disorder: A Second Multicenter, Randomized, Double-blind, Placebo-controlled Study. *J Clin Psychopharmacol.* 2008;28(2):156–165.

### POSTER 130. ADJUNCTIVE ARIPIPRAZOLE PROVIDES BENEFICIAL EFFECTS IN SEXUAL FUNCTIONING FOR PATIENTS WITH MDD AND AN INADEQUATE RESPONSE TO STANDARD ANTIDEPRESSANT THERAPY

Ross Baker, Ph.D., M.B.A., *Bristol-Myers Squibb, 777 Scudders Mill Road, Plainsboro, NJ 08536-1615*, Maurizio Fava, M.D., Raymond Mankoski, M.D., Ph.D., Quynh-Van Tran, Pharm.D., Andrei Pikalov M.D., Ph.D., Randall Owen, M.D., Robert M. Berman, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to describe effects on the severity of sexual dysfunction in patients with MDD when aripiprazole is added to their standard antidepressant therapy.

### SUMMARY:

Objective: To assess the effect of adjunctive aripiprazole on sexual function in major depressive disorder (MDD). Methods: Data were pooled from two randomized, placebo-controlled trials among 670 MDD patients with an inadequate response to an 8-week trial of a single ADT who received adjunctive aripiprazole or placebo (blinded) for an additional 6 weeks. Comparisons were made using ANCOVA on items from the Massachusetts General Hospital Sexual Functioning Inventory (SFI) Follow-Up, with treatment, study, and gender as main effects and assessment at end of monotherapy as a covariate. Results: Baseline (end of monotherapy) severities on 5 (of 6) SFI items ranged from 3.6 to 4.6, representing a moderate level of sexual dysfunction. (The sixth item is not associated with a baseline value). Adjunctive aripiprazole ( $n=341$ ) demonstrated statistically significant improvement compared with adjunctive placebo ( $n=329$ ) in mean change from baseline to endpoint (LOCF) on three SFI items: interest in sex ( $-0.40$  vs.  $-0.08$ ,  $p<0.001$ ), sexual arousal ( $-0.34$  vs.  $-0.15$ ,  $p<0.05$ ), and overall sexual satisfaction ( $-0.34$  vs.  $-0.12$ ,  $p<0.05$ ). Conclusions: Aripiprazole adjunctive to ADT can have beneficial effects on sexual functioning in patients with MDD who respond inadequately to standard ADT. The benefits of aripiprazole on sexual functioning, which may be, at least partly, secondary to the improvement in symptoms of the depression itself, may have a positive impact on patient adherence.

### REFERENCES:

1. Berman RM, Marcus RN, Swanink R, et al. The efficacy

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and safety of aripiprazole as adjunctive therapy in major depressive disorder: a multicenter, randomized, double-blind, placebo-controlled study. *J Clin Psychiatry* 2007;68:843–853.

2. Marcus RN, McQuade RD, Carson WH, et al. The efficacy and safety of aripiprazole as adjunctive therapy in major depressive disorder: a second multicenter, randomized, double-blind, placebo-controlled study. *J Clin Psychopharmacol* 2008;28:156–165.

### POSTER 131. ADJUNCTIVE ARIPIPRAZOLE IN MAJOR DEPRESSIVE DISORDER: ANALYSIS OF EFFICACY AND SAFETY IN PATIENTS WITH ANXIOUS AND ATYPICAL FEATURES

Madhukar Trivedi, M.D., *UT Southwestern Medical Center at Dallas, 6363 Forest Park Road, Suite 13.354, Dallas, TX 75235*, Michael E. Thase, M.D., Huyuan Yang, Ph.D., Quynh-Van Tran, Pharm.D., Andrei Pikalov, M.D., Ph.D., Michael Martin, M.D., Berit X. Carlson, Ph.D., Ronald N. Marcus, M.D., Robert M. Berman, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to understand the efficacy and safety of aripiprazole augmentation in patients diagnosed with major depressive disorder presenting with anxious or atypical features with an inadequate response to standard antidepressants.

#### SUMMARY:

**Objective:** To evaluate the efficacy of adjunctive aripiprazole to standard antidepressant therapy (ADT) for patients with anxious and atypical depression. **Methods:** Data from two identical studies of aripiprazole augmentation, consisting of an 8-week prospective ADT treatment phase and a 6-week randomized (adjunctive aripiprazole or placebo) phase were pooled to evaluate efficacy and safety in subgroups. The efficacy endpoint was the mean change in rating scale measures from end of ADT treatment to end of randomized treatment (LOCF). Similar to Sequenced Treatment Alternative to Relieve Depression Study (STAR-D), anxious depression was defined by HAM-D17 criteria; atypical depression was defined by the Inventory of Depressive Symptomatology-Self Rated (IDS-SR) criteria, both at Week 0. **Results:** For all subpopulations analyzed, patients receiving adjunctive aripiprazole demonstrated a significantly greater improvement in the MADRS Total Score versus placebo from Week 1 or Week 2 to endpoint (anxious:  $-8.72$  vs.  $-6.17$ ,  $p < 0.001$ ; non-anxious:  $-8.61$  vs.  $-4.97$ ,  $p < 0.001$ ; atypical:  $-9.31$  vs.  $-5.15$ ,  $p < 0.001$ ; non-atypical:  $-8.08$  vs.  $-6.22$ ,  $p < 0.05$ ). At endpoint, remission rates were also greater with adjunctive aripiprazole versus adjunctive placebo (anxious: 25.0% vs. 15.7%;  $p < 0.05$ , non-anxious: 26.6% vs. 15.0%,  $p < 0.05$ ; atypical: 23.6% vs. 12.5%,  $p < 0.01$ ; non-atypical: 27.4% vs. 18.2%,  $p < 0.05$ ). Reporting of akathisia and weight gain did not differ between subgroups, although restlessness was more common in anxious than non-anxious patients (OR 1.96; 95% CI, 1.03–3.75). **Conclusions:** Adjunctive aripiprazole improves depressive symptoms in patients with anxious or

atypical features. Different from the STAR-D trial, remission rates with adjunctive aripiprazole were comparable between patients with major depression with anxious or nonanxious features.

#### REFERENCES:

1. Berman RM, Marcus RN, Swanink R, et al: The Efficacy and Safety of Aripiprazole as Adjunctive Therapy in Major Depressive Disorder: A Multicenter, Randomized, Double-blind, Placebo-controlled Study. *J Clin Psych* 2007;68:843–853.
2. Trivedi MH, Rush AJ, Wisniewski SR, et al: Evaluation of Outcomes with Citalopram for Depression Using Measurement-Based Care in STAR-D: Implications for Clinical Practice. *Am J Psych*. 2006;163;28–40.

### POSTER 132. METABOLIC EFFECTS OF ARIPIPRAZOLE ADJUNCTIVE TO CLOZAPINE IN PATIENTS WITH SCHIZOPHRENIA

W. Wolfgang Fleischhacker, M.D., *University of Innsbruck, Department of Biological Psychiatry, Innsbruck, A-6020 Austria*, Martti E Heikkinen, M.D., Ph.D., Jean-Pierre Olié, M.D., Wally Landsberg, M.B., Patricia Dewaele, Ph.D., Robert D. McQuade, Ph.D., Delphine Hennicken, M.S., Helene Peyro-Saint-Paul, M.D., M.B.A., Ross A. Baker, Ph.D., M.B.A., Sheila Assunção-Talbot, M.D., Ph.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to recognize that the addition of aripiprazole to clozapine may reduce metabolic risk factors associated with clozapine treatment without increasing psychiatric symptoms.

#### SUMMARY:

**Objective:** To assess the metabolic effects and efficacy of aripiprazole (ARI) adjunctive to clozapine (CLZ) in patients with *DSM-IV-TR* schizophrenia. **Methods:** This randomized, double-blind, placebo-controlled study included two phases: a 16-week double-blind period and a 12-week open-label extension phase. Outpatients with schizophrenia on stable doses of clozapine (CZP) for  $\geq 3$  months with sub-optimal schizophrenia control (inadequate efficacy and/or tolerability) and with weight gain of  $\geq 2.5$  kg while on CLZ were randomized to receive either adjunctive ARI 5–15 mg/day or adjunctive placebo (PBO). Metabolic assessments included mean change in body weight (primary endpoint), waist circumference, glucose, and lipids. Efficacy was measured by PANSS Total, CGI-I, and CGI-S. **Results:** 207 patients (108 ARI, 99 PBO) entered the double-blind phase; 180 continued into the extension. Baseline demographics were similar between groups, except for mean weight. At the end of 16 weeks, ARI was associated with a greater decrease in mean weight and in waist circumference compared with clozapine alone (placebo). Weight decreases were ARI  $-2.53$  kg vs. PBO  $-0.38$  kg ( $p < 0.001$ ). Waist circumference decreases were ARI  $-2.00$  cm vs. PBO 0 cm,  $p < 0.001$ . At the end of 16 weeks, ARI was associated with significant improvement in mean percent

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change in fasting total cholesterol ( $p=0.002$ ) and in LDL-C ( $p=0.003$ ) vs. CLZ alone. Metabolic parameters continued to improve during the extension phase. Compared with CLZ alone, adjunctive ARI was associated with significant improvement in CGI-I but not in PANSS Total or CGI-S. PANSS Total scores decreased during the extension phase in the following manner: previous CZP alone:  $-3.90$  vs. previous ARI:  $-1.82$ . Conclusion: The addition of aripiprazole to clozapine may provide benefit to patients with schizophrenia by reducing metabolic risk factors associated with CLZ treatment without increasing psychiatric symptoms.

### REFERENCES:

1. Henderson DC, Kunkel L, Nguyen DD, et al: An exploratory open-label trial of aripiprazole as an adjuvant to clozapine therapy in chronic schizophrenia. *Acta Psychiatr Scand* 2006;113(2):142–147.
2. Newcomer JW: Metabolic considerations in the use of antipsychotic medications: a review of recent evidence. *J Clin Psychiatr* 2007;68(Suppl 1):20–27.

### POSTER 133. SSRIS DURING PREGNANCY

Sachid Peteru, M.D., *Resident, Department of Psychiatry, Jamaica Hospital Medical Center, NY*, Artin Minaeian, Behrooz Azizi, Ajit Bisen, Reyna Payero, Kelly Cervellione, Isak Isakov, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to determine whether or not there is an association between SSRI medication in pregnancy and the outcome of the pregnancy, as well as the health status of the newborn.

### SUMMARY:

SSRI antidepressants are most commonly used to treat depression and anxiety disorders. Recent data about the safety of these medications during pregnancy is yet to be established. In an attempt to investigate the safety of SSRIs in the pregnancy, we did a retrospective study looking at the depressed pregnant women taking SSRIs. We analyzed the pregnancy outcome and neonatal outcome and attempted to retrieve the demographic profile of the subjects during the period of 2003 to January 2008. Most of the studies done to date were from pooled data from registries or from patients who volunteered through phone interviews or replied via mail. Numerous studies that were conducted showed results including withdrawal symptoms from SSRIs, pulmonary hypertension but without any significant differences in major congenital malformations. However, there could be a bias in reporting the usage of other medications, substance abuse, and other confounding variables by the subjects, as there were no objective verification of data. In an attempt to avoid the confounding variables, the study was designed to exclude subjects with substance abuse and intake of other medications during the pregnancy.

### REFERENCES:

1. Altshuler, et al.; Effects of antenatal depression and antidepressant treatment on gestational age at birth and risk of

- preterm birth; *Am J Psychiatry*; 2007 Aug;164(8):1206-13.
2. Berard A, et al.; First trimester exposure to paroxetine and risk of cardiac malformations in infants: the importance of dosage; *Birth Defects Res B Dev Reprod Toxicol*. 2007 Feb;80(1):18-27.

### POSTER 134. STARTING A LONG ACTING INJECTION CLINIC IN A COMMUNITY MENTAL HEALTH CENTER: BARRIERS AND POTENTIAL SOLUTIONS

*Supported by Janssen Pharmaceuticals a Division of Johnson and Johnson*

Elisa Medellin, B.A., M.A., *8122 Data Point, Suite 1150, San Antonio, TX, 78229*, Dawn I. Velligan, Ph.D., Natalie J. Maples, M.A., Tamara J. Reeves, M.S., Troy A. Moore, Pharm.D., M.S., Albana Dassori, M.D., Alexander L. Miller, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to identify the benefits of a long acting injection, as well as possible clinic and state level barriers associated with establishing a long acting injection club at a community mental health clinic.

### SUMMARY:

Introduction: As many as 50% of patients with schizophrenia do not take oral antipsychotic medications as prescribed. Poor adherence to antipsychotic medication leads to re-hospitalization, derails the process of recovery, and contributes to the high cost of treating schizophrenia. Long-acting injections improve adherence and allow prescribers to distinguish between poor efficacy and problem adherence. However, these medications are underutilized in the U.S. Methods: We worked to establish a Consta Club in an over-burdened public mental health clinic. Participants receive Risperidone Long Acting Injections (RLAI) every two weeks, and attend Club meetings focused on recovery. Nineteen individuals have been recruited to date. Results: Barriers to the use of RLAI have been identified. There was no infrastructure for a shot clinic. Physicians frequently have very little time to spend with patients. Changing medications takes longer and may necessitate more frequent visits than does continued maintenance on the same medication. There are negative attitudes on the part of both physicians and patients about injections. Moreover, few patients have their own transportation making frequent visits a burden. We also identified funding barriers that limit the availability of RLAI for certain individuals. Discussion: To address barriers we are attempting to develop an infrastructure for the club by working with administration, scheduling, nursing and psychiatry. We also suggest public advocacy on the part of the clinic and consumers to work with state funding sources to change regulations that may limit appropriate clinical care. Supported by a grant to the second author from Janssen Pharmaceuticals a division of Johnson and Johnson.

### REFERENCES:

1. Sackett DL: Compliance with Therapeutic Regimens. Bal-

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timore, MD, Johns Hopkins University Press, 1976.

2. Velligan DI, Lam F, Ereshefsky L, Miller AL: Psychopharmacology: perspectives on medication adherence and atypical antipsychotic medications. *Psychiatr Serv* 2003; 54: 665-667.

### **POSTER 135. ADOLESCENTS ADHERENCE WITH ATYPICAL NEUROLEPTIC MEDICATION FOLLOWING INPATIENT TREATMENT**

David Pogge, Ph.D., *Four Winds Hospital, 800 Cross River Road, Katonah, NY 10536*, Philip D. Harvey, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant will have an increased understanding of the rates of post discharge adherence to atypical antipsychotic medications in adolescent patients and will be better able to identify barriers to post discharge adherence to these medications.

#### **SUMMARY:**

Background: Adherence to antipsychotic treatment is an issue of major concern. As more adolescent patients are treated with these medications, there is little information available about their adherence patterns. With the advent of FDA approval for use of atypical antipsychotics with adolescents, such information could be helpful in guiding treatment planning. Methods: One hundred and twenty-three adolescent inpatients were recruited after being treated with an antipsychotic medication was initiated. These inpatients were followed up 30 and 120 days after their discharge from inpatient care. Their adherence to medications was grouped into four categories: Adherent to same medication; changed to new antipsychotic medication; medication discontinued following parental or medical decision; nonadherent. Results: Of the 123 patients, 60 (56%) were still adherent to the same medication and 10 (8%) had been switched to a different atypical. Thirty-three (27%) of the patients had stopped their medication because of their advice of a parent or outside psychiatrist and only 15 (12.2%) were nonadherent. There were no differences associated with the time course of discontinuation, with only 6 of the 15 nonadherent cases stopping their medication within 30 days of discharge. Conclusions: These data suggest that adolescent patients treated with atypical antipsychotic medications have a very low rate of self-initiated medication discontinuation. Further investigation of the reasons for parental or physician discontinuation of atypical antipsychotics after discharge may lead to more efficient treatment planning for this population.

#### **REFERENCES:**

1. David L. Pogge, Melissa Biren Singer, & Philip D. Harvey. Rates and Predictors of Adherence with Atypical Antipsychotic Medication: A follow-up study of Adolescent Inpatients. *Journal of Child and Adolescent Psychopharmacology*, 2005, 15, 901-912.
2. Olfson M, Blanco C, Liu L, Moreno C, Laje G. National Trends in the Outpatient Treatment of Children and Adolescents With Antipsychotic Drugs. *Arch Gen Psychiatry*, 2006: 63:679-685.

### **POSTER 136. FOUR-WEEK ILOPERIDONE DEPOT INJECTABLE: SAFETY AND PHARMACOKINETIC PROFILE IN PATIENTS WITH SCHIZOPHRENIA AND SCHIZOAFFECTIVE DISORDER**

Supported by *Vanda Pharmaceuticals*

Christon Lorn Hill, *Vanda Pharmaceuticals Inc., 9605 Medical Center Drive, Rockville, MD 20850*, Paolo Baroldi, Ph.D., Curt Wolfgang, Ph.D., Kristen M. Boyce

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Recognize iloperidone depot as a potential future long-term treatment for patients with schizophrenia or schizoaffective disorder; and 2.) Demonstrate understanding of the pharmacokinetics of iloperidone.

#### **SUMMARY:**

Introduction: In the treatment of schizophrenia, long-term injectable formulations provide an option to patients and physicians to increase treatment compliance. This double-blind, placebo-controlled, parallel-group study evaluated the safety and pharmacokinetics of a 28-day injectable depot formulation of iloperidone, a mixed D2/5-HT2 antagonist being developed for the treatment of schizophrenia. Methods: The study had 1 double-blind 28-day cycle and 2-6 optional open-label 28-day cycles. Different dose ranges (12-750 mg) were administered to adult patients with schizophrenia or schizoaffective disorder. Safety assessments included adverse events (AEs), laboratory evaluations, injection site reactions, vital signs, ECG, and Extrapyramidal Symptom Rating Scale (ESRS). Results: Iloperidone depot showed sustained release over 28 days, with immediate release starting at day 1. Systemic exposure was generally dose proportional and compared with that of the oral formulation over a 28-day period. The safety population comprised 84 patients (iloperidone 64; placebo 20). The adverse event profile of 28-day injectable was similar to that of the oral formulation. No patient had QTc prolongation of clinical significance. Conclusions: These data suggest that oral dosing is not needed prior to the first injection as this formulation showed immediate release at day 1 and a sustained release over 28 days. Iloperidone depot appeared to be safe and well tolerated. This formulation may provide a future tool aiding treatment compliance among the schizophrenia population. Vanda Pharmaceuticals sponsored this study.

#### **REFERENCES:**

1. Corbett R, Griffiths L, Shipley JE, Shukla JT, Strupczewski JT, Szczepanik AM, Szewczak MR, Turk DJ, Vargas HM, Kongsamut S, and the Iloperidone Project Team: Iloperidone: preclinical profile and early clinical evaluation. *CNS Drug Rev* 1997; 3:120-147.
2. Sainati SM, Hubbard JW, Chi E, Grasing K, Brecher MB: Safety, tolerability, and effect of food on the pharmacokinetics of iloperidone (HP 873), a potential atypical antipsychotic. *J Clin Pharmacol* 1995; 35:713-720.

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### POSTER 137. BINDING OF THE NOVEL INSOMNIA AGENT EPLIVANSERIN TO CORTICAL 5HT2A RECEPTORS, AS ASSESSED BY PET SCANNING

*Supported by Sanofi-Aventis, Inc.*

Bernard Sadzot, M.D., Ph.D., *Department of Neurology (B35), C.H.U. Sart Tilman, Liège, 4000 Belgium*

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to understand the binding of the novel sleep agent eplivanserin to cortical 5HT2A receptors in healthy human subjects, as assessed by positron emission tomography.

#### SUMMARY:

Introduction/hypothesis: [18F]altanserin is one of the most selective 5HT2A antagonist radiotracers, and is used in positron emission tomography (PET) to evaluate 5HT2A receptor levels, location and ligand binding[1]. Eplivanserin is an Antagonist of Serotonin Two A Receptors (ASTAR), which increases slow-wave/restorative sleep[2], and is being developed for the treatment of chronic insomnia characterized by nighttime awakenings (CINA). The binding of eplivanserin to central 5HT2A receptors was assessed to determine the dose at which maximum inhibition of [18F]altanserin binding was achieved. Methods: This was a single-center, open-label study of a single dose or daily doses of orally administered eplivanserin 1 mg and 10 mg for 6 days in eight healthy male subjects. PET scanning was performed ~4–6 h after the single or last repeated dose. Safety was assessed by monitoring adverse events (AEs), vital signs, physical examination, ECG and laboratory tests. Results: Subjects received eplivanserin 1 mg for 1 day (n=2) or 6 days (n=2), or 10 mg for 1 day (n=1) or 6 days (n=3). PET scanning demonstrated that both single and repeated doses of eplivanserin 1 or 10 mg were able to inhibit completely the binding of [18F]altanserin to cortical 5HT2A receptors. Only one AE was reported (abnormal accommodation), determined as unlikely to be related to study drug. No serious AEs occurred. Conclusion: This study demonstrates the in vivo binding of eplivanserin to central 5HT2A receptors, and shows that oral administration of doses as low as 1 mg completely inhibited cortical binding of the selective 5HT2A radiotracer, [18F]altanserin. This study was supported by Sanofi-Aventis, Inc.

#### REFERENCES:

1. Price JC, et al. *Synapse*. 2001; 41(1): 11–21.
2. Sanger DJ, et al. *Ann Pharm Fr*. 2007; 65(4): 268–74.

### POSTER 138. EPLIVANSERIN, A NOVEL SLEEP AGENT, IMPROVES SLEEP CONTINUITY WITHOUT NEXT-DAY EFFECTS IN PATIENTS WITH CHRONIC PRIMARY INSOMNIA

*Supported by Sanofi-Aventis, Inc.*

Pierre Gervais, B.Ph., M.S.C., *Q&T Research, 130 – 95 Camirand, Sherbrooke, QC, J1H 4J6, Canada*, Eduard Estivill, M.D., Carole Hecquet, Ph.D., Raymond Matte, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to understand the effects of eplivanserin, a novel sleep agent, on sleep parameters and next-day effects, as reported by patients with insomnia characterized by nighttime awakenings (CINA).

#### SUMMARY:

Introduction/hypothesis: We evaluated the effects of the novel Antagonist of Serotonin Two A Receptors (ASTAR) [1,2], eplivanserin (EPL) on patients with chronic primary insomnia. Methods: Multicenter, double-blind, placebo (PBO)-controlled, 3-parallel-arm, 4-week study in 351 patients with a wake time after sleep onset (WASO)  $\geq 30$  min, problems with sleep latency (SL) or non-restorative sleep  $\geq 1$ x/month. Patients were randomized to nightly PBO or EPL 1 or 5 mg. Patient-reported sleep parameters were recorded with morning sleep questionnaires assessing sleep quality (SQ), SL, WASO, number of nighttime awakenings (NAW) and total sleep time (TST). Impression of treatment was measured on the Patient Global Impression scale. Adverse events (AEs) and next-day effects were assessed throughout, with rebound insomnia evaluated during a 1-week run-out. Results: EPL 5 mg significantly reduced WASO vs. PBO (–38:37 vs. –26:08 min:sec;  $P=0.009$ ), and both EPL 1 and 5 mg significantly reduced NAW vs. PBO (–2.2 and –1.0 vs. –1.0;  $P=0.025$  and  $0.008$ , respectively). EPL 5 mg improved refreshing SQ (–0.5 vs. –0.4;  $P=0.049$ ; 4-point Likert scale) and there was a trend of increased TST vs. PBO (+42:45 vs. +30:12 min:sec;  $P=0.072$ ), with more EPL 5 mg- than PBO-treated patients reporting that the study drug aided sleep (64% vs. 52%;  $P=0.076$ ). Neither EPL 1 nor 5 mg significantly affected SQ (primary endpoint) or SOL vs. PBO. Treatment-emergent AEs  $\geq 5\%$  with EPL 1 and 5 mg vs. PBO were headache (9.4% and 12.3% vs. 9.2%), dry mouth (2.6% and 5.3% vs. 1.7%) and dizziness (5.1% and 1.8% vs. 2.5%). There were no serious AEs or next-day residual effects (morning sleepiness/ability to concentrate), and there was no evidence of rebound insomnia after EPL discontinuation. Conclusion: EPL 5 mg/day improved sleep continuity by decreasing WASO and NAW in insomnia patients and was well tolerated, with no effect on next-day functioning or rebound insomnia. This study was funded by Sanofi-Aventis, Inc.

#### REFERENCES:

1. Edinger JD, Glenn DM, Bastian LA, Marsh GR. Slow-wave sleep and waking cognitive performance II: Findings among middle-aged adults with and without insomnia complaints. *Physiol Behav* 2000; 70(1-2):127–134.
2. Sanger DJ, Soubrane C, Scatton B. New perspectives for the treatment of disorders of sleep and arousal. *Ann Pharm Fr* 2007; 65(4):268–274.

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### **POSTER 139. CONSEQUENCES ASSOCIATED WITH POTENTIAL DRUG-DRUG INTERACTIONS BETWEEN ANTIPSYCHOTICS AND CONCOMITANT MEDICATIONS IN PATIENTS WITH SCHIZOPHRENIA**

*Supported by Ortho-McNeil Janssen Scientific Affairs, LLC*

Jeff J. Guo, Ph.D., 3225 Eden Avenue, Cincinnati, OH 45267, Christina M.L. Kelton, Ph.D., Nick C. Patel, Ph.D., Jasmanda H. Wu, Ph.D., Yonghua Jing, M.S., Huihao Fan, M.S., Paul E. Keck Jr., M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, participants will be able to describe health care utilization and costs associated with potential drug-drug interactions (DDIs) between antipsychotics and concomitant medications among Medicaid adult patients with schizophrenia or schizoaffective disorder.

#### **SUMMARY:**

**Introduction:** Inhibiting or inducing antipsychotic metabolism via hepatic cytochrome P450 (CYP450) may have clinical and economic consequences. This study examined whether drug-drug interactions (DDIs) between oral antipsychotics and non-antipsychotics that are inhibitors or inducers of CYP450 isoenzymes are associated with increased health care utilization and costs in schizophrenics or schizoaffective-disorder patients. **Methods:** Ohio State Medicaid data contributed patients (18 = age < 65) who had schizophrenia or schizoaffective disorder and received an antipsychotic from 2000 to 2003 (N=31,716). Clinically significant DDI pairings (Facts & Comparisons 4.0) were examined, with exposure for an antipsychotic prescription overlapping with an interacting medication. Three adverse events (AEs) (extrapyramidal symptoms, increased seizure risk and QT-prolongation or arrhythmias) associated with DDIs were studied. Utilization and costs for inpatient and ambulatory care during a 90-day follow-up were examined. Regression analyses were used to adjust for confounding factors between patient groups. **Results:** Most patients had no DDI (26,546); 7060 had DDI (no AE) and 110 experienced a DDI +AE. Length of stay and emergency room visits (mean±SD) were highest for the latter (25 days±17.8; 3.4±4.1) and lower for DDI (11 days±9.9; 1.5±1.0) and non-DDI (3.6 days±15.6; 0.5±2.8) groups. Healthcare costs were higher with DDI+AE (\$9699) or DDI (\$2962) compared to no DDI (\$2201). Regression analysis indicated that patients with DDI+AE or DDI had significantly higher healthcare utilization and costs than patients without DDI (P<0.001). Step-wise regression showed that patients with a DDI or DDI+AE associated with olanzapine, risperidone and quetiapine had higher total costs than patients without DDI. **Conclusion:** These data suggest that antipsychotic DDIs are related to higher healthcare utilization and costs. Sponsored by Ortho-McNeil Janssen Scientific Affairs, L.L.C.

#### **REFERENCES:**

1. Davies SJC, Eayrs S, Pratt P, et al: Potential for drug interactions involving cytochromes P450 2D6 and 3A4 on general adult psychiatric and functional elderly psychiatric wards. *Br J Clin Pharmacol* 2004; 57:464-472.

2. Howe AM, Kozma C, Russo P, et al: The prevalence of potential antipsychotic drug-drug interactions in a large US national managed care database. [unpublished poster presentation] The 19th Annual US Psychiatric & Mental Health Congress. November 16-19, 2006.

### **POSTER 140. MODULATION OF COGNITIVE FUNCTION WITH TRANSCRANIAL DIRECT CURRENT STIMULATION**

Carl Erik Fisher, B.A., 1051 Riverside Drive, Unit 21, New York State Psychiatric Institute, New York, NY 10032, Peter Bulow, M.D., Bruce Luber, Ph.D.; Sarah Lisanby, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant should be able to recognize transcranial direct current stimulation as a potential new noninvasive brain stimulation intervention.

#### **SUMMARY:**

**Background:** Transcranial direct current stimulation (tDCS) is a safe, non-invasive method of applying a weak, focal direct current to the human cortex. The dorsolateral prefrontal cortex (PFC) has been implicated in specific memory and cognitive tasks. However, the left PFC is the predominantly active site during verbal fluency tasks, while working memory tasks are associated with broader activation networks. **Objective:** We attempted to assess whether short-term direct current polarization would alter performance on these tasks. We hypothesized that anodal stimulation, which activates local neuron firing, might increase performance on a verbal fluency task when compared to cathodal or sham conditions, and that cathodal stimulation may impair performance on this task. We further hypothesized that performance on the Sternberg task for working memory would not be affected as much as the verbal fluency task. **Methods:** 10 healthy male and female volunteers between the ages of 18 and 35 were recruited for the study. 2 milliamp current was applied to the left dorsolateral prefrontal cortex for 32 minutes. Three conditions were used: anodal, cathodal, and sham stimulation. Stimulation was preceded and followed by the verbal fluency task. The Sternberg task was performed immediately prior to stimulation, and during the last 17 minutes of stimulation. **Results:** Preliminary data from these ten subjects show a significant improvement on the verbal fluency task in the anodal and sham conditions, but not during cathodal stimulation. There were no significant effects on the Sternberg working memory task. Additional data are forthcoming. **Discussion:** Cathodal direct current stimulation of the human cortex appears to selectively modulate frontal lobe function in a task-specific manner. Direct current brain polarization may be a safe, simple, and inexpensive method to directly modulate cognitive function.

#### **REFERENCES:**

1. Iyer et al. (2004). "Safety and cognitive effect of frontal DC brain polarization in healthy individuals." *Neurology* 64: 872-875.
2. Wasserman and Grafman. (2005). "Recharging cognition with DC brain polarization." *Trends in cognitive science* 9(11):503-505.

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### POSTER 141. PATIENT ASSESSED QUALITY OF LIFE (PQ-LES-Q) VERSUS CLINICIAN ASSESSMENT (PANSS, CGI) IN A TRIAL OF ARIPIPRAZOLE IN ADOLESCENT PATIENTS WITH SCHIZOPHRENIA

*Supported by Otsuka Pharmaceutical*

Andrei Pikalov, M.D., Ph.D., 2440 Research Boulevard, Rockville, MD 20850, Richard Whitehead, B.S., Na Jin, M.S., Mirza Ali, Ph.D., Edward Kim, M.D., M.B.A., Margaretta Nyilas, M.D., William Carson, M.D., Taro Iwamoto, Ph.D., Stephen A. Wisniewski, Ph.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to recognize the association between patient assessed subjective measures (i.e. PQ-LES-Q) and clinician assessed objective measures (i.e. PANSS and CGI) and recognize quality of life improvement as seen with PQ-LES-Q overall.

#### SUMMARY:

**Introduction:** The self administered pediatric Quality of Life Enjoyment and Satisfaction Questionnaire (PQ-LES-Q) is made up of 14 Total (T) items that assess important aspects of quality of life (QoL) and a 1 item overall (O) assessment. This post hoc analysis was to determine if patient's assessment of improvement in QoL correlates with improvement as determined by the clinical assessment (PANSS; CGI-S). **Methods:** 302 children (age 13-17) with schizophrenia participated in a 6-week, multicenter, randomized trial. It examined 2 fixed doses of aripiprazole (10 & 30 mg/day) or placebo. The primary measure was mean change from baseline to endpoint on PANSS total (LOCF). Secondary measures included: mean changes on CGI-S and PQ-LES-Q(T) and (O). **Results:** Aripiprazole showed significant improvements over placebo at week 6 ( $p < 0.05$ ; LOCF). Mean change in CGI-S for both aripiprazole arms were significantly better over placebo ( $p < 0.01$ ; LOCF). Both aripiprazole groups significantly improved on PQ-LES-Q(O) ( $p < 0.005$ ; LOCF), but did not show significant change on PQ-LES-Q(T). Strong correlation ( $r = 0.37$  &  $p < 0.001$ ) was found between all measures. When PANSS Total improvement was put into 4 categories (<20%; 20-30%; 30-50%; or >50% reduction) % change in mean PQ-LES-Q(T) was 3.1, 13.8, 24.7, & 20.9 per category (trend analysis  $p = .0002$ ; Linear regression =  $p = .0001$ ; LOCF). When CGI-S was put into 4 categories (=0; -1; -2; or =-3 point change) % change in mean PQ-LES-Q(O) was 0.06, 0.51, 0.64, and 0.61 per category (trend analysis  $p = .0006$ ; LOCF). **Conclusions:** There is significant correlation in improvement between patient self assessed quality of life (PQ-LES-Q(T)) and clinician assessment (PANSS Total) and Global self-assessed QoL (PQ-LES-Q(O)) and clinician assessment (CGI-S). Degree of subjective improvement in QoL measured by PQ-LES-Q is associated with degree of clinical improvement measured by PANSS and CGI. Supported by funding from Otsuka Pharmaceutical.

#### REFERENCES:

1. Endicott, J, Nee J, Yang R, Wohlberg C: Pediatric quality of life enjoyment and satisfaction questionnaire (PQ-

LES-Q): reliability and validity. *J Am Acad Child Adolesc Psychiatry* 2006; 45:4.

2. Kay SR, Fiszbein A, Opler LA: The positive and negative syndrome scale (PANSS) for schizophrenia, *Schizophr Bull* 1987; 13(2):261-76.

### POSTER 142. OLANZAPINE LONG-ACTING INJECTION: AN 8-WEEK, DOUBLE-BLIND, RANDOMIZED, PLACEBO-CONTROLLED STUDY IN ACUTELY-ILL PATIENTS WITH SCHIZOPHRENIA

*Supported by Eli Lilly and Company*

Holland Detke, Ph.D., *Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285*, John Lauriello, M.D., Tim Lambert, M.D., Scott Andersen, M.S., Daniel Lin, Ph.D, David McDonnell, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to describe the speed of onset of clinical drug effect of olanzapine long-acting injection (OLAI) after administration, as well as its efficacy and safety for the treatment of schizophrenia based on results from an 8-week, placebo-controlled trial.

#### SUMMARY:

**Objective:** This study examined the acute efficacy and tolerability of a new long-acting, injectable, atypical antipsychotic, OLAI, for the treatment of schizophrenia. **Method:** In this 8-week, double-blind study, 404 acutely ill adult patients with schizophrenia and a BPRS score of  $\geq 30$  (0-6 scale) were randomized to receive 210mg/2 wks, 300mg/2wks, 405mg/4 wks OLAI, or placebo/2 wks. No oral antipsychotic supplementation was permitted. The primary efficacy measure was mean baseline-to-endpoint change in Positive and Negative Syndrome Scale (PANSS) total score using last-observation-carried-forward methodology. **Results:** Mean baseline-to-endpoint decreases in PANSS total scores were significantly greater for all OLAI regimens relative to placebo (-22 to -26 vs. -9 points; all  $p < 0.001$ ). The 300mg/2 wks and 405mg/4 wks OLAI groups separated from placebo on the PANSS Total at 3 days after starting treatment, and all OLAI groups separated from placebo by 7 days. Incidences of sedation and increased appetite were significantly higher for 300mg/2 wks OLAI relative to placebo ( $p < 0.05$ ). Mean weight gain (3.2-4.8 vs. 0.3kg,  $p < 0.001$ ) and incidence of weight gain  $\geq 7\%$  of baseline (23.6-35.4% vs. 12.4%,  $p = 0.002$ ) were significantly greater for OLAI relative to placebo. Significant differences between OLAI and placebo were observed with mean changes in fasting total cholesterol (5.5-10.4 vs. -7.0mg/dL;  $p \leq 0.015$ ), and fasting triglycerides (17.6-30.3 vs. -9.4mg/dL;  $p \leq 0.016$ ). Injection site reactions occurred in 3.6% of OLAI patients vs. 0% for placebo ( $p = .073$ ). **Conclusions:** OLAI administered at 2- or 4-week injection intervals was significantly more efficacious than placebo for the treatment of acutely ill patients with schizophrenia despite the lack of supplementation with oral antipsychotics. Efficacy and safety findings were consistent with those seen in similar

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studies conducted using oral olanzapine. This work was funded by Eli Lilly and Company.

### REFERENCES:

1. Beasley CM, Jr., Tollefson G, Tran P, Satterlee W, Sanger T, Hamilton S: Olanzapine versus placebo and haloperidol: acute phase results of the North American double-blind olanzapine trial. *Neuropsychopharmacology* 1996; 14:111-123.
2. Tollefson GD, Beasley CM, Jr., Tran PV, Street JS, Krueger JA, Tamura RN, Graffeo KA, Thieme ME: Olanzapine versus haloperidol in the treatment of schizophrenia and schizoaffective and schizophreniform disorders: results of an international collaborative trial. *Am.J Psychiatry* 1997; 154:457-465.

### POSTER 143. OLANZAPINE LONG-ACTING INJECTION FOR THE MAINTENANCE TREATMENT OF SCHIZOPHRENIA: A 24-WEEK, RANDOMIZED, DOUBLE-BLIND TRIAL

*Supported by Eli Lilly and Company*

Holland Detke, Ph.D., *Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285*, David McDonnell, M.D., John Kane, M.D., Dieter Naber, M.D., Gopalan Sethuraman, Ph.D., Daniel Lin, Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to describe the efficacy and safety of olanzapine long-acting injection for the maintenance treatment of schizophrenia based on results from a 24-week clinical trial.

### SUMMARY:

Objective: This study examined the efficacy and safety of olanzapine long-acting injection (OLAI) for maintenance treatment of patients with schizophrenia. Method: Adult outpatients with schizophrenia who maintained stability on open-label oral olanzapine (10, 15, or 20mg/day) for 4-8 weeks were randomized to OLAI at doses of 150mg/2-weeks (N=140), 405mg/4-weeks (N=318), or 300mg/2-weeks (N=141), or to a low reference dose of 45mg/4-weeks (N=144), or to oral olanzapine at their previously stabilized dose (N=322) for 24 weeks of double-blind treatment. Cumulative rates of and time to relapse were estimated using Kaplan-Meier methodology. Results: At 24 weeks, 93% of oral olanzapine-treated patients, 95% of 300mg/2 wks-, 90% of 405mg/4 wks-, 84% of 150mg/2 wks-, and 69% of 45mg/4 wks OLAI-treated patients remained relapse-free, with the 405mg/4 wks and pooled 2-week dosing regimens demonstrating noninferiority to oral olanzapine as well as to each other. All 3 higher OLAI doses were superior to 45mg/4-weeks based on time to relapse (all  $p < .01$ ). Incidence of weight gain  $\geq 7\%$  of baseline was significantly greater for oral olanzapine (21.4%), OLAI 300mg/2 wks (20.7%), 405mg/4 wks (15.2%) and 150mg/2 wks (16.4%), compared with OLAI 45mg/4 wks (8.3%, all  $p \leq .05$ ). There were no clinically significant differences between OLAI and oral olanzapine with respect to laboratory measures, vital signs,

ECGs, or EPS. The incidence of injection site reactions was low (2.8%) with no significant differences between treatment groups. Two patients treated with OLAI experienced sedation and delirium following accidental intravascular injection. Conclusions: OLAI at doses of 150mg/2 wks, 405mg/4 wks, and 300mg/2 wks was efficacious in maintenance treatment of schizophrenia for up to 24 weeks. The safety profile for these OLAI doses was consistent with that of oral olanzapine except for injection-related events. This work was funded by Eli Lilly and Company.

### REFERENCES:

1. Kane JM: Review of treatments that can ameliorate non-adherence in patients with schizophrenia. *J Clin.Psychiatry* 2006; 67 Suppl 5:9-14.
2. Tran PV, Dellva MA, Tollefson GD, Wentley AL, Beasley CM, Jr.: Oral olanzapine versus oral haloperidol in the maintenance treatment of schizophrenia and related psychoses. *Br.J Psychiatry* 1998; 172:499-505.

### POSTER 144. OLANZAPINE LONG-ACTING INJECTION IN PATIENTS WITH SCHIZOPHRENIA AT RISK OF RELAPSE: 12-WEEK SWITCHING DATA

*Supported by Eli Lilly and Company*

Holland Detke, Ph.D., *Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285*, David P. McDonnell, M.B.B.Ch., M.R.C.Psych., Scott W. Andersen, M.S., Susan B. Watson, Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to compare the safety and efficacy of various methods of switching to olanzapine long-acting injection (OLAI) from other antipsychotic medications.

### SUMMARY:

Objective: To compare the safety and efficacy of four methods of switching to olanzapine long-acting injection (OLAI) from other antipsychotic medications. Analyses were based on 12-week data from an ongoing 2-year open-label randomized study of OLAI in schizophrenia. Methods: Patients were aged 18 to 65, with baseline PANSS total score  $< 70$  and considered at risk for relapse. Patients received OLAI every 4 weeks, with a starting dose of 405 mg and flexible dosing thereafter. Investigators could switch patients directly to OLAI or taper the prior antipsychotic medication in the first 2 weeks of treatment. Supplemental oral olanzapine up to 5 mg/day was allowed from weeks 2 to 8. Results: Of the 264 patients, 50.0% were in the direct switch group, 6.8% in the supplementation group, 31.1% in the taper group, and 12.1% in the supplementation + taper group. Rate of all-cause discontinuation was 21.2%. The switch groups did not significantly differ in time to all-cause discontinuation ( $p = .582$ ) or discontinuation rate ( $p = .574$ ). PANSS total score mean changes did not significantly differ among the switch groups ( $p = .203$ ). Treatment-emergent adverse events in  $\geq 5\%$  of patients were increased weight (6.8%), insomnia (6.1%), and increased appetite (5.3%). The switch groups

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did not significantly differ in mean weight change ( $p=.910$ , overall $=+1.6$  kg). There were no significant group differences in fasting glucose mean change, which ranged from  $+0.11$  to  $+0.24$  mmol/L ( $p=.927$ ). There was a significantly greater total cholesterol mean increase for the supplementation + taper group ( $+0.26$  mmol/L) versus the supplementation group ( $-0.17$ ,  $p=.027$ ) and versus the taper group ( $-0.06$ ,  $p=.016$ ). There were no significant group differences in triglycerides mean change ( $p=.914$ ). Conclusion: In this 12-week analysis of switching data, there did not appear to be clinically significant differences in most efficacy or safety parameters among the four switching groups. Research supported by Eli Lilly and Company.

### REFERENCES:

1. Lauriello J, Lambert T, Andersen SW, Lin DY, Taylor CC, McDonnell D: A double-blind, placebo-controlled, randomized study of the efficacy and safety of intramuscular olanzapine depot for the treatment of schizophrenia. *J Clin Psychiatry* 2008; in press.
2. Csernansky JG, Mahmoud R, Brenner R, Risperidone-USA-79 Study Group: A comparison of risperidone and haloperidol for the prevention of relapse in patients with schizophrenia. *N Engl J Med* 2002; 346:16-22.

### POSTER 145. POST-INJECTION DELIRIUM/ SEDATION SYNDROME OBSERVED WITH OLANZAPINE LONG-ACTING INJECTION *Supported by Eli Lilly and Company*

Angela Gulliver, Pharm.D., *Lilly Research Laboratories, Indianapolis, IN 46285*, David P. McDonnell, M.B.B.Ch., M.R.C.Psych., Sebastian Sorsaburu, M.D., Elizabeth Brunner, M.D., Holland C. Detke, Ph.D., Scott W. Andersen, M.S., Richard F. Bergstrom, Ph.D., Malcolm Mitchell, M.B.B.S., M.F.P.M., Kristen Ogle, Ph.D., Mary P. Stickelmeyer, Ph.D., Susan B. Watson, Ph.D., Sara A. Corya, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to describe the incidence of post injection delirium/sedation syndrome observed with olanzapine long-acting injection and to understand its recommended risk management and medical management procedures.

### SUMMARY:

Objective: A recognized potential risk of intramuscular products is accidental intravascular injection, the signs and symptoms of which are dependent on the formulation and safety profile of the injected medication. During clinical trials of olanzapine long-acting injection (OLAI), cases were identified in which a cluster of adverse events characterized by post-injection delirium and/or excessive sedation were observed. This post-injection syndrome appeared to be potentially related to inadvertent intravascular injection of a portion of the OLAI dose. Methods: Safety data were pooled from all completed and ongoing OLAI clinical trials through the last database lock in 2007 (cutoff date: 30-Sep-2007), and

all 25 cases of post-injection delirium/sedation occurring in this timeframe were reviewed. Incidence of post-injection delirium/sedation was estimated by dividing number of events by number of injections or number of patients. Results: Incidence of post-injection delirium/sedation syndrome following administration of OLAI was 0.07% per injection and 1.2% per patient. Affected patients presented with symptoms consistent with excessive systemic levels of olanzapine (eg, sedation, dizziness, confusion, slurred speech, altered gait, weakness, muscle spasms, and/or unconsciousness). No clinically significant decreases in vital signs were observed. All patients recovered completely from signs and symptoms of post-injection delirium/sedation syndrome after 3 to 72 hours. Conclusion: The incidence of post-injection delirium/sedation syndrome with OLAI was similar to a reported rate of a similar syndrome observed with intramuscular procaine penicillin G. Special precautions when using OLAI include proper injection technique and implementation of a post-injection observation period. Post-injection delirium/sedation signs and symptoms should be managed as medically appropriate. Research supported by Eli Lilly and Company.

### REFERENCES:

1. Beyea, S.C., Nicoll, L.H. 1995. Administration of medications via the intramuscular route: an integrative review of the literature and research-based protocol for the procedure. *Appl Nurs Res*, 8:23-33.
2. Downham, T.F. 2nd, Cawley, R.A., Salley, S.O., Dal Santo G. 1978. Systemic toxic reactions to procaine penicillin G. *Sex Transm Dis*, 5:4-9.

### POSTER 146. METABOLIC PARAMETERS DURING TREATMENT WITH LONG-ACTING, INTRAMUSCULAR OLANZAPINE *Supported by Eli Lilly and Company*

Angela Gulliver, Pharm.D., *Lilly Research Laboratories, Indianapolis, IN 46285*, David P. McDonnell, M.D., Ludmila A. Kryzhanovskaya, M.D., Ph.D., D.Sc., Fangyi Zhao, Ph.D., Holland C. Detke, Ph.D., Peter D. Feldman, Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to discuss the similarities and differences between the intramuscular, long-acting injectable and oral formulations of olanzapine in adult patients receiving treatment for schizophrenia.

### SUMMARY:

Background: To characterize metabolic changes during treatment of schizophrenia in patients receiving olanzapine long-acting injection (LAI), relative to oral olanzapine, during a large, double-blind, randomized study. Methods: Data were collected from male or female adult patients (18–70 years of age) with schizophrenia who had been stabilized on oral olanzapine (10–20 mg/d) for 4 weeks and then randomly assigned to either continued oral olanzapine treatment ( $n = 322$ ) or to olanzapine LAI ( $n = 599$ ; 150 mg/2 wk, 405 mg/4 wk, or 300 mg/2 wk) for up to 24 weeks. Results: Mean changes

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in weight, glucose, and most lipids were not significantly different between treatment groups. Weight gains over time followed similar patterns and were not significantly different at endpoint between olanzapine LAI and oral olanzapine. However, patients who were obese (BMI =30) at baseline experienced a significant mean weight increase only under oral treatment. LDL cholesterol decreased significantly less among olanzapine LAI-treated patients. Incidence rates of treatment-emergent significant changes in weight, glucose, and lipids were similar between treatment groups regardless of baseline metabolic status, and incidence rates of treatment-emergent weight-gain-, diabetes- and dyslipidemia-related adverse events, which were low in both groups, were not significantly different between treatment groups. Conclusions: In general, metabolic changes during olanzapine LAI treatment appear to be largely similar to those during oral treatment. Research funded by Eli Lilly and Company.

### REFERENCES:

1. Kane JM, Naber D, Detke HC, Sethuraman G, Lin DY, McDonnell D. Olanzapine long-acting injection: a 24-week, randomized, double-blind trial of maintenance treatment in patients with schizophrenia. *Am J Psychiatry* (in press).
2. Lauriello J, Lambert T, Andersen S, Taylor CC, McDonnell D. An 8-week double-blind, randomized, placebo-controlled study of olanzapine long-acting injection in acutely ill patients with schizophrenia. [ePub ahead of print April 28, 2008] *J Clin Psychiatry*.

### POSTER 147. ATYPICAL ANTIPSYCHOTIC MEDICATION UTILIZATION IN PRIVATE PAYER ADMINISTRATIVE CLAIMS

*Supported by Eli Lilly and Company*

Michael Stensland, Ph.D., *Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285*, Debra Eisenberg, Ph.D., Judith J. Stephenson, S.M.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation the participant should be able to describe the characteristics of patients with private insurance who are initiating treatment with olanzapine, risperidone, quetiapine, ziprasidone and aripiprazole in usual clinical practice. More specifically, the participant should understand differences between apparent psychiatric diagnostic categories and patient demographic characteristics for individuals prescribed different atypical antipsychotic medications.

### SUMMARY:

**Introduction:** Now that there are multiple atypical antipsychotic (AA) drugs available, managed care organizations are differentiating AAs as preferred and non-preferred agents with different patient co-pays. However, the AAs vary in receptor binding profiles, which likely leads to unique effectiveness and safety profiles. Differences between the AAs may also translate into varying medication use patterns. This study assessed differences in patient characteristics for

the different AAs in private payer administrative claims. **Methods:** This retrospective cohort study utilized claims in the HealthCore Integrated Research Database from 10/1/03 to 10/31/07. Eligibility requirements included 18 months of continuous eligibility, >1 pharmacy claim for an AA, and a 6 month index-drug naïve period prior to the AA index prescription. Psychiatric diagnoses were identified by >1 medical claim during the 18 month study period based on the primary ICD-9 code. **Results:** A total of 35,469 patients met inclusion criteria and were treated with an AA: quetiapine (14,224, 40.1%), risperidone (8,185, 23.1%), olanzapine (6,157, 17.4%), aripiprazole (5,016, 14.1%), and ziprasidone (1,887, 5.3%). Overall, 56.8% were female and 14.2% were children, age 12-17. Aripiprazole (23.1%) and risperidone (21.4%) users were most likely to be children and olanzapine users were least likely to be children (7.4%). The common psychiatric disorders identified in these private payer claims were depression (51.1%), bipolar disorder (30.7%), anxiety (26.0%), insomnia (15.0%), substance abuse disorders (6.2%) and, schizophrenia (4.5%). **Conclusions:** In these private payer patient populations, which differ from public payer patient populations, a surprising amount of AA use appeared to be for individuals who did not have a bipolar or schizophrenia diagnosis. Meaningful age variations were observed across the different AAs. This study was funded by Eli Lilly and Company.

### REFERENCES:

1. Gibson P, Ogostalick A, Zhu B, Ramsey J: Risperidone versus olanzapine: How population characteristics can confound results. *Drug Benefit Trends* 2003; 15:38-46.
2. Van Brunt DL, Gibson PJ, Ramsey JL, Obenchain R: Out-patient use of major antipsychotic drugs in ambulatory care settings in the United States, 1997-2000. *MedGenMed* 2003; 5(3):16.

### POSTER 148. EFFECT ON FUNCTIONING, COGNITION, AND PRODUCTIVITY OF QUETIAPINE OR LITHIUM MONOTHERAPY VERSUS PLACEBO FOR MAINTENANCE TREATMENT OF BIPOLAR I DISORDER

*Supported by AstraZeneca Pharmaceuticals*

Richard Weisler, M.D., *University of North Carolina at Chapel Hill, Department of Psychiatry and Behavioral Science, 700 Spring Forest, Suite 125, Raleigh, NC 27609*, Liberty Fajutrao, M.D., Björn Paulsson, M.D., Julie Locklear, Pharm.D., M.B.A.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to evaluate the clinical evidence for improvement in functioning and productivity associated with long-term treatment with quetiapine relative to switching to lithium or placebo in patients with bipolar I disorder whose acute episodes were stabilized on quetiapine. Participants should also be able to recognize the efficacy of both active treatments versus placebo against measures of cognition.

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### SUMMARY:

**Introduction:** The aim of this analysis was to examine outcomes pertaining to functioning, cognition, and productivity, from a long-term, placebo-controlled trial that examined the effect of maintenance treatment with quetiapine (QTP) or lithium (Li) monotherapy in adults with bipolar I disorder (D1447C00144). **Methods:** Patients received open-label QTP (range 300-800 mg/d) for 4-24 weeks. Stabilized patients (YMRS =12 and MADRS =12 for 4 consecutive weeks) were randomized to continue double-blind QTP treatment (300-800 mg/d), receive placebo (PBO), or switch to Li (600-1800 mg/d; target serum 0.6-1.2 mEq/L) for up to 104 weeks or until recurrence of a predefined mood event. Secondary efficacy measures included the Sheehan Disability Scale (SDS), Medical Outcomes Study-Cognitive Scale (MOS-Cog), Trail Making Test (TMT), and Work Productivity and Activity Impairment (WPAI) Questionnaire. **Results:** Risk for recurrence of any mood event was significantly lower in patients continuing QTP or switched to Li (HRs 0.29 and 0.46;  $P<0.0001$ ) compared with PBO, and was significantly lower with QTP than Li (HR 0.66;  $P=0.005$ ). QTP was associated with significant improvement in SDS total scores, up to but excluding the mood event, vs. PBO ( $P=0.0011$ ). The differences between Li and PBO or QTP were not significant. Both QTP and Li were associated with significant improvements in MOS-Cog scores vs. PBO (1.1 [ $P=0.007$ ] and 1.5 [ $P<0.001$ ]) and showed placebo-like effects on TMT times, an indicator of cognitive function. QTP and Li demonstrated significant improvements in selected WPAI subscales vs. PBO. **Conclusions:** Long-term QTP monotherapy was associated with significant improvements in functioning and cognition, as well as selected aspects of work productivity and activity impairment compared with PBO. Li showed improvement in elements of cognition and productivity vs. placebo, but not SDS functioning. QTP was generally well tolerated. Supported by funding from AstraZeneca Pharmaceuticals.

### REFERENCES:

1. Keck PE Jr: Long-term management strategies to achieve optimal function in patients with bipolar disorder. *J Clin Psychiatry* 2006; 67(suppl 9):19-24.
2. Burdick KE, Braga RJ, Goldberg JF, Malhotra AK: Cognitive dysfunction in bipolar disorder: future place of pharmacotherapy. *CNS Drugs* 2007; 21:971-981.

### POSTER 149. RANDOMIZED, DOUBLE-BLIND, PLACEBO- AND ACTIVE-CONTROLLED STUDY OF PALIPERIDONE ER FOR ACUTE MANIC AND MIXED EPISODES IN BIPOLAR I DISORDER

*Supported by Johnson & Johnson Pharmaceutical Services*

Vivek Kusumakar, *Johnson & Johnson Pharmaceutical Research and Development, LLC, 1125 Trenton-Harbourton Road, Titusville, NJ 08560*, Joris Berwaerts, M.D., Isaac Nuamah, Ph.D., Pilar Lim, Ph.D., Eric Yuen, M.D., Joseph Palumbo, M.D., David Hough, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should have an understanding of the efficacy and safety of the antipsychotic paliperidone extended-release tablets (flexibly dosed 3-12mg/day) for the treatment of patients with acute manic or mixed episodes in bipolar I disorder.

### SUMMARY:

**Introduction:** Efficacy and safety of flexibly dosed paliperidone extended-release tablets (paliperidone ER) (3-12mg/day) vs. placebo over a 3-week period in patients with acute manic or mixed episodes were assessed. **Methods:** The study randomized 493 patients to paliperidone ER (3-12mg/day; initial dose 6mg/day), quetiapine (400-800mg/day; forced titration from 100mg/day to 400mg/day at Day 4) or placebo (2:2:1 ratio) for 3 weeks. **Results:** The intent-to-treat analysis set included 486 patients (placebo n=104, paliperidone ER n=190, quetiapine n=192). Most recent episode was manic in 65% of patients. Overall, 76% of patients completed the 3-week study (62%, 82% and 79% for placebo, paliperidone ER and quetiapine, respectively). Median mode doses for paliperidone ER and quetiapine were 9mg/day and 600mg/day, respectively. Mean±SD changes in YMRS score from baseline to Week 3 (primary endpoint) were -7.4±10.74, -13.2±8.68 and -11.7±9.25 for placebo, paliperidone ER and quetiapine, respectively. Least-squares mean (LSM) difference (paliperidone ER-placebo) for change in YMRS score from baseline was -5.5 (95% CI:-7.57; -3.35) ( $p<0.001$ ). From Day 2 to endpoint, paliperidone ER was significantly superior to placebo ( $p<0.05$ ) for change from baseline in YMRS score. Mean±SD changes from baseline in GAF score were 6.7±13.56, 12.2±11.17 and 11.6±11.96 for placebo, paliperidone ER and quetiapine, respectively. LSM difference (paliperidone ER-placebo) for change in GAF score from baseline was 5.1 (95% CI:2.29; 7.87) ( $p<0.001$ ). Treatment-emergent AEs were reported by 63%, 65% and 77% of patients with placebo, paliperidone ER and quetiapine, respectively. Patients experiencing serious AEs were similar across groups (3-5%). **Conclusions:** Paliperidone ER (3-12mg/day) was superior to placebo for change from baseline in YMRS score at Week 3 endpoint, from as early as Day 2 of treatment. Paliperidone ER was safe and well tolerated. Funded by Johnson & Johnson Pharmaceutical Services, LLC.

### REFERENCES:

1. Hirschfeld RM, Keck PE, Jr., Kramer M, Karcher K, Canuso C, Eerdekens M, Grossman F: Rapid antimanic effect of risperidone monotherapy: a 3-week multicenter, double-blind, placebo-controlled trial. *Am J Psychiatry* 2004; 161:1057-1065.
2. Meltzer HY, Bobo WV, Nuamah IF, Lane R, Hough D, Kramer M, Eerdekens M: Efficacy and tolerability of oral paliperidone extended-release tablets in the treatment of acute schizophrenia: pooled data from three 6-week, placebo-controlled studies. *J Clin Psychiatry* 2008; May 6: e1-e13. [Epub ahead of print].

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### POSTER 150. PSEUDOPHAECHROMOCYTOMA SYNDROME INDUCED BY CLOZAPINE THERAPY: A CASE REPORT

Thomas Sobanski, M.D., *Rainweg 68, Saalfeld, 07318 Germany*, Gerd Wagner, Ph.D., Ilko Dafov, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to realize that clozapine therapy in some patients may cause pseudophaeochromocytoma syndrome. Hazardous hypertension, therefore, represents another severe side effect of this drug that should be considered in clinical practice.

#### SUMMARY:

Case report: This 39 year-old male patient had suffered from schizophrenia for more than twenty years. At admission to our clinic he presented with severe positive symptoms. After several antipsychotic drugs had failed to improve the symptomatology, we decided to start therapy with clozapine. The patient was physically in a healthy condition. Renal and hepatic functions were normal and there was no history of hypertension. After thirteen days of clozapine therapy when a dosage of 150 mg per day was reached the patient suddenly developed severe hypertension (max. 200 / 140 mm Hg) and heart rate acceleration at rest (max. 132 BPM). These symptoms did not improve although a treatment with ramipril and propranolol was started immediately. To exclude phaeochromocytoma as a possible cause of these symptoms we measured urinary adrenaline, norepinephrine, and dopamine concentrations which were increased. After approximately five weeks of therapy clozapine was withdrawn and hypertension as well as heart rate acceleration largely improved within one week. Urinary adrenaline, norepinephrine and dopamine concentrations were normal when reassessed eleven days after the end of treatment. Discussion: Clozapine is generally known to decrease blood pressure and to cause orthostatic dysregulation. Only a few cases of paradoxical hypertension and pseudophaeochromocytoma syndrome have been reported, the symptomatology mostly being associated with other antipsychotic treatment. The neuropharmacological actions of clozapine are complex and include affinity for 5-HT<sub>2</sub> receptors and for adrenergic receptors in vitro. Clozapine has been reported to cause increases in plasma norepinephrine concentrations, a postulated mechanism being the inhibition of presynaptic reuptake mediated by alpha<sub>2</sub> adrenergic receptors. Recent studies have revealed that D<sub>2</sub> and D<sub>4</sub> receptors exist in the adrenal gland and may play significant roles in the modulation of hormone secretion.

#### REFERENCES:

1. Krentz AJ, Mikhail S, Cantrell P, Hill GM: Drug Points: Pseudophaeochromocytoma syndrome associated with clozapine. *BMJ* 2001; 322:1213.
2. Wu KD, Chen YM, Chu TS, Chueh SC, Wu MH, Bor-Shen H: Expression and localization of human dopamine D<sub>2</sub> and D<sub>4</sub> receptor mRNA in the adrenal gland, aldosterone-producing adenoma, and pheochromocytoma. *J Clin Endocrinol Metab* 2001; 86:4460-4467.

### POSTER SESSION 6

SATURDAY, OCTOBER 4

3:00 P.M.-4:30 P.M.

#### PSYCHOTIC ILLNESSES

MODERATOR: DAVID A. POLLACK, M.D.

### POSTER 151. DESCRIPTIVE EPIDEMIOLOGY AND COMORBIDITY OF SCHIZOPHRENIA IN THE NATIONAL HOSPITAL DISCHARGE SURVEY (NHDS), 1979-2003

Natalya Weber, M.D., M.P.H., *Department of Epidemiology, Division of Preventive Medicine, Walter Reed Army Institute of Research, 503 Robert Grant Avenue, Silver Spring, MD 20901*, David N. Cowan, Ph.D., M.P.H., David W. Niebuhr, M.D., M.P.H., M.S., Amy M. Millikan, M.D., M.P.H., Timothy E. Powers, M.S.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to understand the distribution of demographic characteristics, time trends, and the likelihood of certain psychiatric and non-psychiatric comorbid conditions among hospitalized patients with schizophrenia.

#### SUMMARY:

Introduction: Medical morbidity and mortality rates in schizophrenia patients are elevated compared to the general U.S. population. More than 50% of patients with schizophrenia have been diagnosed with one or more comorbid psychiatric or medical conditions that worsen prognosis and contribute to the increased morbidity and mortality. The greater risk of concurrent medical illnesses among persons with schizophrenia may be attributed to high risk and unhealthy behaviors, socioeconomic disadvantages, and side effects of psychotropic medications. Methods: Using the National Hospital Discharge Survey (NHDS) we evaluated temporal trends in the proportional morbidity of schizophrenia, demographic characteristics and the most frequent comorbid conditions among hospitalizations with schizophrenia, in comparison to hospitalizations with other diagnoses. The demographic characteristics are presented for the total estimated number of discharges (N=835,919,990) based on the NHDS sample of 5,733,781 records. Comorbidity is analyzed using unweighted NHDS sample. Results: Percent of hospitalized with schizophrenia was higher among males (1.3) compared with females (0.8), blacks (1.8) compared with whites (0.9) or others (1.0), age group 15-44 (1.6) followed by 45-64 (1.3), and those from Northeast (1.5) compared with the other regions (=1). There was a significant increase over time in the proportion of discharges with schizophrenia among both males and females (p<0.0001). As expected compared with the discharges without schizophrenia, those with schizophrenia have a much higher proportion of comorbidity with other mental disorders and some non-psychiatric conditions such as obesity (proportionate morbidity ratio 2.1), chronic airway obstruction not elsewhere classified (1.7), asthma (1.4), and diabetes type II (1.2). Discussion: A closer attention to prevention, early diagnosis and treatment of comorbid

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conditions may decrease medical morbidity and mortality and improve schizophrenia prognosis.

### REFERENCES:

1. Carney CP, Jones L, Woolson RF. Medical comorbidity in women and men with schizophrenia: a population-based controlled study. *J Gen Intern Med* 2006; 21(11):1133-1137.
2. Brown S, Inskip H, Barraclough B. Causes of the excess mortality of schizophrenia. *Br J Psychiatry* 2000; 177:212-217.

### POSTER 152. CONCEPTUALIZING THE MULTI-FACETED DETERMINANTS OF THE DURATION OF UNTREATED PSYCHOSIS

Michael Compton, M.D., M.P.H., *Emory University School of Medicine, Department of Psychiatry and Behavioral Sciences, 49 Jesse Hill Jr. Drive, S.E., Room #333, Atlanta, GA 30303*, Beth Broussard, M.P.H.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Discuss the importance of the duration of untreated psychosis construct; 2.) Describe the various categories of potential determinants of duration of untreated psychosis; and 3.) Assess the importance of research on both modifiable and non-modifiable determinants of the duration of untreated psychosis.

### SUMMARY:

**Introduction:** A number of research studies, summarized in two independent meta-analyses, have indicated that treatment delay in first-episode nonaffective psychosis, termed duration of untreated psychosis (DUP), has detrimental effects on early-course outcomes. Although evidence of negative consequences of DUP has accumulated, very little research has examined potential causes, or determinants of DUP. **Methods:** A review of the literature on determinants of DUP was conducted, potential determinants were summarized, and a conceptual diagram was constructed to classify the multifaceted determinants of DUP. **Results:** Potential determinants of DUP were categorized as patient-level factors (demographic characteristics, premorbid and onset-related variables, and illness-related factors), family-related factors, health systems factors, and societal factors. Early research suggests that several patient-level factors, such as mode of onset of psychosis; some family-related factors, such as family involvement in help-seeking; and several society-level factors, such as stigma, may be predictors of DUP. **Discussion:** Given increasing evidence that DUP is a potentially modifiable predictor of outcomes in the early course of schizophrenia, additional research on determinants of DUP is required. One such research project, the Atlanta Cohort on the Early Course of Schizophrenia is attempting to elucidate predictors of DUP in a sample of 100 first-episode patients in the United States. Elucidation of both malleable and non-modifiable determinants of DUP could inform early intervention strategies.

### REFERENCES:

1. McGlashan TH. Duration of untreated psychosis in first-episode schizophrenia: Marker or determinant of course? *Biological Psychiatry* 1999;46:899-907.
2. Norman RMG, Malla AK: Duration of untreated psychosis: A critical examination of the concept and its importance. *Psychological Medicine* 2001;31:381-400.

### POSTER 153. MODE OF ONSET AND FAMILY INVOLVEMENT IN HELP-SEEKING AS DETERMINANTS OF DURATION OF UNTREATED PSYCHOSIS

Michael Compton, M.D., M.P.H., *Emory University School of Medicine, Department of Psychiatry and Behavioral Sciences, 49 Jesse Hill Jr. Drive, S.E., Room #333, Atlanta, GA 30303*, Sandra M. Goulding, M.P.H., Victoria H. Chien, B.A., Amy S. Leiner, Ph.D., Paul S. Weiss, M.S.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Discuss the importance of clinical and social variables that lead to delays in seeking treatment for first-episode psychosis; 2.) Appreciate congruous findings from samples from the U.S. and U.K.; 3.) Understand potential reasons for discrepant findings from samples of first-episode patients in these two countries; and 4.) Present reasons for continuing research on determinants of the duration of untreated psychosis.

### SUMMARY:

**Introduction:** The duration of untreated psychosis (DUP) is a potentially modifiable determinant of the early course of nonaffective psychotic disorders, though a paucity of research has addressed determinants of DUP. Recent data from London and Nottingham, UK indicated that a shorter DUP was predicted by: 1.) An acute mode of onset; 2.) Employment; and 3.) Active involvement of at least one family member in seeking evaluation [1]. The present analysis was conducted in an effort to replicate those findings in a predominantly low-income, urban, African American sample. **Methods:** DUP and the three key predictors of interest were assessed using standardized procedures. All analytic plans replicated those of Morgan and colleagues [1] to the largest extent possible. Sufficient information was available to rate DUP for 73 patients. **Results:** The median DUP was 23.4 weeks. Bivariate tests, survival analysis, and Cox regression revealed that an insidious mode of onset was associated with a substantially longer DUP compared with an acute onset, and that family involvement in help-seeking was independently associated with a longer duration. **Discussion:** While mode of onset is a reliable illness-related determinant of DUP, further research is needed on the complex ways in which family-related variables influence DUP.

### REFERENCES:

1. Morgan C, Abdul-Al R, Lappin JM, et al (2006) Clinical and social determinants of duration of untreated psychosis in the AESOP first-episode psychosis study. *Br J Psychiatry* 189:446-452.

## POSTERS

2. Compton MT, McGlashan TH, McGorry PD (2007) Toward prevention approaches for schizophrenia: An overview of prodromal states, the duration of untreated psychosis, and early intervention paradigms. *Psychiatr Ann* 37:340–348.

### POSTER 154. IMPACT OF A PSYCHIATRIC EMERGENCY SERVICE ON A COUNTY MENTAL HEALTH SYSTEM

Christopher Chee, B.S., *Department of Psychiatry, 1830 Flower Street, Bakersfield, CA 93305*, Alfred Sun, M.D., Benjamin K.P. Woo, M.D., Conrado Sevilla, M.D., Tai P. Yoo, M.D., M.S.B.A., D.F.A.P.A.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to identify the various discharge dispositions of a county psychiatric emergency services (PES) and recognize the importance of the PES in the overall county mental health system.

#### SUMMARY:

**Objective:** The aim was to assess the impact of the psychiatric emergency service (PES) of a county hospital on the overall mental health system. **Methods:** We retrospectively reviewed the charts of all patients presenting from September 1 to November 30, 2007, to the PES of Kern Medical Center, a university-affiliated hospital serving a population of over 780,000. **Results:** Over the study period, 768 patients were included and consisted of 50.9% female, 57.7% non-Hispanic, 69.4% single, and 15.2% privately insured individuals. 88.5% were on involuntary legal holds. The 3 most common diagnoses were bipolar disorder (20.3%), mood disorder (19.5%), and schizophrenia (13.5%). The 3 most common dispositions were inpatient admission (54.3%), home (32.6%), and observation hold (8.1%). **Conclusions:** In this retrospective study of 768 patients, we found that the majority were involuntary and indigent, which suggests that the PES provides an essential service to the county, especially for high-acuity patients. Our data is higher than the 53% rate of involuntary admission found previously (1). In a nationwide study, substance-related disorders were the most common mental health diagnoses in the emergency department, comprising 30% of visits (2). This was higher than our finding of 6%, suggesting that there is room for improvement in detecting patients with dual diagnoses. Certain patients in our population who were discharged home received referrals to various outpatient mental health services, including alcohol and substance abuse services, proactive mobile mental health teams, and emergency shelters for children. Future studies are warranted to evaluate patient follow-up and referral efficacy. In conclusion, our findings show that the county PES provides an important service and merits consideration in public policy planning.

#### REFERENCES:

1. Catalano R, McConnell W, Forster P, et al: Psychiatric emergency services and the system of care. *Psychiatric Services* 54:351–355,2003.

2. Larkin GL, Classen CA, Emond JA, et al: Trends in US emergency department visits for mental health conditions, 1992 to 2001. *Psychiatric Services* 56:671–677,2005.

### POSTER 155. FUNCTIONAL CORRELATES OF ANTIDEPRESSANT EFFECT WITH OLANZAPINE TREATMENT IN PATIENTS WITH SCHIZOPHRENIA

Alicia Austin, M.D., *University of Alabama at Birmingham, 1701 7th Avenue South, Birmingham, AL 35294*, Adrienne Lahti, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to recognize the changes in regional cerebral blood flow in brain regions that have been linked to antidepressant response when treating patients with schizophrenia with olanzapine versus haloperidol.

#### SUMMARY:

**Introduction:** Using PET with H215O, we evaluated the regional cerebral blood flow (rCBF) patterns generated by haloperidol and olanzapine in patients with schizophrenia at different phases of treatment. Given the claim that olanzapine has antidepressant effect in the treatment of bipolar depression (Tohen, 2003), we were interested to evaluate whether there were differential patterns of rCBF activation with olanzapine vs. haloperidol in brain regions that have been linked to antidepressant response (Mayberg, 2000). **Methods:** Schizophrenic volunteers (SV) were scanned after withdrawal of all psychotropic medication (2 weeks off-drug) and then blindly randomized to treatment with haloperidol or olanzapine. Scans were obtained after an acute dose, after one and after 6 weeks of treatment. Subjects were scanned on the GE Advanced 3 D PET system. The PET system acquires 30 parallel slices with a center-to-center separation of 5 mm. The bolus H215O method (Raichle, 1983) was used without arterial blood sampling. Approximately 12 mCi H215O was administered with each scan. PET data are acquired for 90 seconds. The quantitative PET blood flow images were analyzed with statistical parametric mapping (SPM 2) routines. Following realignment all images were transformed into a standard anatomical space and smoothed using a 12-mm Gaussian kernel. Regions of interest (ROI) were sampled in the dorsolateral prefrontal cortex (DLPFC), the insula, the anterior cingulate cortex (ACC), the posterior cingulate, the thalamus and the hippocampus, both in the off and on medication scans (haloperidol and olanzapine). In addition, using SPM2, we conducted a whole brain analysis by contrasting the olanzapine- with the haloperidol-induced rCBF changes over the 6 week treatment period. **Results:** Seventeen-olanzapine treated and twelve-haloperidol treated patients completed the study. Differential activations between olanzapine vs. haloperidol were found in ROI in the DLPFC.

#### REFERENCES:

1. Mayberg, H. S., S. K. Brannan, et al. (2000). "Regional metabolic effects of fluoxetine in major depression: serial changes and relationship to clinical response." *Biol Psychiatry* 48(8):830-43.

## POSTERS

2. Tohen, M, E. Vieta, et al. (2003). "Efficacy of olanzapine and olanzapine-fluoxetine combination in the treatment of bipolar I depression. *Arch Gen Psychiatry* 60(11):1079-88.

### POSTER 156. ECONOMIC BURDEN OF SCHIZOPHRENIA IN SOUTH KOREA

*Supported by the World Psychiatric Association*

Hee Woo Lee, M.D., *Department of Psychiatry & Behavioral Science, Seoul National University College of Medicine, 28 Yeongeong-dong, Jongno-gu, Seoul, South Korea, 110-744*, Sung Man Chang, M.D., M.A., Seong-Jin Cho, M.D., Ph.D., Hong Jin Jeon, M.D., Ph.D., Bong-Jin Hahm, M.D., Ph.D., Jong-Ik Park, M.D., Ph.D., Maeng Je Choa M.D., Ph.D., Maeng Je Cho, M.D., Ph.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to recognize the prevalence of treated schizophrenia in Korea in 2005, and the direct and indirect costs associated with the disease.

#### SUMMARY:

**Objective:** To estimate the treated prevalence of schizophrenia and the annual costs associated with the illness in Korea in 2005, from a societal perspective. **Background:** Annual direct healthcare costs associated with schizophrenia were estimated from National Health Insurance and Medical Aid records. Annual direct non-health care costs were estimated for incarceration, transport, community mental health centers, and institutions related to schizophrenia. Annual indirect costs were estimated for the following components of productivity loss due to illness: unemployment, reduced productivity, premature mortality, and caregivers' productivity loss using a human capital approach based on market wages. **Method:** In the present study, we used various data sources, including published scientific literature and government reports and documents to estimate the economic burden of schizophrenia. Costs included in this analysis were; direct health care costs, direct non-health care costs, and the indirect costs associated with productivity losses. **Results:** All costs were adjusted to 2005 levels using the health care component of the Consumer Price Index. The treated prevalence of schizophrenia in 2005 was 0.4% of the Korean population. The overall cost of schizophrenia was estimated to be \$3,174.8 million (3251.0 billion Won), which included a direct health care cost of \$418.7 million (428.6 billion Won). Total direct non-health care costs were estimated to be \$121 million (123.9 billion Won), and total indirect costs were estimated at \$2,635.1 million (2,698.3 billion Won). Unemployment was identified as the largest component of overall cost. **Conclusion:** These findings demonstrate that schizophrenia is not rare, and that represents a substantial economic burden.

#### REFERENCES:

1. World Health Organization. Mental and neurological disorders. Fact sheet no. 265. 1998 [cited 2007 March]; Available from: [http://www.who.int/whr/2001/media\\_centre/en/whr01\\_fact\\_sheet1\\_en.pdf](http://www.who.int/whr/2001/media_centre/en/whr01_fact_sheet1_en.pdf).

2. Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, Wittchen HU, Kendler KS. Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States. Results from the National Comorbidity Survey. *Arch Gen Psychiatry* 1994; 51: 8-19.

### POSTER 157. TREATMENT HISTORY AND THE IMPACT OF ALTERNATIVE TREATMENTS ON POST-TREATMENT COSTS FOR PATIENTS WITH SCHIZOPHRENIA

Jeffrey McCombs, Ph.D., *Department of Clinical Pharmacy and Pharmaceutical Economics and Policy, School of Pharmacy, University of Southern California, Los Angeles, CA 90089-9004*, Sara Zolfaghari, M.S., Vaidy Ganapathy, M.S., Dana Stafkey-Mailey, Pharm.D., M.S.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to recognize the impact of the patient's drug treatment history on the effectiveness of alternative antipsychotics in treating schizophrenia.

#### SUMMARY:

**Objective:** To compare one-year, post-treatment costs across alternative antipsychotics in the treatment of schizophrenia. **Methods:** Data from a commercial health plan from 7/1/03 to 6/30/06 were used to identify non-institutionalized patients with schizophrenia (ICD-9 codes 295.xx) who initiated treatment with a typical antipsychotic (TAP), atypical antipsychotic (AAP: aripiprazole, olanzapine, quetiapine, risperidone or ziprasidone), mood stabilizer or antidepressant. Episodes were divided into three categories: restarting treatment after a break in drug therapy > 15 days with the drug used in the previous episode, switching therapy with or without a break in treatment, and augmentation therapy. First observed episodes were excluded from the analysis due to uncertainty concerning the patient's prior treatment history. A total of 21,570 episodes were included in the analyses using ordinary least squares (OLS) regression models of post-treatment costs adjusting for age, gender, geographic region, drug use history, prior medical care use, schizophrenia diagnosis and co-morbid medical conditions. **Results:** Average total cost measured across all episodes ranged from \$24,910 for TAPs to \$34,579 for mood stabilizers. Augmentation episodes were estimated to be significantly more costly than switching episodes (+\$4,425,  $p < 0.0001$ ) or restart episodes (+\$7,179,  $p < 0.0001$ ). There is considerable variability in total cost across medications. However, in this commercially insured population, there is no significant difference in post-treatment costs between patients receiving individual AAPs and TAP. Patients with schizophrenia treated with quetiapine were significantly more costly than TAP patients for restart episodes (+\$5,524,  $p < 0.05$ ) and augmentation episodes (+\$1573,  $p < 0.05$ ). **Conclusion:** In a commercially-insured population, there are few significant differences in total post-treatment costs for AAPs patients relative to TAPs patients.

## POSTERS

### REFERENCES:

1. Chen L, McCombs JS and Park JX. The impact of atypical antipsychotic medications on the use of health care by patient with schizophrenia. *Value in Health* 2008, 11(1): 34-43.
2. Chen L, McCombs JS and Park JX. Duration of antipsychotic drug therapy in real world practice: A comparison with CATIE trial results. *Value in Health* 2008 11(3): 487-496.

### POSTER 158. CONSEQUENCES OF CONTINUITY OF CARE IN PATIENTS WITH SCHIZOPHRENIA AND SCHIZOAFFECTIVE DISORDER: RESULTS OF A PILOT DATA COLLECTION EFFORT

*Supported by Ortho-McNeil Janssen Scientific Affairs, LLC*

Concetta Crivera, Pharm.D., M.P.H., *Ortho-McNeil Janssen Scientific Affairs, LLC, 1125 Trenton-Harbourton Road, Titusville, NJ 08560*, Kelly McCarrier, M.P.H., Mona L. Martin, R.N., M.P.A., Carla Ascotyia, M.A., Ron Manderscheid, Ph.D., Joe Parks, M.D., Jean-Pierre Lindenmeyer, M.D., Riad Dirani, Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to better understand the patterns of continuity of care (CoC) between inpatient and ambulatory settings, and describe the relationship of CoC with 6-month rehospitalization rates for patients with schizophrenia and schizoaffective disorder.

### SUMMARY:

**Introduction:** Many patient-specific factors and facility-level processes influence CoC during transition, and may influence overall treatment efficacy and clinical consequences such as rehospitalization. As part of a larger project to describe relationships between CoC processes and potential psychiatric consequences, this presentation reports early pilot results from the state of Missouri. **Methods:** Medical record data were abstracted for retrospective review at 4 inpatient psychiatric facilities. CoC status was defined by whether patients had confirmed attendance at their first scheduled outpatient visit within 30 days of discharge. Rehospitalization within 6 months of the index discharge was the primary outcome measure. The chi-square statistic was used to compare the proportion of rehospitalizations among groups defined by CoC status. **Results:** The interim analysis reports results for 120 patients. Of those, 21 were transferred to other inpatient facilities and 99 were discharged to the community. CoC status was known for 60 of these 99 patients (61%). Of the 60 patients with known CoC status, 58% attended their first outpatient visit within 30 days of discharge. Differences in 6-month rehospitalization rates between patients who attended their first outpatient visit within 30 days (43% rehospitalized) and those who did not (36% rehospitalized) were not statistically significant ( $P=0.59$ ). The rehospitalization rate among patients without CoC status data available was 31%. **Conclusion:** Initial findings provide documentation of gaps in both data and actual continuity of care for patients with schizophrenia or schizoaffective disorder who are discharged from inpatient

to community settings together with a high rehospitalization rate. Preliminary analysis of the interim data suggests that outpatient visit attendance within 30 days may not be the only determinant of rehospitalizations for these patients. Supported by Ortho-McNeil Janssen Scientific Affairs, LLC.

### REFERENCES:

1. Brekke JS, Ansel M, Long J, Slade E, Weinstein M: Intensity and continuity of services and functional outcomes in the rehabilitation of persons with schizophrenia. *Psychiatr Serv* 1999; 50(2):248-256.
2. Kopelowicz A, Wallace CJ, Zarate R: Teaching psychiatric inpatients to re-enter the community: a brief method of improving the continuity of care. *Psychiatr Serv* 1998; 49(10):1313-1316.

### POSTER 159. A CAUTIONARY TALE: ACUTE RENAL FAILURE IN TWO PATIENTS RECENTLY STARTED ON CLOZAPINE

Jacob Kanofsky, M.D., M.P.H., *Bronx Psychiatric Center, 1500 Waters Place, Bronx, NY 10461*, Mary E. Woesner, M.D., James Kelleher, M.D., Karen Gittens, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to recognize the signs of clozapine sensitivity and acute renal failure, including acute interstitial nephritis. Through a literature review, the participant will understand the relationship of clozapine to acute renal failure and will demonstrate that increased vigilance with psychiatric patients leads to early diagnostic testing, early withdrawal of offending medications, and prevention of clozapine induced renal disease.

### SUMMARY:

**Introduction:** It is not well known that clozapine is implicated in causing acute interstitial nephritis (AIN) (1, 2). Thus, the diagnosis of this reversible form of renal failure can be delayed. We discuss two cases of acute renal failure (ARF) that developed shortly after the initiation of clozapine. **Methods:** The medical records of two Bronx Psychiatric Center ACT Team patients who developed ARF were reviewed for evidence of clozapine-induced AIN. **Results:** Both patients had longstanding schizoaffective disorder treated with lithium and divalproex. They were each placed on clozapine and had a sensitivity reaction within six days [Case 1: eosinophil count of 11.6% (absolute count 900/mm<sup>3</sup>); Case 2: temperature of 103o F]. They both developed ARF within sixteen days of starting clozapine. In both instances, lithium was discontinued. In one case, a renal biopsy showed AIN, consistent with a drug sensitivity reaction. Lithium was cited as the suspected causative agent. No renal biopsy was obtained in the second case, the etiology of ARF remaining unknown. **Conclusions:** Clozapine was likely a causative factor in ARF because of the close temporal relation of drug initiation to the onset of renal failure and because the patients developed sensitivity reactions that often accompany AIN. Lithium, by contrast, had been given for an extended period without problem

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and classically causes a chronic, insidious nephritis (1). Nevertheless, clozapine may not have been the only factor, as one patient recovered from ARF while on clozapine and the second patient received other agents known to cause AIN. We speculate that clozapine interacted with other factors to create the conditions for ARF. We review the clozapine, drug sensitivity and ARF literature and suggest ways to prevent ARF if clozapine sensitivity is detected.

### REFERENCES:

1. Elias TJ, Bannister KM, Clarkson AR, Faull D, Faull RJ: Clozapine-induced acute interstitial nephritis. *Lancet* 1999; 354(9185):1180-1.
2. Au AF, Luthra V, Stern R: Clozapine-induced acute interstitial nephritis. *Am J Psychiatry* 2004; 161(8):1501.

### POSTER 160. MEDIATORS OF MEDICATION NON-ADHERENCE IN BIPOLAR DISORDER: A CROSS-SECTIONAL SURVEY

Jay Bates, Ph.D., *Bristol-Myers Squibb Company, 777 Scudders Mill Road, Plainsboro, NJ 08536-1615*, Richard Whitehead, B.S., Edward Kim, M.D., M.B.A.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to understand mediators of non-adherence in bipolar disorder.

### SUMMARY:

Introduction: Bipolar disorder is a chronic disorder that is optimally managed by long-term medication treatment. Causes of medication non-adherence may include efficacy, tolerability, and socio-demographic variables. This study sought to identify factors associated with medication non-adherence in patients with bipolar disorder. Methods: A cross-sectional web-based study surveyed a convenience sample from an existing cohort (Lightspeed Panel, Consumer Health Sciences). The primary outcome – the Morisky Compliance Scale – was used to define patients as adherent (total score of 0–1) or non-adherent (total score of 2–4). Bivariate analysis compared differences between adherent and non-adherent subjects with respect to collected demographic, socio-economic, and disease-related variables. Additional variables studied included the Liverpool University Neuroleptic Side Effect Scale (LUNSERS), and the Satisfaction with Antipsychotic Medication (SWAM) scale. Results: Of 1,164 eligible subjects, 575 (49.4%) were adherent and 589 (50.6%) were non-adherent. Non-adherent subjects were older, had more children under 18 years of age living in their household ( $p=0.009$ ) and had a higher number of depressive and manic episodes ( $p=0.005$  and  $0.009$ , respectively). Non-adherent patients had higher total LUNSERS scores and scores on all individual items ( $p<0.001$ ), and lower total scores on the SWAM scale ( $p<0.001$ ). Conclusions: Medication non-adherence is common in bipolar disorder. Reasons for non-adherence are related to demographics, disease severity, and medication side effects.

### REFERENCES:

1. Baldessarini RJ, Perry R, Pike J: Factors associated with treatment nonadherence among US bipolar disorder patients. *Hum Psychopharmacol* 2008;23:95–105.
2. Johnson FR, Ozdemir S, Manjunath R et al: Factors that affect adherence to bipolar disorder treatments: a stated-preference approach. *Med Care* 2007;45:545–552.

### POSTER 161. SAFETY AND TOLERABILITY OF PALIPERIDONE PALMITATE INJECTED IN THE DELTOID OR GLUTEUS MUSCLE IN PATIENTS WITH SCHIZOPHRENIA

*Supported by Johnson & Johnson*

Srihari Gopal, *1125 Trenton-Harbourtown Road, Titusville, NJ 08560*, Jean-Pierre Lindenmayer, M.D., David Hough, M.D., Rama Melkote, M.Sc., M.P.H., Pilar Lim, Ph.D., Mariëlle Eerdeken, M.D., M.B.A.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to describe the overall safety and tolerability of the long-acting injectable investigational antipsychotic, paliperidone palmitate (50, 75, and 100 mg eq. doses) administered into either the deltoid or gluteal muscles of adult patients with schizophrenia.

### SUMMARY:

Objective: Paliperidone palmitate (PP) is an investigational long-acting injectable formulation of the recently marketed oral antipsychotic paliperidone for treatment of schizophrenia (1-3). This study assessed the safety and tolerability of initiating treatment via deltoid vs. gluteal injection given every 4 wks and of switching injection sites after 3 injection cycles (13 wks) in adults with stable schizophrenia. Methods: In this crossover trial, patients (N=252) were equally randomized to 3 treatment groups (PP 50, 75, or 100 mg eq.) and 2 injection sequences: deltoid muscle in period 1 followed by gluteal muscle in period 2 or the reverse. The double-blind phase (blinded to dose) had 2 study periods: 13 wks (first injection site), then 12 wks (second site). Results: The ITT population had 249 patients: mean age= 43 (SD:12.8) yrs; men (57%); white (81%); baseline mean PANSS total score=56 (SD:11.5). The most common (<sup>3</sup>5% overall) treatment-emergent adverse events (TEAE) were: (period 1) insomnia, anxiety, headache, and agitation; and (period 2) insomnia, psychotic disorder, weight increase, and tachycardia. During treatment initiation (period 1), the rates of systemic TEAE were similar between the 2 injection sites across all dose levels (proportion of patients reporting TEAE for gluteus minus deltoid [90%CI]): -6.7% (-23.5, 10.7) for 50 mg eq.; -0.7% (-17.6, 16.5) for 75 mg eq.; and -3.4% (-20.4, 13.8) for 100 mg eq. The total difference between the rates (90% CI) across doses was -3.3% (-13.3, 6.7). A comparison of systemic TEAE rates during the last 8 wks of the 2 study periods did not reveal significant differences upon switching of injection sites. Injection-site pain was rated slightly higher with the deltoid injection by investigators and patients. Conclusion: The incidence of systemic TEAE was similar when initiating treatment with either deltoid or gluteal

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injections. Switching between injection sites was also safe and well-tolerated. Funded by Johnson & Johnson.

### REFERENCES:

1. Literature Reference 1: Davidson M, Emsley R, Kramer M, Ford L, Pan G, Lim P, Eerdeken M: Efficacy, safety and early response of paliperidone extended-release tablets (paliperidone ER): Results of a 6-week, randomized, placebo-controlled study. *Schizophr Res* 2007; 93:117-130
2. Kane J, Canas F, Kramer M, Ford L, Gassmann-Mayer C, Lim P, Eerdeken M: Treatment of schizophrenia with paliperidone extended-release tablets: a 6-week placebo-controlled trial. *Schizophr Res* 2007; 90:147-161.

### POSTER 162. PALIPERIDONE PALMITATE IN PREVENTION OF SYMPTOM RECURRENCE IN PATIENTS WITH SCHIZOPHRENIA: A RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED STUDY

*Supported by Johnson & Johnson*

Srihari Gopal, 1125 Trenton-Harbourtown Road, Titusville, NJ 08560, David Hough, M.D., Ujjwala Vijapurkar, Ph.D., Pilar Lim, Ph.D., Margarita Morozova, M.D., Ph.D., Mariëlle Eerdeken, M.D., M.B.A.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to describe the effect of the new injectable antipsychotic, paliperidone palmitate, compared with placebo on preventing symptom recurrence in patients with schizophrenia, as well as describe dosing and tolerability.

### SUMMARY:

**Objective:** Schizophrenia is a chronic disease characterized by frequent recurrence of psychotic symptoms (1) and a subsequent deterioration of functioning (2). We assessed efficacy and tolerability of an investigational, injectable antipsychotic, paliperidone palmitate (PP), in preventing symptom recurrence in adults with schizophrenia. **Methods:** Eligible patients with PANSS total scores <120 were transitioned from prior treatment to gluteal injections of PP during a 9-week (wk) open-label flexible-dose phase. The first 2 injections of 50 mg eq. were given 1 wk apart. Subsequent injections, which could be adjusted (25, 50, or 100 mg eq.), occurred every 4 weeks. Patients with total PANSS <75 at wk 9 continued into the 24-wk maintenance phase. Patients clinically stable on a fixed dose for the last 12 wks were randomized 1:1 to continue on their PP dose or start placebo (pbo) in the double-blind phase of variable duration. **Results:** The preplanned interim analysis at 68 recurrence events included 312 patients: mean age=40 yrs, 55% men, 66% white, baseline PANSS (SD): pbo, 69.5 (16.89); PP, 69.3 (17.39). Time-to-recurrence (primary measure) favored PP (p<0.0001, log-rank test): median time-to-first-recurrence was 163 days for pbo and not estimable for PP. Based on the significant interim efficacy results, the study was stopped early. Treatment-emergent AE rates during double-blind phase (N=408) were: 38% PP, 44% pbo. Weight increase and gastroenteritis (viral) occurred more frequently with PP

(difference of 32% vs. pbo). Local injection-site tolerability was good. For PP treated patients (n=205), the investigators reported injection-site pain as usually absent (81%) or mild (18%) at double-blind endpoint, similar to pbo treatment. **Conclusion:** Paliperidone palmitate treatment significantly delayed time-to-recurrence and was generally well-tolerated, both locally and systemically, in patients with schizophrenia. Study funded by Johnson & Johnson.

### REFERENCES:

1. Andreasen NC: Symptoms, signs, and diagnosis of schizophrenia. *Lancet* 1995; 346:477-481.
2. Wyatt RJ: Neuroleptics and the natural course of schizophrenia. *Schizophr Bull* 1991; 17:325-351.

### POSTER 163. CHANGES IN MENTAL HEALTH RESOURCE USE AFTER INITIATION OF PALIPERIDONE ER IN PATIENTS WITH SCHIZOPHRENIA

*Supported by Ortho-McNeil Janssen Scientific Affairs, LLC*

Riad Dirani, Ph.D., 1125 Trenton-Harbourton Road, Titusville, NJ 08560, Phillip G. Janicak, M.D., Jasmanda H. Wu, Ph.D., Joan Amatniek, M.D., Lian Mao, Ph.D., Jacqueline Pesa, Ph.D., Jayme Trott, Chris Kozma, Ph.D., Carla M. Canuso, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should learn that paliperidone extended-release (paliperidone ER) tablets may be associated with reduction in overall mental health resource use in patients with schizophrenia.

### SUMMARY:

**Introduction:** Schizophrenia care produces a substantial economic burden. Interventions that reduce resource use are of interest to clinicians and payers. **Objective:** To assess changes in mental health resource use following initiation of paliperidone extended-release (ER) tablets in 3 double-blind (DB) trials and their open-label extensions (OLE). **Methods:** A retrospective chart review generated data on resource use during the 12 months before and after the DB trials. Additional IRB approval and informed consent were obtained. Average number of inpatient and ambulatory care services in the pre- and post-periods was calculated, including use of bootstrap resampling methods to assess statistical significance of differences. Total person-years were calculated for the pre- and post-periods to account for different lengths of observation. Separate analyses were performed by country. **Results:** Patients (n=79) were from the US (38.0%), Canada (19.0%) and Malaysia (43.0%). Mean (+/-SD) patient age was 38.0 (+/-10.4) years, 73.4% were male, and 70.9% received prior treatment with antipsychotics. During the OLE, the mean paliperidone ER treatment duration (+/-SD) was 226.4 (+/-142.3) days and the mean dose was 11.5 (+/-2.2) mg. Overall, paliperidone ER patients used fewer resources after drug initiation (mean reduction per person-year: days hospitalized=12.1, P=0.002; number of ER visits=0.3, P=0.038; number of psychiatric-related office visits=2.3, P<0.001; number of psychotherapy

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sessions=0.4,  $P=0.004$ ). Subgroup analyses revealed that the greatest reduction in most resource categories occurred at US sites (e.g., mean reduction in days hospitalized per person-year=19.7 in the US, 6.3 in Canada and 7.1 in Malaysia). **CONCLUSION:** In this post-hoc analysis, paliperidone ER was associated with a statistically significant reduction in mental health resource use. Prospective studies are needed to confirm the findings. Supported by Ortho-McNeil Janssen Scientific Affairs, LLC.

### REFERENCES:

1. Kane J, Canas F, Kramer M, Ford L, Gassmann-Mayer C, Lim P, Eerdeken M: Treatment of schizophrenia with paliperidone extended-release tablets: a 6-week placebo-controlled trial. *Schizophr Res* 2007; 90:147-161.
2. Davidson M, Emsley R, Kramer M, Ford L, Pan G, Lim P, Eerdeken M: Efficacy, safety and early response of paliperidone extended-release tablets (paliperidone ER): results of a 6-week, randomized, placebo-controlled study. *Schizophr Res* 2007; 93:117-130.

### POSTER 164. RECOVERY-ORIENTED CARE ON AN INPATIENT PSYCHIATRIC UNIT

Melissa Buboltz, M.D., 3710 S.W. U.S Veterans Hospital Road, Portland, OR 97239, Annette Matthews, M.D., Bonita Davis, C.T.R.S.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to define basic principles of recovery and identify recovery-oriented interventions used on an inpatient psychiatric unit.

### SUMMARY:

**Background:** The Portland VA Medical Center has been implementing recovery-oriented interventions in multiple areas of the medical center. **Methods:** Education from recovery coordinators, multidisciplinary collaboration, and consumer input have been instrumental to these changes. **Results:** This poster identifies interventions that are being made on the inpatient psychiatric unit and other areas of the hospital that interface with acute psychiatry including the mental health clinic and day treatment program. Examples include recovery groups, use of peer support specialists, and the development of discharge plans that incorporate key recovery concepts. **Conclusion:** Recovery-oriented interventions have the potential to improve patient care and enhance the educational experience of residents and medical students on an acute inpatient psychiatric service. Culture change is a process in which interventions in multiple areas of the medical center can build upon one another.

### REFERENCES:

1. Jacobson N & Greenly D. (2001). What is recovery? A conceptual model and explication. *Psychiatric Services*, 52: 482-485.
2. Anthony WA, Cohen M, Farkas M, & Gagne C. (2002). *Psychiatric Rehabilitation*, 2nd edition. Boston: Boston University Center for Psychiatric Rehabilitation.

### POSTER 165. OUTCOME AMONG COMMUNITY DWELLING OLDER ADULTS WITH SCHIZOPHRENIA: RESULTS USING FIVE CONCEPTUAL MODELS

Richa Pathak, M.D., SUNY Downstate Medical Center, 450 Clarkson Avenue, Brooklyn, NY 11203, C.I. Cohen, M.D., P. Ramirez, Ph.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to recognize the conceptual models and their components used to measure outcomes of schizophrenia in the elderly population.

### SUMMARY:

**Objective:** There have been few studies examining the outcome of schizophrenia in later life. In this study, we assess outcome based on 5 conceptual models. **Methods:** The schizophrenia (S) group consisted of 198 community-dwelling persons aged 55 years and older who developed schizophrenia before age 45 years. A community comparison (CC) group (N=113) was recruited using randomly selected block-groups. We operationalized 5 outcome measures based on the following conceptual models: Remission using a modification of criteria proposed by Andreasen et al.; Recovery by adapting the criteria suggested by Liberman et al.; Community Integration using the conceptual model of Wong and Solomon; Subjective and Objective Aging using the model of Rowe and Kahn. **Results:** 49% of the S Group met criteria for remission, and 17% met criteria for recovery. There were significant differences between the S and CC groups in the distribution of community integration and successful aging scales: 41% of the CC met at least 10 of 12 criteria versus 23% of the S on the Community Integration Scale; 19% of the CC met all six criteria versus 2% of the S on the Objective Successful Aging Scale; 27% of the CC versus 13% of the S met all six criteria on the Subjective Successful Aging Scale. Correlations among the five outcome measures ranged from .23 to .53; the median shared variance was 13%. **Conclusion:** There is a wide variability in outcome in later life depending on which measure is used. Although outcome measures contain some similar items, they are largely independent of each other. Thus, rather than one universal measure, each measure offers a different perspective on outcome that can provide useful guidelines for researchers, clinicians, and policymakers.

### REFERENCES:

1. Andreasen NC, Carpenter WT, Kane JM, et al: Remission in schizophrenia: proposed criteria and rationale for consensus. *Am J Psychiatry* 2005; 162:441-449.
2. Liberman RP, Kopelowicz A, Ventura J, et al: Operational criteria and factors related to recovery from schizophrenia. *International Review of Psychiatry* 2002; 14:256-272.

### POSTER 166. COMFORTROOM PROJECT ENSCHEDE, THE NETHERLANDS: AN UPDATE OF RESULTS.

René De Veen, M.D., Kottenhof 6, Enschede, 7522 RB Netherlands

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### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to understand the effects of this intervention on rates of seclusion and restraint. He or she will have learned that comfortrooms offer an alternative for seclusion and restraint, but also are an instrument to bring about a change in the way to engage the patient but also to change the treatment culture in a mental health care facility.

### SUMMARY:

**Background:** In The Netherlands seclusion is a widespread intervention. The Comfortroom project aims at reducing seclusion rates and achieving a change in treatment culture by using this alternative intervention in stead of seclusion. The use of Comfortrooms is combined with the Engagement Model (Murphy & Bennington-Davis, 2005) to create a safer treatment milieu. In this model, an open, trauma-informed and hospitable attitude of employees is crucial. The model is implemented in three years. A study assesses factors that influence the process of this planned culture change and the effect of the introduction of this American intervention in a Dutch hospital. This study is a presentation of preliminary results. **Objective:** Is this change of treatment culture in The Netherlands possible and is the concept of Comfortrooms, combined with Engagement model, a good instrument to bring this about? **Method.** Several sources were used to capture outcome, such as a day to day registration of seclusion room use, a day to day registration of aggressive incidents by means of the SOAS-r (Nijman et. al, 1999) and by means of qualitative interviews with various key actors in the change process. **Results:** Results of the outcome measurements will be presented, showing a significant decline in seclusion room use in the project wards, together with a decline in aggressive incidents, proving some effect on ward culture and safety. Qualitative information shows a change of culture was primarily related to client input in ward therapeutical climate. **Discussion:** There is little doubt that the use of Comfortrooms is successful. Question is whether the drop in seclusion rates is a direct effect of the use of these rooms or of the change in treatment culture and staff-attitude. Current data do not differentiate sufficiently. Implications for further qualitative research will be presented, new focuses of attention and research will be indicated.

### REFERENCES:

1. Murphy, T en Bennington-Davis, M. Restraint and seclusion, HcPro, University of MA, Marblehead, USA, ISBN 1-57839-662-0, 2005.
2. Nijman, H.L.I.; Muris, P.; Merckelbach, H.L.G.J. (07417 7435); Palmstierna, T.; Wistedt, B. he staff observation aggression scale-revised (SOAS-R) : Aggressive behavior, 25, 6, 476-479; 1999.

### POSTER 167. HYPONATREMIA AND FALLS ON AN INPATIENT PSYCHIATRIC UNIT

David Goldbloom, M.D., 315 Avenue C, #11E, New York, NY 10009, Ramin Mojtabai, M.D., Ph.D., Michael Serby, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to recognize the correlation of falls on an inpatient psychiatric unit to hyponatremia and psychiatric medications known to cause low serum sodium.

### SUMMARY:

**Background:** A recent report identified hyponatremia as a risk factor for falls in patients presenting to a medical emergency department (Renneboog, et al.). Falls are a major concern in psychiatric inpatient facilities, and it is known that serum sodium (Na) levels may be lowered by many of the medications utilized on such units, most notably selective serotonin reuptake inhibitors (SSRIs) (Jacob and Spinler). The present study explored a possible relationship between falls and the presence of hyponatremia on an inpatient psychiatry service. It also examined the role of SSRIs as a contributing factor to hyponatremia and falls. **Methods:** We reviewed the records of all patients with reported falls (n=131) over the year 2006 in the inpatient psychiatry service of Beth Israel Medical Center in New York City (92 beds). The records of 124 patients, matched for age and gender, who did not fall in the same calendar year were randomly selected and also reviewed (See Table 1). The incidence of hyponatremia and frequency of SSRI prescription were noted amongst each patient population. The measured Na closest in time prior to the fall was used for the cases (falls) while a random number table was used to select a Na for comparison in the controls (no falls). Data were analyzed using contingency tables and X2 tests. **Results:** Ten falls (7.6%) occurred in patients with abnormal Na levels (range 131-134) and 121 falls (92.4%) were associated with normal Na values. Similarly, ten (8.1%) of the controls were found to have Na levels below normal (range 128-134) while 114 (91.9%) had normal Na values (chi square = 0.02, df = 1, p = 0.89, See Figure 1). Of the 10 falls that occurred in patients who were noted to be hyponatremic, 2 (20%) were also associated with concurrent SSRI administration. Three (30%) of the controls noted to be hyponatremic were taking SSRI medication (chi square = 0.27, df = 1, p = 0.605, See Table1). **Discussion:** These data demonstrate that there is no significant difference in the incidence of hyponatremia amongst the population of patients who fell in 2006 compared to those who did not. Similarly, SSRI medications were no more or less responsible for hyponatremia amongst the fall and control patient populations. In conclusion, neither hyponatremia nor SSRI prescription appears to be a significant risk factor for inpatient falls.

### REFERENCES:

1. Jacob S, Spinler SA. Hyponatremia associated with selective serotonin-reuptake inhibitors in older adults. *Ann Pharmacother.* 2006 Sep;40(9):1618-22.
2. Renneboog B, Musch W, Vandermergel X, Manto MU, Decaux G. Mild chronic hyponatremia is associated with falls, unsteadiness, and attention deficits. *Am J Med.* 2006; 119(1):71.e1-8.

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### **POSTER 168. FACTORS INFLUENCING THE EXTREMES OF TREATMENT OUTCOMES IN ASSERTIVE COMMUNITY TREATMENT (ACT) TEAM PATIENTS**

Kay Dantzer, M.D., *Community Psychiatry Program, University of Alabama at Birmingham, 908 20th Street South, Birmingham, AL 35294*, John A. Dantzer, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to list several factors that influence the outcome of a patient receiving ACT (Assertive Community Treatment) services. The participant should gain a better understanding of the complexity and range of services provided by ACT teams, and how these services can be affected by patient characteristics.

#### **SUMMARY:**

This poster presents a qualitative analysis of outcome data from four patients treated by the University of Alabama at Birmingham's ACT team. The patients were selected by team members as representing the two most outstanding successes and the two most outstanding failures that the team had experienced. Team members were interviewed about all of the factors that they felt had contributed to the outcomes with these particular patients. The commonalities and contrasts within these data were analyzed. The factors which seemed most important in determining the outcomes with these patients were the presence or absence of predictable behaviors in the patients at the time of engagement, team members' perceptions of the likeableness of the patients, the severity of the patients' substance abuse disorders, and the patients' perceptions of the inherent value of services offered by the team. It is hoped that this and further research concerning the factors most strongly influencing ACT team success will improve selection of patients most appropriate for ACT team treatment as well as improving the quality of that treatment.

#### **REFERENCES:**

1. P. B. Gold, N. Meisler, A. B. Santos, J. Keleher, D. R. Becker, W. H. Knoedler, M. A. Carnemolla, O. H. Williams, R. Toscvano, and G. Stormer. The Program of Assertive Community Treatment: Implementation and dissemination of an evidence-based model of community-based care for persons with severe and persistent mental illness. *Cognitive and Behavioral Practice* 2003, 10: 290-303.
2. G. R. Bond, R. E. Drake, K. T. Mueser, and E. Latimer. Assertive community treatment for people with severe mental illness: Critical ingredients and impact on patients. *Disease Management & Health Outcomes* 2001, 9: 141-159.

### **POSTER 169. A GENETIC SIGNATURE OF ILOPERIDONE EFFICACY IN THE TREATMENT OF SCHIZOPHRENIA**

*Supported by Vanda Pharmaceuticals*

Simona Volpi, Ph.D., *Vanda Pharmaceuticals Inc., 9605*

*Medical Center Drive, Rockville, MD 20850*, Louis Licamele, M.S., Christian Lavedan, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Demonstrate understanding of SNPs predictive of an enhanced response to iloperidone in patients with schizophrenia; 2.) Recognize that combined presence of favorable genotypes can increase the power of predictions of the response to iloperidone; and 3.) Recognize that SNPs predictive of a response to iloperidone do not necessarily predict response to other antipsychotics.

#### **SUMMARY:**

**Introduction:** In a clinical study of the efficacy of iloperidone, a new antipsychotic developed for the treatment of schizophrenia with an improved profile for extrapyramidal symptoms and metabolic side effects, 6 single nucleotide polymorphisms (SNPs) were shown to be associated with efficacy. This study quantified the diagnostic value of these SNPs for iloperidone treatment and their effect on response to an active comparator and placebo. **Methods:** A pharmacogenomic study was conducted in a randomized, double-blind, multicenter, phase III clinical trial evaluating iloperidone (24 mg/day), ziprasidone (160 mg/day), and placebo for 28 days in patients with schizophrenia. The primary efficacy variable was change from baseline in the Positive and Negative Syndrome Scale Total (PANSS-T) score. DNA samples (iloperidone 218; ziprasidone 103; placebo 105) were genotyped for >500,000 SNPs. Odds and likelihood ratios, specificity, sensitivity, and predictive values were calculated. **Results:** The 6 SNPs associated with iloperidone response showed odds ratios ranging from 2.43 to 3.57 for ?20% improvement in PANSS-T score. The highest specificity and positive predictive value were observed with rs11851892 (NPAS3), while the highest sensitivity and negative predictive value were seen with rs9643483 (XKR4). None of the 6 SNPs were significantly associated with response to ziprasidone. The combination of 6 markers defined several groups of patients with different probability of response to iloperidone. Almost 80% of the patients with the optimal genotype combination (27% of all patients) showed ?20% improvement in PANSS-T score. **Conclusions:** This study shows that genetic markers could predict an enhanced response to iloperidone. These findings support the application of pharmacogenomics to differentiate medication options and improve individualized treatments for schizophrenia. Vanda Pharmaceuticals sponsored this study.

#### **REFERENCES:**

1. Kalkman HO, Feuerbach D, Lotscher E, Schoeffter P: Functional characterization of the novel antipsychotic iloperidone at human D2, D3, ?2C, 5-HT6, and 5-HT1A receptors. *Life Sci* 2003; 73:1151-1159.
2. Nnadi CU, Malhotra AK: Individualizing antipsychotic drug therapy in schizophrenia: the promise of pharmacogenetics. *Curr Psychiatry Rep* 2007; 9:313-318.

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### POSTER 170. EXTRAPYRAMIDAL SYMPTOM AND AKATHISIA PROFILE OF ILOPERIDONE IN PHASE III SCHIZOPHRENIA CLINICAL TRIALS

Supported by Vanda Pharmaceuticals

Paolo Baroldi, M.D., Ph.D., 9605 Medical Center Drive, Suite 300, Rockville, MD 20850, John Lauriello, M.D., Rosarelis Torres, Ph.D., Curt D. Wolfgang, Ph.D., John Feeney, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to demonstrate an understanding of the risk of extrapyramidal symptoms and akathisia with iloperidone.

#### SUMMARY:

Background: Antipsychotic-induced extrapyramidal symptoms (EPS) and akathisia can influence functioning, quality of life, and treatment adherence. Iloperidone, a mixed D2/5-HT2 antagonist being developed for the treatment of schizophrenia, is under review by the FDA. Currently available atypical antipsychotics still show a range of liability to cause EPS or akathisia, so investigation of the potential for causing these adverse events is an important aspect of any antipsychotic agent development program. Methods: EPS and akathisia were assessed in a pooled analysis of iloperidone data from 4 short-term, phase III, double-blind, placebo-controlled clinical trials of adult patients with acute schizophrenia. Outcomes include rates of treatment-emergent adverse events (TEAEs), change from baseline on the Extrapyramidal Symptoms Rating Scale (ESRS) and on the Barnes Akathisia Scale (BAS), and rates of concurrent anticholinergic use. Results: A total of 2505 patients (iloperidone 4–24 mg/day, n=1344; haloperidol 5–20 mg/day, n=118; risperidone 4–8 mg/day, n=306; ziprasidone 160 mg/day, n=150; placebo, n=587) were included. EPS was reported as a TEAE in 15.6% of iloperidone, 53.4% of haloperidol, 28.1% of risperidone, 24.0% of ziprasidone, and 11.6% of placebo patients. Mean changes in Overall EPS on the ESRS scores from baseline to endpoint were 0.3 with iloperidone, 1.8 with haloperidol, -0.3 with risperidone, 0.2 with ziprasidone, and -0.3 with placebo. Akathisia was reported as a TEAE in 2.5% of iloperidone, 13.6% of haloperidol, 6.9% of risperidone, 7.3% of ziprasidone, and 2.7% of placebo patients, and worsening of akathisia (BAS scores) was reported in 7.8% of iloperidone, 15.5% of risperidone, 15.6% of ziprasidone, and 11.4% of placebo patients. Conclusions: Iloperidone may have a lower propensity to cause EPS or akathisia compared with haloperidol, risperidone, or ziprasidone. Vanda Pharmaceuticals sponsored this study.

#### REFERENCES:

1. Kalkman HO, Feuerbach D, Lotscher E, Schoeffter P: Functional characterization of the novel antipsychotic iloperidone at human D2, D3, 5-HT2C, 5-HT6, and 5-HT1A receptors. *Life Sci* 2003; 73:1151-1159.
2. Weiden PJ: EPS profiles: the atypical antipsychotics are not all the same. *J Psychiatr Pract* 2007; 13:13-24.

### POSTER 171. ETHNIC DIFFERENCES IN METABOLIC EFFECTS OF ARIPIPRAZOLE AND OLANZAPINE IN EPISODE SCHIZOPHRENIA (CN138-002)

Richard Whitehead, B.S., Otsuka America Pharmaceutical, Inc., Medical Affairs, 2440 Research Boulevard, Rockville, MD 20850, Jonathan Meyer, M.D., Edward Kim, M.D., M.B.A., Lisa Rosenblatt, M.D., M.P.H., Andrei Pikalov, M.D., Ph.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this presentation, the participant should be able to understand the relationship between ethnicity and metabolic complications of antipsychotic therapy.

#### SUMMARY:

Objective: To assess ethnic differences in metabolic effects of aripiprazole and olanzapine in patients with schizophrenia. Methods: Data from a 26-week double-blind randomized controlled trial comparing aripiprazole with olanzapine (CN138-002) was stratified by ethnicity. Patients in the safety sample were classified as “White/Other”, “Black”, or “Hispanic” patient groups. Within each subgroup, we conducted an ANOVA on body mass index (BMI), weight, waist circumference, systolic and diastolic blood pressure (SBP and DBP), serum lipids and glucose and glycosylated hemoglobin (HgbA1c). The last observation carried forward (LOCF) was applied in data analysis. Results: The safety sample of 304 yielded 167 White/Other, 86 Black and 51 Hispanic cases. Baseline differences between treatment arms were limited to the Hispanic patient sample in which aripiprazole patients were older than olanzapine patients ( $p=0.03$ ). In the White/Other patient group, olanzapine was associated with significantly greater increases in BMI, weight and waist circumference ( $p<0.01$ ), as well as increased SBP compared with aripiprazole ( $p=0.03$ ). Serum triglycerides and low-density lipoprotein also favored aripiprazole ( $p=0.02$ ). In the Black patient group, olanzapine was associated with greater increases in weight ( $p=0.03$ ). Serum high-density lipoprotein changes favored aripiprazole ( $p<0.01$ ). There were no treatment differences in Hispanic patients on any metabolic parameters studied. Conclusions: The different metabolic profiles demonstrated by aripiprazole and olanzapine vary in different ethnic groups. Further studies are warranted to assess the interaction between treatment and ethnicity.

#### REFERENCES:

1. Subramaniam M, Ng C, Chong SA, et al: Metabolic differences between Asian and Caucasian patients on clozapine treatment. *Hum Psychopharmacol* 2007;22:217–222.
2. McQuade RD, Stock E, Marcus R, et al: A comparison of weight change during treatment with olanzapine or aripiprazole: results from a randomized, double-blind study. *J Clin Psychiatry* 2004;65(Suppl 18):47–56.

### POSTER 172. COPING STRATEGIES IN OLDER ADULTS WITH SCHIZOPHRENIA

Nurun N. Begum, M.D., Ph.D., Resident, SUNY Downstate Medical Center, 450 Clarkson Avenue, Brooklyn, NY 11203, Carl I. Cohen, M.D., Paul M. Ramirez, Ph.D.

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### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to conceptualize various coping strategies used by older adults with schizophrenia in the process of recovery.

### SUMMARY:

Background: Although coping strategies play a critical role in the recovery process, there are little data on how older adults with schizophrenia employ various coping styles. This study examines the moderating and mediating role of various coping styles in affecting the impact of positive symptoms and other stressors on community integration among persons age 55+ with schizophrenia. Methods: The schizophrenia(S) group consisted of 198 persons aged 55+ living in the community who developed schizophrenia before age 45. We excluded persons with substantial cognitive impairment. A community comparison(C) group (n=113) was recruited using randomly selected block-groups. This study uses the theoretical framework of Pearlin and Schooler that elicits both active and passive (i.e., avoidant) coping strategies. A modified version of Yanos and Moos' 5-dimension integrative model of community adaptation was used to assess the role of coping in tandem with other factors that affect community integration. Using Pearlin's coping items, a principal component analysis using Varimax rotation was conducted. Five factors were identified: cognitive, behavioral, social network, chemical, and isolation. The scores of the coping factors were compared for the community and schizophrenia groups. For the schizophrenia group, logistic regression analyses were conducted to examine the impact of each of these coping styles on PANSS positive scores and stressors (financial and acute). Results: There were no difference between C and S with respect to Cognitive coping style, whereas the C group was more apt to use behavioral coping styles and the S group to use the other styles. In the S group, we found that the cognitive, behavioral, network coping styles reduced the beta values of between positive symptoms and social integration by 19%, 4%, and 7.5%, respectively(mediating effect). There was an interactive (moderating) effects between the cognitive coping and positive symp

### REFERENCES:

1. Pearlin LI, Schooler C. The structure of coping. *J Health Soc Behav.* 1978 Mar;19(1):2-21.
2. Nancy H. Solano and Susan Krauss Whitbourne, Coping with Schizophrenia: Patterns in Later Adulthood, 2001:53 (1):1-10.

### POSTER 173. PROGRAM INNOVATION ON AN ACUTE INPATIENT PSYCHIATRIC UNIT: AN OPPORTUNITY TO ADDRESS THE METABOLIC SYNDROME

Lorann Murphy, M.S.N., 1730 W. 25th Street, Behavioral Health 2A, Cleveland, OH 44236, David J. Muzina, M.D., Roman M. Dale, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be

able to understand: 1.) Three consequences of the metabolic syndrome in the psychiatric patient; 2.) How to screen for the metabolic syndrome according to ATP-III guidelines; and 3.) Program elements that can initiate awareness and behavioral change.

### SUMMARY:

"Metabolic syndrome" (MetS) is of increasing concern in the psychiatric community, with recent studies reporting prevalence rates of 32.3% among patients with schizophrenia (1) and 16.7% among those with bipolar disorder (2). MetS has been associated with an increased prevalence of depression (3) and it has further been demonstrated that depressive symptoms along a continuum of severity are independently associated with multiple unhealthy lifestyles (4). The inpatient psychiatry unit provides a valuable setting for clinicians to partner with patients in an effort to better recognize and manage the important cardiometabolic risk presented by MetS. Here we present the innovative multidisciplinary response of the Cleveland Clinic inpatient psychiatric unit at Lutheran Hospital to address this clinical issue. Methods/Results: The unit began a quality assurance project to screen each patient for MetS according to Adult Treatment Panel-III guidelines and added measurement of high sensitivity C-reactive protein as a potential marker of heart disease risk. Nutrition is serving healthier snacks including fruit, baked chips, sugar-free gelatin and pudding. Occupational Therapy sessions teach patients how to use artificial sweeteners and applesauce through baking classes as well as how to prepare "Heart Healthy" snacks and appetizers. Nursing began a Healthy Lifestyles Group focused on exercise and healthy nutrition. Upon discharge, the patient's community psychiatrist receives a letter with the patient's fasting laboratory results, vital signs, waist circumference and identified risk factors. Social Work makes appointments with primary care physicians for patients who screened positive for MetS. Conclusions: Although results from our MetS screening project are pending, all inpatient psychiatry units should consider how best to partner with their patients in efforts to recognize and reduce MetS risk.

### REFERENCES:

1. De Hert MA, van Winkel R, Van Eyck D, Hanssens L, Wampers M, Scheen A, & Peuskens J: Prevalence of the metabolic syndrome in patients with schizophrenia treated with antipsychotic medication. *Schizophr Res* 2006; 83: 87-93.
2. van Winkel R, De Hert M, Van Eyck D, Hanssens L, Wampers M, Scheen A, & Peuskens J: Prevalence of diabetes and the metabolic syndrome in a sample of patients with bipolar disorder. *Bipolar Dis* 2008; 10: 342-348.

**POSTER 174. RECURRENT READMISSION TO INPATIENT PSYCHIATRIC CARE: A PILOT STUDY OF A TREATMENT PLANNING INTERVENTION**  
Christine Dunn, M.A., *Yale School of Medicine, Department of Psychiatry, Program for Recovery and Community Health, 319 Peck Street, Building 1, 1st Floor, New Haven, CT 06513*, Timothy Schmutte, Ph.D., William H. Sledge, M.D.

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### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to promote the recovery, self-determination, and inclusion of people facing psychiatric disability, addiction, and discrimination through focusing on their strengths and the valuable contributions they have to make to the lives of their communities. Through collaborative research and evaluation, education and training, policy development and analysis, and consultation.

### SUMMARY:

**Objective:** To explore the impact of discharge planning on readmission rate at six months for patients who are recurrently readmitted to psychiatric hospitalization. **Methods:** The data is derived from a prospective study of recurrently readmitted inpatients (three admissions within eighteen months) who were followed prospectively after having been administered a treatment planning innovation. Conditions at discharge were examined by chi square and stepwise regression in an effort to determine conditions at discharge that predicted readmission from the index hospitalization. **Results:** Patients who demonstrated a good concept of their case management services enjoyed significantly less readmission. **Conclusions:** Patient understanding of discharge planning may be essential for preventing readmission. However, more research investigating this proposition is necessary. Body Recurrent readmission to inpatient psychiatric services is a vexatious problem for all involved in mental health services. Klinkenberg and Calsyn (1) proposed system responsiveness as the most important element associated with high readmission rates. One approach to system responsiveness has been discharge planning. Caton and colleagues (2) found adequate discharge planning significantly influenced compliance and re-hospitalization in the first three months after index hospitalization. This report describes an unexpected finding in conduct of a pilot discharge planning intervention evaluation among patients with histories of recurrent psychiatric hospitalization. Patients who were hospitalized twice or more in the 18 months prior to the index hospitalization, 18 years of age or older, fluent in English, and able to give informed consent were invited to participate. Thirty-one subjects were enrolled and followed monthly for six months after discharge in order to determine their adherence to the treatment plans and to assess clinical outcome.

### REFERENCES:

1. Klinkenberg WD, Calsyn RJ: Predictors of receipt of aftercare and recidivism among persons with severe mental illness: a review. *Psychiatric Services* 47:487-96, 1996.
2. Caton CLM, Goldstein JM, Serrano O, et al.: The Impact of Discharge Planning on Chronic Schizophrenic Patients. *Hospital and Community Psychiatry* 35:255-262, 1984.

### POSTER 175. CHOICE OF MEDICATION COULD HAVE AN IMPACT ON QUALITY OF LIFE IN SCHIZOPHRENIC PATIENTS: A COMPARISON OF FIRST AND SECOND GENERATION ANTIPSYCHOTICS WITH REGARD TO SMOKING RATES

Mahboob Aslam, M.D., M.S., 322 Augur Street, #3, Hamden CT 06517, Judie Kwolek, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participants should be able to recognize the possible correlation between reduced rates of smoking among patients with schizophrenia and treatment with atypical antipsychotics as compared to those patients treated with typical agents, to understand the proposed biochemical explanation for this difference, and to appreciate the profound impact that switching to a second generation drug can have on patients quality of life.

### SUMMARY:

**Background:** Nicotine is known to improve cognitive function in patients with schizophrenia, particularly in the domains of sustained and focused attention as well as working memory. It also aids in improving auditory gating deficits and deficits in pre-attention information processing. Self-medicating with nicotine to improve cognition could explain why individuals with schizophrenia have extremely high rate of cigarette smoking, ranging from 58% to 90% (1). In some studies, the amount of nicotine consumed correlated with occupancy of D2 receptors by different antipsychotics (2). In one study patients on typical antipsychotics were considered to be more prone to nicotine consumption, possibly due to stronger binding with D2 receptors. Atypical antipsychotic drugs have the advantage of improving negative symptoms and therefore enhancing cognition, and this too, may contribute to lower smoking rates. **Methods:** To test this hypothesis, we reviewed 131 charts for patients with schizophrenia. Twenty patients were receiving treatment with first generation antipsychotics and 111 patients were prescribed second-generation antipsychotics. **Results:** It was found that out of 20 patients on typical anti psychotics, 12 were smokers (60%) and 8 were non-smokers (40%). Out of 111 patients on atypicals, 39 were smokers (35.13%) and 72 (54.87%) were non-smokers. Therefore, it was determined that the smoking rate was significantly higher for those patients receiving first generation drugs. These findings confirm results of earlier studies suggesting that higher rates of smoking may be related to treatment with typical agents. **Conclusion:** The findings of this study provide one reason to consider switching patients from typical agents to atypical agents, as this could develop into a step towards smoking cessation in patients with schizophrenia, who are already prone to cardiovascular and metabolic diseases.

### REFERENCES:

1. Micheal T. Compton, MD, MPH. Cigarette smoking in individuals with schizophrenia. *Medscape Psychiatry and Mental Health*. 2005;10(2) 2005 Medscape. Posted 11/16/2005.
2. de Haan L; Booji J; Lavalaye J; van Amelsvoort T; linszen D. Department of Psychiatry, Academic Medical center, University of Amsterdam, Amsterdam, The Netherlands. *Psychopharmacology (Berl)*. 2006; 183;(4):500-5 (1ssn: 0033-3158).

## POSTERS

### **POSTER 176. RETROSPECTIVE STUDY ON THE EFFECTS OF DECREASED VISIT FREQUENCY ON STABILIZATION AND APPOINTMENT COMPLIANCE OF CLOZAPINE PATIENTS**

Mirlande Jordan, M.D., *45 Ashley Avenue, Building 57, Middletown, NY 10940*, Ashokkumar Patel, M.D., Hameeda Jangda, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion, the participant should be able to recognize that clozapine patients who have transitioned from biweekly to monthly blood work monitoring can be adherent to treatment, if they are involved in groups, and continue to attend regular appointments to see a physician or therapist.

#### **SUMMARY:**

To study the effects of visit frequency on stabilization and appointment compliance of clozapine patients following change of clozapine monitoring standards in 2005 of white blood cell counts from two weeks to four weeks, after these patients have been on clozapine for at least one year. In a study, where the effects of visit frequency on drug adherence was studied when blood work monitoring (white blood cell/absolute neutrophil count) went from weekly to biweekly after six months of clozapine therapy, significant effects of visit frequency on adherence to clozapine therapy were noted. (1). In this study, two groups of subjects were studied; subjects who were treated before, and after the FDA labeling change in monitoring frequency, on April 1, 1998. For the patients inadequately adherent to therapy an increase in visit frequency of weekly monitoring, prior to the change to biweekly monitoring helped them to be more adherent to treatment. They were not as adherent, to treatment when they were seen biweekly. Adherence, and concordance are often used as synonyms for compliance (2). Not much has been written about this topic. According to the literature, other than the study mentioned above, there have been no other studies concerning this topic. We propose that change in visit frequency did not affect patient stabilization and appointment compliance following change of clozapine monitoring standards in 2005. It could be that these patients went to groups, and were being monitored in other ways, so change in visit frequency had no effect on patient stabilization as well as appointment compliance.

#### **REFERENCES:**

1. Patel NC, Crismon ML, Miller AI, Johnsrud MT Drug adherence: effects of decreased visit frequency on adherence to clozapine therapy. *Pharmacotherapy*. 2005 Sep; 25 (9): 1242-7.
2. Keith SJ, Kane JM. Partial compliance and patient consequences in Schizophrenia: our patients can do better. *J Clin Psychiatry* 2003; 64: 1308-15.

### **POSTER 177. THE EFFECT OF SMOKING CESSATION ON PATIENT OUTCOMES IN THE STATE HOSPITAL SETTING AMONG THE HIGH END USER POPULATION**

Habibah Mosley, D.O., *1901 N. DuPont Highway, New*

*Castle, DE 19720*, Arshad U. Siddiqui, M.D., Gerard Gallucci, M.D., Steven Dettwyler, Faith Morris, Carol Kuprevich, Ed.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this presentation, the participant will be able to recognize the impact of smoking cessation on patient outcomes in the inpatient population. In addition, participants will develop a better understanding of the various issues involved with the implementation of a smoking cessation initiative.

#### **SUMMARY:**

Introduction/Hypothesis: Mental health patients are noted to smoke as much as three times the rate of the general population with higher relative risk of death. Cessation rates among smokers with any current mental health diagnosis are significantly lower than smokers with no history of mental illness. Smoking has become a part of the milieu of public mental health facilities. Patients can become more anxious waiting for, or having missed a smoke break, which may lead to more Pre Ren Nata (PRN) medication use, and/or more incidences of adverse patient outcomes. Approximately 59 percent of public mental health facilities still allow smoking. The Delaware Division of Substance Abuse and Mental health has initiated a campus-wide no smoking policy that started January 15, 2008. The purpose of this study is to compare the difference in patient outcomes among a group of patients who are high end users of psychiatric services before and after smoking cessation efforts were initiated. The goal of this study is to examine a fixed identifiable population of individuals with persistent and serious mental illness who comprise the "High End User" population to see how patient outcomes on the inpatient unit differ before and after smoking cessation. It is anticipated that our study will demonstrate that patient outcomes will improve, with an overall decrease in unfavorable patient outcomes over the course of 6 months following smoking cessation as opposed to 6 months prior. Methods: A chart review of the high end user population in the six-month periods pre and post initiation of smoking cessation. Various patient outcomes will be considered. Results: Preliminary results (25% of total population to be studied) suggest significant decrease in adverse patient outcomes. Conclusion/Discussion: Adverse patient outcomes were significantly decreased after initiation of smoking cessation program in a state hospital.

#### **REFERENCES:**

1. Ward MM, Vaughn TE, Doebbeling BN, Jones MF, Woolson RF, Bross DS, Branch LG. Effect of smoking cessation guidelines on provider practice patterns and patient outcomes. *Abstr Book Assoc Health Serv Res Meet*. 16: 63-4.
2. M. Hamilton, R. Weyant. Smoking cessation training improves provider performance but has limited effect on patient smoking behavior. *Journal of Evidence Based Dental Practice*, Volume 5, Issue 1, Pages 11-13 M. Hamilton, R. Weyant.

# SYMPOSIA

## SYMPOSIUM 1

THURSDAY, OCTOBER 2 8:30 a.m.-11:30 a.m.

### **LIFE SKILLS INTERVENTIONS FOR ADULTS WITH PSYCHIATRIC DISABILITIES WHO ARE AT RISK FOR HOMELESSNESS**

Thomas W. Allen, M.D., *446 E. Ontario Avenue, 6-200, Chicago, IL 60611*, Christine A. Helfrich, Ph.D., OTR/L

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to demonstrate the benefits of using an occupationally-based, manualized life skills training program to aide in the overall recovery of adults who are homeless and mentally ill.

#### **OVERALL SUMMARY:**

Nearly 90% of the homeless population in the U.S. experiences a psychiatric disability every year. These individuals lose housing due to difficulty managing on a low budget, not paying rent, isolation, and lack of meaningful occupation. The absence of personal choice by consumers of mental health services has been linked to a decreased ability to maintain housing and meet their basic needs; therefore, consumer involvement is paramount to providing successful and relevant services. A positive association exists between the ability of consumers to choose and control their receipt of, and access to, services and their ability to function independently. Despite these known facts, there is an absence of evidenced-based data supporting the outcomes of self-determined life skill interventions with adults with psychiatric disabilities. In a three-year federally funded study, the workshop presenters have demonstrated that a manualized life skills intervention applying empowerment theory and situated learning to occupational therapy improved skills in food, money, room and self care management and safe community participation for adults with mental illness who are at risk for homelessness. The intervention was conducted with 100 module completers, who completed an initial evaluation, enrolled in at least one of four life skills intervention modules which included six didactic group and six practical individual sessions to apply the material, and then completed module posttests and practical skills tests. All assessments were repeated three and six months later to measure change and retention of skills and knowledge. An empowerment evaluation of the process and outcomes of intervention content and format was conducted using participatory approaches. The data suggest that through an intervention that emphasizes empowerment and self determination, this population may develop and retain the life skills needed to maintain residential stability.

#### **1. A CASE STUDY EXAMINING THE APPLICATION OF THE TRANSTHEORETICAL MODEL OF CHANGE AND SOCIAL LEARNING THEORY IN A LIFE SKILLS INTERVENTION FOR HOMELESS ADULTS WITH MENTAL ILLNESS**

Emily K. Simpson, M.S., *Assistant Professor, Midwestern University, Occupational Therapy Program, 555 31st Street, Downers Grove, IL 60622*

#### **SUMMARY:**

This case study highlights the experience of one person who completed an intervention designed to improve the life skills of adults with mental illnesses who are at risk of becoming homeless. The purpose of this case study is to emphasize the relationship between readiness to change - according to the transtheoretical model of change - and the outcomes of an intervention, improving an individual's ability to maintain housing. The participant in the study received education and an opportunity to practice skills in the areas of money management, food and nutrition management, safe community participation, and room and self care. He was assessed pre- and post-intervention, as well as 3 and 6 months later, using the University of Rhode Island Change Assessment -Psychotherapy Version, Occupational Self Assessment, Allen Cognitive Level Screen, and the Assessment of Motor and Process Skills. Over the course of the four-month intervention, the participant's stage of change went from contemplation to action. His goals, as well as his priorities on the Occupational Self Assessment, shifted from more externally focused items to those related to self-improvement and personal change. The empowerment approach and social learning method of this intervention allowed participants to become involved in the intervention regardless of their stage of change, even though their individual goals and skill attainment varied. This case illustrates that even though one may have debilitating symptoms of anxiety, paranoia and social dysfunction, with time and gradual exposure to new skills and learning opportunities, one can develop relationships, identify personal achievements, and become more successful at interacting and performing within one's environment. Similar to the larger study, the results of this case provide an example of how it is important to exercise caution in using the action stage of readiness as a requirement for one to participate in a particular intervention.

#### **2. ASSESSING COGNITIVE FUNCTIONING IN ADULTS WITH MENTAL ILLNESS AT RISK FOR HOMELESSNESS USING SOCIAL LEARNING-BASED LIFE SKILL INTERVENTIONS**

Peggy S. Sabol, M.A., *Northwestern Memorial Hospital, 446 E. Ontario, 7/246, Chicago, IL 60611*

#### **SUMMARY:**

Many people who are homeless and live with a severe mental illness encounter numerous challenges that make daily functioning particularly difficult. Some of the most significant challenges in this population can be cognitive limitations. This paper presents the results of a four-year outcomes study that evaluates the effects of teaching life skills to people with mental illness at risk for homelessness. Participants were evaluated using a comprehensive assessment battery, including the Allen Cognitive Level Screen (ACLS), pre-intervention, post-intervention and at three and six months post-intervention. The manualized intervention included modules addressing financial management, nutrition management, room and self-care, and safe community participation. The concepts of social learning theory allowed participants to take responsibility for their own treatment. This theoretical framework also

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allowed people of different cognitive levels to participate in the same intervention group. Individuals who functioned at higher levels were seen as role models for other participants, and as a result of the group structure and empowerment approach, individuals with more functional challenges were perceived as contributing members of the group. The content of individual sessions was adapted to the particular level of each participant. Scores on the ACLS increased significantly for the whole group from pre-intervention to six months post-intervention, with greater changes seen in scores among persons in emergency housing compared to those in single room occupancy housing. The relationship of ACLS scores to participant demographics and scores on other assessment tools will be discussed. The impact of cognitive functioning on group participation using a social-learning model will be explored with case vignettes as illustrations.

### REFERENCES:

1. The Urban Institute: A New Look at Homelessness in America, 2000. <http://www.urban.org/>.
2. Shern DL, Felton CJ, Hough RL, Lehman AF, Goldfinger SM, Valencia E, et. al: Housing outcomes for homeless adults with mental illness: results from the second-round McKinney Program. *Psychiatric Services* 1997; 48:239-241.
3. Tsembelis S, Elfenbein C: A perspective on voluntary and involuntary outreach services for the homeless mentally ill. *New Directions in Mental Health Service* 1999; 82:9-19.
4. Nelson G, Walsh-Brown R, Hall GB: Housing for psychiatric survivors: values, policy, and research. *Administration and Policy in Mental Health* 1998; 25:455-462.

### SYMPOSIUM 2

**THURSDAY, OCTOBER 2** 8:30 a.m.-11:30 a.m.

#### DAVANLOO'S INTENSIVE SHORT-TERM DYNAMIC PSYCHOTHERAPY: INTRODUCTION, PART I

James Q. Schubmehl, M.D., 2541 Monroe Avenue, Suite B-7, Rochester, NY 14618

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Acquire a vivid sense of the forces underlying human psychopathology, and a view of crucial elements of the healing process; and 2.) Describe main elements of Davanloo's technique as they are applied in the initial psychotherapy session.

#### SUMMARY:

Highly resistant, poorly motivated patients are a major challenge to every clinician, especially when the clinical picture includes a complex mixture of character pathology and symptom disturbances. Davanloo's Intensive Short-Term Dynamic Psychotherapy (DISTDP) has shown rapid effectiveness with difficult to treat conditions, including functional disorders, depression, panic and other anxiety disorders. This 3 hour symposium will begin with a history of the evolution of psycho-

therapeutic technique to place DISTDP in perspective. This will be followed by an overview of the techniques and the metapsychology. This didactic material will then be demonstrated with extensive video recordings of actual patient interviews. The activation of a powerful unconscious therapeutic alliance will be shown in a case of a typical hard-to-engage patient. As well, the catalytic role of the "unlocking of the unconscious" in freeing the patient from the destructive forces of the punitive super-ego will be shown. The format anticipates a lively discussion between presenter and participants with scheduled blocks of discussion time. This symposium will also provide an excellent background for the paired afternoon symposium entitled, "Davanloo's Intensive Short-Term Dynamic Psychotherapy: Working-Through, Termination and Outcome." Psychiatrists in clinical practice, early career psychiatrists, psychotherapy researchers and other mental health professionals in clinical practice are likely to find this presentation to be both highly engaging and of significant value in practice.

### REFERENCES:

1. Davanloo, H. (1990) *Unlocking the Unconscious*. Chichester, England. John Wiley and Sons.
2. Davanloo, H. (2000) *Intensive Short-Term Dynamic Psychotherapy, Selected Papers of Habib Davanloo, MD*. Chichester, England. John Wiley and Sons.
3. Davanloo, H. "Intensive Short-Term Dynamic Psychotherapy", in: Kaplan H., and Sadock B. (eds), *Comprehensive Textbook of Psychiatry, 8th ed, Vol 2, Chapter 30.9, 2628-2652*, Lippincott Williams & Wilkins, Philadelphia, 2005.
4. Schubmehl, J. Q. (1995a) Management of Syntonic Character Resistance in Intensive Short-Term Dynamic Psychotherapy. *International Journal of Short-Term Psychotherapy*, 10(1), 3-19.

### SYMPOSIUM 3

**THURSDAY, OCTOBER 2** 2:00 p.m.-5:00 p.m.

#### THE IMPACT OF INTERNALIZED STIGMA AND IDENTITY TRANSFORMATION ON RECOVERY FROM SEVERE MENTAL ILLNESS: EVIDENCE AND TREATMENT DIRECTIONS

Philip T. Yanos, Ph.D., *John Jay College of Criminal Justice, CUNY, Psychology Department., 445 W. 59th Street, New York, NY 10019*

**Discussant:** David Roe, Ph.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Describe the relevance of internalized stigma and identity transformation to recovery from severe mental illness; 2.) Recognize and assess the presence of internalized stigma in clinical contexts; and 3.) Identify emerging and promising strategies for clinically addressing internalized stigma among clients with severe mental illness.

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### OVERALL SUMMARY:

Despite growing optimism and interest regarding the possibility of recovery for people with severe mental illness (SMI), an essential question for the mental health field continues to be how and why progress in moving towards recovery varies between individuals, and how service systems can facilitate the potential for recovery. There is evidence that a major, but often neglected, way in which SMI impacts subjective and objective aspects of recovery is by transforming a person's identity. A major aspect of this process is the loss of previously held identities (e.g., as student, worker, parent, etc.) and internalization of negative views held by others about people with SMI (e.g., that people with SMI are unable to live functional lives); this process is usually referred to as "internalized stigma" or "self stigma." Accumulating evidence indicates that roughly one-third of persons with SMI show evidence of high internalized stigma. There is substantial evidence that internalized stigma and related processes have profound negative effects upon both the objective (e.g., social functioning) and subjective (e.g., self-esteem and well-being) components of recovery for persons with SMI that persist independent of the severity of symptoms. Despite such research findings, there has been little acknowledgment of the potentially central role that internalized stigma and identity transformation can play in influencing recovery and response to treatment interventions such as illness management and supported employment, and even less attention has been devoted to developing treatments that can diminish internalized stigma. The purpose of this symposium is to create a forum for discussion of current findings on this topic and spur discussion of ways to advance research and develop treatments to address internalized stigma and related processes.

### 1. PROPOSING AND TESTING A MODEL OF THE EFFECTS OF SELF-ILLNESS IDENTITY ON RECOVERY-RELATED OUTCOMES IN SEVERE MENTAL ILLNESS

Paul H. Lysaker, Ph.D., *Roudbeush VA Medical Center, 1481 West 10th Street, (116h), Indianapolis, IN 46202*

#### SUMMARY:

Little is known about the impact of self-illness identity on recovery from severe mental illness (SMI). The purpose of this presentation is to propose a theoretically driven model of the impact of self-illness identity on the course and recovery from SMI and report evidence from an empirical test of the model. We propose that accepting a definition of oneself as mentally ill and assuming that mental illness means incompetence and inadequacy reduces hope and self-esteem, which further increases suicide risk, avoidant coping, poorer social interaction, poorer vocational functioning, and symptom severity. We then present findings of a test of the model using path analysis from a study with 102 persons with schizophrenia-spectrum disorders. Path analyses tested a predicted model and an alternative model for the relationships between the variables. Results from the first model support the view that internalized stigma increases avoidant coping, active social avoidance and depressive symptoms, and that these rela-

tionships are mediated by the impact of internalized stigma on hope and self-esteem. Results from model 2 replicated significant relationships from model 1, but also supported that possibility that positive symptoms may reduce hope and self-esteem. Findings from two models support the possibility that internalized stigma leads persons to have less hope and poorer self-esteem, leading to negative outcomes related to recovery.

### 2. ADDRESSING ENGULFMENT IN FIRST EPISODE SCHIZOPHRENIA: THE ROLE OF SELF-CONCEPT

Elizabeth A. McCay, R.N., *Ryerson University, School of Nursing, 4th Floor Reception, 350 Victoria Street, Toronto, Ontario, Canada M5B 2K3*

#### SUMMARY:

Young people coping with first episode schizophrenia are predisposed to illness engulfment, whereby personal identity is lost and replaced with a sense of self defined entirely by the illness. Our group has evaluated a 12-week novel group intervention designed to promote healthy self-concepts by reducing self-stigmatization and engulfment among young adults recovering from first episode schizophrenia in a randomized controlled trial. We have demonstrated a significant improvement, immediately post-intervention, in engulfment, hope and quality of life in those participants who received the intervention compared to those participants who received treatment as usual, alone. Improvements were not observed in stigma and self-concept, post-intervention. In order to further understand the mechanism of action for the group intervention, we undertook a cross-sectional analysis of the data for all participants at time 1, prior to the intervention. The engulfing effects of the illness appear to have a differential impact on quality of life, according to the individuals' level of self-concept; specifically self-concept moderates the relationship between engulfment and quality of life. Those individuals with a more robust sense of self appear to maintain high levels of quality of life, in spite of high levels of engulfment, whereas those with low self-concept and high engulfment experience low quality of life. These findings underline the complex interaction between the young person's sense of self, the engulfing effects of the illness and their capacity to remain engaged in their lives, as they recover from the illness. Interventions need to take into consideration the fit between the proposed intervention and individuals' sense of self as they work through the early stages of the illness.

### 3. STRATEGIES FOR DIMINSHING SELF-STIGMA

P. Corrigan, Psy.D., *Illinois Institute of Technology, 3424 S. State Street, Chicago, IL 60616*

#### SUMMARY:

The focus of this presentation is to review practical exercises that help advocates and others to diminish self-stigma. Our ongoing research program has focused on the fundamental paradox of self-stigma; i.e., how some people internalize public stigma and suffer diminished self-esteem while others are righteously angry about stigma and a third group is indifferent altogether. Our work has argued that self-stigma is moderated

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by group identity and stigma salience. The majority of the presentation will focus on three strategies for dealing with self-stigma. Cognitive Reframing: Some people suffer diminished self-esteem because they apply the stigmatizing attitudes of mental illness against themselves. Aaron Beck's cognitive therapy has been used to teach people how to reframe negative self-statements into manageable cognitions that do not lead to diminished self-esteem and self-efficacy. Kingdon and Turkington have adopted this method to teach people who self-stigmatize how to "normalize" the experiences of mental illness so self-esteem is not injured. In this section, we will discuss how to identify stigmatizing self-statements, how to gather evidence that challenges these statements, and how to develop counters and reframes that help the person challenge the statements in the future. Disclosure: Because mental illness stigma is largely hidden -- i.e., the public cannot tell a person falls into the "mentally ill" labeled group unless he or she self-reports -- people with mental illness must consider whether to disclose their mental illness status to the public. This involves: (1) discussion of the legal protections that should prevent unwanted disclosure; (2) consideration of the costs and benefits of coming out; and (3) review of the various ways a person might disclose. Fostering Empowerment: Strategies that foster personal empowerment will counter self-stigma.

### REFERENCES:

1. McCay EA, Seeman MV. A scale to measure the impact of a schizophrenic illness on an individual's self-concept. *Arch Psychiatr Nurs* 1998; 12: 41-49.
2. Ritsher JB, Phelan, JC. Internalized stigma predicts erosion of morale among psychiatric outpatients. *Psychiatry Res* 2004; 129: 257-265.
3. Lysaker PH, Roe D, Yanos PT. Toward understanding the insight paradox: Internalized stigma moderates the association between insight and social functioning, hope and self-esteem among people with schizophrenia spectrum disorders. *Schizophr Bull* 2007; 33: 192-199.
4. Corrigan PW, Watson AC, Barr L. The self-stigma of mental illness: Implications for self-esteem and self-efficacy. *J Soc Clin Psychol* 2006; 25: 875-884.

### SYMPOSIUM 4

THURSDAY, OCTOBER 2

2:00 p.m.-5:00 p.m.

#### **DIVINE INTERVENTION: TRANSFORMING THE MENTAL HEALTH SYSTEM THROUGH FAITH/MENTAL HEALTH COLLABORATION**

Michael A. Torres, M.D., *Center for the Integration of Spirituality & Mental Health, Inc., 309 N. Charles Street, Second Floor, Baltimore, MD 21201*, Annelle B. Primm, M.D., M.P.H.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Recognize the biopsychosociospiritual model as well as models of life and wellness that foster a recovery ori-

ented approach to mental health services; 2.) Identify mutual interests and goals in the faith community and mental health system; 3.) Describe the potential impact of faith/mental health partnerships on eliminating mental health disparities; and 4.) Identify challenges associated with faith/mental health partnerships.

#### **OVERALL SUMMARY:**

Stigma associated with mental health help-seeking remains a significant barrier to care. People of faith commonly rely exclusively on religious leaders and pastoral care for support in the face of unmet mental health needs. Furthermore, the recovery-oriented approach to mental health care, promoted as an element of transformation of the mental health system, emphasizes hope, a concept embedded in belief systems. These are some of the realities that underlie recent developments across the nation involving partnerships and collaborations between the mental health community and faith community. There are numerous benefits to be derived from the integration of mental health and spirituality to make mental health services more appealing to people of faith. The presenters in this symposium will build a case for integration and collaboration between the religious community and the mental health community to better meet the needs of people of various faiths in a culturally competent fashion. The biopsychosociospiritual model will be discussed, as well as the importance of service delivery that values life and wellness in a recovery-oriented approach to mental health services. The role of pastoral counseling in mental health recovery and the importance of increasing acceptability of mental health services in a physical health oriented service system will be presented. The challenges associated with faith/mental health partnerships will be considered in the context of their potential positive impact on eliminating mental health disparities and transforming the mental health system. Dr. Primm will discuss the ways in which religious and spiritual beliefs can influence help-seeking behaviors for depression and other mental disorders, which can in turn have an impact on chronic disease, progression, and outcomes. She will also discuss the implications for mental health education and engagement of the faith community as a partner in improving overall health for underserved populations.

#### **1. FAITH, SPIRITUALITY AND CULTURAL CONSIDERATIONS IN THE CONTEXT OF DEPRESSION AND CHRONIC DISEASE CARE**

Annelle B. Primm, M.D., M.P.H., *American Psychiatric Association, 1000 Wilson Boulevard, Arlington, Virginia 22209*

#### **SUMMARY:**

Dr. Primm will discuss the ways in which religious and spiritual beliefs can influence help-seeking behaviors for depression and other mental disorders, which can in turn have an impact on chronic disease, progression, and outcomes. She will also discuss the implications for mental health education and engagement of the faith community as a partner in improving overall health for underserved populations.

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### **2. THE RELATIONSHIP BETWEEN PASTORAL CARE AND THE MENTAL HEALTH SYSTEM: HOW BEST CAN WE PARTNER?**

Douglas M. Ronsheim, D.Min., *Executive Director, American Association of Pastoral Counselors, 9504A Lee Highway, Fairfax, VA 22031-2303*

#### **SUMMARY:**

Dr. Ronsheim will describe the role of pastoral counselors in providing mental health services to people of faith. He will also discuss the potential for more interaction and collaboration between pastoral counselors, faith leaders, psychiatrists and other mental health professionals.

### **3. WELLNESS, QUALITY OF LIFE, AND SPIRITUALITY IN THE CONTEXT OF MENTAL HEALTH NEEDS: WHAT RESEARCH TELLS US**

Jacqueline Mattis, Ph.D., *New York University, Department of Applied Psychology, 239 Greene Street, 4th Floor, New York, NY 10003*

#### **SUMMARY:**

Dr. Mattis will present findings from her research on the impact of spirituality and mental health on the achievement of wellness. Based on this work, she will provide guidelines for clinicians on how they can foster wellness in consumers of mental health services through an integration of spiritual concepts and mental health care.

### **4. BIOPSYCHOSOCIOSPIRITUAL MODEL: CHALLENGES AND OPPORTUNITIES TO TRANSFORM THE MENTAL HEALTH SYSTEM**

Michael A. Torres, M.D., *Center for the Integration of Spirituality & Mental Health, Inc., 309 N. Charles St., Second Floor, Baltimore, MD 21201*

#### **SUMMARY:**

Dr. Torres will discuss the integration of biological, psychosocial and spiritual perspectives making the utilization of mental health services more palatable to diverse and underserved populations. He will also describe his work in educating faith community leaders about mental illnesses and integrating spiritual concepts in mental health care.

### **5. LEADING CAUSES OF LIFE, DEEPLY WOVEN ROOTS, BOUNDARY LEADERSHIP AND BEYOND: IMPLICATIONS FOR FAITH AND MENTAL HEALTH PARTNERSHIP IN TRANSFORMING THE MENTAL HEALTH SYSTEM: PART I**

Gary R. Gunderson, D.M., *Senior Vice President, Methodist Le Bonheur Healthcare, Memphis, TN 01330*

#### **SUMMARY:**

Dr. Gunderson will discuss the concept of leading causes of life and the importance of safe faith community and mental health collaborations to achieve optimal wellness in underserved populations. He will explore how religious and cultural implications impact how faith communities and mental health systems interact.

#### **REFERENCES:**

1. Blanch A.: Integrating religion and spirituality in mental health: the promise and the challenge. *Psychiatr Rehabil J.* 2007 Spring;30(4):251-60.
2. Falloot RD.: Spirituality and religion in recovery: some current issues. *Psychiatr Rehabil J.* 2007 Spring;30(4):261-70.
3. Russinova Z, Blanch A.: Supported spirituality: a new frontier in the recovery-oriented mental health system. *Psychiatr Rehabil J.* 2007 Spring;30(4):247-9.
4. Meador KG, Koenig HG.: Spirituality and religion in psychiatry practice: parameters and implications. *Psychiatr Ann.* 2000 Aug;30(8):549-55.

## SYMPOSIUM 5

THURSDAY, OCTOBER 2

2:00 p.m.-5:00 p.m.

### **DAVANLOO'S INTENSIVE SHORT-TERM DYNAMIC PSYCHOTHERAPY: WORKING-THROUGH, TERMINATION AND OUTCOME, PART II**

James Q. Schubmehl, M.D., *2541 Monroe Avenue, Suite B-7, Rochester, NY 14618*

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this symposium, the participant should be able to: 1.) Acquire a vivid sense of the forces underlying human psychopathology, and a view of crucial elements of the healing process; 2.) Describe main elements of Davanloo's technique of working-through and termination; and 3.) Discuss the role of actual experience of unconscious feelings in producing deep psychic change in symptoms and character.

#### **SUMMARY:**

Highly resistant, poorly motivated patients are a major challenge to every clinician, especially when the clinical picture includes a complex mixture of character pathology and symptom disturbances. Davanloo's Intensive Short-Term Dynamic Psychotherapy (DISTDP) has shown rapid effectiveness with difficult to treat conditions, including functional disorders, depression, panic and other anxiety disorders. This symposium will begin with a brief overview of the major technical and metapsychological concepts of DISTDP to prepare those who have not had earlier exposure, such as to the half-day morning symposium entitled, "Davanloo's Intensive Short-Term Dynamic Psychotherapy: Introduction and First Session". This will be followed by an in-depth discussion of the nature and process of symptom removal and character in the working-through portion of DISTDP. The subject will then go to termination. Video recordings of a person suffering with complex symptom and character disturbances will be used to illustrate the concepts introduced. The nature and activity of the Unconscious Therapeutic Alliance as a new psychic force that operates in the service of healing by helping the patient experience even the most intense and disturbing unconscious impulses and feelings will be directly demonstrated in these recordings. The role that these experiences play in producing a new level of psychic integration will be evident, especially

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in the termination video recording. Using the same person's recordings, the outcome assessment will be shown include vignettes of the "patient as supervisor" watching and commenting on the initial evaluation session. The format anticipates a lively discussion between presenter and participants with scheduled blocks of discussion time.

### REFERENCES:

1. Davanloo, H. "Intensive Short-Term Dynamic Psychotherapy", in: Kaplan H., and Sadock B. (eds), *Comprehensive Textbook of Psychiatry*, 8th ed, Vol 2, Chapter 30.9, 2628-2652, Lippincot Williams & Wilkins, Philadelphia, 2005.
2. Davanloo, H. (2001) Intensive Short-Term Dynamic Psychotherapy Extended Major Direct Access to the Unconscious. *European Psychotherapy*, 2(1): 25-70.
3. Schubmehl, J. Q. (1996): Technique and Metapsychology of the Early Working Through Phase of Davanloo's Intensive Short-Term Dynamic Psychotherapy. *International Journal of Short-Term Psychotherapy*, vol. 11, 225-251.
4. Schubmehl, J. Q. (1991) Countertransference in Davanloo's Intensive Short-Term Dynamic Psychotherapy. *International Journal of Short-Term Psychotherapy*, 6(1), 27-54.

### SYMPOSIUM 6

FRIDAY, OCTOBER 3

8:30 a.m.-11:30a.m.

#### **PERSPECTIVES ON CULTURAL COMPETENCE IN DISASTER MENTAL HEALTH SERVICES AND RECOVERY: ALL HEALERS MENTAL HEALTH ALLIANCE**

Elliott R. Hill, L.C.S.W., 2625 Piedmont Road, N.E., Suite 56-502, Atlanta, GA 30324, Atlanta, GA30324-5905, Annelle B Primm, M.D., M.P.H.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Recognize how antecedents, social and economic status, language, as well as race and ethnic backgrounds influence groups' reactions to disaster services; 2.) Discuss the importance of advocating for, investing in, and developing an action plan for cultural competences in mental health; and 3.) Discuss the attitudes, knowledge and skill sets that are essential to possess to be culturally competent during disaster.

#### **OVERALL SUMMARY:**

All Healers Mental Health Alliance (AHMHA) was formed after Hurricane Katrina to facilitate meeting the mental health needs of diverse populations affected by disasters. This symposium will be an extension of AHMHA's mission. Survivors who need behavioral health services tend to come from many groups, but many times they come from ethnically and racially diverse and other marginalized groups. Programs and providers of services to disaster survivors must take into account the group's cultural diversity. All Healer Mental Health Alliance has been establishing a network of cultural competent men-

tal health professionals across the nation to link survivors to these professionals. Additionally, the AHMHA has been providing culturally competent support and technical assistance to organizations on cultural competence and promoting the use of telepsychiatry and medical records systems to enhance patient care after disasters. AHMHA is a part of the movement to make cultural proficiency a behavioral health care. This symposium will address cultural competence in disaster mental health from the: sociological, psychological, psychiatric, spiritual, and systemic perspectives.

#### **1. HOW DOES CULTURE INFLUENCE A GROUP'S REACTION TO DISASTER SERVICES: A SOCIOLOGICAL PERSPECTIVE**

Sandy Ortega, Ph.D., 44 Merion Road, Marlton, NJ 08053

#### **SUMMARY:**

Dr. Ortega, a sociologist and therapist, will examine how historical antecedents, social and economic status, language, as well as race and ethnic backgrounds influence groups' reactions to disaster services. It is logical to appreciate the groups and cultural backgrounds that individuals come before attempting to do disaster mental health work. Once these factors have been considered, a mental health provider is in a better position to bring cultural understanding to working with individual survivors of disasters.

#### **2. CULTURAL COMPETENCY IN DISASTER MENTAL HEALTH: DO WE REALLY WANT IT, FUND IT, OR EVEN PRACTICE WHAT WE "PREACH"?**

Phyllis Harrison-Ross, M.D., *Psychiatrist and President, All Healers Mental Health Alliance, 41 Central Park West, Suite 10 C, New York, NY 10023*

#### **SUMMARY:**

Dr. Phyllis Harrison-Ross, a community psychiatrist and the president of AHMHA, will discuss the contemporary questions of implementing culturally competent programs including whether there are mandates for organizations to achieve cultural competence; funding to support these efforts and groups who can provide cultural competency technical assistance. In the face of disaster, faith-based groups and spiritual interventions have been effective for survivors of disasters. Culturally appropriate, faith-based interventions, partnerships and collaborations need to be included in our thinking about culturally appropriate disaster mental health services to these underserved populations. This presentation will bring home the need to advocate for, invest in, and to develop an action plan for cultural competences in mental health.

#### **3. DON'T LEAVE YOUR MANNERS AT HOME: CULTURAL COMPETENCE IN DISASTER MENTAL HEALTH INTERVENTIONS**

Elliott R. Hill, L.C.S.W., 2625 Piedmont Road, N.E., Suite 56-502, Atlanta, GA 30324-5905

#### **SUMMARY:**

Mr. Hill, a clinical social worker and consultant on disaster mental health projects, will describe the elements of "cultural

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orientation” for disaster mental health workers and define the concept of “cultural broker” through experiences coordinating crisis counseling teams after Katrina. This presentation will discuss attitudes, knowledge and skill sets that are essential to possess to be cultural competent, while providing crisis counseling and give examples for the field.

#### **4. AND YOU WANT ME TO TRUST YOU? THE CHALLENGES FACED BY NON-WHITES RECEIVING HELP FROM MENTAL HEALTH PROVIDES AFTER A DISASTER**

Carl C. Bell, M.D., *Community Mental Health Council, Inc., 8704 S. Constance, Chicago, IL 60617*

##### **SUMMARY:**

Dr. Bell, a Chicago-based community psychiatrist and researcher, will discuss the cultural challenges faced by Hurricane Katrina survivors he worked with in Chicago. He will present historical evidence that non-white populations within the U.S. have experienced a myriad of pre-disaster traumas, ranging from overt racism (e.g. microinsults and microaggressions), biologic warfare, unprovoked shootings and internment. In addition, because of poverty, ghetto life and discrimination, some non-whites live in traumatic, toxic environments. As a result, when visited by a natural or manmade disaster, many non-whites have had previous traumatic experiences. A sense of safety, calming, sense of self and community efficacy, connectedness and hope are generic basic principles necessary to prepare non-white persons for disaster and are generic basic principles to apply to non-white populations immediately post disaster. In addition to these generic principles, in order to be culturally sensitive, the process of intervention must intimately involve representatives from non-white populations.

#### **5. PRACTICING PSYCHIATRY BEFORE, DURING, AND AFTER A DISASTER: WHAT’S CULTURE HAVE TO DO WITH IT?**

Hendry Ton, M.D., *2230 Stockton Boulevard, Sacramento, CA 95817*

##### **SUMMARY:**

Dr. Ton, an academic medical center-based cultural psychiatrist, will discuss the role of cultural competency along the continuum of care and illustrate how to create a culturally proficient system of care. This psychiatrist will also discuss how cultural bias leads to misdiagnosis and inappropriate treatment interventions, including psychopharmacology in ethnically and racially diverse patients and other marginalized groups.

##### **REFERENCES:**

1. U.S. Department of Health and Human Services. Developing cultural competence in disaster Mental Health Programs: Guiding Principles and Recommendations. DHHH Pub. SMA No.3828. Rockville, MD; Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, 2003.
2. Bernard, J.A. (1998) Cultural competence plans: A strategy for the creation of culturally competent system of care. In M. Hernandez and M. Isaacs (Eds.), Promoting

Cultural Competence in Children’s Mental Health Services. Baltimore, MD: Brookes Publishing Company.

3. Dykeman, Bruce F: Cultural Implications of Crisis Intervention. *Journal of Instructional Psychology* 2005; 32.
4. Ton, Hendry: Cultural and Ethnic Consideration in Disaster Psychiatry. In *Disaster Psychiatry Handbook*, Arlington, VA.

### SYMPOSIUM 7

FRIDAY, OCTOBER 3

8:30 a.m.-11:30 a.m.

#### **PROMOTING PARTNERSHIPS THROUGH PSYCHOEDUCATION: PRACTICAL PROGRAMS**

*Supported by the Therapeutic Education Association*

Karen A. Landwehr, M.C., *514 South 13th Street, Tacoma, WA 98402*,

**Discussant:** Larry S. Baker, M.A.

##### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Recognize psychoeducation as an identified best practice and the historical development of psychoeducation as a treatment modality; and 2.) Identify current psychoeducation programs that offer practical approaches to meeting the psychoeducation needs of target groups within a variety of settings.

##### **OVERALL SUMMARY:**

Psychoeducation has been recognized as a best practice for at least ten years, and yet many treatment providers fail to employ staff with the specialized training and abilities to facilitate psychoeducation programs. This symposium will offer participants an overview of 30 years of psychoeducation programming and an opportunity to learn about psychoeducation programs that are practical in their approach to psychoeducation and replicable in a variety of treatment settings. In addition, participants will learn about design and staffing qualities necessary for developing and/or implementing a psychoeducation program within their treatment setting.

#### **1. PSYCHOEDUCATION: HISTORICAL PERSECTIVES**

Cynthia C. Bisbee, Ph.D., *484 Farmington Lane, Pike Road, AL 36064*

##### **SUMMARY:**

Psychoeducation had its roots nearly three decades ago, and has evolved into an evidence-based intervention recognized as an important part of the overall treatment plan for serious mental illness. This presentation will describe some of the early psychoeducation efforts such as nurse-led medication groups and show how the field has progressed to include comprehensive psychoeducational programming for both consumers and families. The presentation will provide an overview of various psychoeducational models and methods, and will use the Patient Learning Center—a comprehensive psychoeducation program in operation for 30 years in Alabama’s largest state psychiatric hospital—as a platform to trace the historical evolution of this intervention.

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### **2. RECOVERY EDUCATION AND TREATMENT CENTER: CREATIVE, CHALLENGING, AND COLLABORATIVE**

Patricia L. Scheifler, M.S.W., *Partnership for Recovery, 249 Lakewood Circle, Sylacauga, AL 35150*

#### **SUMMARY:**

This presentation will share a wide range of practical program components that can be replicated in many different settings. Brain Boosters: Cognitive enhancement; Team Solutions: Illness education and management; Solutions for Wellness: Healthy eating and physical activity; Recovery Art Works Gallery: Creative expressions of recovery principles, concepts, and experiences; Structured Group Therapy: Tailored for individuals with severe persistent mental illness; Skill Building: Cognitive behavioral and structured steps approach to symptom management, handling anger, assertiveness, problem solving, criticism management, relaxation training, and social skills; Click and Pick: Efficient computerized documentation; Wall of Pride: Individual accomplishments on display; Aerobic Exercise: Knowledge and skill building sessions; Goal Setting and Review: Practicing knowledge and skills in daily life; Recovery Support Groups: Weekly outpatient group therapy; Effective Facilitation Skills: Staff training and competency determination; and more.

### **3. TRANSLATING KNOWLEDGE TO PRACTICE: THE UNIVERSITY OF MEDICINE AND DENTISTRY OF NEW JERSEY CENTER FOR EXCELLENCE IN PSYCHIATRY DISSEMINATION MODEL**

Anna Marie Toto, Ed.M., *University of Medicine & Dentistry of New Jersey (UMDNJ), University Behavioral HealthCare (UBHC), Center for Excellence in Psychiatry, 151 Centennial Avenue, Suite 1500, Piscataway, NJ 08854*

#### **SUMMARY:**

Since 2003, the University of Medicine and Dentistry of New Jersey, University Behavioral HealthCare (UMDNJ-UBHC) Center for Excellence in Psychiatry, has developed collaborative partnerships to upgrade the dissemination of psychoeducation and psychosocial approaches for individuals living with mental illness. Through the Center's unique collaboration with Eli Lilly and Company, nearly 700 behavioral health care organizations have been trained from 47 states on recovery-based, illness management and wellness approaches. The mission of this partnership has been to improve the standard of care and infuse a holistic treatment approach for individuals living with mental illness. This presentation will share details of the training curriculum, and how its dissemination method of the Neuroscience Treatment Team Partner (NTTP) Program, a structured, modular, psychoeducational program tailored for people with mental illness, continues to reap successful implementation outcomes. Special focus will be made on the implementation planning component of this program, the theories behind it and its replication value for other psychoeducational programs. Additionally, best practice approaches achieved by behavioral health organizations as a result of this program will be shared.

### **4. A PROGRAM THAT WORKS: WHY, AND HOW, AND WHO ELSE CAN DO IT?**

Garry M. Vickar, M.D., *11125 Dunn Road, Suite 213, St. Louis, MO 63136*

#### **SUMMARY:**

What makes a psychoeducational program work? And how do we know? And if it is working, why are other similar facilities not doing it? This presentation will address those issues, and offer suggestions for others wishing to institute a specific program for treating patients diagnosed with schizophrenia, and how this also helps their families/loved ones.

### **5. IMPLEMENTING ILLNESS MANAGEMENT AND RECOVERY**

Michelle P. Salyers, Ph.D., *Roudebush VA Medical Center, 1481 W. 10th Street, (11H), Indianapolis, IN 46202*

#### **SUMMARY:**

Illness self-management involves core knowledge and skills to support the recovery of individuals with severe mental illness. The Illness Management and Recovery program is a comprehensive, structured approach to support self-management and personal recovery. Developed as one of the resource kits for the National Implementing Evidence-Based Practices Project, IMR is a structured curriculum that includes motivational, educational, and cognitive-behavioral techniques shown to be effective in helping people with mental illness learn more about their illness, develop skills to manage their illness more independently, avoid relapse and rehospitalization, and to identify and pursue personally meaningful goals that help them live productive lives beyond their illness. This session will provide an overview of the program, with specific attention to implementation issues. This session will also provide updated research information as the program has been implemented in several places now.

### **6. PROMOTING CONSUMER, FAMILY, PROVIDER PARTNERSHIPS: THE PEBBLES IN THE POND PROGRAM**

Karen A. Landwehr, M.C., *514 South 13th Street, Tacoma, WA 98402*

#### **SUMMARY:**

Pebbles in the Pond is a multidisciplinary 12-week psychoeducation program for individuals who have a mental illness, their family members and service providers. Drawing on concepts from the fields of nursing, sociology and counseling, as well as pharmacotherapy, this program uses shared praxis methodology to expand the medical model and help participants incorporate recovery-oriented practices into their daily life. Currently offered throughout Pierce County, Washington, this unique program has been associated with a 30% increase in knowledge about mental illness, as well as an 83% decrease in two-year re-hospitalization rates. During this presentation, participants will receive information about the program, its impact on participants, and its replicability in other settings.

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### REFERENCES:

1. Hogarty, G.E., C.M. Anderson, D.J. Reiss, S.J. Kornblith, D.P. Greenwald, R.F. Ulrich, and M. Carter. 1991. Family psychoeducation, social skills training, and maintenance chemotherapy in the aftercare treatment of schizophrenia: two-year effects of a controlled study on relapse and adjustment. *Archives of General Psychiatry* 48:340–7.
2. Gingerich, S., & Mueser, K. (2002). *Illness Management and Recovery: Implementation Resource Kit & Users Guide*: SAMHSA, Center for Mental Health Services.
3. Dixon, L., C. Adams, and A. Lucksted. 2000. Update on Family Psychoeducation for Schizophrenia. *Schizophrenia Bulletin* 26:5–20. Lincoln TM, Wilhelm K, & Nestoruc Y. (2007).
4. Effectiveness of psychoeducation for relapse, symptoms, knowledge, adherence and functioning in psychotic disorders: A meta-analysis. *Schizophrenia Research* Nov, 96(1-3):232-45. Epub 2007 Sep 7.

### SYMPOSIUM 8

FRIDAY, OCTOBER 3

8:30 a.m.-11:30 a.m.

#### SUBSTANCE USE DISORDERS AND PSYCHIATRIC CO-MORBIDITY: OPPORTUNITIES FOR SERVICES RESEARCH

Wilson M. Compton III, M.D., *Director, Division of Epidemiology, Services and Prevention Research, National Institute on Drug Abuse, 6001 Executive Boulevard, Room 5159, Bethesda, MD 20892-9589*

**Discussants:** Stanley Sacks, Ph.D., Philip Wang, M.D., Ph.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Define health services research; 2.) Identify at least two national epidemiologic surveys that estimate the prevalence of co-occurring disorders; 3.) Discuss at least two treatment models that serve dual disorder populations; and 4.) Articulate the challenges of treating patients with co-occurring mood and substance use disorders.

#### OVERALL SUMMARY:

This symposium provides an overview of the programmatic and clinical challenges facing providers who serve adults and adolescents with co-occurring disorders. Clients said to have co-occurring disorders have one or more disorders relating to the use of alcohol and/or other drugs, as well as one or more mental disorders. This session surveys recent epidemiologic studies to illustrate the prevalence of co-occurring disorders in the general population, as well as in treatment samples. The challenges of assessment, diagnosis, and placement with individuals with co-occurring disorders will be presented and the various forms of single-disorder and dual disorder treatment models will be discussed. In addition to quantitative survey studies, qualitative research will also be presented to illustrate the clinical and social complexity of treating dual diagnosis patients. For clinicians, the symposium will highlight current findings from recent clinical trials on the treatment of

the co-occurrence of substance use disorders with depression, anxiety and bipolar disorders. As an illustration of recent services research, the symposium will also examine the rates and correlates of self-reported receipt for mental health services among adolescents who were admitted to community-based substance abuse outpatient clinics and had a co-occurring mental health problem. The session concludes with a discussion of main services research themes in several areas: service utilization, treatment models and strategies, treatment systems and settings, treatment process and organizational factors. Services research has increased our understanding of co-occurring disorders (its prevalence, the many associated problems, and the ways in which treatment and treatment outcomes can be affected) and has expanded treatment options for practitioners and clients. Research has increased our understanding of co-occurring disorders— its prevalence, the many associated problems that accompany the disorder, and the ways in which treatment and treatment outcomes can be affected — and has expanded treatment options for practitioners and clients. The session concludes with a discussion of the presentations and the main services research themes of epidemiology and service utilization, treatment models and strategies, treatment systems and settings, treatment process, and continuity of care. Discussion will focus on the contributions of the presentations to the advancement of research. An agenda for future research has identified three areas that have the most potential to advance the field; namely, significant contributions would be made to the co-occurring disorders population through research that (1) helps treatment programs to optimize their use of restricted resources (including specialized personnel), (2) encourages addiction to be considered as a chronic, not acute, condition, at the same time that various models of continuing care are being developed and tested, and (3) supports the transfer of science to service by exploring topics that relate to the successful implementation of new practices, such as the staffing, resources, and organizational characteristics necessary to adopt, realize and sustain a research-based treatment innovation. Bringing this agenda to fruition would continue to improve care for individuals with co-occurring disorders. Research has increased our understanding of co-occurring disorders its prevalence, the many associated problems that accompany the disorder, and the ways in which treatment and treatment outcomes can be affected and has expanded treatment options for practitioners and clients. The session concludes with a discussion of the presentations and the main services research themes of epidemiology and service utilization, treatment models and strategies, treatment systems and settings, treatment process, and continuity of care. Discussion will focus on the contributions of the presentations to the advancement of research. An agenda for future research has identified three areas that have the most potential to advance the field; namely, significant contributions would be made to the co-occurring disorders population through research that (1) helps treatment programs to optimize their use of restricted resources (including specialized personnel), (2) encourages addiction to be considered as a chronic, not acute, condition, at the same time that various models of continu-

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ing care are being developed and tested, and (3) supports the transfer of science to service by exploring topics that relate to the successful implementation of new practices, such as the staffing, resources, and organizational characteristics necessary to adopt, realize and sustain a research-based treatment innovation. Bringing this agenda to fruition would continue to improve care for individuals with co-occurring disorders.

### **1. CO-OCCURRING DISORDERS IN SUBSTANCE ABUSE TREATMENT: ISSUES AND PROSPECTS**

Patrick M. Flynn, Ph.D., *Institute of Behavioral Research, Texas Christian University, TCU Box 298740, Fort Worth, TX 76129*

#### **SUMMARY:**

This presentation will explore the epidemiology of co-occurring disorders among substance abuse treatment patients with an emphasis on the implications of study findings for the functioning and potential of substance abuse treatment. Rates of antisocial personality, depression, and anxiety disorders will be considered in regards to substance dependency patterns among treatment patients. Severity of co-occurring disorders and their significance for specialized treatment within two distinct treatment systems (i.e., mental health and substance abuse) will be discussed. Emphasis will be assigned to the availability and use of existing resources and the real capabilities of the mental health and substance abuse treatment systems. Implications of conceptualizations of care and personal and programmatic selectivity will be considered in regards to service utilization as a function of patient understanding of: (a) primary presenting problem, (b) treatment, (c) availability of services, and (d) access to care. Issues raised for consideration by the clinical research and treatment provider communities will be discussed such as assessment and diagnosis, manpower and training, and service delivery based on patient needs.

### **2. THE DUAL DIAGNOSIS CAPABILITY IN ADDICTION TREATMENT (DDCAT) INDEX: METHODOLOGY AND FINDINGS ACROSS NINE STATE SYSTEMS**

Mark P. McGovern, Ph.D., *Associate Professor of Psychiatry, and of Community and Family Medicine, Dartmouth Medical School, 2 Whipple Place, Suite 202, Lebanon, NH 03766*

#### **SUMMARY:**

Community addiction and mental health service providers accept the fact that co-occurring disorders are common and a risk factor for negative outcomes. The Integrated Dual Disorder Treatment (IDDT) model has advanced the evidence for persons with severe mental illnesses (SMI) and substance abuse disorders in mental health settings. For persons with substance dependence and non-SMI disorders, addiction treatment providers and consumers have yearned for pragmatic guidance in assessing the capability of services, particularly regarding the role of policy, the implementation of evidence-based practices and in workforce requirements. This presentation describes the development and methodology of the DDCAT index. The DDCAT systematically gathers data

on the dual diagnosis capability of addiction treatment services via observational techniques, and rates these observations on 35 benchmark items which are aligned and profiled on 7 dimensions. Based on total scores, programs are categorized as Addiction Only Services (AOS), Dual Diagnosis Capable (DDC), or Dual Diagnosis Enhanced (DDE). 151 treatment programs from across nine state systems used the DDCAT to assess services at baseline, and to guide practice improvements. Programs were re-assessed at one year follow-up. At baseline, the distribution of AOS to DDC to DDE programs across the nine states ranged from AOS level (62 to 100%), DDC (0 to 38%) to DDE (0 to 11%). Data collection is underway assessing programs at follow-up and in determining specific implementation factors associated with improvements in program capability. The DDCAT provides an objective measure of program capacity to guide program and system change, and is being widely adopted over 20 states are in various stages of implementation. Research is now focused on examining implementations associated with improvements in program capability and the relationship to outcomes for patients with co-occurring disorders.

### **3. SERVICES FOR DUAL DIAGNOSED HOMELESS: IMPLICATIONS FOR DUAL RECOVERY**

Deborah K. Padgett, Ph.D., *Professor, Silver School of Social Work, Room 416, New York University, 1 Washington Square, North, New York, NY 10003*

#### **SUMMARY:**

The new paradigm of mental health recovery holds promise for dual diagnosed persons, but it also highlights the obstacles presented by substance abuse and a greater likelihood of homelessness. This NIMH-funded study addresses the socio-environmental contexts of being 'dually diagnosed' among homeless individuals entering two differing types of programs in New York City: housing first (HF) (non-abstinence-requiring) and treatment first (TF) (abstinence-requiring). Contrasts between HF and TF enrollees are examined for group differences in achieving markers of mental health recovery. Using a longitudinal qualitative design, 27 HF and 48 TF clients were interviewed over 12 months to assess housing stability, service use, substance abuse, mental functioning and social relationships. Study retention was 75 out of 83 (90%). Cross-case analyses were conducted using independent coding and team consensus. The sample was 70% male and 75% black/Latino; program dropout rates were 11% (HF) and 54% (TF). Typologies of abstinence cross-tabulated with program type showed significant differences ( $p < .001$ ) favoring HF; group differences were less pronounced in mental functioning, social relationships and service use. Progress in recovery for both groups was undermined by personal adversity—poor health, trauma, depleted social networks—as well as environmental constraints, e.g., lack of jobs and affordable housing and residing in risky neighborhoods. Housing first clients manifested greater housing stability, program retention and abstinence despite few or no restrictions on substance use. These noteworthy findings have direct implications for services research. Yet they highlight the need to also address structural barriers

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to 'dual recovery' for those who are severely disadvantaged.

### **4. TREATING COMMON MOOD AND ANXIETY DISORDERS AMONG SUBSTANCE DEPENDENT PATIENTS**

Edward V. Nunes, M.D., *New York State Psychiatric Institute, 1051 Riverside Drive, Unit 51, New York, NY 10032*

#### **SUMMARY:**

Depression and anxiety disorders are prevalent among patients presenting for treatment for alcohol or drug dependence, and have been associated with greater illness severity and worse treatment outcome. The literature on the treatment of mood and anxiety disorders among substance dependent patients will be reviewed. The largest body of evidence comes from placebo-controlled trials of antidepressant medications among patients with depression and substance dependence. Here, a meta-analysis shows a significant effect of medication treatment in improving mood; antidepressant medication also reduces substance use in studies where robust medication effects were obtained on mood outcome. There is also significant heterogeneity among the studies with a cluster of positive studies, and a cluster of studies that show no effect of medication; differences between these clusters are analyzed in an effort to better guide patient selection and design of treatment services. Emerging evidence from studies of treatment of patients with bipolar illness or anxiety disorders and substance abuse will also be reviewed.

### **5. UTILIZATION OF MENTAL HEALTH SERVICES AMONG ADOLESCENTS IN COMMUNITY-BASED SUBSTANCE ABUSE OUTPATIENT CLINICS**

Michael L. Dennis, Ph.D., *Senior Research Psychologist and GAIN Coordinating Center Director, Chestnut Health Systems, 720 West Chestnut, Bloomington, IL 61701*

#### **SUMMARY:**

Substance use disorders are highly intertwined with a wide variety of psychological and behavioral difficulties. Yet, a substantial proportion of individuals with substance use and co-occurring mental disorders do not receive mental health services during the course of treatment for their substance use disorder. This study examined the rates and correlates of self-reported receipt for mental health services among adolescents, aged 12 -19, who were admitted to community-based substance abuse outpatient clinics and had a co-occurring mental health problem. Data were pooled from adolescent treatment studies funded by the Substance Abuse and Mental Health Service Administration's (SAMHSA's) Center for Substance Abuse Treatment (CSAT) involving adolescents entering substance abuse treatment between 2002 and 2006. The data were collected as part of general clinical practice or specific research studies under their respective voluntary consent procedures. Utilization of mental health service was ascertained 3 months post-intake. Receipt of mental health service was defined as a participant reporting: (a) receipt of psychotropic medication for mental health problems; or (b) a visit to a hospital, doctor's office, outpatient clinic or emergency room for their mental, emotional, behavioral or psychological problems

during the preceding 90 days after treatment entry. Of the 1,190 adolescents with mental health service needs at treatment admission, the mean age was 15.5, with 61.3% male, 58.6% Caucasian, 13.6% African American, 10.4% Hispanic, and 17.5% Mixed. About four in ten came from a single parent household (43.6%). Being suspended or expelled from school or training was prevalent (60.8%), as was criminal justice system involvement at 3-month post intake (45.9%). About one third (35%) of adolescents with a co-occurring mental health problem identified at intake received mental health service in the 3 months after intake.

### **6. RESPONDING TO THE CHALLENGE OF CO-OCCURRING DISORDERS: SUGGESTIONS FOR FUTURE RESEARCH**

Stanley Sacks, Ph.D., *Director, Center for the Integration of Research & Practice (CIRP), National Development & Research Institutes, Inc. (NDRI), 71 W. 23rd Street, 8th Floor, New York, NY 10010*

#### **SUMMARY:**

Research has increased our understanding of co-occurring disorders—its prevalence, the many associated problems that accompany the disorder, and the ways in which treatment and treatment outcomes can be affected — and has expanded treatment options for practitioners and clients. The session concludes with a discussion of the presentations and the main services research themes of epidemiology and service utilization, treatment models and strategies, treatment systems and settings, treatment process, and continuity of care. Discussion will focus on the contributions of the presentations to the advancement of research. An agenda for future research has identified three areas that have the most potential to advance the field; namely, significant contributions would be made to the co-occurring disorders population through research that (1) helps treatment programs to optimize their use of restricted resources (including specialized personnel), (2) encourages addiction to be considered as a chronic, not acute, condition, at the same time that various models of continuing care are being developed and tested, and (3) supports the transfer of science to service by exploring topics that relate to the successful implementation of new practices, such as the staffing, resources, and organizational characteristics necessary to adopt, realize and sustain a research-based treatment innovation. Bringing this agenda to fruition would continue to improve care for individuals with co-occurring disorders.

#### **REFERENCES:**

1. Flynn, P.M., Brown, B.S. Co-occurring disorders in substance abuse treatment: Issues and prospects. *Journal of Substance Abuse Treatment*. 2008; 34 (1): 36-47.
2. Compton, W.M., Thomas, Y.F., Stinson, F.S., Grant, B.F. Prevalence, Correlates, Disability, and Comorbidity of DSM-IV Drug Abuse and Dependence in the United States *Arch Gen Psychiatry*. 2007;64:566-576.
3. Drake, R.E., Mueser, K.T., Brunette, M.F. Management of persons with co-occurring severe mental illness and substance use disorder: program implications *World Psychiatry* 2007;6:131-136.

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4. Sacks, S., Chandler, R. Gonzales, J. Responding to the challenge of co-occurring disorders: Suggestions for future research. *Journal of Substance Abuse Treatment*. 2008; 34 (1):139-146.

### SYMPOSIUM 9

**FRIDAY, OCTOBER 3**

**8:30 a.m.-11:30 a.m.**

#### **HIV CARE FOR THE MENTAL HEALTH CLINICIAN: PART 1**

*Supported by the APA Committee on AIDS*

Francisco Fernandez, M.D., *Department of Psychiatry, University of South Florida, 3515 E. Fletcher Avenue, #14, Tampa, FL 33613*

**Discussant:** Marshall Forstein, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Identify the spectrum of HIV-related neuropsychiatric, psychiatric, and somatic disorders; 2.) Recognize common complaints, assess mental status, and provide follow-up care; and 3.) Outline their role on the treatment team.

#### **OVERALL SUMMARY:**

The devastating toll of HIV disease is evident in almost every country in the world. Populations most affected by this pandemic include newborns, sexually active youth, men who have sex with men (MSM), injecting drug users, and women of color. As the life expectancy of people living with HIV infection has increased, mental health providers are more likely to encounter neuropsychiatric manifestations of the disease. Studies estimate that 75 percent of all AIDS patients will show symptomatic CNS consequences. Subsequently, as quality of life becomes a more central consideration in the management of this disease, better awareness of these neuropsychiatric manifestations is paramount. The purpose of this three-part, multidisciplinary symposium is to create a dialog for understanding, diagnosing, and treating the psychiatric dimensions of HIV and AIDS. Attendees will discuss the role of the mental health treatment team in ensuring the best possible care for persons living with HIV and AIDS, and gain knowledge about associated neuropsychiatric and psychiatric complications, assessment and patient care. Question and answer periods staggered throughout the program will provide the audience with an opportunity to discuss individual clinical cases and explore questions and concerns.

#### **1. NEUROPSYCHIATRIC ASPECTS OF HIV**

Francisco Fernandez, M.D., *Department of Psychiatry, University of South Florida, 3515 E. Fletcher Avenue, #14, Tampa, FL 33613*

#### **SUMMARY:**

There are significant direct consequences to the invasion of HIV into the nervous system that may present as neurological, neuropsychiatric, and/or psychiatric syndromes and disorders. These may arise acutely and require rapid evaluation and intervention or they may be chronic, subtle, and present accompanied by physical complaints. Dramatic changes in cognition, motor capacity, mood or behavior have obvious conse-

quences for the individual. However, subtle neurocognitive impairments may affect coping mechanisms and the ability to work, adherence to HAART and medical care, and adherence to protective sexual practices. Appropriate training is needed to assess, diagnose, and treat the neuropsychiatric sequelae of HIV disease. This presentation will focus on the treatment of psychiatric disorders in people with HIV and AIDS, with a focus on neuropsychiatric manifestations, psychiatric syndromes, and somatic complaints. Presenters will share their clinical experiences, focusing on the prevalence, clinical features, patient complaints, clinical course, differential diagnosis and treatment of these disorders.

#### **2. CLINICAL ASSESSMENT AND INTERVENTION**

Milton L. Wainberg, M.D., *1051 Riverside Drive, Unit 112, New York, NY 10032*

#### **SUMMARY:**

Early involvement of mental health clinicians, in the assessment and treatment of neuropsychiatric complaints are essential to both the overall well-being of the patient and to the efficacy of other treatments. In addition to the enormous psychological burden of progressive illness and loss of physical function, even subtle and subclinical changes in brain function may significantly affect both quality of life and the ability for a person to participate in his or her own medical care. This presentation will teach participants to recognize changes in affect, behavior, or cognition that may indicate CNS involvement, psychiatric impairment, or medication side effects or toxicities; understand how to assess mental health status; and provide appropriate interventions. This presentation will follow a lecture format and include a question and answer period to provide participants with an opportunity to discuss clinical problems.

#### **REFERENCES:**

1. HIV/AIDS: The Brain & Behavior: A Multidisciplinary Mental Health Services Curriculum. Center for Mental Health Services/ADMA, Rockville, MD, 2003.
2. Cournois F, Forstein M (eds). What Mental Health Practitioners Need to Know About HIV and AIDS. Jossey-Bass, 2000, 87:Fall.
3. American Psychiatric Association: Practice Guidelines for the Treatment of Psychiatric Disorders Compendium. Practice guidelines for the treatment of patients with HIV/AIDS. Arlington, VA, American Psychiatric Association, 2004, pp 155-162.
4. Treisman G, Angelin A: The Psychiatry of AIDS: A Guide to Diagnosis and Treatment. Baltimore, MD, The John Hopkins University Press, 2004.

### SYMPOSIUM 10

**FRIDAY, OCTOBER 3**

**2:00 p.m.-5:00 p.m.**

#### **CHANGING THE WORLD: NATIONAL STRATEGIES FOR SYSTEMIC IMPLEMENTATION OF INTEGRATED SERVICES: APPLICATIONS IN ILLINOIS**

*Supported by the American Association of Community Psychiatrists*

## SYMPOSIA

Kenneth Minkoff, M.D., *100 Powdermill Road, Acton, MA 01720*

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Identify the eight principles of a comprehensive continuous integrated system of care and their application to system design within an integrated recovery philosophy; 2.) Recognize the 12 steps of implementation for integrated systems and their utilization in real world systems; and 3.) Define real world applications and use of top down bottom up CQI strategies for building dual diagnosis capability at a system and program.

### OVERALL SUMMARY:

Individuals with co-occurring mental health and substance use disorders represent a population with poorer outcomes and higher costs in multiple domains, presenting with sufficient frequency in all systems and services that it is recognized that “dual diagnosis is an expectation, not an exception.” As a result, there has been increasing recognition of the need for developing a systemic approach to serving these individuals. Minkoff and Cline have developed an implementation process for a model termed Comprehensive Continuous Integrated System of Care, in which within existing resources in any system, all programs can be designed as “dual diagnosis programs” meeting minimal standards of dual diagnosis capability, but each program has a different job, to provide matched services to its existing cohort of cod clients based on a set of consensus best practice principles within an integrated disease and recovery philosophy. In this symposium they describe the model, and the 12 step implementation process and implementation toolkit, based on strategic planning and continuous quality improvement principles. The remainder of the symposium is dedicated to describing the ongoing process of for implementation of system wide changes in the capacity to provide integrated services within Fayette Companies, a comprehensive community mental health, addiction, and primary health center in Peoria, IL, and its relationship to statewide efforts by the Illinois Departments of Mental Health (DMH) and Alcoholism and Substance Abuse (DASA).

### 1. COMPREHENSIVE CONTINUOUS INTEGRATED SYSTEM OF CARE: DESCRIPTION OF THE FRAMEWORK

Kenneth Minkoff, M.D., *100 Powdermill Road, Acton, MA 01720*

#### SUMMARY:

Individuals with co-occurring disorders are an expectation, not an exception throughout the service system, associated with poor outcomes and high costs in multiple domains. To provide more welcoming, accessible, integrated, continuous, and comprehensive services in a system of care with scarce resources, the CCISC model organizes a framework for system design in which every program is a dual diagnosis program meeting minimum standards of Dual Diagnosis Capability (DDC) (along with some specialized program elements that are Dual Diagnosis Enhanced) within the context

of its existing resources, but each program has a different job, based first on what it is already designed to be doing, and the people with co-occurring disorders already there, but providing matched services based on a set of research derived integrated consensus best practice principles within the context of its existing resources. Similarly, each clinician is a dual diagnosis clinician meeting minimal standards of dual competency regardless of licensure or job description, to provide properly matched services to the clients in his or her caseload. This presentation summarizes the model, the eight principles, and the twelve step program of CCISC implementation involving a strategically planned CQI process that incorporates a “top-down, bottom-up and back again” interactive design, in which the system, programs, clinical practices, and clinician competencies all progress together building on existing system strengths and resources.

### 2. CCISC: Real World Application and Implementation Strategies

Christie A. Cline, M.D., *ZiaPartners, 369B Third Street, #223, San Rafael, CA 94901*

#### SUMMARY:

Based on the author’s experience with implementation projects in 30 states and three Canadian provinces during the past 5 years, this presentation will discuss the specific strategies by which the CCISC framework can be adapted to the needs of real world systems with complex structures and limited resources. Topics will include the design of the quality improvement partnership that incorporates the top down, bottom up feedback loop, common traps regarding data collection, funding and training and how to avoid them, methods for implementing programmatic improvement and clinician competency development through the creation of an empowered cadre of practice improvement specialists or “change agents”, and other concrete techniques. The presentation will also discuss the CCISC toolkit, including system fidelity tool (CO-FIT), program self-assessment for dual diagnosis capability (COMPASS), and clinician self-assessment of attitudes and skills (CODECAT). There will be an emphasis on the fundamental clinical processes of welcoming engagement, integrated relationships, universal integrated screening, integrated longitudinal strength-based assessment, and stage specific assessment and treatment planning, as grounding features of clinical practice development. Finally, examples of application of the model will be discussed in a range of state and county systems across the U.S. and Canada.

### 3. HERE’S HOW IT PLAYS IN PEORIA: INTEGRATED SYSTEM DEVELOPMENT AND BEHAVIORAL HEALTH RECOVERY MANAGEMENT IN A COMMUNITY BEHAVIORAL HEALTH ORGANIZATION

Michael G. Boyle, M.S.W., *President and CEO Fayette Companies, 600 Fayette Street, Peoria, IL 61603*

#### SUMMARY:

An organization’s ten year journey to implement fully integrated treatment for co-occurring disorders will be detailed,

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including how this effort evolved into embracing evidence-based clinical practices and developing the Behavioral Health Recovery Management project. Difficulties experienced in implementing the CCISC model will be discussed and lessons learned in overcoming barriers will be highlighted, including changing merit pay and developing incentive systems tied to increasing supervision and improving clinical skills. The use of the COMPASS assessment tool for identifying and focusing on areas requiring improvement for integration of care will be described. Development of partnerships between psychiatry and primary care physicians to expand access to both psychotropic and addiction treatment medicines in an efficient manner will be detailed, as well as strategies to obtain these medications for indigent persons. Development and implementation of new service methodologies such as Recovery Coaching and outcomes obtained from these approaches will be reviewed. The process improvement approach developed by the Network for the Improvement for Addiction Treatment (NIATx) will be presented as a model for organizational change. Current and planned activities to further enhance the systems of care will be discussed, including movement to person-centered treatment planning and the development and use of technology devices to provide ongoing recovery supports with low labor costs.

### REFERENCES:

1. Minkoff and Cline, Changing the World: Design and Implementation of Comprehensive Continuous Integrated Systems of Care. *Psychiatric Clinics of North America*, Dec 2004.
2. Minkoff and Cline, Developing Welcoming Systems of Care for Individuals with Co-occurring Disorders, *Journal of Dual Diagnosis*, 2005.
3. White, W., Boyle, M., and Loveland, D. (2003) Behavioral Health Recovery Management: Transcending the limitation of addiction treatment. *Behavioral Health Management*.23 (3): 38-41.
4. Loveland, D.L. and Boyle, M.G. (2005) Manual for recovery coaching and personal recovery plan development. Posted at <http://bhrm.org/guidelines/addguidelines.htm>.

### SYMPOSIUM 11

FRIDAY, OCTOBER 3

2:00 p.m.-5:00 p.m.

#### HOW TO BE AN AGENT OF CHANGE IN PUBLIC AND COMMUNITY PSYCHIATRY

Carl C. Bell, M.D., *Community Mental Health Council, Inc.*, 8704 S. Constance, Chicago, IL 60617

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Describe the soft skill set needed to be a change agent in public and community psychiatry; 2.) List at least three cases in which psychiatrists became change agents and moved "science into service;" and 3) Identify at least one evidence intervention they can move into service in the community they serve and the tools needed to deliver that evidence-based service.

### OVERALL SUMMARY:

Because of its high internal validity, the randomized control trial (RCT) line of inquiry has enormous scientific value. However, because RCTs often lack external validity (i.e., no one in clinical practice sees the pristine research subjects in RCTs in the day to day world), these studies often lack relevance. Thus, despite a plethora of randomized control trial (RCT) research that shows efficacious biomedical and psychosocial interventions -- if they ever move into service -- it would take 17 years to move this "science into service." The presenters will offer examples of another approach, specifically a public mental health approach that is based on the theoretical principles driving the RCTs, but which has the added value of being done in the real world in large systems of care. So, rather than present "demonstration projects" so frequently found in NIMH review panels, the presenters will present "population-based demonstration projects" that influence thousands of individuals receiving services from the public sector. Using themselves as examples, Drs. Carl Bell, Dale Walker, Ken Thompson, Altha Stewart, and Phyllis Harrison-Ross will provide case models for how they have been able to accomplish this task. Specifically, Dr. Bell will discuss his work helping to transform the Chicago Department of Public Health, the New Orleans Recovery School District, Chicago Public Schools, and the Illinois Department of Children and Family Services. Dr. Walker will discuss his work with the One Sky Center and the American Indian Life Skills Development Curriculum. Dr. Thompson will discuss his role with SAMHSA and his efforts in facilitating this aspect of the Federal Government's efforts to move "science into service." Dr. Phyllis Harrison-Ross will discuss how to change the culture of community mental health centers to reflect the community. Dr. Altha Stewart will discuss the changing role of the psychiatrist administrator in a public mental health system.

#### 1. PSYCHIATRIC CHANGE AGENT IN CHICAGO'S DEPARTMENT OF PUBLIC HEALTH, NEW ORLEANS RECOVERY SCHOOL DISTRICT, AND ILLINOIS DEPARTMENT OF CHILDREN AND FAMILY SERVICES

Carl C. Bell, M.D., *Community Mental Health Council, Inc.*, 8704 S. Constance, Chicago, IL 60617

#### SUMMARY:

In 1998, Dr. Bell, et. al. introduced an evidence-based violence prevention intervention throughout the entire Chicago Public School system. From 2000 to 2002, Dr. Bell and team reduced the number of children being removed from their homes in McLean County, IL from 39/1,000 to 11/1,000. In 2006, Dr. Bell helped convince the Illinois Department of Children and Family Services to focus on children in foster care in a proactive manner to help them avoid potential maladaptive outcomes from their trauma. Illinois is one of the first states to set into motion an initiative aimed at providing a structured assessment of foster children's strengths and weaknesses and writing manualized interventions to foster resiliency in foster care children. In 2007, the Chicago De-

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partment of Public Health (CDPH) held a day-long forum. At *Toward a Healthy Future: A Public Health Paradigm for Physical and Mental Health*, renowned speakers presented innovative research findings on a public health approach to the prevention of mental and physical illness. Attendees included a group of over 60 high-level leaders and opinion makers. The ultimate goal of the *Toward a Healthy Future* initiative is to develop policies and programs that prevent disease in the Chicago population. CDPH plans to carry this initiative forward in a collaborative manner, working together with other City departments, health workers, and human service workers for the greatest impact. Drs. Bell and Mason will report on the concrete progress to date. In 2007, Paul Vallas – Superintendent, New Orleans Recovery School District requested Dr. Bell to come to help the New Orleans Recovery School District (RSD) assist Central Office staff, Principals, RSD Mental Health Support leadership and staff, private agency mental health support leadership (Children’s Bureau of New Orleans, Metropolitan Human Services District, Daughters of Charity, Tulane Department of Psychiatry, etc.), teachers, parents, youth and communities cultivate resiliency.

### **2. TAKING CARE OF HOME: TRANSFORMING CARE IN AMERICAN INDIAN COMMUNITIES**

R. Dale Walker, M.D., *Department of Psychiatry, Oregon Health Sciences University, 3181 S.W. Sam Jackson Park Road, Portland, OR 97239*

#### **SUMMARY:**

Dr. Walker will discuss his work with the One Sky Center and the American Life Skills Development Curriculum. A particularly important aspect of this work is suicide intervention and prevention, as well as improving prevention and treatment of substance abuse and mental health disorders in American Indian communities.

### **3. GETTING IT DONE: MOVING SCIENCE INTO SERVICE AT THE FEDERAL GOVERNMENT LEVEL**

Kenneth S. Thompson, M.D., *6108 Kentucky Avenue, Pittsburgh, PA 19203*

#### **SUMMARY:**

Dr. Thompson will discuss his role with SAMHSA and his efforts in facilitating this aspect of the Federal Government’s efforts to move “science into service.” Dr. Thompson will also share his thoughts about the essential feature of psychiatrist leaders who are committed to being change agents in public psychiatry.

### **4. CHALLENGES AT THE TOP: THE PSYCHIATRIST ADMINISTRATOR AS AN AGENT OF CHANGE**

Altha J. Stewart, M.D., *111 S. Highland Street, #180, Memphis, TN 38111-4640*

#### **SUMMARY:**

Dr. Altha Stewart will discuss the changing role of the psychiatrist administrator in a public mental health system. Dr. Stewart’s experiences underscore the fact that in many mental health systems, changes may not be welcomed and change

agents may encounter insurmountable barriers.

### **5. CULTURE CLASH: MAKING COMMUNITY HEALTH CENTERS REFLECT THE COMMUNITIES THEY SERVE**

Phyllis Harrison-Ross, M.D., *Psychiatrist and President, All Healers Mental Health Alliance, 41 Central Park West, Suite 10 C, New York, NY 10023*

#### **SUMMARY:**

Dr. Phyllis Harrison-Ross will discuss how to change the culture of community mental health centers to reflect the community. Dr. Harrison-Ross will speak to her experiences as president of the All Healers Mental Health Alliance (AHMHA), a group of psychiatrists and other health professionals who aim to facilitate the provision of mental health services in the wake of disasters, like Hurricane Katrina.

#### **REFERENCES:**

1. Literature References: Redd J, Suggs H, Gibbons R, Muhammad L, McDonald J, Bell CC. A Plan to Strengthen Systems and Reduce the Number of African-American Children In Child Welfare. *Illinois Child Welfare*, Vol. 2, No. 1 & 2, 2005, pp. 34-46.
2. Bell CC, Gamm S, Vallas P, Jackson P. Strategies for the Prevention of Youth Violence in Chicago Public Schools. In M. Shafii & S. Shafii (Eds). *School Violence: Contributing Factors, Management, and Prevention*. Washington, D.C., American Psychiatric Press, 2001, p. 251 - 272.
3. Commonwealth Department of Health and Aged Care Promotion, Prevention and Early Intervention for Mental Health -- A Monograph, Mental Health and Special Programs Branch, Commonwealth Department of Health and Aged Care, Canberra, 2000. [www.mentalhealth.gov.au](http://www.mentalhealth.gov.au).
4. Substance Abuse and Mental Health Services Administration, Center for Mental Health Services (2007). *Promotion and Prevention in Mental Health: Strengthening Parenting and Enhancing Child Resilience*, DHHS Publication No. CMHS-SVP-0175. Rockville, MD.

## SYMPOSIUM 12

**FRIDAY, OCTOBER 3**

**2:00 p.m.-5:00 p.m.**

### **HIV CARE FOR THE MENTAL HEALTH CLINICIAN: PART 2**

*Supported by the APA Committee on AIDS*

Marshall Forstein, M.D., *24 Olmsted St., Jamaica Plain, MA 02130*

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Describe the prevalence of HIV infection and other clinical issues relevant to patients with HIV and mental health; 2.) Identify emerging issues regarding risk patterns and challenges to prevention and risk reduction concerning patients with mental illness; and 3.) Demonstrate practical counseling exercises to encourage persons living with HIV/AIDS to reduce participation in high-risk behaviors.

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### OVERALL SUMMARY:

People with depression and other mental illness comprise a growing proportion of individuals living with HIV in the United States; at the same time, the prevalence of HIV among mentally ill individuals is at least seven times higher than in the general population. Such individuals, who report high rates of sex and/or drug risk behaviors, include HIV infected drug users, patients presenting at HIV primary care clinics for medical treatment, and HIV infected men who have sex with men (MSM). Apparently, knowledge of HIV and its transmission is insufficient to deter these individuals from engaging in HIV risk behaviors, suggesting that certain personality characteristics may increase the likelihood of engaging in high risk behavior. In the last symposium segment, HIV Care for the Mental Health Clinician: Part 2, attendees will be introduced to effective prevention and treatment programs for HIV infected persons that consider specific personality factors for reducing the practice of high risk sexual behaviors. Question and answer periods staggered throughout the program will provide the audience with an opportunity to discuss individual clinical cases and explore questions and concerns.

### 1. TREATMENT OF DEPRESSION AND ADHERENCE ILLNESS

Lisa Rizzano, Ph.D. *140 S. Michigan Avenue, Suite 900, Chicago, IL 60612*

#### SUMMARY:

Depression complicates the management of HIV infection. Depression is a common disorder. It can be disabling and impair adherence to ART. We will review and discuss the management of HIV/AIDS in patients with co-occurring depression and in patients with clinical evidence of central nervous system impairment. Recognizing the impact of psychiatric disorders and HIV/AIDS on the lives of patients is critical. The treatment of depression in a patient with HIV/AIDS can significantly enhance quality of life.

### 2. TRIPLE DIAGNOSIS: TREATING HIV, MENTAL ILLNESS, AND SUBSTANCE ABUSE

Jeffrey D. Watts, M.D., *2020 W. Harrison Street, Chicago, IL 60612*

#### SUMMARY:

Comorbid substance use is common among HIV positive individuals with psychiatric disorders resulting in serious adverse effects. Substance use in patients with HIV creates a host of complications. In this session, participants will leave with a better understanding of complications to successful treatment. The presenter will review intervention and treatment options for patients with HIV and co-occurring disorders.

### 3. RISK REDUCTION FOR PEOPLE WITH MENTAL ILLNESS

Milton L. Wainberg, M.D., *1051 Riverside Drive, Unit 112, New York, NY 10032*

#### SUMMARY:

Psychiatrists and other mental health professionals must play an active role in educating their patients about HIV risk be-

haviors and strategies for adopting and maintaining behaviors that prevent and reduce risk. This session will help clinicians increase their own comfort level in discussing sensitive issues specific to high risk behaviors regarding HIV acquisition and transmission.

### REFERENCES:

1. Weiser, Sheri D: The HIV epidemic among individuals with mental illness in the United States. *BioMed Central* 2005;1:186-192.
2. Hutton, Heidi E. and Treisman, Glenn: Understanding the role of personality in HIV risk behaviors: implications for prevention and treatment. *The Hopkins HIV Report*. 2001.
3. Brunnette M, Rosenberg S, Goodman L, et al: HIV risk factors among people with severe mental illness in rural and suburban areas. *Psychiatric Services*.
4. Robin L, Dittus P, Whitaker D, et al: Behavioral interventions to reduce incidence of HIV, STD, and pregnancy among adolescents: a decade in review. *Journal of Adolescent Health* 2004; 34:3-26.

### SYMPOSIUM 13

SATURDAY, OCTOBER 4

8:30 a.m.-11:30 a.m.

### INNOVATIONS IN LEVEL OF CARE ASSESSMENT FOR INDIVIDUALS WITH CO-OCCURRING PSYCHIATRIC AND SUBSTANCE DISORDERS

*Supported by the American Association of Community Psychiatrists*

Kenneth Minkoff, M.D., *100 Powdermill Road, Acton, MA 01720*

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Identify the clinical principles of utilization management that permit accurate matching of seriousness of illness in multiple dimensions to intensity of service or level of care required in multiple dimensions; 2.) Describe the flexible array of services that can be provided for individuals with co-occurring disorders in an integrated continuum of care; and 3.) Demonstrate the ability to use the ASAM PPC 2R cr.

#### OVERALL SUMMARY:

Individuals with co-occurring mental health and substance use disorders represent a population with poorer outcomes and higher costs in multiple domains, and often present in complex crisis situations requiring accurate assessment of level of care in systems that neither have developed organized utilization management strategies, nor an appropriate continuum of services, for these individuals. This symposium explores the issue of level of care assessment for individuals with psychiatric and substance use disorders first of all as a clinical issue, as opposed to a "managed care company" financial issue, and identifies the clinical principles of multidimensional assessment and their application to flexible service matching, utilization management, and level of care determination throughout an integrated continuum of care. These principles are then illustrated through a description of the most com-

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mon and widely available tools for level of care determination available for general system use – the American Society of Addiction Medicine Patient Placement Criteria – Second Edition Revised (ASAM PPC2R) (presented by Dr. David Mee-Lee, the lead developer of that document), and the American Association of Community Psychiatrists Level of Care Utilization System (LOCUS) (presented by Dr. Wes Sowers, the lead developer of that document). In order to demonstrate the application of these tools, participants will be provided with a complex case example, assisted to use the tools, as well as their own clinical judgment, to determine appropriate level of care for that case, and then participate in a discussion to explore the current state of the art and science of level of care determination for individuals with co-occurring disorders and the clinical challenges that emerge in addressing their needs.

### 1. PRINCIPLES OF UTILIZATION MANAGEMENT FOR INDIVIDUALS WITH CO-OCCURRING DISORDERS.

Kenneth Minkoff, M.D., *100 Powdermill Road, Acton, MA 01720*

#### SUMMARY:

Utilization management (UM) is a clinical science that is rarely taught, and as a result most clinicians experience UM through its external application by managed care organizations. This presentation explores the key clinical principles of utilization management as the organized process to determine how to accurately match intensity of service to seriousness of need. This process begins with the recognition that both service need of the patient, and intensity of service provided encompass multiple independent dimensions: level of residential support and security, level of staffing, level of medical or psychiatric management, level of nursing care required, intensity and content of programming, intensity of case management. Each of these dimensions can be connected to elements of the patient's clinical presentation, and may be predictive of various configuration of programming to respond to those elements. These dimensions relate to acuity and risk, level of medical complexity or need for medical/nursing management, cognitive capacity, willingness to engage in treatment, level of the patient's skill or capacity to address the issue or participate in treatment outside of a controlled setting, patient's learning or rehabilitative needs, and level of external support available (whether through clinicians, family or peers). In addition, for individuals with co-occurring disorders, each disorder can be considered primary, and the response to each disorder has to be integrated appropriately into any setting, and may be influenced by the dimensional assessment of each disorder listed above. Further, individual clients may shift (up or down) relatively quickly, so level of care determinations may be best applied flexibly within a vertically integrated continuum of care for both disorders. Within this framework, relatively small shifts in the patient's or client's capacity to engage with services may lead to significant differences in need for service intensity or level of care at any point in time. For this reason, systematic approaches to evaluating service intensity need or level of care can be very helpful.

### 2. UNDERSTANDING AND USING THE PATIENT PLACEMENT CRITERIA OF THE AMERICAN SOCIETY OF ADDICTION MEDICINE

David Mee-Lee, M.D., *4228 Boxelder Place, Davis, CA 95618*

#### SUMMARY:

Clinicians involved in planning and managing care often lack a common language and systematic assessment and treatment approach that allows for effective, individualized treatment plans and level of care placement. The Patient Placement Criteria for the Treatment of Substance-Related Disorders of the American Society of Addiction Medicine (ASAM) first published in 1991, provided common language to help the field develop a broader continuum of care. The Revised Second Edition (ASAM PPC-2R) published in April 2001, added criteria for co-occurring mental and substance-related disorders, which made the ASAM PPC-2R even more applicable to behavioral health systems.

### 3. LEVEL OF CARE UTILIZATION SYSTEM FOR PSYCHIATRIC AND ADDICTION SERVICES (LOCUS)

Wesley E. Sowers, M.D., *304 Wood Street, Room 505, Pittsburgh, PA 15222*

#### SUMMARY:

LOCUS is an instrument that is designed to be a simple and intuitive approach to making recommendations for intensity of behavioral health services based on quantitative ratings in six dimensions of function. In this presentation the basic process for the development of LOCUS will be reviewed and the principles that guided it will be discussed. The assessment dimensions and levels of service intensity definitions will be described and some examples of the rating process will be completed with participants. Extended applications of the LOCUS rating system will also be briefly described. Participants will have an opportunity to rate some sample cases independently and compare their ratings with others in the group and with recommendations suggested by the ASAM criteria.

#### REFERENCES:

1. Minkoff K, Zweben J, Rosenthal R, & Ries R. Development of service intensity criteria and program categories for individuals with co-occurring disorders. *J. Add. Dis* (2003) 22 (supp 1):113-29.
2. Mee-Lee D, Shulman GD, Fishman M, Gastfriend DR, and Griffith JH, eds. (2001). ASAM Patient Placement Criteria for the Treatment of Substance-Related Disorders, Second Edition-Revised (ASAM PPC-2R). Chevy Chase, MD: American Society of Addiction Medicine, Inc.
3. Mee-Lee, David (2006): "Development and Implementation of Patient Placement Criteria" in "New Developments in Addiction Treatment". *Academic Highlights. J Clin Psychiatry* 67:11: 1805-1807.
4. American Association of Community Psychiatrists, Level of Care Utilization System (LOCUS 2.001), Dallas, AACAP 2000.

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## SYMPOSIUM 14

**SATURDAY, OCTOBER 4**      **8:30 a.m.-11:30 a.m.**

### **ABUSIVE RESIDENTIAL CARE OF YOUTH: PROFESSIONAL AND ADVOCACY RESPONSE**

*Supported by the American Association of Community Psychiatrists*

Charles W. Huffine, Jr., M.D., 3123 Fairview Avenue, East, Seattle, WA 98102

**Discussant:** Maia Szalavitz

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) List the problems of abusive residential treatment including data to support that it is widespread and produces severe harm; and 2.) Design a model on how to partner with advocates and professionals from other fields to effect change for both individuals and systems.

#### **OVERALL SUMMARY:**

This group of professionals and advocates will introduce the audience to the phenomenon of abuse and maltreatment of youth in programs within the United States. These programs are either not regulated at all by states, or are “below the radar” of existing regulations. The audience will be treated to an example of collaboration between professionals and advocates that has begun to produce results. The chair, Dr. Huffine, will open with a brief overview of the problems in the “teen-help industry.” A representative of the Government Accountability Office will outline their investigation of this industry to date (or an alternate from Rep Miller’s EdLabCommittee). We will then have two parents whose sons were killed while in care. Both testified before the House Education and Labor Committee. They will speak about a growing advocacy initiative for parents whose children have been harmed or killed by this industry. Two youth survivors will share their experiences in residential programs. They will talk about their work in providing support and advocacy for other youth involved in such programs. A third youth will add balance by presenting her positive residential treatment story. Allison Pinto will share the results of her on-line survey of several hundred youth who have been in residential programs; some who reported positive experiences, but a majority shared examples of abuse practices. Wanda Mohr will share her research into the risks of unskilled restraint of youth and the mechanisms of death from such activity. She will describe her advocacy regarding programs that falsely purport to help troubled youth and their families. Christina Kloker Young will share her advocacy work regarding abusive residential treatment. Maia Szalavitz, an award winning author and journalist, will comment on the presentation.

#### **1. THE INVESTIGATION OF THE RESIDENTIAL CARE INDUSTRY**

Greg Kutz, Government Accountability Office, 441 G Street, N.W., Washington, DC 22130

#### **SUMMARY:**

Mr. Kutz will offer an update of the ongoing investigation of the GAO into the residential care industry. He will attempt to provide some data as to the numbers and types of programs catering to distraught parents and practices that are of concern they have documented in certain programs. The contents of this program element will be “hot off the press” and as yet not available data and qualitative analysis.

#### **2. PERSPECTIVE OF AN ADVOCATE AND PARENT’S WHO HAVE LOST SONS**

Bob Bacon, 726 W. Dunlap Avenue, Phoenix, AZ 85021

#### **SUMMARY:**

The pain of losing a child is incomprehensible to most, but to have that child die due to the neglect and abusive treatment of those to whom you have entrusted their care has many implications for families so victimized. Being powerless to withdraw your child from what you have assessed to be an abusive program due to custody issues is terrifying. This paper will be presented by advocates involved in such tragedies and will address the emotional, psychological and legal issues for parents and the role of advocacy in helping parents resolve and get beyond the pain and frustration of the acute trauma and find meaning in participating in reforms that will save other families the harm and losses. Parent professional partnerships will be emphasized in this paper.

#### **3. PERSPECTIVE OF YOUTH WHO HAVE BEEN RESIDENTS OF ABUSIVE FACILITIES**

Katherine Whitehead, 9964 Dean Oaks Court, Orlando, FL 32825

#### **SUMMARY:**

Being forced into a residential treatment program with no recourse for appeal of the decision for placement violates the human rights of youth. No situation illustrates this more than when the treatment is clearly abusive and incompetent. Youth who are involved in such care are clearly aware of this, yet helpless to correct the situation. This paper will present two stories that reflect this horrific situation and one that offers an example of how residential care may be an intervention that can meet critical needs if grounded in ethical principles and appropriate care. This paper will present some ideas for appropriate care and how all youth who have been involved in being placed in a residential program can partner with professionals as advocates against abusive treatment and seek for reform in the residential care industry.

#### **4. DATA SUGGESTING A WIDESPREAD PROBLEM**

Allison Pinto, Ph.D., 3123 Fairview Avenue, East, Seattle, WA 98102

#### **SUMMARY:**

The number and types of “teen help” facilities in the United States is unknown as are the numbers of youth they serve. This makes any accurate accounting for the types and impact of therapy programs impossible to measure. Given the large number of anecdotal reports of abusive treatment and methods of dealing with youth problems that have no standing in

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clinical practice, A START initiated a web based survey that might at least give some indication of what former residents of such facilities might report. In collaboration with a youth survivor web site, we solicited information from youth who had been in residential care. The results of that survey were that over 600 youth responded. A minority had positive things to report about their experiences in a residential program. The majority gave details of abusive care with details that clearly documented abuse. They reported being subjected to extreme weather without safe and appropriate clothing, being denied adequate nutrition and health care and were limited from contacts outside their program, including untended contacts with parents. They reported educational programs were inadequate and found after discharge that they were not appropriately accredited. Youth reports of the same programs were consistent even accounting for non-overlapping tenure in the same program and many programs were cited by youth for having abusive and inadequate programs. These preliminary results of this survey were reported to a Congressional hearing on October 10, 2007 as evidence that abuse and maltreatment in residential programs for youth is widespread and of serious concern given the consistency of the reports.

### 5. THE MODE OF DEATH FROM MISAPPLIED RESTRAINT

Wanda Mohr, Ph.D., 6131 Greenhill Road, New Hope, PA 18938

#### SUMMARY:

The history of residential treatment of troubled children has not always been a pretty one, for all the scientific progress that we have made. Patients have been unnecessarily incarcerated simply because they have lucrative insurance policies, they have been subjected to capricious punishment by staff members, they have been treated shabbily and in inhuman conditions, they have been secluded for hours, and they have been killed proximal to restraint use that may or may not have been a necessary act. This history continues to this day in many settings to which children are sent by desperate and uninformed families. This discussion focuses on the dangers that such treatment poses and the number of deaths that have been recorded specific to physical restraint in such facilities.

#### REFERENCES:

1. Alliance for the Safe, Therapeutic and Appropriate use of Residential Treatment, Child Neglect and Abuse in Private Residential Facilities: A summary of a Congressional Hearing, <http://pdfdownload.tsone.info/pdf2html.php?url=http%3A%2F%2Fwww.bazelon.org%2Fpdf%2FRTChearing10-9-07.pdf&images=yes>.
2. Alliance for the Safe, Therapeutic and Appropriate use of Residential Treatment, Fact Sheet. <http://www.google.com/search?client=firefox-a&rls=org.mozilla%3Aen-US%3Aofficial&channel=s&hl=en&q=Alliance+for+Saf+e+Therapeutic+and+Appropriate+Residential+Treatment+&btnG>.
3. Friedman RM, Pinto A, Behar L, Bush N, Chirolla A, Epstein M, Green A, Hawkins P, Huff B, Huffine C, Mohr W, Seltzer T, Vaughn C, Whitehead K, Young CK, Alliance for the Safe, Therapeutic and Appropriate use of Residential Treatment, Unlicensed residential programs: the next challenge in protecting youth, *Am J Orthopsychiatry*. 2006 Jul;76(3):295-303.
4. Mohr, WK, Petti, TA, & Mohr, BD, (2003) Adverse effects associated with the use of physical restraints. *Canadian Journal of Psychiatry*, 48, 330-337.

### SYMPOSIUM 15

SATURDAY, OCTOBER 4

2:00 p.m.-5:00 p.m.

#### ASPECTS OF VIOLENCE IN MINORITY GROUPS

*Supported by the APA Assembly Committee of Representatives of Minority/Underrepresented Groups*

Gail E. Robinson, M.D., D.P.H., *Toronto General Hospital, 8-231 E.N., 200 Elizabeth Street, Toronto, ON, Canada, M4W 3M4*, Ruth E. Frydman, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to recognize the factors that contribute to violence in various minority groups, and to identify approaches to prevention.

#### OVERALL SUMMARY:

Minority groups are frequently victims of violence both from external sources and within their own groups. Black Americans accounted for 13 percent of the U.S. population in 2005, but were the victims of about 15 percent of all of the nonfatal violent crime and about 49 percent of all homicides. Black homicide victims tended to be younger than white victims with about half being between the ages of 17 and 29, compared to about 37 percent of white victims. Females were more likely to be victimized by persons whom they knew, while males were more likely to be victimized by strangers. For homicides in which the victim-offender relationship was known, an intimate killed 31% of female victims age 12 or older and 4% of male victims 12 or older. In the USA the FGI reported that 15.6% of hate crimes reported to police in 2004 were founded on perceived sexual orientation. 61% of these attacks were against gay men, 14% against lesbians, 2% against heterosexuals and 1% against bisexuals, while attacks against GLBT people at large made up 20%. The experience of violence in these minority groups can lead to low self-esteem, self-loathing and a variety of mental health problems. This symposium will look at violence in a number of minority groups in order to understand why it occurs and suggest means of prevention.

#### 1. DOMESTIC VIOLENCE IN SOUTH ASIANS: AN EXAMPLE OF RESPONSE FROM A COMMUNITY

Jagannathan Srinivasaraghavan, M.D., *Southern Illinois University School of Medicine, Choate Mental Health Center, 1000 N. Main Street, Anna, IL 62906*

#### SUMMARY:

This paper will define domestic violence and United Nations

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declaration of Violence Against Women (VAW). Domestic violence is prevalent in all cultures all around the world. Among South Asians violence against women is committed in abortions of female fetus, infanticide, physical, sexual and psychological abuse, honor killing, disfigurement and bride-burning. Single, separated, divorced, pregnant women and adolescent girls are at highest risk of being victims of violence. Psychiatric and psychological sequelae resulting from violence can be enormous. Immigrants who are subjected to violence face additional problems due to language difficulties, lack of appropriate support system, unfamiliarity with laws and fear of deportation. Throughout the United States, Asian communities have responded to domestic abuse among their communities in establishing various programs and organizations for survivors of domestic violence. One such agency is Apna Ghar (Our Home), established in Chicago in 1990 to serve South Asian victims of violence. This shelter has served more than 5,000 women and children since its inception. The services provided include crisis line, legal advocacy, individual and group counseling, job assistance and training and therapy for children. Apna Ghar has also raised community awareness by community education and is actively involved in collaborative work with the state, city and local coalitions, councils, advisory boards, community organizations and forums.

### **2. THE EPIDEMIOLOGY AND MENTAL HEALTH CONSEQUENCES OF VIOLENCE AGAINST LESBIAN, GAY, BISEXUAL, AND TRANSGENDERED (LGBT) PEOPLE**

Mark Townsend, M.D., *1464 Nashville Avenue, New Orleans, LA 70115*

#### **SUMMARY:**

According to statistics compiled by the FBI, attacks against LGBT people comprise 15-20% of all reported hate crimes in a given year. However, epidemiological studies indicate a lifetime prevalence of violence or harassment in this population of up to 50%. Studies have demonstrated that such violence can lead to serious mental health problems among LGBT people including depression, anxiety disorders, substance use disorders, lowered self-esteem and increased suicidality. Some have suggested that violence against LGBT people has increased as a backlash to certain civil rights victories such as the Supreme Court's decision to strike down anti-sodomy laws in 2003. Others cite intolerance of homosexuality by certain religious and political groups as the basis for increased violence against this population. This paper will summarize what is known about the epidemiology of violence against LGBT people and the psychiatric sequelae. It will also explore the roots of such violence and how this is being addressed by mental health professionals and society.

### **3. VIOLENCE AGAINST WOMEN: WHAT HELPS?**

Gail E. Robinson, M.D., *Toronto General Hospital, 8-231 E.N., 200 Elizabeth Street, Toronto, ON, Canada, M4W 3M4*

#### **SUMMARY:**

Compared to many areas of the world, North America is seen as a place where women have equal rights and equal status.

However, despite the lack of formal prohibitions against such things as women's autonomous functioning and access to jobs and education, violence against women is epidemic in North America. Such violence includes homicide, assault, domestic violence, incest and child abuse, rape and elder abuse. These crimes are still rampant, often go undetected, are generally poorly dealt with by physicians, police and the courts and can result in low self-esteem and many mental health problems including depression, anxiety, PTSD and substance abuse. Prevention is not an easy matter. There is insufficient evidence about the efficacy of screening for abuse, treatment of victims or interventions for batterers. Despite this, individual clinicians must make decisions as to how to intervene. As well, education in the schools, public awareness campaigns, changes in the approaches by police and the courts and closer integration of various agencies are essential.

#### **REFERENCES:**

1. Jones, Janine M. Exposure to chronic community violence: Resilience in African American children. *Journal of Black Psychology*. 2007,33: 125-149.
2. Sampson RJ, Morenoff JD, Raudenbush S. Social anatomy of racial and ethnic disparities. *Am J Public Health* 2005;95:224-232.
3. Huebner DM, Rebchook GM, Kugeles SM: Experiences of harassment, discrimination, and physical violence among young gay and bisexual men. *Am J Public Health* 2004; 94: 1200-1203.
4. Prevention of violence against women: Recommendation statement from the Canadian Task Force on Preventive Health Care. Wathen CN, Harriet L. MacMillan HL, with the Canadian Task Force on Preventive Health Care. *CMAJ* 2003;169:582-584.

### **SYMPOSIUM 16**

**SATURDAY, OCTOBER 4**

**2:00 p.m.-5:00 p.m.**

#### **ADDRESSING BARRIERS TO EFFECTIVE DRUG TREATMENT IN PUBLIC MENTAL HEALTH**

Harold Carmel, M.D., *One Copley Parkway, #534, Morrisville, NC 27560*

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Demonstrate an understanding of barriers to effective treatment in the public mental health sector, including psychosocial and financial barriers, lack of information from the patient, and suboptimal prescribing practices; and 2.) Recognize effective public sector programs that can improve effective drug treatment.

#### **OVERALL SUMMARY:**

This symposium presents several perspectives on barriers to effective drug treatment in public mental health systems, from veterans' care and from the experience of a state mental health system. Understanding the perspective of the patient is important, and the report from the CIVIC-MD Project Team presents data on barriers to effective care, as the complex in-

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terplay of risk factors cumulatively impacts the effective treatment of patients with bipolar disorder. Another perspective is provided by a report of an audio computer-assisted self interviewing (ACASI) system, which provides the consumer with the opportunity to provide information that helps the clinician identify and address potential barriers. The experience of Missouri in addressing a crisis in the Medicaid pharmacy budget identifies methods that engages physicians in improving the quality of psychotropic medication prescribing, resulting in better quality care that is reflected in reductions in hospitalizations, urgent care/emergency room visits, and hospitalizations. These reports identify barriers to effective drug treatment in public mental health systems and point to effective methods to improve treatment.

### **1. IMPROVING CLINICAL DECISIONS AND ADHERENCE THROUGH PATIENT SELF ASSESSMENT**

Chris Reist, M.D., *5901 East 7th Street, Long Beach, CA 90822*

#### **SUMMARY:**

As mental health systems embrace the recovery model of treatment, much attention is given to important elements such as supported employment, peer support, and social skills training. As important to successful recovery are optimal benefit from medications and clinician access to important clinical information. Audio computer-assisted self-interviewing (ACASI) supports data collection by asking patients waiting for appointments clinical questions visually and aurally. It has improved outcomes for many disorders and has proved to be feasible in the treatment of severe mental illness in the clinic. This method can provide important information to the clinician, which can be used to help in addressing poor adherence to medications, an important barrier to improved outcomes. This talk will describe experiences with this technology and how it can inform provider decision making and improve patient care.

### **2. MEDICATION ADHERENCE, ETHNICITY, AND THE INFLUENCE OF MULTIPLE PSYCHOSOCIAL AND FINANCIAL BARRIERS IN VETERANS WITH BIPOLAR DISORDER**

John E. Zeber, Ph.D., *South Texas Veterans Health Care System, 7400 Merton Minter Road, (11c6), San Antonio, TX 78229*

#### **SUMMARY:**

Patients with bipolar disorder are often poorly medication adherent, resulting in deteriorating symptomatology, higher admission rates, and diminished quality of life. Many factors are strongly associated with adherence, including financial burdens and a variety of psychosocial factors. However, analyses typically consider potential barriers independently rather than conjointly from the patient's perspective, neglecting the complex interplay of risk factors. This study uses self-reported data to evaluate the differential and cumulative impact of nine barriers upon medication adherence. We recruited 435 patients from the Continuous Improvement for Veterans in

Care - Mood Disorders (CIVIC-MD, FY04-06) study, which examined quality of care provided to veterans with bipolar disorder. Surveys collected information on multiple financial and psychosocial adherence barriers: medication copayments, foregoing treatment due to cost, binge drinking, access difficulty, social support problems, poor therapeutic alliance, and low medication insight. Multivariable logistic regression modeled adherence as a function of perceived barriers upon adherence, controlling for demographics, homelessness, and affective symptomatology. Nearly half of the respondents reported adherence difficulty. Patients experienced an average of 2.8 barriers, with 41% perceiving at least three. Minority veterans reported poorer adherence than white patients (56 percent versus 40 percent,  $p=.01$ ), while claiming more overall barriers. Multivariable models revealed that the total number of barriers was significantly associated with poor adherence (OR=1.24 per barrier). The most significant were low medication insight, binge drinking, and difficulty accessing psychiatric care (ORs of 2.41, 1.95 and 1.73, respectively). Veterans with bipolar disorder experience multiple barriers to medication adherence.

### **3. IMPLEMENTING EVIDENCE-BASED MEDICINE IN PUBLIC MENTAL HEALTH SETTINGS**

Joseph J. Parks, M.D., *1706 East Elm Street, P. O. Box 687, Jefferson City, MO 65102*

#### **SUMMARY:**

Implementing evidence-based medicine has been a desired goal for the last decade, encouraged by The Institute of Medicine, The President's New Freedom Commission, and numerous articles by researchers and policy makers. However, achieving the vision has proven difficult and several approaches including Practice Guidelines, algorithms, and toolkits have failed to be broadly adopted due to being cumbersome, expensive, or distasteful to physicians. This session will review lessons learned from prior approaches and discuss implementing evidence-based medicine on an individual patient decision approach with regards to prescribing psychotropic medications.

### **4. DEMONSTRATING THE EFFECTIVENESS OF A PROGRAM TO IMPROVE PHYSICIAN PRESCRIBING IN THE MISSOURI MENTAL HEALTH SYSTEM**

Harold Carmel, M.D., *One Copley Parkway, #534, Morrisville, NC 27560*

#### **SUMMARY:**

Given limited resources, it is important to find ways to promote best practices in psychotropic prescribing, reduce costs and improve outcomes. We studied the effect of the first mailed educational message to a physician about psychotropic medication prescribing practices ("intervention") on the rate of change of pharmacy, hospital and outpatient costs in the Missouri Medicaid system. Patients were adults on psychotropic medications, continuously Medicaid-eligible throughout 2002-2005. A first intervention was mailed from 6/03 to 11/04. 3 groups were studied: 1.) Patients for whom a first intervention was mailed ("Direct Effect",  $N=16,962$ ); 2.) Pa-

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tients whose physician got a mailing on another patient, but who themselves needed no intervention (“Collateral Effect”, N=42,960); and 3.) A subset of the “Direct Effect” group with schizophrenia (“Subgroup,” N=6310). Pharmacy claims data were available for all three groups; inpatient and outpatient claims data for the “Subgroup.” For each patient, the rate of change in the outcome measure for the year after first intervention was compared to the rate of change for the entire 2002-2005 period before intervention. The analysis was based on a repeated measures analysis of covariance, using mixed model methodology to estimate mean cost/pt/m for each patient. A significant difference ( $p < 0.0001$ ) was found between the rate of change before and after intervention for psychotropic pharmacy costs in all three groups. “Subset” patients showed significant savings in inpatient costs (\$799/pt/yr, 24.1%) and outpatient costs (\$277/pt/yr, 3.8%), and a significant drop in admissions (0.132/pt/yr, 22.8%) and bed days (1.2/pt/yr, 26.9%). Estimated cost reductions for all three groups for the year after each patient’s first intervention totaled \$36.5 million. Mailed educational interventions to physicians on psychotropic drug prescribing practices can reinforce best practice and substantially reduce pharmacy, hospital and outpatient costs.

### REFERENCES:

1. Zeber JE, McCarthy JF, Bauer MS, Kilbourne AM: Data-points: Self-Reported Access to General Medical and Psychiatric Care Among Veterans With Bipolar Disorder. *Psychiatr Serv* 2007 58:740.
2. Parks J, Surlis R: Using best practices to manage psychiatric medications under Medicaid. *Psychiatr Serv* 2004;55: 1227-1229.
3. Koyanagi C, Forquer S, Alfano E: Medicaid policies to contain psychiatric drug costs. *Health Affairs* 2005;24:536-544.
4. JJ Parks: Commentary: Government Perspective. *J Clin Psychiatry* 2003;64 Suppl 17:37-8.

### SYMPOSIUM 17

SUNDAY, OCTOBER 5

8:30 a.m.-11:30 a.m.

#### FROM THE EVERYDAY TO THE EXOTIC: EXPERIENCES FROM THE BELLEVUE HOSPITAL COMPREHENSIVE PSYCHIATRIC EMERGENCY PROGRAM

Patricia M. Schwartz, M.D., *Bellevue Hospital Center, 462 First Avenue, CPEP, New York, NY 10016*, Kishor Malavade, M.D.

**Discussant:** Megan Poe, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Recognize the variety of psychiatric pathology that leads patients to present to a psychiatric emergency department; 2.) Differentiate when psychiatric presentations may be secondary to primary medical issues or substances; 3.) Define how cultural issues may influence the manner in which patients present with psychiatric symptoms; and 4.) Identify

some of the forensic issues relevant to emergency psychiatry.

#### OVERALL SUMMARY:

The Bellevue Hospital Center Comprehensive Psychiatric Emergency Program (CPEP) is among the largest psychiatric emergency settings in the country, seeing patients with a wide variety of psychiatric, medical and social issues. Given the unique cross-section of New York City’s population that it treats, the Bellevue CPEP’s cases range from the everyday, “bread and butter” substance induced psychosis to psychiatric presentations of exotic medical illnesses. In this symposium, residents will present cases that they have encountered in the Bellevue CPEP, each with a discussant from the CPEP faculty who will expand upon the issues brought up by the case and how its lessons might be applied in other psychiatric emergency settings.

#### 1. CASE 1: UNDERSTANDING A MOTHER AND SON WHO BOTH PRESENT TO THE EMERGENCY ROOM WITH PSYCHOTIC SYMPTOMS

Nomi Levy-Carrick, M.D., *NYU Psychiatry Residency Training Program, 550 First Avenue, NB 20N11, New York, NY 10016*

#### SUMMARY:

This presentation will examine the complex interplay between psychiatric pathology and cultural issues. It will address how families seek to explain the psychotic symptoms of their loved ones within the cultural framework that makes sense to them, and how their interpretation of their loved ones’ symptoms may itself seem psychotic. The discussion will focus on how to best evaluate the primary patient in such situations, and how to engage the family through psychoeducation in the treatment process.

#### 2. CASE 2: EVALUATING THE PRISONER IN THE PSYCHIATRIC EMERGENCY ROOM SETTING

Susan Gray, M.D., *NYU Psychiatry Residency Training Program, 550 First Avenue, NB 20N11, New York, NY 10016*

#### SUMMARY:

This presentation will address the complexity of evaluating patients under arrest, when privacy rights and the standards for psychiatric admission are often not as clear as they would be for civilians. The discussion will focus on the factors that should be considered when deciding whether a patient is psychiatrically stable enough to proceed to arraignment. The conflict between protecting the patient’s due process rights and ensuring appropriate mental health treatment will be emphasized.

#### 3. CASE 3: UNCAL HERNIATION PRESENTING WITH PSYCHOSIS

Mary Weathers, M.D., *NYU Psychiatry Residency Training Program, 550 First Avenue, NB 20N11, New York, NY 10016*

#### SUMMARY:

This dramatic and unusual case will be used to illustrate when a medical cause for psychiatric illness should be suspected. The presentation will address what clues from the evaluation and mental status exam point to a possible medical cause of

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psychosis, and what type of medical workup is indicated for new onset psychosis.

### 4. CASE 4: COCAINE INDUCED PSYCHOSIS

Katherine Maloy, M.D., *NYU Psychiatry Residency Training Program, 550 First Avenue, NB 20N11, New York, NY 10016*

#### SUMMARY:

This all-too-common case will be used as a launching pad for a discussion of substance induced psychosis. The presentation will address how cocaine induced psychosis can be distinguished from primary psychotic illness on the initial examination. It will also address the appropriate management of patients with cocaine induced psychosis, both during the psychotic episode and after its resolution.

#### REFERENCES:

1. Lautenschlager NT, Forstl H: Organic psychosis: Insight into the biology of psychosis. *Current Psychiatry Reports* 2001; 3(4):319-25.
2. Wong DF: Uncovering sociocultural factors influencing the pathway to care of Chinese caregivers with relatives suffering from early psychosis in Hong Kong. *Culture, Medicine & Psychiatry* 2007; 31(1):51-71.
3. Floyd AG, Boutros NN, Struve FA, Wolf E, Oliwa GM: Risk factors for experiencing psychosis during cocaine use: a preliminary report. *Journal of Psychiatric Research* 2006; 40(2):178-82.
4. Simon RI, Goetz S: Forensic issues in the psychiatric emergency department. *Psychiatric Clinics of North America* 1999; 22(4):851-64.

## SYMPOSIUM 18

SUNDAY, OCTOBER 5

8:30 a.m.-11:30 a.m.

### PRINCIPLES OF ANTIPSYCHOTIC PRESCRIBING FOR POLICY MAKERS

Alan Q. Radke, M.D., M.P.H., *444 Lafayette Road, North St. Paul, MN 55164-0979*, Joseph J. Parks, M.D.

**Discussant:** Brian M. Hepburn, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Recognize the impact two major government studies (CATIE, CUTLASS) has had on the prescribing of antipsychotic medications; 2.) List the principles of antipsychotic access, efficient utilization, and prescribing; 3.) Identify policy recommendations based on the current state of knowledge; and 4.) Articulate the current state of knowledge about antipsychotic efficacy and prescribing from all available studies to date.

#### OVERALL SUMMARY:

The National Association of State Mental Health Program Directors (NASMHPD) Board asked that the NASMHPD Medical Directors' Council advise the commissioners on antipsychotic prescribing in light of two recent government studies (CATIE and CUTLASS). To do this the Council: 1) Summarized the current state of knowledge about antipsychotic

efficacy and prescribing from all available studies to date; 2.) Developed a set of principles of antipsychotic access, efficient utilization and prescribing; and 3.) Made policy recommendations based on the current state of knowledge. The policy recommendations are: 1.) Ensure appropriate access; 2.) Ensure efficient utilization; 3.) Promote best-practice use of antipsychotic medications; and 4.) Ensure timely availability of dissemination of necessary clinical trial information. The bottom line is that the NASMHPD medical directors have critically reviewed the findings of current studies in the context of other data, summarized the findings, and made recommendations to help policy-makers understand the implications of said data on antipsychotic access and utilization. These findings and recommendations are solely those of the Medical Directors' Council and not of NASMHPD or its Board of Directors. Over the past decade, there has been a significant change in patterns of antipsychotic practice, with the newer, more costly and believed-to-be-more effective "atypical" agents replacing the older "typical" antipsychotic medications. While all of these medications are FDA-approved for the treatment of schizophrenia in adults, where their use has been best-studied, they are often utilized "off-label" for treatment of a wide variety of other conditions. The recent publication of the findings of two major government-funded studies (CATIE, CUTLASS) of comparative antipsychotic effectiveness in schizophrenia has caused uncertainty among patients, clinicians and policy makers about the relative utility of atypical and typical antipsychotic agents. To address the issue, NASMHPD medical directors critically reviewed the findings of these studies in the context of other data. Based on our review, we present a summary of findings and propose a set of recommendations for prescribing, access and pharmacy utilization management with regard to antipsychotic medications.

### 1. PRINCIPLES OF ANTIPSYCHOTIC ACCESS: EFFICIENT UTILIZATION AND PRESCRIBING

Alan Q. Radke, M.D., *444 Lafayette Road, North St. Paul, MN 55164-0979*

#### SUMMARY:

NASMHPD Medical Directors' Council is recommending that six principles be considered when prescribing of antipsychotics. They are: 1.) Treatment with antipsychotic medications, like any other treatment, should be individualized in order to optimally promote recovery; 2.) Treatment with antipsychotic medications should be as effective, safe and well-tolerated as possible; 3.) Treatment with antipsychotic medications should consider personal preference and vulnerabilities; 4.) Treatment with antipsychotic medications should provide value in terms of improved quality of life to the consumer; 5.) Treatment choices with antipsychotic medications should be informed by the best current evidence and must evolve in response to new information; and 6.) Cost considerations should guide antipsychotic medication selections if the preceding principles are met.

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### 2. PRINCIPLES OF ANTIPSYCHOTIC PRESCRIBING FOR POLICYMAKERS

Joseph J. Parks, M.D., 1706 East Elm Street, P. O. Box 687, Jefferson City, MO 65102

#### SUMMARY:

Over the past decade, there has been a significant change in patterns of antipsychotic practice, with the newer, more costly and believed to be more effective “atypical” agents replacing the older “typical” antipsychotic medications. While all of these medications are FDA-approved for the treatment of schizophrenia in adults, where their use has been best-studied, they are often utilized “off-label” for treatment of a wide variety of other conditions. The recent publication of the findings of two major government-funded studies (CATIE, CUTLASS) of comparative antipsychotic effectiveness in schizophrenia has caused uncertainty among patients, clinicians and policy makers about the relative utility of atypical and typical antipsychotic agents. To address the issue, NASMHPD medical directors critically reviewed the findings of these studies in the context of other data. Based on our review, we present a summary of findings and propose a set of recommendations for prescribing, access and pharmacy utilization management with regard to antipsychotic medications.

### 3. COMPARATIVE EFFICACY OF ANTIPSYCHOTIC MEDICATIONS: PUTTING CATIE IN CONTEXT

Rajiv Tandon, M.D., Room 235, Building 6, 1317 Winewood Boulevard, Tallahassee, FL 32399-0700

#### SUMMARY:

Over the past decade, there has been a significant change in patterns of antipsychotic practice, with the newer, more costly and believed to be more effective “atypical” agents replacing the older “typical” antipsychotic medications. The recent publication of the findings of two major government-funded studies (CATIE, CUTLASS) of comparative antipsychotic effectiveness in schizophrenia has caused uncertainty among

patients, clinicians and policy makers about the relative utility of atypical and typical antipsychotic agents. To address the issue, NASMHPD medical directors critically reviewed the findings of these studies in the context of other data. Over the past two years, the Medical Directors’ Council repeatedly reviewed the evolving evidence, sought to understand the studies’ findings, and discussed policy implications. The principal investigator of CATIE (Jeffrey Lieberman, M.D.) participated in a full-day discussion of CATIE in July 2006. Subsequently, findings and implications were discussed at monthly Medical Directors’ conference calls and three additional NASMHPD Medical Directors’ Council meetings (October 2006; May 2007; and December 2007). Review drafts were provided to psychiatrists active in researching antipsychotic medications and their input was considered and incorporated. Observations were also presented to the NASMHPD Commissioners in July 2006 and December 2007. This session will present a synthesis of the available research on the comparative efficacy of antipsychotic medications.

#### REFERENCES:

1. Lieberman JA, et al: Special Section of CATIE Baseline Data. *Psychiatric Services* 57: 1093-1126, 2006.
2. McEvoy JP, et al: Impact of the Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) Study on Clinical Practice. *CNS Spectrums* 7 (Suppliment 7):4-47, 2006.
3. McEvoy JP, Lieberman JA, et al: Effectiveness of Clozapine Versus Olanzapine, Quetiapine, and Risperidone in Patients With Chronic Schizophrenia Who Did Not Respond to Prior Atypical Antipsychotic Treatment. *American Journal of Psychiatry* 163: 600-611, 2006.
4. Stroup TS, Lieberman JA, et al: Effectiveness of Olanzapine, Quetiapine, Risperidone, and Ziprasidone in Patients With Chronic Schizophrenia Following Discontinuation of a Previous Atypical Antipsychotic. *American Journal of Psychiatry* 163: 611-622, 2006.

## WORKSHOPS

### WORKSHOP 1

THURSDAY, OCTOBER 2 8:00 a.m.-9:30 a.m.

#### THE WRATH OF GOD: A FAITH-BASED SURVIVAL PARADIGM (A PRESENTATION AND FILM ABOUT THE SURVIVORS OF THE 2005 EARTHQUAKE IN PAKISTAN)

Samoon Ahmad, M.D., 800 Fifth Avenue, New York, NY 10065

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Understand how faith, religion, society and family can play a large role in coping mechanisms and apply to their clinical practices; and 2.) Recognize that lack of basic necessities and resources cultivates passivity, dependency, hopelessness, resentment and ultimately the potential exploitation by extremist viewpoints.

#### SUMMARY:

On October 8, 2005 at 8:52 a.m., an earthquake measuring 7.6 on the Richter scale struck Pakistan and Kashmir. More than 250,000 people perished, though the official toll remains around 80,000. The majority of the dead were children. Millions (3.5) are homeless, with no relief in sight. This oral presentation and the 20 minute movie illustrates the role of faith as a coping mechanism in the earthquake victims. The project began after my visit to the earthquake region of Pakistan and Kashmir in May 2006, six months after the earthquake. An individual's ability to cope with disaster is a function of culture, religion, faith, and belief. Common patterns of trauma have emerged among those affected by disaster, and have been the subject of numerous studies. A literature search showed that no scientific papers have been written nor any protocol developed to study this population. Psychiatry is non-existent due to detachment from the modern world by virtue of its geographical inaccessibility. Individuals in this population may cope with disaster differently since they exist as nuclear extended families with strong religious and spiritual belief systems. Survivors were interviewed and videotaped utilizing the Traumatic Stress Symptom Checklist (TSSC). Despite a high prevalence of PTSD and Depressive Disorder, there was less incidence of suicide and more optimism due to faith and religious belief systems. The role of God was quite prevalent, as was a shift from a collective society to an individualistic one and disintegration of familial bonds. Faith, religion, society and family play a large role in coping mechanisms, but do not prevent the induction of PTSD or depressive symptoms. Lack of basic necessities and resources cultivates passivity, dependency, hopelessness, resentment and ultimately the potential exploitation by extremist viewpoints.

#### REFERENCES:

1. Terry J Lewin. Recovery from post-earthquake psychological morbidity: who suffers and who recovers? Australian and New Zealand Journal of Psychiatry 1998; 32:15-20.

2. Chie Watanabe. Social support and Depressive Symptoms Among Displaced Older Adults Following the 1999 Taiwan Earthquake. Journal of Traumatic Stress, Vol. 17, No. 1. February 2004, pp. 63-67.

### WORKSHOP 2

THURSDAY, OCTOBER 2 8:00 a.m.-9:30 a.m.

#### THE DESIGN AND RENOVATION OF THERAPEUTIC SPACE IN AN OVER-REGULATED AND UNDERFUNDED WORLD.

Virginia L. Susman, M.D., New York Presbyterian Hospital, Westchester Division, 21 Bloomingdale Road., White Plains, NY 10605, Philip Wilner, M.D., Jaques Black

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to recognize the challenges of meeting increasing regulatory standards for safety, while upgrading or re-creating aesthetically pleasing and restorative treatment environments and gain a deeper understanding of the therapeutic value of design.

#### SUMMARY:

To avoid restraint, to ensure individual dignity, to provide comfortable and pleasant surroundings, to promote well-being and health – these remain essential features of psychiatric inpatient treatment today. The original goal of William Tuke and early proponents of Moral Treatment was to promote mental and physical healing in an environment that emphasized aesthetics, exposure to natural surroundings, light, air and the individual needs of the patients. As asylums grew in size and patient volumes, the need for oversight and regulation within the asylums grew proportionately. Reformers like Dorothea Dix campaigned passionately to ensure clean and safe conditions within these enlarged institutions. Some have said that the legacy of such reforms has been intense regulatory oversight that interferes not only with design of therapeutic space but also with patient treatment. Anyone involved in maintaining and renovating facilities or designing new inpatient environments must deal with the conflicting demands of regulation, program needs, cost and the desire to create an environment conducive to healing. Reconciling patient comfort and privacy with code mandates for security and safety, and with long-term maintenance poses considerable challenges. Meeting increasing demands for patient safety can even mean having to modify real world items such as hardware, toilet fixtures, curtains, windows, and lighting. CMS, JCAHO, state health department regulations, AIA Guidelines for Design and Construction of Health Care Facilities all establish regulations which emphasize minimizing risk for violence and self-harm. Planners and designers are hard pressed to strike a balance between codified standards, patient comfort, clinical needs and creative expression. This workshop will highlight the history of psychiatric architecture, current regulatory standards, contemporary design features and the difficult choices between building a new and renovation of existing facilities.

## WORKSHOPS

### REFERENCES:

1. Edginton, B. The Design of Moral Architecture at the York Retreat. *J. of Design History*. 2003 16: 102-117.
2. Moran, J., Topp, L., Andrews J., eds. *Madness Architecture and the Built Environment: Psychiatric Spaces in Historical Context*. London: Routledge, 2007.

### WORKSHOP 3

**THURSDAY, OCTOBER 2**                      **8:00 a.m.-9:30 a.m.**

#### **DEVELOPING COLLABORATIVE CARE MODELS FOR BIPOLAR DISORDER: PATIENT-CENTERED CHANGES TO IMPROVE OUTCOME FOR SERIOUS MENTAL ILLNESS**

Mark S. Bauer, M.D., *Psychiatry Education-116A7, Building 5, Room C-110, Brockton Division, VA Boston Healthcare System, Brockton, MA 02301*, Martha Sajatovic, M.D., Amy Kilbourne, Ph.D., M.P.H.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Assess the principles of collaborative care models for serious mental illness; 2.) Identify the results of recent long-term multi-site studies of collaborative care models for bipolar disorder; and 3.) Implement issues and think through potential issues in their own systems.

#### **SUMMARY:**

Collaborative chronic care models (CCMs) improve outcome in chronic medical illnesses and in depression treated in primary care. These models emphasize patient-centered, recovery-oriented care that entails reorganization of services, provider behavior change, and augmentation of patient self-management skills (Bauer et al, 2006). We have developed and tested the first CCM to be used for chronic mental illnesses; two long-term, multi-site randomized controlled trials have demonstrated that such CCMs can improve clinical and functional (1,2) outcome in real-world (effectiveness) samples of individuals with bipolar disorder at little (2) to no (1) net cost. Such CCMs consist of (a) patient self-management skills enhancement via psychoeducation, (b) provider support through simplified practice, and (c) enhanced access and continuity of care implemented by a nurse care manager. These trials indicate that these principles are robust and can be operationalized in a variety of ways. Thus the evidence supports the use of CCMs and their readiness for dissemination to routine care in real-world practices. This workshop will first review the above evidence in some detail, with particular attention to adherence and medical risk (e.g., metabolic syndrome). We will then focus on strategies for implementation in the participants' healthcare systems. Rather than delivering a how-to lecture about an off-the-shelf intervention, we will take an implementation science approach and focus the workshop on how the intervention might be implemented in participants' specific healthcare systems. This process can also support implementation of other modalities for other serious mental illnesses. The workshop will be guided by the

following questions. In my specific healthcare system: 1.) What aspects of the intervention are of most value? 2.) What are the potential barriers to implementation, both internal and external, and what are potential solutions? 3.) What factors might enhance uptake, and how can I maximize them? and 4.) How would I develop and analyze a "business case" for implementation?

#### **REFERENCES:**

1. Bauer MS, McBride L, Williford WO, Glick HA, Kinoshian B, Altshuler L, Beresford TP, Kilbourne AM, Sajatovic M, Brown GR, Eilers SG, Evans D, Fenn H, Hauger R, Kirk GF, Mayeda A, Tekell J, Akiskal HS, Collins JF, Lavori P, for the CSP #430 Study Team. Collaborative care for bipolar disorder, Parts I & 2: intervention and implementation in a randomized effectiveness trial. *Psychiatric Services* 2006; 57:927-36 & 937-45.
2. Simon GE, Ludman EJ, Bauer MS, Unützer J, Operskalski B. Long-term effectiveness and cost of a systematic care management program for bipolar disorder. *Arch Gen Psychiatry* 2006; 63:500-08.

### WORKSHOP 4

**THURSDAY, OCTOBER 2**                      **8:00 a.m.-9:30 a.m.**

#### **COGNITIVE AND BEHAVIORAL TECHNIQUES TO IMPROVE BRIEF PHARMACOTHERAPY SESSIONS**

*Supported by the APA Committee on Psychotherapy by Psychiatrists*

Donna M. Sudak, M.D., *Drexel University College of Medicine, c/o Friends Hospital, P.O. Box 45358, Philadelphia, PA 19124*, Jesse Wright, M.D., Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Use key techniques for depressed patients; 2.) Use key techniques for patients with anxiety; and 3.) Use key techniques to promote medication adherence.

#### **SUMMARY:**

Cognitive Behavioral Therapy has been demonstrated to be effective, both with and without medication, for a wide range of psychiatric disorders. Although, many practitioners do not have the time or expertise to conduct CBT sessions, they nevertheless can learn key techniques to use when doing medication consults, to help reduce depressive and anxiety symptoms, enhance medication adherence, and improve outcomes. This workshop will focus on demonstrating the use of activity scheduling, responding to distressing cognitions, and other "high yield" interventions that can be implemented in briefer sessions. Participants will see role-play and videotape demonstrations of the intervention and learn the rationale for each strategy. We anticipate considerable discussion about the practical application of these techniques in clinical practice. The audience will receive information about other resources available to learn about this approach to patients.

## WORKSHOPS

### REFERENCES:

1. Beck, J.S. (2001). A cognitive therapy approach to medication compliance. In *Annual Review of Psychiatry*. Washington, D.C.: American Psychiatric Press.
2. Wright, J.H. (2003). Integrating cognitive therapy and pharmacotherapy. In Leahy, R. (Ed.) *New advances in cognitive therapy*. New York: Guilford.

### WORKSHOP 5

**THURSDAY, OCTOBER 2                      10:00 a.m.-11:30 a.m.**

#### **MENTAL HEALTH SYSTEMS AND DELIVERY OF CARE IN DEVELOPING COUNTRIES OF ASIA**

*Supported by the South Asian Forum*

Jagannathan Srinivasaraghavan, M.D., *Southern Illinois University School of Medicine, Choate Mental Health Center, 1000 N. Main Street, Anna, IL 62906*, Maniam Thambu, M.D., Gita Sadighi, M.D., Psy.D., Jitendra Trivedi, M.D., M.R.C., Dinara Amanbekova, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Recognize how some of the developing countries in Asia are handling mental health issues often with minimal funding and trained health care personnel; and 2.) Identify innovations that may have relevance to service delivery in rural and underserved areas of the U.S. that we may adopt.

#### **SUMMARY:**

Neuropsychiatric disorders including self-inflicted injuries account for 13% of the burden of diseases and 28% of the disabilities are due to mental health problems. By 2020, mental disorders are projected to contribute more than 15% of the total burden of diseases. Asia is home to more than half the population of the world. However, the majority of the population live in developing countries. There are 4.15 psychiatrists for 100,000 persons worldwide, however the ratio is much smaller in most Asian countries. Besides, there is a wide variation in policies, programs, financing, services, professionals and resources. There are common social problems such as rapid urbanization, unemployment, illiteracy, malnutrition, violence, substance abuse and increase in commercial sex workers. The health care budget remains small and only a tiny fraction is allotted for mental health. There are limited institutional and organizational support networks and lack of trained personnel and infrastructure. Stigma, communication problems, diagnostic and treatment bias are additional barriers. In this workshop, four scholars with knowledge about four different areas provide an overview of insight about Iran and the Middle East, India and South Asia, Malaysia and Southeast Asia and Kyrgyzstan and Central Asia. There is emphasis on reliance on non-specialized health workers, mental health training for primary care professionals, community-based rural mental health programs and integrating a multidisciplinary approach in the care of mentally ill. Some innovative programs may be suitable for our adoption in the delivery of care in rural areas. There will be ample time for interactive

exchanges and audience participation.

### REFERENCES:

1. *Mental Health Atlas 2005*. World Health Organization, Geneva, Switzerland.
2. Sadighi G, Srinivasaraghavan J. Culture and Mental Health in the Islamic Republic of Iran. Chapter in "Culture, Personality and Mental Illness in Third World Perspective" edited by Vijoy K. Varma & Anirudh Kala (in press).

### WORKSHOP 6

**THURSDAY, OCTOBER 2                      10:00 a.m.-11:30 a.m.**

#### **PARTNERING WITH YOUR PATIENT TO IMPROVE MEDICAL CARE**

Jeffrey T. Rado, M.D., M.P.H., *1700 W. Van Buren, 5th Floor, Chicago, IL 60612*, John C. Onate, M.D., Sarah Rivelli, M.D., Robert McCarron, D.O., Russell Lim, M.D., Glen L Xiong, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Recognize the obstacles to medical care and preventive health services for chronic mentally ill patients; and 2.) Implement different approaches that can enhance medical care for patients in various clinical settings.

#### **SUMMARY:**

Severe mental illness has been associated with 2-4 times increased mortality compared with the general population. Much of this can be attributed to diabetes, cardiovascular and respiratory diseases which are often associated with preventable risks factors such as smoking, obesity and dyslipidemia. Patients with chronic mental illness are also more likely to have medical illness go undiagnosed and are less likely to receive preventive medical services. Provision of medical care is hindered by poor communication between members of the health care team and lack of mutual accountability. Chronic paranoia, impaired reality testing and mood instability make providing medical care to this population challenging. These factors, in addition to a fragmented health care system, all create obstacles to adequate care. Further, antipsychotic medications themselves have been associated with obesity, diabetes and dyslipidemia. This has led to the recent publication of APA/ADA guidelines for medical monitoring of patients being treated with antipsychotics. This workshop will present practical approaches to improving medical outcomes in psychiatric patients. The focus will include outpatient, inpatient and emergency room settings. Preventive health care, including appropriate screening guidelines, will be reviewed. Integrative approaches with an emphasis on coordination of care will be discussed. Participants will have the opportunity to apply concepts in a case-based, interactive discussion led by program presenters.

#### **REFERENCES:**

1. Folson DP, McCahill M, Bartels SJ et al: Medical comorbidity and receipt of medical care by older homeless

## WORKSHOPS

- people with schizophrenia or depression. *Psychiatr Serv* 2002;53:1456-1460.
2. Druss BG, Rohrbaugh RM, Levinson CM: Integrated medical care for patients with serious psychiatric illness. *Arch Gen Psychiatry* 2001;58:861-868.

### WORKSHOP 7

**THURSDAY, OCTOBER 2                    10:00 a.m.-11:30 a.m.**

#### **TRANSFORMING THE CARE OF THE MENTALLY ILL IN JAILS AND PRISONS: THE NEW MENTAL HEALTH STANDARDS OF THE NATIONAL COMMISSION ON CORRECTIONAL HEALTH CARE**

*Supported by the APA Caucus of Psychiatrists Working in Correctional Settings*

Henry C. Weinstein, M.D., *1111 Park Avenue, New York, NY 10128*, Carl Bell, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Describe and discuss the history of the National Commission on Correctional Health Care; 2.) Describe and discuss the original decision to combine the medical and the mental health accreditation standards; and 3) Describe and discuss the need for separate mental health accreditation standards and the details of their development.

#### **SUMMARY:**

Dramatic reform of the correctional health and mental health systems began in 1974 when an American Medical Association (AMA) survey of sheriffs administering local jails discovered that nearly two-thirds of the jails' correctional health care consisted of first aid and 16.7 percent reported that not even first aid was available. Fewer had facilities for treating alcoholics and drug addicts, and only 14 percent had facilities for the mentally ill. Prison correctional mental health was no better and jails and prisons as a rule, lacked mental health screening mechanisms and testing services, thus, inmates' mental health problems went undetected and untreated. The National Commission on Correctional Health Care (NCCHC), which is the dominant organization in establishing correctional health care standards and accreditation was a spin off of the AMA program. The NCCHC was incorporated in 1983 and consists of 37 professional organizations, including the American Psychiatric Association. A group of distinguished psychiatrists developed a unique set of standards for mental health care in jails and prisons. It was decided however, for more efficient and effective accreditation, to combine these with the standards for health care in jails and prisons. This workshop will describe the perceived need for separate mental health standards, their development, and specific details of these new standards in order to elicit comments and discussion from the audience. The Chair of this interactive workshop is the President of the APA Caucus of Psychiatrists Working in Correctional Settings and is also the APA representative to the National Commission's Board of Directors. Other faculty include the Chair of the APA Council on Social Issues and

Public Policy who is also the Chair of the Accreditation Committee of the National Commission. They will be joined by the President of the National Commission on Correctional Health Care.

#### **REFERENCES:**

1. National Commission on Correctional Health Care. *Correctional Mental Health Care: Standards and Guidelines for Delivering Services*. Chicago: National Commission on Correctional Health Care; 2003.
2. American Psychiatric Association. *Psychiatric Services in Jails and Prisons*, 2nd ed. Washington, DC: American Psychiatric Association; 2000.

### WORKSHOP 8

**THURSDAY, OCTOBER 2                    1:30 p.m.-3:00 p.m.**

#### **HIGH TECH/LOW TECH: SHELTER ROTATIONS FOR OUTPATIENT TRAINING**

Ellen Berkowitz, M.D., *450 Clarkson Avenue, Brooklyn, NY 11203*, Van Yu, M.D., Stephen M. Goldfinger, M.D., Carolina Klein, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to recognize the value of including an outpatient shelter rotation into residency training to develop online curricula for this and other educational courses.

#### **SUMMARY:**

The residency training program at the State University of New York, Downstate Medical Center (DMC) is, to our knowledge, one of only two training programs in the US with a required rotation in homeless shelters as part of the outpatient training experience. In collaboration with the Project for Psychiatric Outreach to the Homeless, Downstate has, for the past six years, had residents spending a half-day a week working in various shelter settings throughout New York City. Most sites have a pair of residents assigned; experiences range from more traditional psychiatric evaluations to cooking groups, "how to get more sex" (start with ADLs!) groups to community outreach to street-dwellers on a mobile van. Sites range from relatively stable SROs serving the elderly or single women with children to short-term emergency shelters where women are assigned chairs in which to sleep. Direct supervision is provided by PPOH physician staff on-site, with biweekly group supervision shared by PPOH and Downstate clinicians. In addition to DMC trainees, volunteer residents and those doing electives from other New York training programs also work in city shelters. One of the challenges was providing essential didactics to these widely scattered trainees, exposing them to the extensive clinical and sociological literature on mental illness and homelessness. Each week, an article is sent out in an email to all residents, with one of them responsible for providing a summary of the reading. This summary, as well as Dr. Yu's own analysis of the implications of the piece, are distributed to the entire mailing list. This combination of "low tech" shelter rotations and electronic didactics

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provides, we think, a unique and highly successful model for reaching not only the many sheltered individuals in our city, but the trainees who treat them. Samples from the online syllabus will be provided, and the generalizability of the model to other situations will be explored. Attendees may, at the end of the meeting, join the online training network.

### REFERENCES:

1. Cohen NL, McQuiston H, Albert G, Edgar J, Falk K, Serby M. Training in community psychiatrist: new opportunities. *Psychiatric Quarterly*. 69(2): 107-116, 1998.
2. McQuiston H, Finnerty M, Hirschowitz J, Susser E. Challenges for psychiatry in serving homeless people with psychiatric disorders. *Psychiatric Services*, 54(5): 669-676, 2003.

### WORKSHOP 9

**THURSDAY, OCTOBER 2** 1:30 p.m.-3:00 p.m.

#### **HATE VIOLENCE: HOW CAN WE PREVENT IT?**

*Supported by the APA Assembly Committee of Representatives of Minority/Underrepresented Groups*

Ruth E. Frydman, M.D., *Portland VA Clinic, 73 Washington Ave., Portland, ME 04101*, Rahn K. Bailey, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Recognize risk factors and precursors of violence, especially hate violence; and 2.) Identify strategies for preventing it.

#### **SUMMARY:**

Given the prevalence of violence and hate violence in our society and the terrible physical and psychological damage that they cause, it is imperative to work on strategies for preventing violence. In this workshop, we will discuss violence prevention in general, but will focus on strategies for reducing hate violence, intimidation, and bias. Strategies can range from individual work to school-based, community-based, and more global approaches. Intervening early, increasing community dialogue, and exposure to others' experience can be effective ways to prevent aggression/bias or reduce its escalation. We are also interested in workshop participants sharing their own experiences in what does and doesn't work.

#### **REFERENCES:**

1. Wessler, Stephen: *The Respectful School: How Educators and Students Can Conquer Hate and Harassment*. Virginia: Association for Supervision and Curriculum Development, 2003.
2. "Speak Up!", Teaching Tolerance Program of the Southern Poverty Law Center, 2005.

### WORKSHOP 10

**THURSDAY, OCTOBER 2** 1:30 p.m.-3:00 p.m.

#### **CORE ELEMENTS OF NEW PUBLIC PSYCHIATRY FELLOWSHIPS IN PENNSYLVANIA**

Jules Ranz, M.D., *257 Judson Avenue, Dobbs Ferry, NY 10522*, Wesley E. Sowers, M.D., Cordula Holzer, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Identify the Core Elements of a Public Psychiatry Fellowship; 2.) Recognize the extent to which the Core Elements inform the various programs being developed in Pennsylvania; and 3.) Recognize the extent to which the various programs have circumstances that are unique to their programs.

#### **SUMMARY:**

As the oldest, largest and best known program training psychiatrists to become public sector leaders, the Columbia University Public Psychiatry Fellowship (PPF) has frequently been consulted by other departments of psychiatry planning to create public/community fellowship programs. In response, the PPF faculty have developed seven Core Elements it views as essential for such a training program. The State of Pennsylvania has recently awarded contracts to University of Pittsburgh, Lake Erie Osteopathic Medical College, and University of Pennsylvania to create public psychiatry fellowships. These programs will describe the extent to which they plan to adopt the Core Elements, and to what extent their programs will be different.

#### **REFERENCES:**

1. Ranz JM, Rosenheck S, Deakins S: Columbia University's Fellowship in Public Psychiatry. *Psychiatric Services* 47:512-516, 1996.
2. Ranz JM, Vergare MJ, Wilk JE, et al: The tipping point from private practice to publicly funded settings for early- and mid-career psychiatrists, *Psychiatric Services* 57:1640-1643, 2006.

### WORKSHOP 11

**THURSDAY, OCTOBER 2** 3:30 p.m.-5:00 p.m.

#### **ASSERTIVE COMMUNITY TREATMENT TEAMS (ACT): THE OPENING NIGHT AND THE EXTENDED ENGAGEMENT**

*Supported by the American Association of Community Psychiatrists*

Curtis N. Adams, Jr., M.D., *630 West Fayette Street, 4 East, Baltimore, MD 21201*, Ann Hackman, M.D., Walter Rush, M.D., Theodora Balis, M.D., Dan Siskind

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to list the challenges and opportunities of newly formed, fully established, and older Assertive Community Treatment Teams.

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### SUMMARY:

Assertive Community Treatment is evidence-based practice, which provides care for those with severe mental illness who are unable to get care in standard mental health clinics. Establishing a team requires finding suitable personnel, training them in the model, and monitoring fidelity to the model. Established teams can experience key staff turnover, drift from the model, and burnout among team members. We will discuss the challenges that a new team in St. Paul, MN and a middle-aged team in Boston, MA faces. We will also review the successes and struggles faced by an older ACT team in Baltimore, MD.

### REFERENCES:

1. SM Essock, N Kontos: Implementing assertive community treatment teams. *Psychiatr Serv* July 1995; 46:679-683.
2. Phillips SD, Burns BJ, Edgar ER, Mueser KT, Linkins KW, Rosenheck RA, Drake RE, McDonel Herr EC: Moving assertive community treatment into standard practice. *Psychiatr Serv.* 2001 Jun; 52(6):771-9.

### WORKSHOP 12

**THURSDAY, OCTOBER 2** 3:30 p.m.-5:00 p.m.

#### CATCH-18 SYNDROME

Charlotte N. Hutton, M.D., 240 Bayou Gentilly Lane, Kenner, LA 70065

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Recognize gaps in criteria for psychiatric services between adolescents and adults; 2.) Identify risks to adolescent patients in psychiatric service and continuity of care; and 3.) Demonstrate an understanding of the role of transitional services and where such transitional services can be strengthened.

#### SUMMARY:

Early recognition of psychiatric and behavioral disorders in children and adolescents has created a growing population of young people who are ageing out of emotional support services for children and adolescents. The world of adult psychiatric services does not recognize severe emotional disturbances and does not provide the same type of intense services that are more common to child and adolescent mental health systems. This is a challenging opportunity for those with disabling psychiatric disorders and their families. The transitions can be uneven and with limited communication about system support needs and effectiveness, as well as medication trials and secondary effects. Such challenges are magnified for specialty populations such as adolescents with co-morbid psychiatric and developmental disorders, those ageing out of foster care, and those with HIV disease. This workshop aims to identify the gaps, the epidemiology of those affected, the risks and outcomes in transition from adolescent and adult psychiatric services, and how these services can be strengthened.

### REFERENCES:

1. Vander Stoep A, Beresford A, Weiss N, McKnight B, Cauce A, Cohen P: Community-based Study of the Transition to Adulthood for Adolescents with Psychiatric Disorders. *Am J of Epidemiology* 2000; 152, 4: 352-362.
2. Dixon L, McFarlane W, Lefley H, Lucksted A, Cohen M, Falloon I, et al: Evidence-based practices for services to families of people with psychiatric disabilities. *Psychiatric Services* 2001; 52:903-910.

### WORKSHOP 13

**THURSDAY, OCTOBER 2** 3:30 p.m.-5:00 p.m.

#### UNRESOLVED WOMEN'S HEALTH ISSUES

Leah J. Dickstein, M.D., 35 Walden Street, Cambridge, MA 02140, Nada L. Stotland, M.D., M.P.H., Miriam Rosenthal, Ph.D., Tana Grady-Weliky, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to resolve these women's health issues both scientifically and ethically, educating all health and legal professionals and the public to greatly improve care for large female populations.

#### SUMMARY:

Major scientific and technological advances have improved the scope and efficacy of women's reproductive health care. However, there is a disproportionate impact of politics on women's reproductive health in the United States. Infertility treatment is virtually unregulated, but most stem cell research has been banned by the federal government. In several states, substance abuse problems in pregnant women have been criminalized, with adverse consequences: women who are prosecuted and jailed, and many other women who avoid care for fear of prosecution. Claims of negative psychiatric outcomes, though not supported by the literature, are now the central, and highly successful, strategy of anti-abortion activists. Domestic violence has received considerable attention from health professional organizations, but the lack of both understanding and resources leave most of the affected women without care or support. Informed mental health professionals can be the leaders in improving knowledge, policy, and care for affected women.

#### REFERENCES:

1. Dickstein L Spouse Abuse and Other Domestic Violence in "The Violent Patient" *The Violent Patient, The Psychiatric Clinics of North America* 11(4) December 1988: 611-627.
2. Stotland, N.L., and Stewart, D.E.[Eds.]:*Psychological Aspects of Women's Health Care: The Interface Between Psychiatry and Obstetrics and Gynecology*, Second Edition. Washington, D.C., American Psychiatric Press, Inc. 2001.

# WORKSHOPS

## WORKSHOP 14

THURSDAY, OCTOBER 2

3:30 p.m.-5:00 p.m.

### FROM CALIGARI TO HANNIBAL THE CANNIBAL: SINISTER PSYCHIATRISTS IN CINEMA

Sharon Packer, M.D., 105 E. 15th Street, New York, NY  
10003

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) List three early, mid-century, and contemporary cinema psychiatrists who show the continuum in depictions of sinister screen psychiatrists; 2.) Show how “sinister cinematic psychiatrists” reflect current ethical concerns (such as involuntary hospitalization, financial/sexual exploitation, alienation of affection); and 3.) Role play a dialogue about “sinister psychiatrists” with a potential patient without resorting to polemic

#### SUMMARY:

Most contemporary commentators on movies and mental illness focus on the ways that movies stigmatize psychiatric patients. Yet cinematic psychiatrists are exploited just as often, and are often portrayed as sinister or sadistic. Such characterizations were present since the earliest days of film. Dr. Caligari and Dr. Mabuse were two of the most memorable “mad doctors” of movies. Dr. Mabuse lived many lives before meeting his demise in Fritz Lang’s 1962 version. Caligari achieved greater fame, inspiring film critic Kraucauer to compare Caligari to Hitler. The trend continues. For Hannibal the Cannibal already appeared in as many movies as Dr. Mabuse, and the end is nowhere near in sight. Interestingly, diabolical doctors transcend gender, race, ethnicity, nationality, even economics, but therapists are portrayed better than MDs or RNs. If we understand why cinema depicts so many sinister psychiatrists, and why these portrayals appeal to the public, we can deal with these unkind characterizations directly, and use this data to engage resistant patients. Since most patients are familiar with films, we can speak to patients on their terms if we familiarize ourselves with these films. This workshop is not a political polemic. Rather, it examines examples of sinister cinematic psychiatrists, tells why such portrayals are popular, and shows how they help some patients address fears of relinquishing control to a “mind doctor” by rehearsing their fears and seeing that their worst fantasies do not come to pass. We help providers open dialogues with patients, by asking them to describe their most memorable movie scene about psychiatrists. We then address inappropriate or inaccurate expectations, derail negative transference before it begins, and build trust by showing that we value patients’ opinions.

#### REFERENCES:

1. Gabbard G & K Gabbard. *Psychiatry and the Cinema*. APA Press, 1999.
2. Packer S. *Movies and the Modern Psyche*. Praeger, 2007.

## WORKSHOP 15

FRIDAY, OCTOBER 3

8:00 a.m.-9:30 a.m.

### THE ROLE OF COUNTIES IN SERVING THE PSYCHIATRICALLY ILL

Roger Peele, M.D., 413 King Farm Boulevard, Apt. 401,  
Rockville, MD 20850, Margery Sved, M.D., Jagannathan  
Srinivasaraghavan, M.D., Daryl Plevy, J.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to explicate the roles of the counties in serving the psychiatrically ill.

#### SUMMARY:

There are over 3,000 counties in the United States. They range in county programs for people with psychiatric illnesses from no program to very comprehensive programs. After describing the roles of counties in Illinois, North Carolina, Virginia, and Maryland, members of the audience will be encouraged to explicate their experiences with county programs in their states and to discuss what they regard as the proper role for the counties.

#### REFERENCES:

1. *Achieving the Promise: Transforming Mental Health Care in America*. Pub no SMA-03-3832. Rockville, Md. US Department of Health and Human Services. New Freedom Commission on Mental Health, 2003.
2. Kleinman A, Das V, Lock M: *Social Suffering*. Berkeley, Calif. University of California Press, 1997.

## WORKSHOP 16

FRIDAY, OCTOBER 3

8:00 a.m.-9:30 a.m.

### ADAPTING ACT TO TREAT CLIENTS WITH BORDERLINE PERSONALITY DISORDER

David C. Lindy, M.D., VNS Community Mental Health  
Services, 1250 Broadway, 22nd Floor, New York, NY 10001,  
Neil Pessin, Ph.D., Macdara O’Sullivan, B.A., L.C.S.W.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to understand models for adapting ACT to the treatment of clients with borderline personality disorder.

#### SUMMARY:

Assertive Community Treatment, (ACT) is an evidence-based practice widely employed for the psychiatric management of people with serious and persistent mental illness who require more than routine care. ACT’s evidence base is primarily related to studies of ACT treatment of schizophrenic, bipolar, and schizoaffective clients. However, as ACT has been utilized throughout the United States and United Kingdom, clients with borderline personality disorder are increasingly referred to ACT teams. While these clients meet usual ACT admission criteria in their need for higher levels of care, they require a treatment approach that can be the very opposite of standard ACT protocols (e.g., demanding care versus

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avoiding care, limit setting versus assertive outreach, affect storms versus flat affect). Indeed, it is not known how well ACT fidelity criteria even apply to ACT borderline clients. The Visiting Nurse Service of New York's Community Mental Health Services has operated two ACT teams in New York City for over ten years. We have designed a treatment protocol for borderline clients in our ACT teams that utilizes aspects of dialectical behavior therapy, motivational interviewing, and specialized training and supervision. This workshop will present our model of the management of borderline ACT clients, and preliminary results. We hope to have a lively discussion with workshop participants, hear their feedback on our presentation, and learn from them about their experiences with ACT and borderline clients.

### REFERENCES:

1. Linehan, M. M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. New York: Guilford Press.
2. Basevitz, P., & Aubry, T. (2002). Providing services to individuals with borderline personality disorder in the context of ACT: Research base and recommendations. Ottawa: Centre for Research on Community Services Faculty of Social Sciences, University of Ottawa; available at: <http://www.sciencesociales.uottawa.ca/crcs/pdf/pinecrest.pdf>.

### WORKSHOP 17

**FRIDAY, OCTOBER 3** **8:00 a.m.-9:30 a.m.**

#### **HELPING CLINICIANS TO PROBLEM SOLVE: THE USE OF IMAGINATION**

Andrew J. McLean, M.D., 2624 9th Avenue, S.W., Fargo, ND 58103, Robert Factor, M.D., Ph.D., Ronald Diamond, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Describe how the concept of imagination can assist in problem solving; and 2.) Educate clinicians in problem solving.

#### **SUMMARY:**

Einstein once said imagination is more important than knowledge. Problem solving requires both of these and much more. The use of the term "imagination" in this workshop refers not necessarily to "creative thinking", but the concept of resourcefulness and the ability to project oneself ahead to consider the potential outcomes and consequences of a decision. Much has been written about clinical problem solving and decision making. From Game theory to Problem-Based Learning. Analogues and prototypes. Lumpers and Splitters. In medical and graduate schools, courses are taught to move students through the learning vector from novice to expert. Some come to clinical work with a well developed ability to "see the forest and the trees." However, most would not be able to articulate how they come to this or be able to pass this skill on to others. Some educators have used mnemonics to instruct. The mnemonic IMAGINE not only provides a tool to assist clinicians in core elements of problem solving, but

it reminds the user of a critical feature involved. The goal of this workshop is to provide a tool to enhance not only progressive learning, but also situational decision making. Come to the workshop to find out how!

### REFERENCES:

1. Elstein AS, Schwarz A: Clinical Problem Solving and Diagnostic Decision Making: Selective Review of the Cognitive Literature. *BMJ* 2002 March 23; 324(7339) 729-732.
2. Solomon C, Saint S, Drazen J: *New England Journal of Medicine Clinical Problem Solving*. McGraw-Hill. 2006.

### WORKSHOP 18

**FRIDAY, OCTOBER 3** **10:00 a.m.-11:30 a.m.**

#### **TELEPSYCHIATRY AND PUBLIC POLICY**

*Supported by the APA Illinois Psychiatric Society*

Jagannathan Srinivasaraghavan, M.D., *Southern Illinois University School of Medicine, Choate Mental Health Center, 1000 N. Main Street, Anna, IL 62906*, Kenneth G. Busch, M.D., Mary Dobbins, M.D., Daniel Yohanna, M.D., Meryl Sosa, J.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to understand the concept of telepsychiatry, its benefits, the needs and barriers in initiating and maintaining services, the process of achieving bills by legislators and an example of how the bill became law in the State of Illinois.

#### **SUMMARY:**

The American Telemedicine Association defines Telemedicine as 'the use of medical information exchanged from one site to another via electronic communication to improve patient's health status'. Telepsychiatry is the delivery of psychiatric services over distances, especially via interactive videoconferences, videophones and in-home messaging services. Currently there is extensive use of telepsychiatry in clinical consultations, professional and administrative communications, court testimony, distant learning and research. The service points can be endless from mental health clinics, emergency rooms, group homes, nursing homes, halfway houses, shelters, civil courts to schools and classrooms. The benefits by improving access, saving travel time and reducing costs can be enormous. There are definite barriers such as cost of equipment, familiarity with the technology, defining reimbursements, handling emergencies and containment as needed, addressing out of state consultations and adhering to privacy and by HIPAA regulations. Further, there are legal issues such as licensing, civil commitment and liability. Some states have taken a lead in passing telepsychiatry bills and many have not yet ventured into this arena. Even after a bill has been passed, often amendments become necessary as our knowledge and the technology keep improving. In this workshop, we will outline the scope, benefits and barriers of telepsychiatry, how to initiate and maintain the equipment needed and the nuts

## WORKSHOPS

and bolts of achieving legislation. In Illinois, Senate Bill 6 was signed on July 20, 2007, and the process of targeting and working with the House and Senate members to get the tele-psychiatry bill passed will be discussed. There will be ample time for questions and answers and audience participation.

### REFERENCES:

1. Psychiatric Needs in Underserved Areas. The report of the American Psychiatric Association's Presidential Task Force to develop a strategic plan to address psychiatric needs in underserved areas 2006.
2. McGinty KL, Saeed SA, Simmons SC, Yildirim Y.: Tele-psychiatry and Mental Health Services: Potential for Improving Access to Mental Health Care. *Psychiatr Q* (2006) 77:335-342.

### WORKSHOP 19

FRIDAY, OCTOBER 3

10:00 a.m.-11:30 a.m.

#### TRANSFORMING TRAINING: PSYCHIATRIC RESIDENCY AND THE RECOVERY MODEL IN A COMMUNITY MENTAL HEALTH CENTER

Edward A. Volkman, M.D., 302 Powell Road, Wynnewood, PA 19096, Jeffrey D. Bedrick, M.D., Nataliya Koliasko, M.D., Donald Thompson, Ph.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to construct both didactic and clinical curricula which move the resident toward a Recovery Model of treatment of serious mental illness.

#### SUMMARY:

The Recovery Model is the transforming paradigm which governs modern Community Psychiatry. The role of the psychiatric resident in this process is obscure as evidenced by the virtual absence of literature on the subject. This workshop attempts to present the efforts to accomplish this task in one particular large urban CMHC. This CMHC is one of two major outpatient training sites for a university residency. The clinic includes a full-time faculty member who is charged with the overall supervision of the residents' training. The CMHC is in the midst of transforming itself to the Recovery Model in all of its service lines. The Medical Director will present an overview of this effort including a brief history of the evolution of the Recovery Model. The Director of Research, who also chairs the Recovery Steering Committee, will outline the changes already achieved, and the plan for the completion of the transformation including the role of physicians, and how the training of residents fits into this plan. The Clinical Supervisor, a full-time faculty member who is sited at the clinic, will describe the didactic and clinical approaches to teaching the new model to the residents (PG-3's and PG-4's). The challenge is to refocus the residents from the Medical Model that has dominated residency training for decades to the new Recovery Model. In addition to didactic instruction this involves the use of individual and group supervision to constantly introduce and focus the residents on the extra-medical dimension

of treatment involving the inclusion of families, and contact with local community groups. Finally, a PG-3 resident will describe her experience of employing the new model. She will highlight the challenges of maintaining her medical expertise while exploring with her patients their increased role as partners in their treatment, and the surprising gratifications this approach has provided.

### REFERENCES:

1. McQuiston HL, Ranz JM, Gillig PM: A survey of american psychiatric residency programs concerning education in homelessness, *Academic Psychiatry* 2004; 28(2): 116-21.
2. Diamond RJ, Stein LI, Susser E: Essential and Nonessential Roles for Psychiatrists in Community Mental Health Centers, *Hospital and Community Psychiatry* 1991; 42(2): 187-89.

### WORKSHOP 20

FRIDAY, OCTOBER 3

10:00 a.m.-11:30 a.m.

#### OBESITY REDUCTION AND PREVENTION STRATEGIES FOR INDIVIDUALS WITH SERIOUS MENTAL ILLNESS

Alan Q. Radke, M.D., M.P.H., 444 Lafayette Road, North St. Paul, MN 55164-0979, Joseph J. Parks, M.D., Mary Diamond, D.O., M.A., Gerard Gallucci, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Recognize the epidemic within an epidemic of obesity within the population of persons with serious mental illness (SMI); 2.) Identify quality of care issues, including health neglect that have contributed to the epidemic; 3.) Articulate the need for behavioral health and physical health integration; and 4.) Treat using motivation, wellness, life style change integrated with recovery and the whole person approach.

#### SUMMARY:

The National Association of State Mental Health Program Directors (NASMHPD) requested that its Medical Director Council develop a technical report of the obesity epidemic of people with serious mental illness (SMI). The report team included experts in mental health and obesity prevention from across the nation, as well as state commissioners, state medical directors, consumers and advocates. This workshop will address the findings, conclusions and recommendations of the report to include: 1.) Epidemiology of obesity in people with SMI and the epidemic within an epidemic; 2.) Ethnic and cultural factors influencing obesity risk; 3.) Quality of care issues including health neglect that contribute to the epidemic; 4.) Behavioral health and physical health integration need to address obesity; 5.) Involvement of consumers in partnership with providers to advocate and promote obesity prevention initiatives; 6.) Direct and indirect costs of obesity and return on investment in obesity prevention and treatment; 7.) Moti-

## WORKSHOPS

vation, wellness and life style change integrated with recovery; 8.) Antipsychotic choice in light of the obesity risk and concerns of switching; 9.) Practical monitoring of obesity and treatment for weight loss in mental health clinics by psychiatrists and psychiatric nurses; 10.) Interventions matched with state of change and weight loss treatment including medications and surgery; and 11.) Prevention and treatment of obesity in populations of people with SMI including children and adolescents and the elderly.

### REFERENCES:

1. Strassnig M, Ganguli R: Weight Loss Interventions for Patients with Schizophrenia. *Clinical Schizophrenia and Related Psychoses* 51-61, 2007.
2. Hoffmann VP, Ahl J, et al: Wellness Intervention for Patients With Serious and Persistent Mental Illness. *Journal of Clinical Psychiatry* 66: 1576-1579, 2005.

### WORKSHOP 21

**FRIDAY, OCTOBER 3** 10:00 a.m.-11:30 a.m.

#### **LOST TO LOCK UP: PSYCHIATRIC CARE FOR PERSONS WITH CHRONIC MENTAL ILLNESS IN THE CRIMINAL JUSTICE SYSTEM**

*Supported by the APA/Bristol-Myers Squibb Fellows*

Jamae C. Campbell, M.D., 1424 Frankln Street, Columbia, SC 29201, Brian Palmer, M.D., M.P.H., Chantelle Simmons, M.D., Lindsay Dykema, M.D., M.P.H.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to 1.) Recognize the current need for treatment of chronic mental illness in correctional facilities; 2.) Identify the current policy and structural issues that have led to transinstitutionalization; 3.) Recognize the challenges of treating chronic mental illness in correctional settings; 4.) State the guidelines that should govern the treatment of inmates with chronic mental illness; and 5.) Define FACT and FICM.

### SUMMARY:

In recent decades, we have seen a steady flow of persons with mental illness out of psychiatric care and into prisons and jails. Today, according to the Department of Justice, a majority of our nation's prison and jail inmates have a mental illness. Furthermore, for patients with severe mental illness, the odds of being jailed are now 1.5 times greater than the odds of being hospitalized. In this workshop, we will examine the policy and structural issues that have led to transinstitutionalization and look at the place of correctional facilities within the broader context of the mental health care system. Building on this contextual foundation, we will explore the delivery of mental health care services. Many challenges interfere with the treatment of mentally ill patients in the correctional setting. We will explore some of these barriers to care including formulary restrictions, compliance, behavior management, and isolation. We will also discuss landmark cases and guidelines governing the treatment of inmates with chronic mental illness. Finally, with regard to the most appropriate treatment

interventions for persons with severe mental illness after they are released from jail, we will discuss the models of FACT (assertive community treatment for forensic populations) and FICM (intensive case management for forensic patients), reviewing the existing evidence base for these interventions and discussing their limitations in preventing jail recidivism.

### REFERENCES:

1. Morrissey J, Meyer P, Cuddeback G: Extending Assertive Community Treatment to Criminal Justice Settings: Origins, Current Evidence, and Future Directions. *Community Mental Health Journal*; October 2007, 43:5.
2. Lewis C: Treating Incarcerated Women: Gender Matters. *Psychiatric Clinics of North America*; September 2006, Volume 29, Issue 3.

### WORKSHOP 22

**FRIDAY, OCTOBER 3** 1:30 p.m.-3:00 p.m.

#### **IN LIVING COLOR: DEPRESSION TREATMENT IN PRIMARY CARE - A CURRICULUM FOR PRIMARY CARE PRACTITIONERS**

Alison L. Bondurant, M.A., *Office of Minority and National Affairs, American Psychiatric Association, 1000 Wilson Boulevard, Suite 1825, Arlington, VA 22209*, Annelle B. Primm, M.D., M.P.H., Majose Carrasco, M.P.A., Marin Swesey

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Interpret how depression can manifest itself in racial and ethnic minorities; 2.) Demonstrate how a physician's culture and their patients' cultures can affect diagnosis and treatment; 3.) Develop strategies for effective physician-patient communication about depression; 4.) Recognize ways to involve family and others in the patient's support system in therapy; and 5.) Identify depression screening and treatment options.

### SUMMARY:

In Living Color: Treating Depression in Diverse Populations is a groundbreaking training program jointly developed by the American Psychiatric Association (APA) and the National Alliance on Mental Illness (NAMI), designed to help primary care doctors better recognize and treat depression in patients of color and to improve physician-patient communication about depression. The curriculum uses an innovative approach to delivery of a comprehensive curriculum in which teams of psychiatrists, primary care physicians, mental health consumers, and family members serve as course instructors. APA and NAMI's goal is to move forward the agenda of eliminating mental health disparities by focusing on primary care clinicians who are often the only health professionals to which diverse and underserved populations turn when they have mental health needs. This workshop will explore depression in communities of color and key concepts of the curriculum that make it innovative and unique.

## WORKSHOPS

### REFERENCES:

1. Collins, KS, et al: Diverse Communities, Common Concerns: Assessing Health Care Quality for Minority Americans. Findings from the Commonwealth Fund 2001 Health Care Quality Survey.
2. Clever SL, et al: Primary care patients' involvement in decision-making is associated with improvement in depression. *Med Care* 2006 May; 44(5):398-405.

### WORKSHOP 23

FRIDAY, OCTOBER 3

1:30 p.m.-3:00 p.m.

#### **NO MORE SHAME OR BLAME: ACADEMIC AND FAMILY INSIGHTS INTO COMBATING STIGMA AND BUILDING RESILIENCY, PART I**

*Supported by the American Association of Community Psychiatrists*

Steven W. Jewell, M.D., *Child Guidance & Family Solutions, 312 Locust Street, Akron, OH 44302*, Richard Shepler, Ph.D., Terrie Casenhiser, Marjorie Cook, Lisa Oswald, M.S.W., Christine Confere, CMT

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) State the current literature on the pervasiveness and impact of stigma, especially on children struggling with mental illness and their families; and 2.) Recognize the personal impact of stigma on families and communities, as shared by both family members and family advocates.

#### **SUMMARY:**

Extensive research on the negative impact that stigma has on adults with mental illness has documented the sense of shame, feelings of blame, the need to keep the diagnosis secret, and the isolation, social exclusion, and hopelessness that are the common deleterious effects of stigma. The vast majority of the research on stigma relates to adults with mental illness, and thus its relevance to children and families is unclear. Nonetheless, children and families have been facing the impact of stigma for as long as we have been diagnosing children with psychiatric disorders. They have no doubt about the damaging effects stigma can have on them, and their ability or even willingness to pursue effective treatment. On the other hand, there is an increasing amount written in the literature about the concept of resiliency in children and families. In recent years, this has included more and more about strategies for building resiliency in the families of children with mental illness. In fact, resiliency can be seen as a protective factor against, or even an antidote for the negative effects of stigma. This two-part workshop will explore the complementary issues of coping with stigma and building resiliency in families of children with mental illness from the perspective of both the existing research base and the families themselves. In Part I, the presentation will review the results of the first large-scale, nationally representative survey of public knowledge, attitudes and beliefs on children's mental health. In Part II, the presentation will summarize recent writings on resiliency and efforts

in Ohio to operationalize those for the purpose of creating a road map for building resiliency in families of children with mental illness. More importantly, each academic presentation will be followed by the responses of family members and advocates, sharing their own personal stories of struggling with stigma and trying to build resiliency within their own families and communities. Their responses, and the opportunity for discussion with the audience at the end of each presentation, will bring home the reality of both the damaging effects of stigma and the protective effects of resiliency in a manner that a simple academic discussion could not.

### REFERENCES:

1. Pescosolido, BA, Perry, BL, Martin, JK, McLeod, JD, Jensen, PS: Stigmatizing Attitudes and Beliefs About Treatment and Psychiatric Medications for Children With Mental Illness, *Psychiat Serv* 2007; 58: 613-618.
2. Pescosolido, BA, Fettes, DL, Martin, JK, Monahan, J, McLeod, JD: Perceived Dangerousness of Children With Mental Health Problems and Support for Coerced Treatment, *Psychiat Serv* 2007; 58: 619-625.

### WORKSHOP 24

FRIDAY, OCTOBER 3

1:30 p.m.-3:00 p.m.

#### **CULTURAL COMPETENCE AND CLINICAL BOUNDARIES: PROVIDING COMFORT, SETTING EXAMPLES OR BREAKING RULES?**

Stephen M. Goldfinger, M.D., *Professor and Chair, Department of Psychiatry and Behavioral Sciences, SUNY Downstate Medical Center, Box 1203, 450 Clarkson Avenue, Brooklyn, NY 11203*, Ramotse Saunders, M.D., Nikhil Palekar, M.D., Azziza Bankole, M.D., Shilpa Diwan, M.D., M.P.H.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to describe several domains of treatment where clinicians must integrate the demands of cultural competence and the traditional framework for psychotherapeutic interactions

#### **SUMMARY:**

Cultural competence and sensitivity are considered essential features of our work- their integral role in treatment seemingly self-evident. Although widely accepted, little attention is paid to times when implications and expectations of such values come into conflict with traditional Western psychiatric practice and principles. At SUNY Downstate we are frequently able to 'match' consumers with providers of similar backgrounds with implications and dilemmas not usually addressed in the professional literature. MK is from a traditional Pakistani background. Her husband accompanies her to her first session; he is adamant that he be part of the treatment sessions. To insist on speaking to Ms. Khan alone risks offending him and possibly having Mr. Khan refuse to support her ongoing treatment. BA, a Nigerian woman, is scheduled to see Dr. B, a PGY3, also from the Yoruba. Her therapist delivers a baby

## WORKSHOPS

early in the treatment; BA's mother brings an elaborate baby gift. "Mother said she knew the 'rules' but as we were both Nigerian she had to give me something for the baby." Knowing that this was a 'boundary violation' for this traditional psychotherapy, the resident also knew that refusal would be viewed as a grave insult by the mother. His traditional Indian family always accompanies RZ a schizophrenic. Alone with the treating resident, his mother explains that, as a child, a marriage was arranged for him. The families exchanged rings and promises. Mother insists that the doctor tell her what to do and what to disclose to the potential bride's family. These cases challenge boundaries defined by western psychiatry: Is it acceptable that the patient always be seen with family? Can the treating physician give advice about personal (marriage) issues? How do we apply principles of cultural psychiatry in such situations to optimize treatment and therapeutic alliance? Can, and should, we sacrifice frame to maintain the relationship, and how do we know when we've gone too far?

### REFERENCES:

1. Saunders R, Hindi A, Vahia I; A new psychiatry for a new world: post-colonialism, post-modernism, and the integration of premodern thought into psychiatry, in Cohen CI and Timimi, S; *Liberatory Psychiatry Philosophy, Politics and Mental Health*, Cambridge University Press (in press, 2008).
2. Falicov CJ; Training to Think Culturally: A Multidimensional Comparative Framework. *Family Process* 34 (4), 373-388, 1995.

### WORKSHOP 25

FRIDAY, OCTOBER 3

1:30 p.m.-3:00 p.m.

#### DEVELOPING, IMPLEMENTING AND EVALUATING CRISIS INTERVENTION TEAMS IN CHICAGO

Amy C. Watson, Ph.D., *Jane Addams College of Social Work, University of Illinois at Chicago, Chicago, IL 60607*, Suzanne Andriukaitis, M.A., L.C.S.W., Jeffrey Murphy, Sue Pickett-Schenk, Ph.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Describe the history and collaboration leading to implementation of Crisis Intervention Teams (CIT) in Chicago; 2.) Identify the components of Chicago's CIT Model; 3.) Recognize the limited but growing evidence on CIT; 4.) State the difficulties in studying interventions such as CIT and limitations of existing evidence; and 5.) Evaluate preliminary findings relating to CIT effectiveness and factors that impact CIT.

#### SUMMARY:

Crisis Intervention Teams (CIT) are being implemented by police departments across the country as an intervention to improve law enforcement's response to persons with mental illness. After piloting CIT in two of its 25 districts, the Chicago Police Department is in the process of implementing CIT citywide. In this workshop, Lt. Jeffrey Murphy, Chicago's

CIT Coordinator and Suzanne Andriukaitis, Executive Director of NAMI-GC, will describe the components of Chicago's CIT program and how it grew out of the collaboration of the members of the police department, NAMI of Greater Chicago and representatives from the mental health and criminal justice systems. The roles of consumers, family members, and professionals in the development and delivery of CIT training will be highlighted, along with a discussion of implementation issues and experiences. Existing literature on CIT effectiveness will be summarized and the difficulties in conducting methodologically rigorous evaluations of real world interventions such as CIT will be discussed. Drs. Susan Pickett-Schenk and Amy Watson, from the University of Illinois at Chicago, will then present data from Chicago on the impact of CIT training on officer knowledge and attitudes and describe an in progress, NIMH funded study of CIT implementation in Chicago. The study is examining officer, organizational and community factors that influence CIT implementation and outcomes. Preliminary findings from the study and implications for the CIT model will be presented.

### REFERENCES:

1. Cordner, G. (2006). Office of Community Oriented Policing Services, U.S. Department of Justice. People with Mental Illness. In *Problems-Specific Guides Series*, 40. 2006 <http://www.popcenter.org/problems/PDFs/MentalIllness.pdf>.
2. Teller, J.L.S., Munetz, M.R., Gil, K.M., & Ritter, C. (2006). Crisis intervention team training for police officers responding to mental disturbance calls. *Psychiatric Services*, 57(2), 232-237.

### WORKSHOP 26

FRIDAY, OCTOBER 3

1:30 p.m.-3:00 p.m.

#### AN OUNCE OF PREVENTION, A LIFETIME OF CURE: CAN WE STOP MENTAL ILLNESS BEFORE IT STARTS?

*Supported by the APA/Bristol-Myers Squibb Fellows*

Peter L. Chien, M.D., M.A., *Department of Psychiatry (MC913), University of Illinois-Chicago, 912 S. Wood Street, Chicago, IL 60612*, Claudia F. Califano, M.D., Katherine Rye, D.O., Michael Ciranni, M.D., Ph.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able; 1.) Recognize the concept of prevention as it applies to psychiatry; 2.) Identify points along the lifespan where preventive measures can be applied; 3.) Describe evidence-based examples of prevention in psychiatry; and 4.) State the role of the psychiatrist within the treatment team when instituting preventive programs.

#### SUMMARY:

Preventive medicine, a cornerstone of medical care in other fields, has been relatively neglected in psychiatry despite

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the clear advantage of preventing the development of mental illness over treatment after it has occurred. Similar to other fields of medicine, empirically validated preventive strategies can be effective in preventing illness even when its complex pathophysiology is not perfectly understood. This workshop explores the role of prevention in psychiatry and re-evaluates the role of the psychiatrist in making prevention a component of providing mental health care. We introduce general concepts of prevention in mental health, as well as a model of envisioning prevention throughout the life span. We present at each stage of development, risk and protective factors, at-risk groups, and intervention strategies for reducing mental illness at that stage. We highlight the synergistic effects of preventive strategies across generations. Finally, we re-examine the role of the psychiatrist within the larger network of agencies involved in prevention according to this model. This workshop will discuss the opportunities and benefits of shifting from a reactive to a proactive model of care within psychiatry.

### REFERENCES:

1. Beardslee WR, Gladstone TR, Wright EJ, Cooper AB. A family-based approach to the prevention of depressive symptoms in children at risk: evidence of parental and child change. *Pediatrics*. 2003 Aug;112(2):e119-31.
2. World Health Organization: Prevention of Mental Disorders. Effective Interventions and Policy Options: Summary Report. Geneva: World Health Organization; 2004. [http://www.who.int/mental\\_health/evidence/en/prevention\\_of\\_mental\\_disorders\\_sr.pdf](http://www.who.int/mental_health/evidence/en/prevention_of_mental_disorders_sr.pdf).

### WORKSHOP 27

FRIDAY, OCTOBER 3

3:30 p.m.-5:00 p.m.

#### IMPLEMENTING THE PRACTICES OF WELLNESS SELF-MANAGEMENT AND SUPPORTED EMPLOYMENT IN SUPPORTIVE HOUSING PROGRAMS

Marilyn Seide, Ph.D., *Los Angeles County Department of Mental Health, 550 South Vermont, Los Angeles, CA 90020*, Suzanne Wagner, M.S., M.S.W., Van Yu, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to understand the elements of wellness self management and how they can be applied in supportive housing settings.

### SUMMARY:

The development of appropriate programs and services to assist persons with serious mental illness in maintaining themselves in the community has become a priority for those of us who are committed to assuring the viability, success and improved quality of life for these individuals. Creating service partnerships with consumers has been proven to improve the outcomes of mental health services, as well as client satisfaction. Representative from the Center for Urban Community Services will discuss two new evidence-based practices they are implementing that address the specific needs of supportive

housing residents to assist them in such areas as developing skills and utilizing resources in order to achieve and maintain recovery, and planning specific strategies for coping with persistent symptoms that lead to relapse. The approach to and outcomes of implementing Wellness Self-Management and Supported Employment in CUCS' supportive housing programs will be discussed.

### REFERENCES:

1. Herz, MI, Lamberti, JS, Mitz, J et al: A program for relapse prevention in schizophrenia: A controlled study. *Archives of General Psychiatry* 57: 277-283, 2000.
2. Leclerc, C, Lesage, D et al: Assessment of a new rehabilitative coping skills module for persons with schizophrenia. *American Journal of Orthopsychiatry* 70 (3): 380-388, 2000.

### WORKSHOP 28

FRIDAY, OCTOBER 3

3:30 p.m.-5:00 p.m.

#### FROM PATIENT TO PARTNER: REVERSING THE CRIMINALIZATION OF THE SERIOUSLY MENTALLY ILL

*Supported by the APA Corresponding Committee on Jails and Prisons*

Henry C. Weinstein, M.D., *1111 Park Avenue, New York, NY 10128*, Erik J. Roskes, M.D., LaVerne D. Miller, J.D., Arthur J. Lurigio

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1) Discuss the prevalence of mental illness within the criminal justice system; 2) Describe the roles of consumers in programs whose target population is justice-involved individuals with mental illness; and 3) Explore ways in which they can incorporate consumers into their treatment.

### SUMMARY:

In September of 2006 the U.S. Bureau of Justice Statistics reported that more than half of all prison and jail inmates had a mental health problem, including 705,600 inmates in State prisons, 78,800 in Federal prisons, and 479,900 in local jails. In addition, it is estimated that 720,000 of the people on parole and probation had mental health problems. While many interventions and diversion attempts have been developed to address this large and growing problem, only recently has work focused specifically on the role of the consumer as a partner in care for such patients. In keeping with the theme of this year's meeting, the APA Committee on the Mentally Ill in the Criminal Justice System is presenting a workshop on the Role of the Consumer in the De-Criminalization of Mental Illness. In this workshop, the audience will hear about the ways in which peers and peer-counselors can assist individuals with mental illness who find themselves mired in the criminal justice system. In addition, providers from both the mental health and criminal justice systems will present their points of view about this approach to care for such people. Active audience participation is expected.

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### REFERENCES:

1. Solomon, P. (2004). Peer support/peer provided services: Underlying process, benefits and critical ingredients. *Psychiatric Rehabilitation Journal*, 27(4): 392-401.
2. Gates, LB and Akabas, SH (2007), Developing Strategies to Integrate Peer Providers into the Staff of Mental Health Agencies. *Administration and Policy in Mental Health and Mental Health Services Research*, 34(3): 293-306.

### WORKSHOP 29

FRIDAY, OCTOBER 3

3:30 p.m.-5:00 p.m.

#### **NO MORE SHAME OR BLAME: ACADEMIC AND FAMILY INSIGHTS INTO COMBATING STIGMA AND BUILDING RESILIENCY, PART II**

*Supported by the American Association of Community Psychiatrists*

Steven W. Jewell, M.D., *Child Guidance & Family Solutions, 312 Locust Street, Akron, OH 44302*, Richard Shepler, Ph.D., Terrie Casenhiser, Marjorie Cook, Lisa Oswald, M.S.W., Christine Confere, CMT

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Recall the current literature on the concept of building resiliency in families, and its potential to be a protective factor in coping with the impact of stigma; and 2.) Describe the personal impact of building resiliency within families, as shared by both family members and family advocates.

#### **SUMMARY:**

Extensive research on the negative impact that stigma has on adults with mental illness has documented the sense of shame, feelings of blame, the need to keep the diagnosis secret, and the isolation, social exclusion, and hopelessness that are the common deleterious effects of stigma. The vast majority of the research on stigma relates to adults with mental illness, and thus its relevance to children and families is unclear. Nonetheless, children and families have been facing the impact of stigma for as long as we have been diagnosing children with psychiatric disorders. They have no doubt about the damaging effects stigma can have on them, and their ability or even willingness to pursue effective treatment. On the other hand, there is an increasing amount written in the literature about the concept of resiliency in children and families. In recent years, this has included more and more about strategies for building resiliency in the families of children with mental illness. In fact, resiliency can be seen as a protective factor against, or even an antidote for the negative effects of stigma. This two-part workshop will explore the complementary issues of coping with stigma and building resiliency in families of children with mental illness from the perspective of both the existing research base and the families themselves. In Part I, the presentation will review the results of the first large-scale, nationally representative survey of public knowledge, attitudes and beliefs on children's mental health. In Part II, the presentation will summarize recent writings on resiliency and efforts

in Ohio to operationalize those for the purpose of creating a road map for building resiliency in families of children with mental illness. More importantly, each academic presentation will be followed by the responses of family members and advocates, sharing their own personal stories of struggling with stigma and trying to build resiliency within their own families and communities. Their responses, and the opportunity for discussion with the audience at the end of each presentation, will bring home the reality of both the damaging effects of stigma and the protective effects of resiliency in a manner that a simple academic discussion could not.

### REFERENCES:

1. Masten, A: Ordinary magic: Resilience processes in development, *American Psychologist* 2001; 56: 227-238.
2. Werner, E, & Smith, R: Overcoming the odds: High-risk children from birth to adulthood. New York, Cornell University Press, 1992.

### WORKSHOP 30

FRIDAY, OCTOBER 3

3:30 p.m.-5:00 p.m.

#### **ADDING TRAUMA-FOCUSED, EVIDENCE-BASED PRACTICE TO STRONG COMMUNITY CARE: DOES IT FIT? HOW DO WE KNOW?**

Paula G. Panzer, M.D., *142 West End Avenue, #1S, New York, NY 10023*

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Describe obstacles to incorporating evidence-based practice in community settings; 2.) Identify strategies to address the obstacles; and 3.) Generate a clinician-driven monitoring tool for their work setting that is relevant to an evidence-based practice program enhancement.

#### **SUMMARY:**

The Jewish Board of Family and Children's Services Center for Trauma Program Innovation (CTPI) has brought several trauma-focused, evidence-based practices (EBP) to residential, day treatment and outpatient community settings. The treatments are of high quality. The staff is committed to client care and eager to best serve their community. Some are receptive to new practice, others are skeptical, and most are in the middle. The clients served are complex – their traumatic exposures are vast, their psychosocial development is disrupted by these experiences, their support systems are variable, their co-morbidity is high, and their resources are low. The treatments, settings and clients are, at best, an imperfect fit. Yet the need for enhanced, evidence informed community practice is paramount. The CTPI has introduced a method for bringing EBP to community practice settings which engages leaders, direct service providers and consumers in monitoring the practice change and evaluating the fit, while simultaneously tracking fidelity to the evidence-based model. This workshop will describe this method and its use with four, evidence-based or evidence informed practices: Trauma-Focused Cognitive Behavioral Therapy, Life Skills/Life Stories, Sanctuary®, and

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Trauma Systems Therapy. Issues of buy-in, implementation monitoring, consensus building, client parameters and outcomes, staff satisfaction, and fidelity will be discussed. The primary focus of this workshop will be on taking standardized treatments and evaluation tools and making them clinician driven – to foster buy-in and effective dissemination. Examples of EBP monitoring tools, made to fit daily service or supervisory practice (to limit paperwork burden) will be shared. Strategies for further program enhancement (adaptations of EBP so as to be relevant for the community served) within the constraints of daily practice will be discussed.

### REFERENCES:

1. Glisson, Charles and Schoenwald Sonja K. The ARC Organizational and Community Intervention Strategy for Implementing Evidence-Based Children's Mental Health Treatments. *Mental Health Services Research*, Vol. 7, No. 4, December 2005.
2. Hoagwood K, Burns BJ, Weisz J: A profitable conjunction: from science to service in children's mental health, In *Community-Based Interventions for Youth With Severe Emotional Disturbances*. Edited by Burns BJ, Hoagwood K. New York, Oxford University Press, in press.

### WORKSHOP 31

**FRIDAY, OCTOBER 3** 3:30 p.m.-5:00 p.m.

#### **INTEGRATING PSYCHIATRIC AND PRIMARY CARE: CHALLENGES AND SOLUTIONS**

*Supported by the APA/Bristol-Myers Squibb Fellows*

Sharon J. Kohnen, M.D., 829 East End Avenue, Pittsburgh, PA 15221, Cyndi Murrer, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this workshop, the participant should be able to: 1.) Recognize the importance of collaboration between psychiatric and primary care providers; 2.) Define the challenges to effective integrated medical and psychiatric care; and 3.) Identify two successful models for collaborative, integrated care.

#### **SUMMARY:**

Primary care providers are responsible for the majority of care for patients with common mental illnesses. There are numerous system, provider, and patient barriers to quality care that result in suboptimal psychiatric and medical care for patients with mental illness. Although the need is apparent, limited opportunities for collaboration between mental health and primary care providers exist. There is growing evidence for successful and effective models for collaborative care. The evidence supporting the need for integrated, collaborative care and the obstacles surrounding this complex issue will be presented. In addition, two successful models for psychiatric-primary care collaboration affiliated with University of California at Davis will be presented. The first is a collaborative care model for an outpatient psychiatric consultation service within a Sacramento County primary care clinic. The second is a consultation care model for an outpatient consul-

tation service through the University of California at Davis' Telehealth Program, which provides consultations for about 50 rural sites. Each program offers unique perspectives and potential solutions to overcoming the barriers to integrated psychiatric and primary care. This presentation will serve as a springboard into a interactive discussion about ways to overcome challenges to integrated care.

### REFERENCES:

1. Unutzer, J, Schoenbaum M, Druss B, Katon W: Transforming Mental Health Care at the Interface With General Medicine: Report for the President's Commission. *Psychiatric Services* 2006; 57: 37-47.
2. Hilty DM, Yellowlees PM, Cobb H, Bourgeois JA, Neufeld, JD, Nesbitt TS: Models of Telepsychiatric Consultation-Liaison Service to Rural Primary Care. *Psychosomatics* 2006; 47:152-157.

### WORKSHOP 32

**SATURDAY, OCTOBER 4** 8:00 a.m.-9:30 a.m.

#### **AT THE INTERSECTION OF SEXUAL ORIENTATION AND SEVERE MENTAL ILLNESS: ISSUES IN INTERVENTION AND REHABILITATION**

James A. Marley, Ph.D., L.C.S.W., *Loyola University, Chicago School of Social Work, Chicago, IL 60611*

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Identify how gay, lesbian, bisexual, and transgendered (GLBT) individuals who have a severe mental illness (SMI) experience stigma, social support, and self-esteem differently from heterosexuals who have a SMI; 2.) Identify key elements of specific intervention services for GLBT individuals who have a SMI; and 3.) Describe possible changes to existing services that would improve outcomes for GLBT individuals with a SMI.

#### **SUMMARY:**

Almost no research exists on how individuals who have both a severe mental illness and who self-identify themselves as gay, lesbian, bisexual, or transgendered function on a day-to-day basis, while struggling with two often-stigmatized labels. In particular, there is little research that explores the experience of stigma management, social support, and self-esteem and how these phenomena impact this group's overall functioning and ability to benefit from psychiatric services. This workshop will provide an in-depth analysis of this important topic from three different perspectives. First, the workshop will explore the general topic of sexual orientation and severe mental illness and review the results of a research project conducted by the workshop leader. The research is based on surveys completed by 319 individuals (GLBT with and without a psychiatric diagnosis, heterosexuals with and without a psychiatric diagnosis) who provided information about stigma, social support, life satisfaction, family and friend support, and self-esteem. Second, the workshop will use these findings as a starting off point to examine and discuss clinical services that

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address the needs of this vulnerable population. In particular, the development of family and friend support, increasing sexual orientation awareness among practitioners, and decreasing stigma will be explored through case examples. And third, the workshop will actively engage the audience in a discussion of their work with this population and the identification of other useful clinical services. Audience members will be encouraged to discuss case examples and help identify agency practices or innovative strategies that address the needs of this very vulnerable group. Through these three processes, the workshop will provide the audience with a thorough understanding of the issues that face this population.

### REFERENCES:

1. Hughes T, Haas A, Razzano L, Cassidy R, Matthews A: Comparing lesbian's and heterosexual women's mental health: A multi-site survey. *Journal of Gay and Lesbian Social Services* 2000: 11: 57-76.
2. Hellman R: Issues in the treatment of lesbian women and gay men with chronic mental illness. *Psychiatric Services* 1996: 47: 1093-1098.

### WORKSHOP 33

**SATURDAY, OCTOBER 4** **8:00 a.m.-9:30 a.m.**

#### **SUPPORTING PEOPLE WITH SEVERE AND CHRONIC MENTAL ILLNESS IN AN ACT TEAM WHO HAVE BEEN DIAGNOSED WITH TERMINAL ILLNESS**

Theodora G. Balis, M.D., *630 West Fayette Street, 4th Floor, Baltimore, MD 21201*, Ann Hackman, M.D., Curtis N. Adams, Jr., M.D., Patrick Aquino, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Recognize the unique challenges that people with severe and chronic mental illness face when diagnosed with a terminal illness; 2.) Arrange support for people with SMI and their families through decision-making of end of life care; and 3.) Identify ways to provide professional advice/treatment yet still allow the person with SMI to maintain as much control as possible during a time of decreasing control.

### SUMMARY:

People with severe and chronic mental illness have extra challenges to deal with when diagnosed with a terminal illness. These challenges include cognitive difficulties, distortions of reality, paranoia, fear of the medical profession, debilitating mood symptoms, and multiple other barriers to care. They often need help to navigate the medical system. Non-psychiatric providers may not understand how to communicate with people with SMI and how to convey the severity of illness, yet instill some hope, and help them make appropriate treatment decisions. These providers may fear taking anything but the most conservative measures in treatment due to worry that the person with SMI would not adhere to treatment or be able to understand it. It is the role of the psychiatrist and the mental health team to help other providers and people with

SMI fully consider treatment possibilities, how to conceptualize their life and quality of life, how to consider families, and how to consider the likelihood of death.

### REFERENCES:

1. Aupperle PM, MacPhee ER, Strozeski JE, Finn M, Heath JM. Hospice use for the patient with advanced Alzheimer's disease: the role of the geriatric psychiatrist. *Am J Hosp Palliat Care*. 2004 Nov-Dec;21(6):427-37.
2. Candilis PJ, Foti ME, Holzer JC. End-of-life care and mental illness: a model for community psychiatry and beyond. *Community Ment Health J*. 2004 Feb;40(1):3-16.

### WORKSHOP 34

**SATURDAY, OCTOBER 4** **8:00 a.m.-9:30 a.m.**

#### **MENTORING TO UNLOCK HEALTH CARE DISPARITIES: HOW TO ESTABLISH, PLAN AND USE A MINORITY MENTORING NETWORK**

*Supported by the APA/SAMHSA Minority Fellows*

Tracee M. Burroughs, M.D., *701 W. Pratt Street, Baltimore, MD 21201*, Aeva N. Gaymon-Doomes, M.D., Anne Ruminjo, M.D., M.P.H., Liwei Hua, M.D., Ph.D., Otis Anderson III, M.D., Toi Harris, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Recognize ways to aid minority trainees in career development; 2.) Identify steps that can be taken to establish a mentoring network; and 3.) Identify issues unique to minority medical students, residents, and fellows in training.

### SUMMARY:

Mental health care disparities form a critical issue affecting underserved patient populations. The reasons for these disparities are multifaceted, including limited access to physicians and appropriate care, leading to negative outcomes. In order to decrease the divide of healthcare disparities, there must be adequate numbers of physicians to serve these populations. Studies show that underrepresented minority physicians are more likely to work with underserved populations. In addition, these populations perceive a better treatment experience when working with physicians of similar backgrounds and are therefore, more likely to seek and comply with treatment. According to the 2003 report from the Sullivan Commission, underrepresented minorities, consisting of African Americans, Hispanic Americans, and American Indians, make up nearly 25 percent of the U.S. population, but account for less than 6 percent of physicians. To increase numbers of underrepresented minorities in the field of medicine, strong mentorship is necessary. Mentors have been proven to help cultivate and encourage trainees, reduce the sense of isolation that trainees feel, and guide them through career development. The purpose of this workshop is to examine ways to establish a successful mentoring program and to use mentoring to increase the number of underrepresented minorities in psychiatry.

## WORKSHOPS

### REFERENCES:

1. Cooper-Patrick L., Gallo J.J., Gonzales J.J., et al. Race, Gender, and Partnership in the Patient-Physician Relationship, *JAMA* 1999; 282 (6): 583-589.
2. Primm A., Lu F.G., Mental Health Disparities, Diversity, and Cultural Competence in Medical Student Education: How Psychiatry Can Play a Role, *Academic Psychiatry* 2006; 30:9-15.

### WORKSHOP 35

**SATURDAY, OCTOBER 4**                      **8:00 a.m.-9:30 a.m.**

#### **VIOLENCE AGAINST WOMEN AMONG SOUTH ASIANS: DOMESTIC VIOLENCE, ACID ATTACKS, AND HONOR KILLING**

*Supported by the APA Caucus of Asian American Psychiatrists*

Jagannathan Srinivasaraghavan, M.D., *Southern Illinois University School of Medicine, Choate Mental Health Center, 1000 N. Main Street, Anna, IL 62906*, Batool Kazim, M.D., Nurun Begum, M.D., Ph.D., Sadaf Hashmi, M.D., M.P.H.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to identify the violence against women among South Asians including severe domestic violence, acid attacks (most prevalent in Bangladesh), and Honor killing among many different groups.

#### **SUMMARY:**

United Nations Population Fund (UNFPA) reported that one in three women has been physically assaulted or abused in some way, typically by someone she knew, such as her husband or other member of her family. Many governments publicly condemn violence against women, but their commitment to stopping violence against women has been a failure in most countries. Violence against women happens in all races, cultures and socioeconomic groups. Asian Americans are one of the fastest growing population groups in the United States. Learning of some of the major problem areas among Asians sensitizes the therapists' need for cultural awareness and consideration of possible treatment options and preventive methods. In this workshop, we will focus on mainly three areas: domestic violence, acid attacks and honor killing. In the United States approximately four million women are battered by their husbands or partners every year and more than a million women seek medical attention for injuries caused by domestic abuse. Anxiety, depression and post-traumatic stress disorder often follow such abuse. A South Asian psychiatrist shares experience of domestic violence and successful recovery using her personal journey as an example. Throwing acid on others' face and body to cause grievous injuries is a barbaric act of vengeance, often perpetrated by men on young girls and women. The reason for attacks is often refusal of sexual advances or marriage proposal and the intent is to make the woman undesirable. Honor killing is a crime

committed against a woman by her male family members because the woman had violated the honor of the family. Though rare, acid attacks and honor killing are occasionally reported among Asian immigrants. There will be a presentation on the dynamics of these phenomena, along with possible clues to prediction and prevention. There will be ample time for audience participation and discussion.

### REFERENCES:

1. Begum AA: Acid violence: a burning issue of Bangladesh-its medicolegal aspects. *Am J Forensic Med Pathol.* 2004 Dec;25(4):321-3. Review.
2. Hussein M: Take my riches, give me justice: A contextual analysis of Pakistan's honor crimes legislation. *Harvard Journal of Law, and Gender* , 2006 Volume 29 p223-246

### WORKSHOP 36

**SATURDAY, OCTOBER 4**                      **8:30 a.m.-11:30 a.m.**

#### **SHAME AND SILENCE: UNDERSTANDING THE STIGMA OF MENTAL ILLNESS IN ASIAN AMERICANS**

Francis G. Lu, M.D., *Department of Psychiatry, 7M8, San Francisco General Hospital, 1001 Potrero Avenue, San Francisco, CA 94110*, Elizabeth J. Kramer, ScM.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able: 1.) Recognize how Asian-American patients present their stigma of mental illness that is related to cultural and family issues; 2.) Explain the use of the *DSM-IV TR* Outline for Cultural Formulation; and 3.) Define how skilled therapists manage stigma.

#### **SUMMARY:**

This three-hour media workshop will show portions of a 2007 DVD entitled, "Shame and Silence: Understanding the Stigma of Mental Illness in Asian Americans," followed by discussion using the *DSM-IV TR* Outline For Cultural Formulation. The DVD consists of five simulated interviews between clinicians and actors who play the roles of simulated patients. The cases include: 1.) A South Asian-American woman with bipolar disorder; 2.) A Vietnamese-American man with somatic presentation of depression and PTSD; 3.) A Chinese-American man with the Culture-Bound Syndrome of Neurasthenia; 4.) The parents of a Philipino-American child with ADHD; and 5.) A Korean-American woman with Major Depression and substance abuse. The clinicians are three psychiatrists (South Asian-American, Vietnamese-American, and Philipino-American) a Chinese-American psychiatric social worker, and a Korean-American psychologist. Discussion will follow each case. The interviews show how the stigma of mental illness manifests in Asian American ethnic subgroups in the individual, family, and community. The interviews demonstrate how clinicians can empathize with patients' and their families' perspectives: 1.) The idioms of distress that patients and families use to describe their distress; 2.) The impact of symptoms on the patients' lives; 3.) The explanatory models

## WORKSHOPS

and treatment pathways that patients and families may use that may be different from those known to the clinician; and 4.) The profound stigma and shame of mental illness. Finally, the interviews show how the clinician can work in partnership with patient, family and traditional providers to negotiate and implement a treatment plan that is acceptable to the patient. The two-hour DVD was co-directed by Elizabeth Kramer, ScM., and Francis Lu, M.D., and sponsored by the New York Coalition for Asian American Mental Health.

### REFERENCES:

1. Lim R (ed.) *The Clinical Manual of Cultural Psychiatry*. Washington, DC: APPI, 2006.
2. Koskoff H. *The Culture of Emotions DVD*. Boston: Fanlight Productions, 2002.

### WORKSHOP 37

**SATURDAY, OCTOBER 4 10:00 a.m.-11:30 a.m.**

#### **MANAGING THE LOSS OF POWER IN CHRONIC ILLNESS: FOSTERING RESILIENCE**

Madeleine Abrams, L.C.S.W., *Bronx Psychiatric Center, Albert Einstein College of Medicine, 3331 Bainbridge Avenue, Bronx, NY 10467*, Joseph Battaglia, M.D., Hillarie Budoff, M.D., Adi Loebel, M.D., Jeffrey Lucey, M.D., Kristina Muenzenmaier, M.D., Adriana Shuster, M.D., B.A., Daniel Smuckler, M.D., David Stern, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Recognize and consider the impact of loss of power on individuals and families coping with chronic illness; and 2.) Incorporate strategies for addressing resilience and empowerment in treatment and training.

#### **SUMMARY:**

Fundamental to an individual's sense of self is the ability to have control over his or her own life. Any person dealing with chronic physical or mental illness faces an inevitable loss of power and control over decision-making, role in family, work, and community. In some conditions, one loses control over basic physical or mental functions. In essence, one's total identity is challenged. For many of those facing such losses, the very meaning of one's life is profoundly and adversely affected. In the rush to alleviate symptoms and plan for care, this loss of what makes life meaningful may not be addressed or acknowledged. Ignoring or disregarding this loss of power and agency in one's personal life, family life, and work life only serves to compound the experience of alienation and disenfranchisement. Moreover, the impact of these losses and the failure to acknowledge them are experienced by family and friends as well. Feeling marginalized and worthless may be pervasive, especially in cases associated with a substantial reduction in social and occupational functioning. As the onset of major physical or mental illness is a widely occurring phenomenon, professionals may also experience this ambiguous loss in their personal and professional lives. In this workshop, we will present the results of an attitude and experience sur-

vey, the Ambiguous Attitude and Experience Survey (AAES). Further, we will propose a training model for addressing this important treatment issue. Training must address self-awareness and empathic listening, as well as ways to foster resilience and empowerment in patients and their families. Using experiential exercises, videotape, and clinical vignettes, we hope to engage the audience in discussion, and work together on understanding and addressing the loss of power in chronic illness.

### REFERENCES:

1. Boss, Pauline: *Ambiguous Loss*. Harvard University Press, Cambridge, MA, 1999.
2. Rolland, John S., MD: *Families, Illness, and Disability*. Basic Books, NY, 1994.

### WORKSHOP 38

**SATURDAY, OCTOBER 4 10:00 a.m.-11:30 a.m.**

#### **DEPRESSION, MANIA AND LEADERSHIP: PSYCHIATRIC LESSONS FROM GRANT, SHERMAN AND THE CIVIL WAR**

*Supported by the National Alliance on Mental Illness*

Suzanne E. Vogel-Scibilia, M.D., *219 Third Street, Beaver, PA 15009-2301*, S. Nassir Ghaemi, M.D., M.P.H., Michael O'Neil, Ph.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Discuss how the relationship between U.S. Grant and W.T. Sherman which is often acknowledged to change the course of the Civil War may have been forged by a mutual understanding of recovery; and 2.) Learn from history how this can impact on the day to day practice of fostering recovery in 2008, and apply these principles to their current practice.

#### **SUMMARY:**

Dr. Michael O'Neil, a Pittsburgh historian, will discuss the historical background of U.S. Grant and William T. Sherman both from the standpoint of their pivotal friendship and military collaboration. Dr. Ghaemi will discuss the impact of William T. Sherman's psychiatric symptoms that resulted in him being assigned to U.S. Grant's forces in the West, and how his baseline hypomanic mood disorder facilitated his military successes. Dr. Vogel-Scibilia will discuss how U.S. Grant's depression and alcohol addiction contributed to his management style and allowed him to develop coping skills that served him well during the Civil War. The concept of recovery as manifested in both the 1860's Civil War arena and the current times will be discussed in a way that participants can appreciate the lessons learned from the pre-medication era. Ample time will be allotted for audience participation and discussion.

#### **REFERENCES:**

1. Grant US: *Memoirs and Selected Letters*. Library of America Series, 1885.
2. Sherman WT: *Memoirs of William T. Sherman*. Library of America Series, Revised Edition, 1886.

## WORKSHOPS

### WORKSHOP 39

**SATURDAY, OCTOBER 4 10:00 a.m.-11:30 a.m.**

#### **SUS CASOS SON MIS CASOS (YOUR CASES ARE MY CASES): THE CHALLENGE OF BEING THE LANGUAGE COMPETENT RESIDENT ON OVERBURDENED CLINICAL SERVICES**

Stephen M. Goldfinger, M.D., *Professor and Chair, Department of Psychiatry and Behavioral Sciences, SUNY Downstate Medical Center, Box 1203, 450 Clarkson Avenue, Brooklyn, NY 11203*, Ellen Berkowitz, M.D., Juan Gallego, M.D., Lina Villegas, M.D., Carolina Klein, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to identify three conflicts that occur in the use, and abuse, of language competent residents to provide translating services in clinical settings.

#### **SUMMARY:**

The Spanish-speaking population in the U.S. is growing at an unparalleled rate, with a growing gap between the number of monolingual patients and those who can treat them. The pitfalls of treatment through translators and the potential consequences to patient care are well known. What, however, is the potential impact of being the only clinician who can talk with these patients...especially if the treator is also a trainee? Inpatient and outpatient services are flooded with Latin patients, often forcing residents into personal, clinical and sometimes ethical dilemmas. "A 14 year old Spanish immigrant was assigned to me. It was difficult for her to adapt to the inpatient unit rules and to communicate with the nurses and patients. She often got into trouble because of misunderstandings. Her way of avoiding trouble was coming to me whenever she didn't understand staff...I was her translator, but also ended up her 'protector'. My countertransference grew as I defended her against unfair accusations of misbehaving, rather than not understanding what was asked of her. Had I lost my objectivity and became too involved? I was investing a lot of time on this patient despite three other patients also assigned to me. What else could I do? They needed me to translate even for the simplest daily routine situations." "As one of two Spanish speakers in the clinic I felt special, and privileged, a key member in the clinic...they were always looking for help and I provided it. However, I soon became overwhelmed. Phone calls kept coming asking for help: "Can you see at least one?" My English-speaking patients started being neglected. One Dominican woman who "just needed a five minute medicine renewal" ended up being lithium toxic" taking my whole afternoon. Is giving Spanish patients to Spanish-speaking residents prevent others from learning about important cultural issues in this population? Do Spanish trainees end up having a case load that prevents them from learning to treat other cultures' patients?

#### **REFERENCES:**

1. Bernard AC, Summers A, Thomas J, Ray M, Rockich A, Barnes S, Boulanger B, Kearney P. Related Articles, LinkOut Novel Spanish translators for acute care nurses

and physicians: usefulness and effect on practitioners' stress. *Am J Crit Care*. 2005 Nov;14(6):545-50.

2. Jacobs EA, Sadowski LS, Rathouz PJ. The impact of an enhanced interpreter service intervention on hospital costs and patient satisfaction. *J Gen Intern Med*. 2007 Nov;22 Suppl 2:306-11.

### WORKSHOP 40

**SATURDAY, OCTOBER 4 10:00 a.m.-11:30 a.m.**

#### **WHY PSYCHIATRY IS A BRANCH OF MEDICINE: AN UPDATE ON SCREENING AND MONITORING CARDIOMETABOLIC RISK DURING MENTAL HEALTH TREATMENT**

John W. Newcomer, M.D., *660 S. Euclid Ave, St. Louis, MO 63110*, Joseph J. Parks, M.D., Dan Haupt, M.D., Elaine Morrato, D.P.H., M.P.H.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to list laboratory measures that are most predictive of cardiometabolic risk, and barriers to appropriate laboratory monitoring in mental health settings.

#### **SUMMARY:**

Persons with major mental illness are at increased risk for premature mortality from a variety of health conditions, including cardiovascular disease (CVD) and diabetes mellitus, with 25-30 years of potential life lost compared to the general population and an average age at death in the early 50s. The leading cause of death in this population is coronary heart disease, a form of CVD, with key modifiable risk factors that include overweight and obesity, dyslipidemia, hyperglycemia, hypertension and smoking. These risk factors are also associated with diabetes mellitus, a risk-equivalent condition for CHD. Compelling evidence indicates an increased prevalence and under-treatment of cardiometabolic risk factors, as well as under-treatment of diagnosed CHD and diabetes, among the mentally ill. These observations indicate substantial missed opportunities for primary and secondary prevention in the mentally ill population. One of the potential contributors to insufficient prevention efforts is a lack of understanding of the utility of different measurable risk indicators, ranging from body mass index (BMI) or waist circumference, to random or fasting or post-load plasma glucose, to various plasma lipid fractions that include total cholesterol, triglyceride, low density lipoprotein (LDL) cholesterol, high density lipoprotein (HDL) cholesterol, and composite measures like non-HDL cholesterol. Physician behavior and hospital or clinic policies regarding screening, monitoring and intervention efforts can also vary substantially across practice settings and different states. Existing public health guidelines offer a standardized approach to screening and monitoring in the general population, as well as guidance for increased efforts in higher risk populations such as patients with major mental illness. Modifiable risk factors are also subject to influence, both favorable and unfavorable, from psychotropic medication effects on adiposity, insulin sensitivity and secretion.

## WORKSHOPS

### REFERENCES:

1. Colton CW, Manderscheid RW. Congruencies in increased mortality rates, years of potential life lost, and causes of death among public mental health clients in eight states. *Prev Chronic Dis.* Apr 2006;3(2):A42.
2. Newcomer JW, Hennekens CH. Severe mental illness and risk of cardiovascular disease. *Jama.* Oct 17 2007; 298(15):1794-1796.

### WORKSHOP 41

**SATURDAY, OCTOBER 4** 1:30 p.m.-3:00 p.m.

#### COLLABORATING FOR QUALITY CARE IN THE COMMUNITY

Mary E. Johnson, R.N., Ph.D., 600 S. Paulina Street, 1030D, Chicago, IL 60612, Jeanne Clement, APRN, BC, FAAN, Ed.D., Julie Carbray, APRN, BC, Ph.D., Mary Meiselman, APRN, CNS, CADC

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Discuss collaborative opportunities between advanced practice psychiatric nurses and other psychiatric professionals; 2.) Identify four factors that contribute to effective collaboration; and 3.) Describe lessons learned from collaborative relationships.

#### SUMMARY:

Traditionally, mental health providers have practiced either independently or in collaboration with providers in similar disciplines. The complex needs of people with mental health disorders, the increase pressure from both CMHS and consumer advocacy groups to integrate the mind and the body and increasing shortages of mental health providers call for a professional workforce that can collaborate effectively. Effective collaboration requires more than co-location of providers. It requires a level of understanding and appreciation of differing roles and perspectives. In this workshop, we will describe exemplars of collaborative relationships between psychiatrists and advanced practice psychiatric nurses. Presenters will describe their collaborative experiences, including lessons learned, practice outcomes, and will explore the factors and their ideas about factors that contributed to, or were barriers to effective collaboration. Interactive discussions between presenters and the audience will be focused on potential collaborations that can contribute to positive outcomes for consumers, families and communities.

#### REFERENCES:

1. Herman, H, Trauer, T., Warnock, J: The roles and relationships of psychiatrists and other service providers in mental health services. *Aust NZ J Psychiatry*; 36: 75-80.
2. Jones A: Supplementary prescribing: relationships between nurses and psychiatrists on hospital psychiatric wards. *J Psychiatr Ment Health Nurs* 2006; 13:3-11.

### WORKSHOP 42

**SATURDAY, OCTOBER 4** 1:30 p.m.-3:00 p.m.

#### PSYCHIATRIC ADVANCED DIRECTIVES: WHERE ARE WE NOW AND HOW ARE THEY DONE?

*Supported by the American Association of Community Psychiatrists*

Hunter L. McQuiston, M.D., *Department of Psychiatry, The St. Luke's & Roosevelt Hospitals, 1090 Amsterdam Avenue, Suite 16C, New York, NY 10025*, Claire Henderson, M.B.B.S., Ph.D., Gloria Pope, Suzanne E. Vogel-Scibilia, M.D.

#### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should recognize the current status of psychiatric advanced directives and their alternatives and identify practical issues and techniques in applying them.

#### SUMMARY:

The recovery paradigm continues to gain traction in mainstream mental health services. A centerpiece of the paradigm is person-centered treatment planning, of which psychiatric advanced directives (PADs) are an important component. Twenty-five states have PAD statutes, but implementation varies among localities, among provider organizations, and from one clinician to the next. In the context of the likelihood of a recovery-driven increased demand for clinical competence in employing PADs, this workshop will focus on their practical application. After framing PADs as part of recovery, the panel comprised of a researcher, a clinician, and a consumer will first describe advanced directives and their alternatives and summarize recent research. They will subsequently present their experiences with PADs, concentrating on real-world implementation issues, leading to a discussion with session participants concerning the benefits and challenges of PADs and their implementation. This session will therefore present current academic and practice-based information on PADs and PAD alternatives and assist clinicians and program planners in facilitating their use.

#### REFERENCES:

1. National Resource Center on Psychiatric Advanced Directives (<http://www.nrc-pad.org/content/view/57/54/>).
2. Strauss JL, Henderson RC, Stechuchak KM et al. Results from a randomized controlled trial to facilitate the use of psychiatric advance directives: lessons learned. *Psychiatric Services* (in press).

### WORKSHOP 43

**SATURDAY, OCTOBER 4** 1:30 p.m.-3:00 p.m.

#### CAREER OPTIONS IN ADDICTION PSYCHIATRY: A WORKSHOP FOR APA MEMBERS-IN-TRAINING

*Supported by the American Academy of Addiction Psychiatry and APA Council on Addiction Psychiatry*

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John A. Renner, M.D., *VA Outpatient Clinic, 251 Causeway Street, Boston, MA 02114-2148*, Elizabeth Howell, M.D., M.S., Petros Levounis, M.D., M.A., Shelly Greenfield, M.D., M.P.H.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should have a better understanding of the range of career opportunities in addiction psychiatry and the professional gratifications associated with this type of work; and recognize more clearly how the treatment of substance use disorders fits within the general practice of psychiatry.

### SUMMARY:

The APA Council on Addiction Psychiatry recently conducted a survey of APS Members-in-Training (MIT) to determine their interest in fellowship training in addiction psychiatry and to identify issues effecting the decision to pursue fellowship training. MITs mentioned their lack of information about career opportunities in this subspecialty, and they identified specific concerns about the availability of stable employment, interesting positions, and competitive salaries. It was noted that many general psychiatry residencies lacked addiction psychiatry mentors and that some residents did not appreciate how the treatment of patients with substance use disorders fit into the practice of psychiatry. This workshop is organized to address these concerns and to provide specific information about career opportunities in addiction psychiatry. Faculty will describe a variety of career options including private practice and public sector psychiatry, and careers that primarily focus on resident training and mentoring, research and/or administration. Faculty will review their own careers and the factors that affected their choices among various professional options. Ample opportunity will be provided for MITs to question faculty and to explore the relative advantages and limitations of careers in this subspecialty.

### REFERENCES:

1. Renner JA, Hennessy G, Levin FR, Waldbaum M, Eld B: APA Addiction Psychiatry Career Survey: Residents' narrative responses. Poster abstracts from the AAAP 17th annual meeting and symposium. *Am J Addict* 2007; 16: 316-24.
2. Tinsley JA: Workforce information on addiction psychiatry graduates. *Acad Psychiatry* 2004; 28(1):56-9.

### WORKSHOP 44

**SATURDAY, OCTOBER 4** 1:30 p.m.-3:00 p.m.

#### HOW TO PARTNER WITH YOUTH

*Supported by the American Association of Community Psychiatrists*

Charles W. Huffine Jr., M.D., *3123 Fairview Avenue East, Seattle, WA 98102*, Lisa Cullins, M.D., Lorrin Gehring, Tricialouise Gurley, Karl Dennis

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be

able to: 1.) Recognize the power of youth/professional partnerships in facilitating a relevant treatment with youth; 2.) Identify the power of youth professional partnerships in enhancing the power of advocacy with administrators and policy makers who run and fund the programs serving youth; and 3.) List the barriers to youth partnership inherent to ones identity as a professional.

### SUMMARY:

This workshop will discuss forms of youth/professional partnerships from both a professional and youth perspective. It will touch on the challenges for professionals to be relevant to the youth they work with in various settings; as members of a treatment team with youth and family leadership and as co-advocates. It will discuss the struggles for youth to become collaborators and equal partners in their own care and forge a partnership with adults who are serving them. It will discuss how alone both professionals and youth are seen as self serving in their search for youth rights, quality services, and a strength-based approach to care, but as a team each can support the others legitimate claim to expertise. This workshop will start with opening statements by participants that will illustrate examples of youth professional partnership in treatment and advocacy settings. It will feature engaging the audience in an interactional discussion and will use techniques to foster interaction such as roll play.

### REFERENCES:

1. Huffine, C.W., Anderson, D. Family advocacy development in systems of care. In *The Handbook of Child and Adolescent Systems of Care: The New Community Psychiatry*. edited by A.J. Pumariega, N.C.Winters, San Francisco, CA: Jossey-Bass, 2003, pp 35 - 65.
2. Youth Group Development: a Website of the Technical Assistance Partnership <http://www.tapartnership.org/youth/default.asp>.

### WORKSHOP 45

**SATURDAY, OCTOBER 4** 3:30 p.m.-5:00 p.m.

#### TREATMENT OF PTSD: UPDATING THE 2004 APA PRACTICE GUIDELINE

*Supported by the APA Steering Committee on Practice Guidelines*

John S. McIntyre, M.D., *2000 Winton Road South, Rochester, NY 14618*, David Benedek, M.D., Laura Fochtmann, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be 1.) Informed about significant developments in the scientific literature regarding treatment of PTSD that could modify recommendations in APA's 2004 practice guideline and be able to apply this knowledge to the clinical care of patients with PTSD; 2.) Compare recommendations available from other sources (e.g., 2007 Institute of Medicine report); and 3.) Recognize how evidence rating systems can influence recommendations.

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### SUMMARY:

APA practice guidelines provide evidence-based recommendations for the treatment of patients with psychiatric disorders. Currently, 14 APA practice guidelines are available. Important knowledge regarding the treatment of post-traumatic stress disorder (PTSD) has accrued since publication of APA's guideline on this topic in 2004. Treatment recommendations have also been promulgated by other organizations including the Veterans Administration/Department of Defense and the Institute of Medicine. Workshop panelists will review APA's guideline development process, summarize significant developments in the scientific literature regarding PTSD treatment, and discuss how evidence rating systems can influence treatment recommendations. Attendees are invited to discuss how current evidence and the evidence-based recommendations of different organizations may influence their clinical practice.

### REFERENCES:

1. American Psychiatric Association. Practice guideline for the treatment of patients with ASD and PTSD. Arlington, VA: APA, 2004. Available online at [www.psychiatryonline.com](http://www.psychiatryonline.com).
2. Ursano RJ et al. 2008 guideline watch. Arlington, VA: APA, in press.

### WORKSHOP 46

**SATURDAY, OCTOBER 4**                      **3:30 p.m.-5:00 p.m.**

#### **HIDE OR SEEK: TREATING IMPAIRED COLLEAGUES**

*Supported by the APA Committee of Residents and Fellows*

Molly K. McVoy, M.D., 11100 Euclid Avenue, Cleveland, OH 44106, Vincent J. Blanch, M.D., Ph.D., Stan Sateren, M.D., Burns Brady, M.D., Ethan Swift, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Discuss addiction and how it affects physicians; and 2.) Interpret treatment options available for the impaired physician.

#### **SUMMARY:**

Addiction is a disease that affects people in all walks of life, from all professions and all cultures. It is real and it is treatable. But, what happens when the person suffering from addiction is a doctor? Then what? Do we sweep it under the rug? Do we fire them? Do we ignore it? The challenge is to work to treat the disease, to help the patient. The challenge is allowing impaired physicians to self-identify before their illness results in serious sanctions by our medical board. The choice to seek treatment can be difficult for the physician involved to make because of lack of knowledge of the process, fear of board involvement, and the stigma associated with such issues. Join a panel of practicing psychiatrists and residents both treating and affected by the disease of addiction to better understand how it affects all of us and how we can help.

#### **REFERENCES:**

1. Baldisseri MR; Impaired Healthcare Professional; Crit

Care Med; 01-FEB-2007; 35(2 Suppl): S106-16.

2. Milling TJ; Drug and alcohol use in emergency medicine residency: an impaired resident's perspective; Ann Emerg Med; 01-AUG-2005; 46(2): 148-51.

### WORKSHOP 47

**SATURDAY, OCTOBER 4**                      **3:30 p.m.-5:00 p.m.**

#### **THE IMPACT/IMPACTO PROJECT: A PUBLIC MENTAL HEALTH LEADERSHIP AND CURRICULUM DEVELOPMENT FOR POST-GRADUATE TRAINEES IN CANADA, USA, AND MEXICO**

Kenneth S. Thompson, M.D., 6108 Kentucky Avenue, Pittsburgh, PA 15206, Richard P. Swinson, M.D., Sonia Chehil, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Recognize an innovative public mental health education program – IMPACT/IMPACTO; 2.) Explain a new global mental health curriculum that will be made available to post-graduate training programs free of charge in late 2008; and 3.) Demonstrate awareness of and knowledge about public mental health in North America.

#### **SUMMARY:**

This workshop describes the development and operation of a unique and innovative educational program that seeks to build knowledge of and leadership in public mental health in post-graduate psychiatry trainees in Canada, USA and Mexico. Funded under the Academic Mobility Program of NAFTA, this project involves six academic institutions (two in each of the NAFTA countries). Senior post-graduate trainees from these countries apply to participate in the program. They are teamed together in groups of 6 – 8 participants with each country represented in each team. The program consists of a three-month experience of which one month is spent in each country exploring public mental health issues specific to the program location. In addition, a global mental health curriculum has been created and all participants work their way through this material as a seminar group with specific topics lead by experts in each of the three countries. Participants must co-author a publication ready paper on an aspect of public mental health. This curriculum will be made available to all post-graduate training programs in each country with an expected release date of December 2008. Early outcomes show strong satisfaction and support for the program. Independent external review have been conducted with similar results. Program experience has directed some participants into a career in public mental health.

#### **REFERENCES:**

1. Prince M., et al. No health without mental health. Lancet. 2007; 370: 859-77.
2. Horton R., Launching a new movement for mental health. Lancet. 2007; 370: 806.

## WORKSHOPS

### WORKSHOP 48

**SUNDAY, OCTOBER 5** 8:00 a.m.-9:30 a.m.

#### **CBT FOR PSYCHOSIS IN THE USA: CAN WE USE IT IN THE REAL WORLD?**

Page Burkholder, M.D., *56 Midwood Street, Brooklyn, NY 11225*, Michael Garrett, M.D., Peter Weiden, M.D., Ylia Landa, M.D.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to describe the overview of a CBT approach to psychosis, and discuss several approaches to implementing CBT for psychosis in a public psychiatry setting (ACT teams, MICA programs, and clinic-based groups).

#### **SUMMARY:**

The use of CBT in the treatment of psychotic disorders has gained increasing acceptance in the USA, building on the more than 10 year history of its practice in the UK. While there is still controversy over the efficacy of the approach, there is a growing interest in the training in and implementation of CBT for Psychosis in many parts of the psychiatric community. In particular, the adaptation of the UK techniques for use in the very different health care system in the USA has prompted both questions and therapeutic trials. After a brief introduction to the more "standard" approach of CBT for psychosis, the presenters of this symposium will discuss their experience with various implementation strategies in the USA, including ACT teams, groups, residency training programs, MICA clinics and in the treatment of "first episode" psychosis. The discussant will present some of the ways that private and public institutions have begun the introduction of the CBT techniques into their programs, and there will be 45 minutes for audience questions and comments.

#### **REFERENCES:**

1. Turkington D, Kingdon D, Weiden PJ; Cognitive behavior therapy for schizophrenia, *Am J Psychiatry*, 2006 Mar; 163(3):365-73.
2. Gumley A, Schwannauer M; *Staying Well After Psychosis: A Cognitive Interpersonal Approach to Recovery and Relapse Prevention*. John Wiley & Sons, Ltd, 2006.

### WORKSHOP 49

**SUNDAY, OCTOBER 5** 8:30 a.m.-11:30 a.m.

#### **INTOLERANCE, SOCIAL JUSTICE, AND RECONCILIATION IN FILMS**

Francis G. Lu, M.D., *Department of Psychiatry, 7M8, San Francisco General Hospital, 1001 Potrero Avenue, San Francisco, CA 94110*

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Discuss the relationship of intolerance, social justice and reconciliation; and 2.) Recognize the value of film in the teaching about these issues that affect our patients.

#### **SUMMARY:**

The current state of world affairs, marked by racial/ethnic, political, and religious irrational hatred, cries out for social justice and reconciliation. Yet how can this be achieved? Nelson Mandela has said, "True reconciliation does not consist of merely forgetting the past." This workshop will address compassion human darkness worldwide, from past eras to the present moment. What emerges from the 12 film clips shown is a message of timely hope. Again and again, tiny miracles of humanity are revealed in these films, in accord with the words of the Talmud: "Whoever saves one life, saves the entire world." This three-hour media workshop is based on a seven-day residential seminar given at Esalen Institute, Big Sur, CA, July 25-August 1, 2008 by the workshop leader and Brother David Steindl-Rast. Films include *Intolerance*, *Crash*, *Sansho the Baliff*, *The Great Dictator*, *Schindler's List*, *Hotel Rwanda*, and *Gandhi*.

#### **REFERENCES:**

1. Kaplan E and Wang B (eds.) *Trauma and Cinema*. Hong Kong: Hong Kong University Press, 2004.
2. Mollica RF. *Healing Invisible Wounds*. New York: Harcourt, 2006.

### WORKSHOP 50

**SUNDAY, OCTOBER 5** 10:00 a.m.-11:30 a.m.

#### **TRANSFORMING THE SYSTEM: INTRODUCING PHARMACOLOGICAL INNOVATIONS IN ADDICTION TREATMENT**

*Supported by the American Academy of Addiction Psychiatry*

John A. Renner, M.D., *VA Outpatient Clinic, 251 Causeway Street, Boston, MA 02114-2148*, Petros Levounis, M.D., M.A., Ricardo Restrepo, M.D., M.P.H.

#### **EDUCATIONAL OBJECTIVES:**

At the conclusion of this session, the participant should be able to: 1.) Discuss the efficacy of new pharmacotherapies for substance use disorders and identify how to use these medications; 2.) Recognize attitudes that have impeded the implementation of new addiction treatments; and 3.) Identify strategies for overcoming these problems.

#### **SUMMARY:**

The last decade has seen the development of many exciting clinical innovations for the treatment of patients with substance use disorders. Of particular importance have been new FDA-approved medications including: A.) Acamprosate and injectable naltrexone for the treatment of alcoholism; B.) Varenicline for smoking cessation; and C.) Buprenorphine for the treatment of opioid addiction. In addition, current research is exploring a variety of agents like topiramate, disulfiram, and modafinil for the treatment of cocaine and crystal methamphetamine dependence. While the pharmacotherapy of substance use disorders is advancing at an astonishing rate, the implementation of these treatment innovations has been slow. Several lines of evidence suggest that the majority of mental

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health systems and practitioners resist adoption of these new practices. This workshop will review recently approved, as well as experimental pharmacological therapies for the substance use disorders and we will also discuss models for integrating psychosocial interventions with pharmacotherapy and brief interventions to facilitate engagement in treatment. Participants will be invited to explore resistance to change encountered among mental health providers and to work with the faculty on formulating creative options for introducing these new treatments into clinical practice.

### REFERENCES:

1. Miller WR, Baca C, Compton WM, et al: Addressing substance abuse in health care settings. *Alcohol Clin Exp Res* 2006; 30(2):292-302.
2. Weiss RD, Kuppenbender KD: Combining psychosocial treatment with pharmacotherapy for alcohol dependence. *J Clin Psychopharmacol* 2006; 26 Suppl 1:S37-42.

### WORKSHOP 51

**SUNDAY, OCTOBER 5** 10:00 a.m.-11:30 a.m.

#### DOMESTIC ABUSE AMONG SOUTH ASIAN AMERICAN POPULATIONS: CHALLENGES AND SOLUTIONS

*Supported by the Indo-American Psychiatric Association*

Surinder S. Nand, M.D., *Department of Psychiatry, University Of Illinois at Chicago, 912 South Wood, Chicago, IL 60612*, Renu Gupta, M.D., Kiran Siddiqui, M.Ed., B.A.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Identify unique cultural issues impacting domestic abuse among the South-Asian American population; and 2.) Develop an understanding of how one Domestic Violence [DV] Organization in a metropolitan city has found some solutions to help victims of domestic abuse from this minority group.

### SUMMARY:

Domestic abuse is a pervasive problem throughout the world and it is estimated that every seven seconds a woman is abused. Approximately 3-4 million women are battered every year while 8-12 million are at risk for abuse. It is estimated that 95% of abuse is perpetrated by family members and that one woman in four experiences domestic abuse at some stage in their lives. Women are abused in all races, religions, socio-economic classes and cultures. Domestic abuse is an even serious problem among minority populations with enormous effects on physical and mental health of victims, as well as huge economic costs to the society. Although SouthAsian Americans are considered a 'Model Community' they have their share of domestic abuse. In this workshop, the presenters will highlight the unique cultural, religious and social issues impacting domestic abuse in this group. We will then present the work of one organization called Apna Ghar [Our Home] in Chicago, which has been helping survivors of domestic

abuse through prevention, intervention and advocacy against domestic abuse among South Asian and South Asian American population.

### REFERENCES:

1. Nankani S. *Breaking the Silence: Domestic Violence in South Asian-American Community*, Xlibris Corp, 2001.
2. Gupta J, Upadhyay U.D., Gupta N; *Domestic Violence in South Asian American Community-Chapter 7 in Domestic Violence in Asian American Communities: A Cultural Overview*, Ed Tuyen D Nguyen, Lexington Books.

### WORKSHOP 52

**SUNDAY, OCTOBER 5** 10:00 a.m.-11:30 a.m.

#### THE ROLE OF THE FAMILY IN SUICIDE PREVENTION: AN ATTACHMENT AND FAMILY SYSTEMS PERSPECTIVE

Sheila M. Loboprabhu, M.D., *Michael E. DeBakey VA Medical Center, 116 MHCL, 2002 Holcombe Boulevard, Houston, TX 77030*, Marki McMillan, L.C.S.W., Victor Molinari, Ph.D., Theron Bowers, M.D.

### EDUCATIONAL OBJECTIVES:

At the conclusion of this session, the participant should be able to: 1.) Describe suicide risk factors in older adults; 2.) Identify family dynamics with respect to attachment and family systems; 3.) Discuss how involving the family may benefit care of the suicidal patient; and 4.) Outline the role of the family in suicide prevention for geriatric patients.

### SUMMARY:

Suicide has long been conceptualized as an act of despair, anger, or escape from intolerable pain. Shneidman described the pre-suicidal state as perceptual constriction with narrowing of the available range of options to just two: total solution to the pain or cessation of the pain altogether. Therapy should use every available resource to de-constrict such tunnel vision and expand the patient's perception of available options. In this workshop, two geriatric psychiatrists, one geropsychologist, and one adult psychiatrist with a background in religion and spirituality discuss the role of family in preventing suicide in older adults. Suicide demographics suggest that elderly white males living alone and lacking religious affiliation are at highest risk for suicide. Over 50% see a primary care clinician within a month before completing suicide. Many have experienced interpersonal losses. Failure of the family physician to connect to these individuals may play some role in unsuccessful suicide prevention. We will review the role of the family in maintaining a stable emotional state for the patient. We will examine the family from an attachment theory and family systems point of view and make specific recommendations about involving families in suicide prevention for older adults. We outline three new family concepts in suicide prevention: family cohesion, family adhesion, and formation of a new family, and we will explain their utility in psychotherapy. We suggest practice implications for psychotherapists to successfully involve families in suicide prevention for older adults.

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### REFERENCES:

1. Shneidman E: What do suicides have in common? In Suicide: Guidelines for assessment, management, and treatment. Edited by Bruce Bongar. New York, Oxford University Press, 1992, pp 9.
2. Chioqueta AP, Styles TC: The relationship between psychological buffers, hopelessness, and suicidal ideation: identification of protective factors. *Crisis* 2007; 28: 67-73.

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