American Academy *of* Addiction Psychiatry

Translating Science. Transforming Lives.

25th Annual Meeting and Symposium

December 4-7, 2014

Turnberry Isle Hotel

Aventura, Florida

Sponsored by
American Academy of Addiction Psychiatry

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AAAP wishes to thank the following contributors for supporting the 25th Annual Meeting and Symposium:

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Welcome

On behalf of the AAAP Board of Directors, I would like to welcome you to the 25th AAAP Annual Meeting at the Turnberry Isle Hotel, Aventura, Florida. This year marks the 29th anniversary of our organization and central to our mission AAAP's Annual Meeting blends quality education with a sense of collegiality. I trust you will find that AAAP has little hierarchy and everyone feels welcome. It is a place where national leaders in the field are willing and accessible to meet attendees and provide opportunities for both to learn from one another. I encourage you to be an active participant in all activities including: symposia, workshops, area and committee meetings throughout the next few days as your involvement is essential to our continued success. Should you have any questions, please contact any of our staff or any of us on the Board. First and foremost, please enjoy the meeting and take advantage of the beautiful surroundings that Aventura, Florida has to offer. Have a great time!

Laurence M. Westreich, MD
President

About AAAP

What is AAAP?

AAAP is an international professional membership organization founded in 1985 with approximately 1,500 members. Membership consists of psychiatrists who work with addiction in their practices, faculty at various academic institutions, primary care professionals, residents and medical students who are making a contribution to the field of Addiction Psychiatry.

- The leading professional membership organization for learning and sharing about the art and science of Addiction Psychiatry research and clinical treatment.
- Transforming lives through a commitment to using evidenced based research to continually improve clinical approaches and outcomes of their patients.
- A caring and engaging group of like-minded professionals who excel at translating work from the laboratory to solutions required in the real world.
- A collegial environment where health professionals have the opportunity to meet new colleagues, learn up close from thought leaders and contribute their own knowledge to an ever-expanding dialogue.
- Commits to building collaborative efforts that provide an ideal forum for health professionals in the field to expand their skills through certification and continuing education programs in the field of addictions.

AAAP Mission Statement

- Promote high quality evidence-based screening, assessment and treatment for substance use and co-occurring mental disorders.
- Translate and disseminate evidence-based research to clinical practice and public policy.
- Strengthen Addiction Psychiatry specialty training and foster careers in Addiction Psychiatry.
- Provide evidence-based addiction education to health care trainees and health professionals to enhance patient care and promote recovery.
- Educate the public and influence public policy for the safe and humane treatment of those with substance use disorders.
- Promote prevention and enhance addiction treatment and recovery across the lifespan.
- Promote research on the etiology, prevention, identification and treatment of substance use and related disorders.

Included with your membership!

- **Stay informed** on the latest evidenced based research on addiction with AAAP News, email bulletins and content in our members only contact website.
- **Network and share knowledge** with leaders in the field at our Annual Meeting, regional events and online forums.
- **Expand your skills and build your career.** Receive essential accreditation through our certification and continuing education programs.
- **Receive a free subscription to *The American Journal on Addictions,*** the most respected publication in the field – a $330 cost to non-members.
- **Qualify for substantial member only discounts** on our Annual Meeting and Symposium, AAAP Addictions and Their Treatment course, and all AAAP sponsored meetings and activities, including the convenient online Self-Assessment Examinations, and webinar trainings.
- **Maintenance of Certifications (MOC) trainings and resources** that are approved by the American Board of Psychiatry and Neurology (ABPN) such as Self-Assessment Examinations, Performance in Practice (PIPs) and Continuing Medical Education (CMEs) credits.
- **Free Member Advertising** (once approved) on AAAP's website or newsletter.
- **One annual fee** – no additional regional fees, no chapter dues and no extra application fees.
- **All AAAP members receive an affiliate membership to International Society of Addiction Medicine (ISAM).**

JOIN

American Academy *of* Addiction Psychiatry

Stop by AAAP Exhibit Booth for a membership brochure and application.
Membership applications are also available
online at http://www.aaap.org/membership/

Continuing Medical Education

Addictions and Their Treatment

Wednesday, December 3, Thursday, December 4 and Friday, December 5, 2014

Learning Objectives

1. Describe new advances in the pharmacotherapy and psychotherapy of alcohol, cocaine, opioid and nicotine addictive disorders.
2. Discuss the epidemiology of substance use disorders and their co-occurrence with other mental health disorders and review current recommended approaches for concurrent treatment of substance use disorders and other mental health disorders.
3. Describe the role of genetics in the risk for developing alcohol and drug use disorders.
4. Identify the major neurobiological pathways involved in addictive disorders.
5. Identify the molecular mechanisms that are altered following drug and alcohol use.
6. Review the literature on screening and brief intervention effectiveness and teach this technique so it is applied.
7. Review current treatment guidelines and how to utilize them in clinical practice.

Accreditation
American Academy of Addiction Psychiatry is accredited by ACCME to provide continuing medical education for physicians.

Credit Designation
American Academy of Addiction Psychiatry designates this live activity for a maximum of *20 AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

PA Accreditation
The American Academy of Physician Assistants accepts certificates of participation for educational activities certified for *AMA PRA Category 1 Credit™* from organizations accredited by ACCME or a recognized state medical society. Physician assistants may receive a maximum of 20 hours of Category 1 credit for completing this program.

If you are an AAAP Member, Claim Self-Assessment Credits from this Live Course
The American Board of Psychiatry and Neurology has approved AAAP's *Addictions and Their Treatment* course for AAAP Members to receive 20 CME credits – 12 CME credits from the educational activity plus 8 CME credits towards Maintenance of Certification (MOC) Self-Assessment credit.

Disclosure
In accordance with ACCME Essentials and Standards, anyone involved in planning or presenting this educational activity is required to disclose any relevant financial relationships with commercial interests in the healthcare industry. This information will be made available to participants at the beginning of the activity. Speakers who incorporate information about off-label or investigational use of drugs or devices will be asked to disclose that information at the beginning of their presentation.

December 4-7, 2014

AAAP 25th Annual Meeting and Symposium Learning Objectives

At the conclusion of this conference participants will be able to:

1. Identify and diagnose substance use disorders and co-occurring mental disorders in clinical populations.
2. Utilize and promote evidence-based approaches for clinical treatment of substance abuse disorders and co-occurring mental disorders.
3. Employ established treatment guidelines to develop biopsychosocial treatment plans for patients with substance use disorders, including those with co-occurring mental disorders.
4. Demonstrate the use of evidence-based approaches and treatments to trainees.

Pain and Risk Management
The following symposia and workshops included in the Annual Meeting will emphasize identification and management of pain in patients related to drug and alcohol use disorders and complications: Symposium II, Symposium III, Workshops A1, A2, A3, B1, B3, B5, C1, C2, and C5.

The following workshops included in the Annual Meeting will emphasize identification and management of risk to patients related alcohol and other drug use disorders and complications: Workshop A1, B3, C1.

Accreditation
American Academy of Addiction Psychiatry is accredited by ACCME to provide continuing medical education for physicians.

Physicians and Nurse Practitioners Credit Designation
American Academy of Addiction Psychiatry designates this live activity for a maximum of *25.5 AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Physician Assistants Accreditation
The American Academy of Physician Assistants accepts certificates of participation for educational activities certified for *AMA PRA Category 1 Credit™* from organizations accredited by ACCME or a recognized state medical society. Physician assistants may receive a maximum of 25.5 hours of Category 1 credit for completing this program.

Nurse Credit Designation
Nurses who are certified by the American Nurses Credentialing Center (ANCC) may utilize activities that are certified by ACCME-accredited providers toward their requirement for certification renewal by the ANCC. A certificate of attendance will be provided by American Academy of Addiction Psychiatry, an ACCME-accredited provider.

Other Professionals
Please contact AAAP for other credit designation approvals at (401) 524-3076 or contact us at cmecpd@aaap.org.

Disclosure
In accordance with ACCME Essentials and Standards, anyone involved in planning or presenting this educational activity is required to disclose any relevant financial relationships with an ACCME defined commercial interest to the CME provider and the audience. Speakers who incorporate information about off-label or investigational use of drugs or devices will inform the audience. This information will be made available to participants at the beginning of the activity.

Schedule at a Glance

Translating Science. Transforming Lives.

Wednesday, December 3, 2014		
7:00 am - 8:00 am	**Addictions and Their Treatment Course Registration** (separate registration is required)	Garden Foyer
8:00 am - 6:30 pm	**Addictions and Their Treatment Course (Part 1)**	Garden Room
2:00 pm - 4:00 pm	PCSS-MAT Steering Committee Meeting	Salons IV-VII
4:00 pm - 6:00 pm	PCCS-O Steering Committee Meeting	Salons IV-VII
Thursday, December 4, 2014		
8:00 am - 6:45 pm	**Addictions and Their Treatment Course (Part 2)**	Garden Room
8:00 am - 2:00 pm	Board of Directors Meeting	Salon VIII
12:00 pm - 7:00 pm	Registration Desk Open	Ballroom East Foyer
12:00 pm - 3:00 pm	Exhibit Set Up	Conference Lobby
1:00 pm - 2:00 pm	Public Policy Committee Meeting	Salon III
1:00 pm - 2:00 pm	Marijuana Special Interest Group	Salon I
1:30 pm - 2:00 pm	Welcome Announcements	Grand Ballroom
3:00 pm - 6:30 pm	Exhibit Hall Opens	Conference Lobby
2:00 pm - 4:00 pm	**Symposium I:** Pharmacogenetically Driven Treatments for Drug and Alcohol Dependence	Grand Ballroom
4:00 pm - 5:30 pm	**Concurrent Workshop Session A (1-5)**	
	Workshop A-1: Legalization of Marijuana: Are We Ready?	Salons I-III
	Workshop A-2: Managing Gambling Disorders: Six Different Cases and Their Appropriate Treatments	Veranda East
	Workshop A-3: Psychostimulant Treatment of Cocaine and Other Stimulant Use Disorders: Is it Time Yet?	Veranda West
	Workshop A-4: Community Reinforcement and Family Training: Utilization Across the Treatment Cycle	Salons IV/V
	Workshop A-5: Implementing the Women's Recovery Group: Group Therapy for Women with Substance Use Disorders	Salons VI/VII
5:30 pm - 6:30 pm	**Welcome Reception**	Magnolia Courtyard
6:30 pm - 8:00 pm	**Trainee Workshop:** Careers in Addiction Psychiatry 7: An Update	Veranda East & West
8:00 pm - 9:00 pm	Recovery Meeting	Salon II
Friday, December 5, 2014		
7:00 am - 8:00 am	**Breakfast for Trainees**	Veranda East & West
7:00 am - 8:00 am	**Committee Meetings**	
	Controversial Issues	Salon I
	MOC/Evidence-Based Treatment/Publications and Products	Salon IV
	The American Journal on Addictions	Salon VI
8:00 am - 10:00 am	**Addictions and Their Treatment Course (Part 3)**	Garden Room
7:30 am - 6:00 pm	Registration Desk Open	Ballroom East Foyer
8:00 am - 5:00 pm	Exhibit Hall Open	Conference Lobby
8:00 am - 9:00 am	**Keynote Session: Founder's Award**	Grand Ballroom
9:00 am - 10:00 am	**Membership Business Meeting**	Grand Ballroom
10:15 am - 11:45 am	**Concurrent Workshop Session B (1-5)**	
	Workshop B-1: Innovative Treatment Strategies for PTSD and Co-Occurring Addictions	Salons I-III
	Workshop B-2: The Addiction Psychiatry Milestones - Questions and Answers	Salons IV/V
	Workshop B-3: Expanding Access to Opioid Overdose Intervention and Naloxone: Roles for Addiction Treatment Provider	Salons VI/VII
	Workshop B-4: Motivational Interviewing in Everyday Practice: A Hands-On Interactive Workshop	Veranda East
	Workshop B-5: "Urine Luck" - Overview of New Drug Testing Technologies and Conundrums	Veranda West
12:00 pm - 1:00 pm	Membership Committee Meeting	Salon IV/V
12:00 pm - 1:00 pm	**Poster Luncheon A**	Conference Lobby

Schedule at a Glance

1:00 pm - 3:00 pm	**Symposium II:** What is the Evidence of Harm to Adolescents Using Cannabis? A Critical Review of the Data	Grand Ballroom
3:00 pm - 4:30 pm	**Case Conference**	Grand Ballroom
4:30 pm - 5:00 pm	**Area Directors Meeting**	Salons I/II
5:00 pm - 6:00 pm	Area I-IX Meetings	(See page 18)
6:00 pm - 7:30 pm	**Auction/Reception**	Garden Room
8:00 pm - 10:30 pm	**Film Workshop:** Addiction in Film 12: "Requiem for a Dream" and the Art, Science, and Culture of a Cult Classic	Salons IV-VII
10:30 pm - 11:30 pm	Recovery Meeting	Salon II

Saturday, December 6, 2014

6:30 am - 8:00 am	Education Committee Meeting	Veranda East
7:00 am - 5:00 pm	Registration Desk Open	Ballroom East Foyer
7:00 am - 8:00 am	**Committee Meetings**	
	Youth and Adolescence	Salon I
	Twelve-Step, Physician Health	Salon IV
	Research	Salon VI
8:00 am - 3:00 pm	Exhibit Hall Open	
8:00 am - 10:00 am	**Symposium III:** Electronic Cigarettes: Friend, Foe, or Uneasy Ally to the Addiction Psychiatrist	Grand Ballroom
10:15 am - 11:45 am	**Concurrent Workshop Session C (1-5)**	
	Workshop C-1: Pain School: Incorporating Addiction Psychiatry into the Treatment of Pain	Salons II/III
	Workshop C-2: QTc - Unraveling Myths From Realities	Salons IV/V
	Workshop C-3: Military Culture 101: What Addiction Psychiatry Needs to Know	Salons VI/VII
	Workshop C-4: Maximizing Patients' Twelve-Step Experience	Veranda East
	Workshop C-5: Sophisticated 5-Minute Tobacco Interventions for Young People	Veranda West
10:15 am - 11:45 am	PsychSIGN Medical Student Interest Group	Salon I
12:00 pm - 1:00 pm	**Poster Luncheon B**	Conference Lobby
1:00 pm - 2:30 pm	Paper Session	Grand Ballroom
2:30 pm - 3:30 pm	**Dessert with the Experts**	Magnolia Courtyard
3:30 pm - 4:30 pm	Poster Session (Not CME accredited)	Conference Lobby
3:30 pm - 5:00 pm	**NIAAA Workshop:** Medications for the Treatment of Alcohol Dependence, Other Alcohol Use Disorders, and Related Comorbidities: A Brief Guide	Salons VI/VII
3:30 pm - 5:30 pm	**Maintenance of Certification Workshop**	Veranda East
7:00 pm - 9:00 pm	**Gala and Awards Ceremony**	Garden Room
9:00 pm	**Soirée –** Hosted by Drs. Petros Levounis and Laurence Westreich	Location TBD
9:00 pm - 10:00 pm	Recovery Meeting	Salon II

Sunday, December 7, 2014

7:00 am - 11:00 am	Registration Desk Open	Ballroom East Foyer
7:00 am - 8:00 am	Program Committee Meeting	Veranda East & West
8:00 am - 9:00 am	**Medical Update:** Traumatic Brain Injury, Substance Misuse and Substance Use Disorders	Grand Ballroom
9:00 am - 11:00 am	**Symposium IV:** Cocaine and Stimulant Dependence: New Strategies for an Old Problem	Grand Ballroom
11:00 am	Conference Adjourns	

Please Be Courteous

Please be sure to set your cell phones and pagers on vibrate. If you must take a call during an educational session, we ask that you exit the session room before taking the call.

Trainee Events

Suggested Events for Medical Students, Residents and Fellows:

Thursday, December 4 ◆ 5:30 pm - 6:30 pm **Location: Magnolia Courtyard**

Welcome Reception: Highlighting Trainees and New Members

Thursday, December 4 ◆ 6:30 pm - 8:00 pm **Location: Veranda East & West**

Trainee Workshop: Careers in Addiction Psychiatry 7: An Update

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Friday, December 5 ◆ 7:00 am - 8:00 am **Location: Veranda East & West**

Breakfast for Trainees - Mingling with the Mentors

Rebecca Payne, Chair, Membership Committee
Jeffrey Devido, Chair, Education Committee
Christina Brezing, MD
Michael Hoefner, MD

Friday, December 5 ◆ 6:00 pm - 7:30 pm **Location: Garden Room**

Auction and Reception

Saturday, December 6 ◆ 6:30 am - 8:00 am **Location: Veranda East**

Education Committee Meeting

Jeffrey DeVido, MD, Chair, Education Section

Saturday, December 6 ◆ 10:15 am - 11:45 am **Location: Salon I**

PsychSIGN Medical Student Interest Group

PsychSIGN is the American Psychiatric Association's official medical student interest group. This year AAAP is organizing a series of presentations in conjunction with psychiatry subspecialty groups to better inform medical students of the scope of our efforts. This program at AAAP will serve to introduce students to Addiction Psychiatry, and better prepare them to treat the patients they encounter throughout their clinical training.

Saturday, December 6 ◆ 2:30 pm - 3:30 pm **Location: Magnolia Courtyard**

Dessert with the Experts

This is a unique opportunity to have small group discussions with experts in the field.

Saturday, December 6 ◆ 7:00 pm - 9:00 pm **Location: Garden Room**

Gala and Awards Ceremony

Saturday, December 6 ◆ 9:00 pm **Location: TBD**

Soiree - Hosted by Drs. Petros Levounis and Laurence Westreich

Wednesday, December 3

8:00 am - 6:30 pm
Location: Garden Room

Addictions and Their Treatment Course (Part I)

(Separate registration is required)

Thursday, December 4

8:00 am - 6:45 pm
Location: Garden Room

Addictions and Their Treatment Course (Part 2)

(Separate registration is required)

1:00 pm - 2:00 pm
Location: Salon III

Public Policy Committee Meeting

Richard N. Rosenthal, MD, Section Head Chair and Hilary S. Connery, MD, PhD, Co-Chair

The Public Policy Section is comprised of two committees (the Public Policy Committee and the Public Information Committee) with the goals of coordinating and disseminating AAAP policy recommendations and disseminating knowledge of addictive disorders to the general public. The Public Policy Section works in close collaboration with the Research, Treatment and Education Sections of AAAP to promote excellence of clinical practice in Addiction Psychiatry, to educate the public regarding substance use disorders, to promote accessibility and quality of treatment for all patients, and to support research in the field.

1:00 pm - 2:00 pm
Location: Salon I

Marijuana Special Interest Group Meeting

Kevin Hill, MD, Chair

The marijuana special interest group aims to inform both treatment of marijuana addiction and marijuana-related policies from an evidence-based perspective. The group is off to a fast start with members from all over the United States. Members share our clinical experiences treating marijuana addiction as well as the challenges and concerns we have about the changing landscape of marijuana policy as state after state faces questions about medical marijuana and legalization of marijuana.

2:00 pm - 4:00 pm
Location: Grand Ballroom

Symposium I: Pharmacogenetically Driven Treatments for Drug and Alcohol Dependence

Symposium Chair: *Albert Arias, MD, Yale University School of Medicine*
Presenters: *Henry Kranzler, MD, University of Pennsylvania, Perelman School of Medicine, David Oslin, MD, University of Pennsylvania; and Thomas Kosten, MD, Baylor College of Medicine*

This symposium will feature three presenters who will review the state of the art clinically relevant pharmacogenetics of substance use disorder treatments. The speakers will focus on reporting cutting edge findings from clinical trials with an emphasis on pharmacogenetics of alcoholism and cocaine dependence treatment response.

Dr. Kranzler will review original research findings from his trials of naltrexone, sertraline, and topiramate treatment of alcoholism. Dr. Oslin will present findings from his line of research on naltrexone phamacogenetics in alcoholics. Dr. Kosten will review findings from pharmacogenetic analyses of disulfiram and immunologic based treatment trials for cocaine dependence.

The symposium will educate attendees on cutting edge pharmacogenetic findings, and help to fill in the knowledge gap for providers on this exciting emerging area of personalized medicine. It is becoming increasingly clear that pharmacogenetics is clinically relevant, and providers will need to learn and understand this area of research in order to help optimize treatment outcomes for their patients. This highly significant symposium will influence clinical practice, research, and will provide important education on emerging treatment modalities.

At the conclusion of this activity participants will be able to:

1. Describe the latest findings with regard to naltrexone pharmacogenetics and alcoholism treatment
2. Describe the impact of variation in kainate receptor subunit genes and topiramate response in AUDs
3. Identify genetic moderators of biological therapies for cocaine dependence

Source of Funding: None
Disclosures: *Drs. Arias and Oslin have nothing to disclose. Dr. Kranzler is a consultant or advisory board member of Alkermes, Lundbeck, Lilly, Roche, and Pfizer. Dr. Kranzler received honoraria from the Alcohol Clinical Trials Initiative (ACTIVE) of the American Society of Clinical Psychopharmacology, which is supported by AbbVie, Ethypharm, Lilly, Lundbeck, and Pfizer. Dr. Kosten is a speaker/consultant for Reckitt Benckiser.*

Thursday, December 4

Concurrent Workshop Session A • 4:00 pm - 5:30 pm

Workshop A-1: Legalization of Marijuana: Are We Ready? **Location: Salons I-III**

Workshop Presenters: *Kevin Hill, MD, MHS, McLean/Harvard, McLean Hospital; Herb Kleber, MD, Columbia University; and Richard Ries, MD, University of Washington*

At the end of the workshop participants will be able to:

1. Describe marijuana use trends in the context of current marijuana policies
2. Discuss the impact of legalization of marijuana in the state of Washington
3. Review the scientific and policy issues relevant to the question of legalization

Marijuana continues to be a hot topic in the United States. State after state has been faced with questions around decriminalization, medical marijuana, and, most recently, legalization of marijuana. Fifty-eight percent of Americans currently are in support of the legalization of marijuana. While these debates rage, use of marijuana among Americans, particularly young Americans, continues to rise as the perception of marijuana's risk decreases.

Addiction psychiatrists are in a difficult position as experts on marijuana—often being asked to comment on the risks of marijuana in the face of these complex policy issues. Dr. Hill will introduce the current state of the policies regarding decriminalization, medical marijuana, and legalization of marijuana. He will also discuss several key risks associated with legalization of marijuana and also the arguments in favor of legalization. Dr. Ries will share Washington State's experience as one of two states that has implemented legalized marijuana. He will discuss how this experience should shape the way other states examine the issue of legalization. Dr. Kleber will moderate a lively discussion and debate among our members about how addiction psychiatrists and AAAP specifically should approach legalization.

Source of Funding: None
Disclosures: *Dr. Hill received a grant from NIDA and NARSAD and is author for Hazelden Publishing. Dr. Kleber has nothing to disclose. Dr. Ries is a speaker for Alkermes, Janssen, and Reckitt Benckiser.*

Workshop A-2: Managing Gambling Disorders: Six Different Cases and Their Appropriate Treatments **Location: Veranda East**

Workshop Presenters: *Iman Parhami, MD, MPH, Delaware Division of Substance Abuse and Mental Health and Timothy W. Fong, MD, University of California, Los Angeles*

At the end of the workshop participants will be able to:

1. Identify and screen gambling disorders
2. Recognize the different types of individuals who suffer from gambling disorders
3. Discuss the appropriate treatments for different types of gamblers

Nearly 4% of the adult U.S. population suffer from gambling related problems and 6% experience harm from gambling during their lifetime. Although no FDA treatments are approved for gambling disorders, research demonstrates that a number of treatments, including psychotropics, have been beneficial in reducing gambling behavior and their associated repercussions.

For the first 15 minutes, this workshop will review the diagnosis, repercussions, and available treatments for gambling disorders. In the remaining time, six cases, and their appropriate treatments, will be interactively presented and discussed among the participants. These cases include: the adolescent gambler, the college gambler, the geriatric gambler, the depressed gambler, the manic gambler, and the suicidal gambler.

Source of Funding: None
Disclosures: *Dr. Parhami has nothing to disclose. Dr. Fong is on the Speaker's Bureau with Pfizer and Reckitt Benckiser.*

Workshop A-3: Psychostimulant Treatment of Cocaine and Other Stimulant Use Disorders: Is it Time Yet? **Location: Veranda West**

Workshop Presenters: *John Mariani, MD, Frances Levin, MD, and Adam Bisaga, MD, Columbia University Medical Center*

At the end of the workshop participants will be able to:

1. Discuss stimulant pharmacotherapy research findings
2. Describe basic science of dopaminergic system

Cocaine and other stimulant use disorders continue to be a substantial public health problem in the United States and around the world, yet no clearly effective pharmacotherapy has been identified. Controlled trials of behavioral treatments for cocaine use disorder yield abstinence rates of up to 30%, with the majority of patients continuing to use cocaine. Scores of double-blind, placebo-controlled pharmacotherapy clinical trials for cocaine use disorder have been conducted testing agents drawn from a wide variety of medication classes, yet none have been shown to have clinical benefit. Psychostimulant medications have shown promise as a treatment for cocaine use disorder, as well as other stimulant use disorders, despite resistance in the field to using controlled substances as therapeutic agents for addictive disorders. Substitution pharmacotherapy for cocaine and other stimulant use disorders has met with resistance, despite this approach being effective for opioid and nicotine use disorders. In addition, psychostimulants are an effective treatment for ADHD and may offer a unique approach for treating co-occurring ADHD and cocaine use disorder. Psychostimulants and related dopamine agonist medications also may have a unique role in augmenting behavioral treatments, in particular contingency management. The objective of this workshop is for the learner to become more competent at treatment planning for patients with cocaine and other stimulant use disorders.

Dr. Bisaga will provide a brief review of cocaine use disorder neurophysiology and stimulant pharmacology. He will also review the use of stimulant and dopaminergic medication with behavioral treatments for cocaine and stimulant use disorders, with an emphasis on contingency management strategies. Dr. Mariani will discuss stimulant pharmacotherapy of cocaine and amphetamine use disorders with an emphasis on recent clinical trials. Dr. Levin will discuss the unique relationship between ADHD and cocaine and other stimulant use disorders, a summary of clinical trials testing stimulants for co-occurring ADHD and cocaine use disorders, with an emphasis on recently available data.

Source of Funding: National Institute on Drug Abuse: P50DA009236, R01DA023652, K24DA029647
Disclosures: *Drs. Mariani and Bisaga have nothing to disclose. Dr. Levin received medication for a study from US World Meds and is a consultant with GW Pharmaceuticals.*

Workshop A-4: Community Reinforcement and Family Training: Utilization Across the Treatment Cycle **Location: Salons IV/V**

Workshop Presenters: *Jeffrey Foote, PhD, Carrie Wilkens, PhD, and Nicole Kosanke, PhD, Center for Motivation & Change*

At the end of the workshop participants will be able to:

1. Discuss a behavioral and motivational approach for families dealing with substance users
2. Distinguish these concepts from traditional approaches currently utilized in the field
3. Discuss concepts related to CRAFT directly with patients

Substance Use Disorders have affected approximately 30% of American adults during their lifetime (Hasin et al., 2007) and 12% of high school students meet clinical criteria for substance use disorder (CASA, 2011). Unfortunately, a majority of individuals struggling with substance use problems do not seek treatment (Compton et al., 2007). Family members often bear the brunt of navigating the treatment system and experience the burden of motivating substance users in their family to seek help for their problems. Utilizing the Community Reinforcement and Family Training approach (CRAFT; Smith and Meyers, 2004), families can be provided with specific skills for understanding the function of substance use in their family member's life and methods for effectively responding to substance use issues. CRAFT demonstrably increases the probability of the substance user seeking professional help and improves family functioning.

The workshop will provide an overview of CRAFT, its use in different treatment contexts, and the training and implementation of these skills with both trained mental health professionals as well as peer "coaches". The audience will be asked to discuss the issues associated with working with family members of individuals with substance use problems (including dealing with the advice they have previously been given about management of their loved one) and the clinical strategies used to incorporate family members in the treatment process. We will provide suggestions on the implementation of CRAFT in clinical practice and review the resources available to the practitioner implementing CRAFT as part of their treatment plan.

Source of Funding: None
Disclosures: *Drs. Foote, Wilkens and Kosanke have nothing to disclose.*

Thursday, December 4

Workshop A-5: Implementing the Women's Recovery Group: Group Therapy for Women with Substance Use Disorders

Location: Salons VI/VII

Workshop Presenter: *Shelly Greenfield, MD, MPH, McLean Hospital, Harvard Medical School*

At the end of the workshop participants will be able to:

1. Recognize how gender-specific treatment is helpful for women with substance use disorders
2. Identify the gender-responsive components of the Women's Recovery Group
3. Identify and problem solve common issues related to conducting the Women's Recovery Group

This workshop will provide information to introduce and familiarize participants with the manual-based, empirically supported Women's Recovery Group (WRG). The presenter will first review the relevant background information related to the development and support surrounding the WRG. Next, the presenter will discuss research findings demonstrating the effectiveness of the WRG in treating women with substance use disorders who are heterogeneous with respect to other co-occurring psychiatric disorders, and age and stage of life. The presenter will use actual therapist video clips to demonstrate the key components of the WRG and how to conduct this group therapy. This interactive session will provide an opportunity for participants to learn about gender-specific treatment and how to implement the WRG in practice.

Dr. Greenfield will first present a background on women and addiction. Next, Dr. Greenfield will discuss research on the benefits of gender-specific treatment while specifically focusing on the key components of the WRG. Dr. Greenfield will also discuss the successful implementation of this program at her treatment site and will provide suggestions for implementing the program in community treatment programs. Part of this presentation will demonstrate the nuts and bolts of conducting WRG using therapist video clips. The workshop will conclude with an interactive discussion of the WRG and its applicability to a variety of treatment settings.

Source of Funding: NIDA grants R01 DA015434 and K24 DA019855.
Disclosure: *Dr. Greenfield has nothing to disclose.*

5:30 pm - 6:30 pm

Location: Magnolia Courtyard

Welcome Reception: Highlighting Trainees and New Members

6:30 pm - 8:00 pm

Location: Veranda East & West

Trainee Workshop: Careers in Addiction Psychiatry 7: An Update

Workshop Presenters: *Jose Vito, MD; Laurence Westreich, MD, New York University School of Medicine; Frances Levin, MD, Columbia University Medical Center; Timothy Fong, MD, University of California, Los Angeles; Karen Drexler, MD, Emory University School of Medicine; and Robert Milin MD, FRCPC, DABPN, University of Ottawa*

At the end of the workshop participants will be able to:

1. Describe a wide range of career opportunities in Addiction Psychiatry and the profession
2. Explore the participants' own decision-making process regarding career options
3. Assess how the treatment of substance use disorders fits within the general practice of psychiatry

The practice possibilities in Addiction Psychiatry are very diverse and becoming more so. Psychiatrists have a wide range of interest in lifestyle goals and working style. It is no surprise that the decision trainees and early careers make regarding long term career decisions are difficult and complex. The APA recently surveyed psychiatry residents about their interest in a career in Addiction Psychiatry. Many trainees noted the lack of information during residency about career opportunities in Addiction Psychiatry, including concerns about the availability of stable employment, interesting positions, and competitive salaries. This workshop is organized to address these concerns and to provide specific information about the range of career opportunities in this field. Each speaker will discuss about lessons learned about their career choices. An interactive session with the audience will proceed with ample time for questions and answers. This workshop is particularly relevant to trainees and early career addiction psychiatrists. Participants will evaluate and recognize a wide range of career opportunities in Addiction Psychiatry and the professional gratifications associated with this type of work.

This workshop is to help residents, fellows, and early careers determine if Addiction Psychiatry meets their needs and furthers their career goals. Expert speakers will describe a variety of career options including private practice, and careers that primarily focus on training and mentoring, research and administration. Speakers will discuss their own decision-making process and give personal accounts on how they chose their area of specialization. They will also describe what their daily work is like and what drew them to their current work settings to help the trainees develop strategies for fostering successful careers in Addiction Psychiatry. Finally, they will offer their own insight on what they wish they'd done differently.

Source of Funding: None
Disclosures: *Drs. Vito and Westreich have nothing to disclose. Dr. Levin received medication for a study from US World Meds and is a consultant with GW Pharmaceuticals. Dr. Fong is on the Speaker's Bureau with Pfizer and Reckitt Benckiser. Dr. Milin is a speaker for Bristol-Myers Squibb.*

Thursday, December 4

8:00 pm - 9:00 pm
Location: Salon II

Recovery Meeting

Friday, December 5

7:00 am - 8:00 am
Location: Veranda East & West

Breakfast for Trainees

If you are a resident or medical student, be sure to attend the Breakfast for Trainees. This breakfast provides an opportunity to meet with other students, trainees, and senior colleagues. Network with fellow members and get to know the AAAP community. There will be a brief introduction at the breakfast by Drs. Rebecca Payne, Chair, Membership Committee; Jeffrey DeVido, Chair, Education Section; Christina Brezing and Michael Hoefer, Trainee Respresentatives to the Board.

7:00 am - 8:00 am
Committee Meetings

Controversial Issues
Location: Salon I

Jon Streltzer, MD, Chair
The Controversial Issues Committee arose several years ago out of the Chronic Pain Task Force that was under the auspices of the Treatment Section. Its mission is to use the principles and lessons of Addiction Psychiatry to help sort out proper medical practice in areas of uncertain and conflicting evidence.

MOC/Evidence-Based Treatment
Location: Salon IV

Dean D. Krahn, MS, MD and Margaret Mary Kotz, DO, Co-Chairs
The Evidence-Based Treatment Committee was formed because of the growing need for members to be informed about evidence-based treatment in addictions. What works, and how do we know? The overarching goal is to provide resource information that will be clinically useful to the field and to increase the likelihood that practitioners actually implement these treatments in their own practices and programs.

Publications and Products
Location: Salon IV

Kevin A. Sevarino, MD, PhD, Chair
The Publications and Products Committee produces or oversees the production of AAAP educational products. The committee generates products on its own and works with other AAAP committees to facilitate the development of products. The committee also manages and oversees AAAP's website, www.aaap.org.

***The American Journal on Addictions* Editorial Board**
Location: Salon VI

Thomas R. Kosten, MD, Editor-in-Chief
AJA Editorial Board provides oversight of the production of the Journal
(Note: By invitation only - members of this committee are appointed by the Editor-in-Chief)

8:00 am - 10:00 am
Location: Garden Room

Addictions and Their Treatment Course (Part 3)
(Separate registration is required)

Friday, December 5

8:00 am - 9:00 am
Location: Grand Ballroom

What Science Can Tell us About the Diagnosis, Prevention, and Treatment of Alcoholism
Keynote Session: George F. Koob, MD, PhD, Director, National Institute on Alcohol Abuse and Alcoholism

Alcohol use disorders cause an enormous amount of human suffering, loss of productivity and cost to our medical care system and the nation's economy. The aim of this lecture is to show that advances in the neuroscience of alcohol use disorders can lead the way to better diagnosis, treatment and prevention of this significant public health problem. Conceptualizing alcoholism as a three-component cycle composed of a binge/intoxication stage, a withdrawal/negative affect stage, and a pre-occupation/anticipation (craving) stage has allowed identification of key neurocircuits that underlie addiction to alcohol and many other drugs. Each stage of the addiction cycle is hypothesized to be mediated by a different neurobiological circuit: the **binge-intoxication stage** involves recruitment of reward neurotransmission in the basal ganglia; the **withdrawal-negative affect stage** involves loss of reward neurotransmission and gain of stress neurotransmission in the extended amygdala; and the **preoccupation-anticipation stage** involves loss of prefrontal cortical executive function. Such a knowledge base provides the heuristic framework for the development of novel, science-based approaches to diagnosis, prevention and treatment of alcohol use disorders in adolescence and will facilitate the implementation evidence-based practice in primary care, mental health, and other health care settings.

Introduction: Laurence M. Westreich, MD, President, AAAP

AAAP 2014 Founders' Award Recipient
George F. Koob, MD, PhD

Dr. George Koob, an internationally-recognized expert on alcohol and stress, and the neurobiology of alcohol and drug addiction, began his tenure as Director of the National Institute on Alcohol Abuse and Alcoholism (NIAAA) on January 27, 2014. As NIAAA Director, Dr. Koob oversees NIAAA's $445 million budget, which funds alcohol-related research in a wide range of scientific areas including genetics, neuroscience, epidemiology, prevention, and treatment.

Even before beginning as NIAAA Director, Dr. Koob had a longstanding relationship with the Institute. Throughout his career, he received funding from NIAAA and other NIH institutes for many significant research projects. Importantly, he also led a 10-year, NIAAA-funded, multi-institutional consortium dedicated to identifying the molecular basis of alcoholism.

Dr. Koob received his PhD in Behavioral Physiology from Johns Hopkins University in 1972. He spent most of his career at the Scripps Research Institute, where he served as the Director of the Alcohol Research Center, and as Professor and Chair of the Scripps' Committee on the Neurobiology of Addictive Disorders. Early in his career, he served as a researcher in the Department of Neurophysiology at the Walter Reed Army Institute of Research and in the Arthur Vining Davis Center for Behavioral Neurobiology at the Salk Institute for Biological Studies. He was a post-doctoral fellow in the Department of Experimental Psychology at the University of Cambridge.

Dr. Koob began his career studying the neurobiology of emotion, including how the brain processes reward and stress. His contributions advanced our understanding of the anatomical connections of emotional systems and the neurochemistry of emotional function. This background led to investigations into why certain alcohol drinkers transition to addiction while others do not, and how the brain and body respond to alcohol consumption.

Dr. Koob's work has significantly broadened our understanding of the neurocircuity associated with the acute reinforcing effects of alcohol and other drugs of abuse, and of the neuroadaptations of the reward and stress neurocircuits that lead to addiction. In addition, he has validated key animal models for addiction associated with alcohol and drugs and identified the major role that brain stress systems play in the development of addiction. Dr. Koob is the author of more than 600 peer-reviewed scientific papers, and the co-author of The Neurobiology of Addiction, a comprehensive review of the most critical neurobiology of addiction research conducted over the past 50 years. He is also the author of a textbook for upper division undergraduates and graduate students called Drugs, Addiction and the Brain which was released in 2014.

Dr. Koob is the recipient of many prestigious honors and awards, including the Daniel Efron Award for excellence in research and Axelrod Mentorship Award from the American College of Neuropsychopharmacology, the Distinguished Investigator and Marlatt Mentorship Awards from the Research Society on Alcoholism, and the Mark Keller Award from NIAAA.

9:00 am - 10:00 am
Location: Grand Ballroom

Membership Business Meeting

Concurrent Workshop Session B ◆ 10:15 am - 11:45 am

Workshop B-1: Innovative Treatment Strategies for PTSD and Co-Occurring Addictions — Location: Salons I-III

Workshop Presenters: *Chaya Bhuvaneswaran, MD, MPH, University of Massachusetts-Worcester; Kathleen Brady, MD, PhD, Medical University of South Carolina; and Denise Hien, PhD, City College of New York*

At the end of the workshop participants will be able to:

1. Discuss the epidemiology (including prevalence among subpopulations) of substance use disorders among PTSD patients in the United States and globally
2. Identify at least three clinically and scientifically significant research results from recent treatment research among patients with PTSD and co-occurring addictions
3. Identify two novel treatment modalities relevant to clinical practice (including mindfulness and complementary/alternative medical treatment modalities) for patients with this co-morbidity

PTSD ranks among the most common psychiatric disorders co-morbid with addiction, with over half of veterans seeking treatment for PTSD meeting criteria for alcohol dependence, and PTSD also representing a significant risk factor for other substance use disorders including smoking, cocaine, and opioids. Thus developing novel and effective treatments for patients with the PTSD-addiction co-morbidity has a pressing public health priority.

In this panel, after providing an overview summary on the epidemiology and presentation aspects unique to this co-morbidity we will focus on: cognitively enhanced exposure therapies for co-morbid PTSD and substance disordered populations (with a focus on recent trials for alcohol dependence and opioid dependence in these populations) and 'next wave' behavioral treatments with an emphasis on mindfulness training to treat addiction among PTSD patients in low socioeconomic settings. Drs. Bhuvaneswaran, Brady, and Hien will present on treatment trials using prolonged exposure therapy and other cognitive behavioral modalities enhanced with medication as well as next wave behavioral therapies such as mindfulness training, with an emphasis on considerations for minority and low SES populations; and NIDA- and NIAA-funded treatment studies among women and minority patients.

Source of Funding: None
Disclosures: *Drs. Bhuvaneswaran, Brady and Hien have nothing to disclose.*

Workshop B-2: The Addiction Psychiatry Milestones - Questions and Answers — Location: Salons IV/V

Workshop Presenters: *Marian Fireman, MD, Oregon Health and Science University; Andrew Saxon, MD, University of Washington; Laura Edgar, Accreditation Council on Graduate Medical Education; Frances Levin, MD, Columbia University Medical Center; and Kyle Kampman, University of Pennsylvania*

At the end of this workshop participants will be able to:

1. List the six core competencies
2. Describe the purpose of the Milestones
3. Discuss the use of milestones in the evaluation of trainees

Over the last decade residency and fellowship training in the United States has seen a shift from a focus on the educational process to specific educational outcomes expected for trainees successfully completing these programs. In 1999 the Accreditation Council on Graduate Medical Education (ACGME) established the six core competencies as an initial step in this process. The Milestones are a major component of this project and describe the key knowledge, skills, outcomes, behaviors and attitudes that residents should achieve as they progress through a training program. This is a major change from the prior evaluation system. The Milestones allow the program director and trainee to outline specific goals to be achieved during training and provide trainees with a detailed description of their progress. The six core competencies include 1) Patient Care, 2) Medical Knowledge, 3) Systems-Based Practice, 4) Practice-Based Learning, 5) Interpersonal Skills and Communication, and 6) Professionalism. The proposed Addiction Psychiatry Milestones include 16 sub-competencies within these core competencies.

The participants in this workshop include the members from Addiction Psychiatry Working Group as well as the Advisory Group. The members will present the background of the Milestones and describe the process of Milestone development. The Milestones themselves will be presented in detail and time-permitting a "mock" Clinical Competency Committee meeting will be included. Input and discussion from the audience will be a key component of this workshop. The purpose of the workshop is both to inform the audience regarding the Milestones as well as answer from training directors and faculty regarding application of the Milestones. Implementation of the Milestones is planned for July 2015.

Source of Funding: None
Disclosures: *Drs. Fireman and Edgar have nothing to disclose. Dr. Saxon is a paid section editor for UpToDate, Alkermes and Reckitt Benckiser provided study medication. Dr. Levin received medication for study from US World Meds and is a consultant with GW Pharmaceuticals. Dr. Kampman received a grant from Braeburn.*

Friday, December 5

Workshop B-3: Expanding Access to Opioid Overdose Intervention and Naloxone: Roles for Addiction Treatment Provider **Location: Salons VI/VII**

Workshop Presenters: *Seddon Savage, MD, MS, Geisel School of Medicine at Dartmouth and Silver Hill Hospital and Eric Collins, MD, Columbia University and Silver Hill Hospital*

At the end of the workshop participants will be able to:

1. Integrate overdose intervention and naloxone prescribing into clinical practice
2. Effectively advocate for expansion of naloxone availability in the community

This workshop will explore the role of the medical community, with focus on addiction treatment providers, in making naloxone available for patients and their families to prevent opioid overdose deaths. The workshop will open with an interactive audience response query of the naloxone-related policy contexts in which attendees practice and their opinions about prescribing naloxone to patients and their families. The first presenter will review naloxone pharmacology and it clinical actions including therapeutic actions, side effects and risks. Other aspects of opioid overdose intervention will be discussed and evolving educational standards for preparing professionals and non-professionals to intervene in opioid overdoses explored.

The second presenter will discuss current Federal and State policies that may present barriers to dissemination of naloxone and will explore innovative legislation and regulatory changes in different states that expand access. A "map" of diverse systems that might be fully engaged to give the broadest possible access to naloxone at the level of the community will be explored, including law enforcement, safety and fire; by healthcare providers and/or pharmacies prescribing or dispensing to patients and families; and AED type boxed availability in public buildings.

Source of Funding: None
Disclosures: *Drs. Savage and Collins have nothing to disclose.*

Workshop B-4: Motivational Interviewing in Everyday Practice: A Hands-On Interactive Workshop **Location: Veranda East**

Workshop Presenters: *Carla Marienfeld, MD; Noah Capurso, MD; Michael Hoefer, MD; Yale University School of Medicine; Nahil Chohan, MD; and Petros Levounis, MD, Rutgers New Jersey Medical School*

At the end of the workshop participants will be able to:

1. List the three terms for the spirit of motivational interviewing (MI), the five core principles of MI, the four core MI skills, and the three A's of MI inconsistent practices
2. Practice key stills and MI tools in an interactive workshop using small groups and role-play exercises
3. Discuss the rationale and choices for using MI consistent techniques in everyday clinical care

Motivational Interviewing (MI) seeks to hasten natural change by creating an interpersonal situation, wherein the patient can engage through a collaborative dialogue that supports positive behavioral change. This workshop will review key concepts in MI, including the stages of change, the style and spirit of MI, the core principles and skills in MI, two important clinical tools in MI, as well as MI inconsistent behaviors. After this review, we will use presenter role modeling and interactive small group practice sessions to practice core skills in MI for using MI in everyday clinical practice. Participants will be provided with a packet of useful MI materials.

The workshop is open to all who would like to learn more about the effective use of the Motivational Interviewing approach to treatment but is particularly targeted towards members in training and early career psychiatrists. This presentation has direct benefit for clinical practice, and the implications are improved interaction with patients and improved patient care.

Source of Funding: None
Disclosures: *Drs. Marienfeld, Capurso, Hoefer, Chohan and Levounis have nothing to disclose.*

Workshop B-5: "Urine Luck" - Overview of New Drug Testing Technologies and Conundrums **Location: Veranda West**

Workshop Presenter: *Gregory Skipper, MD*

At the end of the workshop participants will be able to:

1. List various matrices and their benefits and deficiencies for detecting specific drugs
2. Describe issues related to panels, cutoffs and methods of cheating and how to respond to them
3. Discuss new alcohol testing technologies and how they are best utilized

An overview of drug testing in the USA including the history, benefits, techniques, and interpretation of drug testing, including data regarding common methods used to cheat testing and how to respond to them and new alcohol markers and devices. Understanding drug testing including various testing techniques, panels, cutoffs, issues related to concentration, and common conundrums is important to successful monitoring. This is a practical presentation to bring psychiatrists up to date and will reference relevant research.

Source of Funding: None
Disclosure: *Dr. Skipper is an employee of Elements Medical Group.*

12:00 pm - 1:00 pm
Location: Salon IV/V

Membership Committee Meeting

Membership Committee
Rebecca A. Payne, MD, Chair

The Membership Committee strives to anticipate, ascertain and address the needs and wishes of its membership. The Membership Committee asserts that members are the organization's most important asset and through constant dialogue, works to continue to improve member benefits and experience. The Membership Committee welcomes members at all levels of their career who would like to become involved.

12:00 pm - 1:00 pm
Location: Conference Lobby

Poster Presentation Luncheon A - (CME Accredited)

(Poster #1-31 descriptions and disclosures on pages 30-43)

1:00 pm - 3:00 pm
Location: Grand Ballroom

Symposium II: What is the Evidence of Harm to Adolescents Using Cannabis? A Critical Review of the Data

Symposium Chair: *David Atkinson, MD, Assistant Professor at University of Texas-Southwestern*
Presenters: *Christopher Hammond, MD, Solnit Integrated Program Yale Child Study Center; Kevin Gray, MD, Medical University of South Carolina; Scott Krakower, DO, Zucker Hillside Hospital; and Greg Tau, MD, PhD, Columbia University*

Cannabis has gained unprecedented national attention in the media over the past several years, and scientific evidence has substantially grown over that time. A knowledge gap currently exists regarding the evidence of harm to adolescent users. Adolescent Perception of harm has decreased greatly since 2008 with only 40% of 12th graders seeing "great risk" in using regularly. While fraught with difficult questions around extracting correlation from causality, the literature provides guidance on specific potential harms. Basic science, longitudinal, population-based, and twin studies have all demonstrated potential harms of adolescent cannabis use that remain significant when controlling for potentially confounding variables. This proposed scientific literature review and appraisal will help participants review, analyze, and contextualize the evidence of harm for adolescent cannabis users.

Dr. Atkinson will review the literature regarding the evidence of cannabis as an addictive substance, while reviewing the neurobiology of addiction, focusing on the specific involvement of cannabis. Attention will be given to the socio-economic sequelae of addiction. Dr. Hammond will review the evidence examining links between cannabis use and mood disorders (depression and bipolar) and anxiety disorders. Dr. Krakower will review the evidence regarding cannabis's effects on the development of psychosis during acute use, including clinical laboratory studies, and he will review prospective and epidemiologic data on the link between schizophrenia and adolescent cannabis use. Dr. Tau will review the evidence on cannabis on cognition, including studies of IQ and studies reviewing different Research Domain Criteria. As discussant, Dr. Gray will review the discussion and provide insights into the relative significance of the various findings presented for the everyday clinician.

At the conclusion of this activity participants will be able to:

1. Review and understand the evidence regarding harm for adolescents using cannabis
2. Analyze the current data in light of its current limitations
3. Apply this knowledge to further research work and clinical care

Source of Funding: None
Disclosures: *Dr. Atkinson, Krakower and Tau have nothing to disclose. Dr. Gray has a financial relationship with Merck, Inc. (Research Funding in the area of Pediatric Bipolar Disorder) and with Supernus Pharmaceuticals (Research Funding for Pediatric ADHD/Aggression)*

Friday, December 5

3:00 pm - 4:30 pm Location: Grand Ballroom
Case Conference

Chair: *Michael M. Scimeca, MD; Fellow AJ Manett, MD; Clinicians: Steven L. Batki, MD and Kyle Kampman, MD*

The case conference provides an opportunity to learn, teach and share clinical experiences. A Fellow briefly presents a problematic treatment case. Two noted clinicians discuss the case presenting their personal clinical approaches: sharing their therapeutic styles and thinking. This approach focuses on stimulating the audience to actively participate with their own case vignettes, opinions, reactions and provocative questions. This year we will present the history of a patient with treatment refractory cocaine addiction.

Source of Funding: None
Disclosures: *Dr. Manett has nothing to disclose. Dr. Kampman received a grant from Braeburn. Dr. Batki is a consultant for Gilead Sciences.*

4:30 pm - 5:00 pm — Location: Salon I
Area Directors Meeting

5:00 pm - 6:00 pm
Area Meetings

Area Meetings I-IX

Area Director Chair: Ismene L. Petrakis, MD, Yale University School of Medicine, VA Connecticut Healthcare System

Area Meetings will take place in breakout rooms. AAAP organizes members geographically by areas to allow addiction professionals to identify colleagues practicing in their region and to meet and discuss topics of regional interest.

Area I: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont — **Location: Salons I/II**
Hilary Smith Connery, MD, PhD, Area I Director

Area II: New York — **Location: Salon III**
Michael Scimeca, MD, Area II Director

Area III: Washington, DC, Delaware, Maryland, New Jersey, Pennsylvania — **Location: Salons IV/V**
Jack Blaine, MD, Area III Director

Area IV: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin — **Location: Salons VI/VII**
Jonathan Dunn, MD, Area IV Director

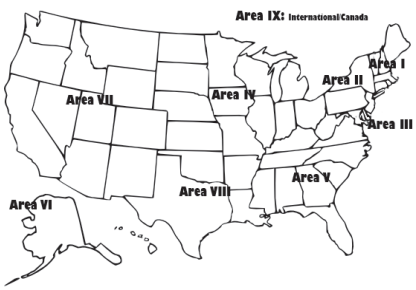
Area V: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia, Puerto Rico — **Location: Salon VIII**
Lon R. Hays, MD, Area V Director

Area VI: Alaska, California, Hawaii — **Location: Veranda East**
Martin H. Leamon, MD, Area VI Director

Area VII: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming — **Location: Veranda West**
Elizabeth Howell, MD, Area VII Director

Area VIII: Arkansas, Louisiana, Oklahoma, Texas — **Location: Garden Room I**
Bryon H. Adinoff, MD and Michael A. Dawes, MD, Area VIII Co-Directors

Area IX: Canada, International — **Location: Garden Room II**
Robert P. Milin, MD, Area IX Director



Friday, December 5

6:00 pm - 7:30 pm
Location: Garden Room

Annual Auction

Auctioneer: Petros Levounis, MD and Charles Silberstein, MD

Don't miss out - Complete your holiday shopping early! Join us for food and fun! AAAP is hosting an auction to benefit the Sheldon I. Miller, MD Educational Fund. This fund supports educational activities for trainees.

Many thanks to all our donors!

8:00 pm - 10:30 pm
Location: Salons IV/VII

Film Workshop: Addiction in Film 12: "Requiem for a Dream" and the Art, Science, and Culture of a Cult Classic

Workshop Presenters: Petros Levounis, MD, MA, Shaojie Han, MD and Humaira Shoaib, MD, Rutgers New Jersey Medical School

At the end of the workshop participants will be able to:

1. Utilize popular films to enhance didactics and teach fundamentals of Addiction Psychiatry to students and trainees
2. Identify three discrepancies between scientific and cinematographic reality
3. Discuss the portrayal of addiction in the media from a cultural perspective

This is the twelfth year that we offer a workshop for Addiction Psychiatry educators who would like to incorporate popular films in their teaching. Movies offer us an invaluable tool in exploring the complexities of addiction in everyday life, beyond familiar settings, such as Emergency Rooms, inpatient rehabs, and outpatient programs.

"Requiem for a Dream" is a horror film about four people who get addicted to heroin, cocaine, and prescription amphetamines. While writing the screenplay, director Darren Aronofsky came to the realization that his characters were secondary players to the true villain. He says: "The hero was the characters' enemy: addiction. The book is a manifesto on Addiction's triumph over the Human Spirit. I began to look at the film as a monster movie. The only difference is that the monster doesn't have physician form. It only lives deep in the characters' heads." Over the past 15 years, the film has reached cult status for its extraordinary power in depicting the very essence of the addictive process—from dream to nightmare.

We will use the film as a springboard for exploring how Hollywood—and by extension the general public—looks at addiction. "Requiem for a Dream" provides a unique platform for such analysis as its scientific basis is not uniformly sound. At times it is brutally accurate and at times it completely misses the mark. Sara Goldfarb's stimulant intoxication scene (brilliantly performed by Ellen Burstyn) is arguably the best depiction of substance-induced psychosis in all of film history. On the other hand, heroin injection repeatedly results in erroneous pupil dilation. When is Hollywood right, and, more importantly, when are popular movies helpful to the general public's understanding of addiction and its treatments?

Furthermore, we will address the more technical aspects of using films as teaching tools including choice of films or movie clips, timing, and suggestions for lecturer's comments before and after showing a movie. Participants are encouraged to bring their own examples and add to the list of addiction-related films, which will be provided at the workshop.

Source of Funding: None
Disclosures: Drs. Levounis, Han and Shoaib have nothing to disclose.

10:30 pm - 11:30 pm
Location: Salon II

Recovery Meeting

Saturday, December 6

6:30 am - 8:00 am

Location: Veranda East

Education Committee Meeting

Jeffrey DeVido, MD, Chair and John J. Mariani, MD, Co-Chair

The primary role of the Education Committee is to support high quality training for PGY-V Addiction Psychiatry residents, promote the quality of teaching and clinical experience in the addictions in general psychiatry residency programs, and encourage medical student interest in the field of Addiction Psychiatry.

7:00 am - 8:00 am

Committee Meetings

Youth and Adolescence

Location: Salon I

Ximena Sanchez-Samper, MD, Chair

The Child and Youth Treatment Committee seeks to identify and address issues unique to our youngest patients. The committee promotes the visibility of addiction treatment of minors by presenting symposia and workshops about child and adolescent substance abuse and distributing educational materials to a broader audience.

Twelve-Step Recovery Committee

Location: Salon IV

Marc Galanter, MD, Chair

The purpose of this committee is to (1) clarify the state of research on the mode of operation of Twelve-Step programs; (2) promote clinically-related approaches, such as the dissemination of Twelve-Step facilitation to enhance psychiatrists' ability to refer patients to such programs effectively; and (3) consider means by which psychiatric residents and fellows can best be given training on these issue.

Physician Health

Location: Salon IV

John Fromson, MD, Chair

The Physician Health Committee serves as an educational and policy planning resource for clinical, administrative and research issues related to the identification and treatment of physicians with psychoactive substance use or other psychiatric disorders as well as factors relating to the prevention of such illnesses.

Research

Location: Salon VI

Maria Sullivan, MD, Section Head

The Research Section examines how recent research advances inform the contemporary practice of Addiction Psychiatry. A particular interest is determining how scientific discoveries are translated into real-world clinical practice by AAAP members and how best to ensure that the most relevant research findings are transmitted to the membership in a timely fashion to promote life-long learning.

8:00 am - 10:00 am

Location: Grand Ballroom

Symposium III: Electronic Cigarettes: Friend, Foe, or Uneasy Ally to the Addiction Psychiatrist

Symposium Chair: *Mary F. Brunette, MD, Geisel School of Medicine at Dartmouth*
Presenters: *James Sargent, MD, Geisel School of Medicine at Dartmouth and Gregory Connolly, DMD, MPH, Harvard School of Public Health*

Since they became available in 2008, the use of electronic cigarettes (e-cigarettes) has been dramatically rising in the U.S. These devices heat a nicotine solution to create inhalable nicotine vapor. As of 2012, 8% of the general population and 30% of smokers had tried them. Completely unregulated by any agency, their safety and impact on nicotine addiction is largely unknown. The presenters of this symposium will provide a comprehensive overview of e-cigarette technology, the extent of their use in the U.S., and examples of how e-cigarette use may impact vulnerable populations.

First, Dr. Connolly will describe e-cigarette design and constituents as well innovations, including chemosensory agents that optimize nicotine delivery, provide cues for reward, and reduce withdrawal as well as new microchip technology that may enhance abuse liability. Second, Dr. Sargent will discuss e-cigarette use among youth and young adults. He will present data from a 2013 national American sample demonstrating rising e-cigarette use with and without other tobacco products among young people. Third, Dr. Brunette will discuss the prevalence of tobacco product use among people with mental illness and with addiction. She will present recent data e-cigarette use among Medicaid recipients with mental illnesses and describe short term impact of e-cigarette use among persistent smokers with severe mental illness who have been unable to quit combustible tobacco products. During the discussion period, the speakers will engage the audience with a discussion regarding the potential utilities and liabilities of these controversial devices.

At the conclusion of this activity participants will be able to:

1. Describe how electronic cigarettes work
2. Discuss the clinical correlates, risks and benefits of elect
3. Identify alternatives to electronic cigarette use

Source of Funding: None

Disclosures: *Drs. Sargent and Connolly have nothing to disclose. Dr. Brunette has received research funding from Alkermes.*

10:15 am - 11:45 am

Location: Salon I

PsychSIGN Medical Student Interest Group

PsychSIGN is the American Psychiatric Association's official medical student interest group. This year AAAP is organizing a series of presentations in conjunction with psychiatry subspecialty groups to better inform medical students of the scope of their efforts. Their program at AAAP will serve to introduce students to Addiction Psychiatry, and better prepare them to treat the patients they encounter throughout their clinical training.

Concurrent Workshop Session C ◆ 10:15 am - 11:45 am

Workshop C-1: Pain School: Incorporating Addiction Psychiatry into the Treatment of Pain

Location: Salons II/III

Workshop Presenters: *Akiva Daum, MD; Claudia Rodriguez, MD; SueAnn Kim, MD; Boston University School of Medicine; Tu Ngo, PhD; Bedford VA, and John Renner, MD, Boston University School of Medicine, VA Boston Healthcare System*

At the end of the workshop participants will be able to:

1. Explain the concept of gate control theory and describe how it impacts perception of physical pain
2. Discuss the importance of a multimodal approach to pain management and how Pain School can be used
3. Facilitate the integration of Addiction Psychiatry into programs for chronic nonmalignant pain

The workshop will consist of a series of presentations and exercises with the goal of highlighting a relatively new method of educating chronic pain patients about pain management. The presentations will focus on gate control theory, the multimodal/biopsychosocial aspects of pain and how Pain School is used to educate patient about their pain and treatment options. We will discuss the potential role of an addiction psychiatrist in the evaluation, prevention, early acknowledgement, and treatment of substance use disorders among this patient population. Following brief informative presentations, there will be a role play in which the audience will observe and then practice ways to introduce Pain School to their patients. Open discussions and Q&A to follow.

Methods will include a review of current literature, with a focus on Pain School and other educational options for patients who suffer from chronic pain. Literature examining opioid use disorder associated with the treatment of chronic non-malignant pain (CNMP), development of aberrant drug related behaviors, and current standards of care in pain management will also be reviewed. The presentation will then highlight ways to introduce and utilize Pain School for patients who suffer from chronic pain. The audience will be asked to consider ways in which addiction services can be incorporated into this multimodal treatment.

Source of Funding: None

Disclosures: *Drs. Daum, Rodriguez, Kim and Ngo have nothing to disclose. Dr. Renner is a stockholder with Johnson & Johnson and General Electric.*

Workshop C-2: QTc - Unraveling Myths From Realities

Location: Salons IV/V

Workshop Presenters: *Gregory Acampora, MD, Massachusetts General Hospital; Carla Marienfeld, MD, Yale University School of Medicine; and Joseph Westermeyer, MD, University of Minnesota/Minnesota VA*

At the end of this workshop participants will be able to:

1. Describe QTc origins and sources of variance
2. Discuss clinical pertinence of QTc, Learning objective
3. Cite correct questions to ask patient and tests to best assess QTc risk

Our activity aims to shed light on QTc as it pertains to clinical practice. The reality is that as psychiatrists seek “evidenced-based knowledge” for “best practice” regarding QTc, they are met with several levels of poor understanding, misinformation, misunderstanding and misapplication of the factors that determine QTc and what that number means to them and their patient. We aim to demonstrate that the literature can be either misleading or lend to misapplications on a practical level. After a review of physiology, we will discuss data gathered from a sophisticated lab at the Twin-Cities VA comparing in-vivo blood data to EKG’s demonstrating pharmacokinetic variance in methadone patients. We will intersperse with illustrative and applicable cases taken from a high volume methadone clinic in New Haven to generate lively discussion.

Questions concerning the QTc interval are frequently encountered by clinicians in and out of the hospital. There are many variables that can prolong QTc; these should be considered when met with an abnormal value. The fulcrum is understanding the Long QT Syndrome (LQTS). We will present three discussions of LQTS, with methadone as the representative drug: 1) discussion of determinates of QTc, 2) data demonstrating the proposed physiology by correlating in-vivo real-time methadone levels to EKG’s obtained for those blood draws, and 3) real cases that will illustrate clinical decision making.

Source of Funding: None

Disclosures: *Drs. Acampora, Marienfeld and Westermeyer have nothing to disclose.*

Saturday, December 6

Workshop C-3: Military Culture 101: What Addiction Psychiatry Needs to Know **Location: Salons VI/VII**

Workshop Presenters: *John Rodolico, PhD, McLean Hospital/Harvard Medical School and Grace Hennessy, MD, Department of Veterans Affairs and New York University School of Medicine*

At the end of the workshop participants will be able to:

1. Describe military culture in relation to treating military personnel with co-occurring disorders
2. Cite what the recent trends in co-occurring disorders are in a Military and Veteran population
3. Describe and discuss the recent interventions that are being piloted by the active duty and reserve components of the military, along with interventions being used by the Department of Veterans Affairs

The psychological injuries from the recent conflicts in Iraq and continuing in Afghanistan have taken a tremendous toll on our service members, including an increase in treatment-seeking for symptoms of PTSD, Major Depressive Disorder, and Substance Use Disorders. The suicide rate among service members and veterans continues to climb at an alarming rate, particularly in the Reserve Component. Increased behavioral health demand has prompted the military to increase its force of contracted civilian clinicians to treat veterans and active duty service members. One of the questions asked by civilian providers is how would they interact differently with this population than others, developing a cultural competency. From the other side of the therapeutic partnership, many Soldiers and Marines state that they can't talk to clinicians that haven't served, because they have to explain many details of military life. This workshop will explore these organizational/cultural differences along with the similarities that can enhance a better working relationship.

Dr. Rodolico will present a brief didactic summary of cultural differences and some of the recent trends and interventions used for military personnel and veterans. The second half of the workshop will include role-plays where each participant will get to practice the new skills they were introduced to during the workshop. An example of this would be: a clinical vignette paragraph will be read in military language and the clinician will need to interpret this and continue with an appropriate therapeutic intervention. There will also be video recordings of service members who had good and bad experiences in treatment settings.

Source of Funding: None
Disclosures: *Drs. Rodolico and Hennessy have nothing to disclose.*

Workshop C-4: Maximizing Patients' Twelve-Step Experience **Location: Veranda East**

Workshop Presenters: *Marc Galanter, New York University School of Medicine; Richard Ries, MD, University of Washington; and Penelope Ziegler, MD, Professionals Resource Network*

At the conclusion of the workshop participants will be able to:

1. Work effectively with the patient who is resistant to attending meetings due to a misperception that they are religious or require belief in God
2. Direct the patient who is prescribed medication, either for medication-assisted addiction treatment or for co-occurring psychiatric disorders
3. Assist the patient who has cravings to drink or drug during meetings
4. Use Twelve-Step Facilitation techniques (an evidence-based treatment modality) in working with patients with co-occurring psychiatric disorders

This workshop will start with a "Fishbowl style" Twelve Step meeting in which recovering members of 12-Step programs share brief synopses of their experiences with addiction and recovery, utilizing the format of a typical AA meeting. This will be followed by a group discussion by workshop attendees, presenters and 12-Step meeting participants. The presenters will guide the discussion toward providing attendees with clinically relevant tools for facilitating patients' exploration of and participation in 12-Step modalities as an important component of their overall recovery from addiction. Specific topics to be addressed will include:

1. The patient who is resistant to attending meetings due to a misperception that they are religious or require belief in God
2. The patient who is on prescribed medication, either for medication-assisted addiction treatment or for co-occurring psychiatric disorders
3 The patient who has cravings to drink or drug during meetings
4. Participants prepare patients effectively for meeting attendance

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Source of Funding: None
Disclosures: *Drs. Galanter and Ziegler have nothing to disclose. Dr. Ries is on the Speaker's Bureau for Alkermes, Janssen, and Reckitt Benckiser.*

Saturday, December 6

Workshop C-5: Sophisticated 5-Minute Tobacco Interventions for Young People **Location: Veranda West**

Workshop Presenters: *Alessandra Kazura, MD, MaineHealth-Center for Tobacco Independence and Tufts University School of Medicine; Kevin Gray, MD, Medical University of South Carolina; Garrett Sparks, MD, Western Psychiatric Institute & Clinic; and Catherine Martin, MD, University of Kentucky College of Medicine*

At the end of the workshop participants will be able to:

1. Describe the rationale for providing tobacco treatment to adolescents and young adults who are in treatment for other substance use
2. Identify the key elements of a brief assessment and psychosocial intervention for tobacco use
3. Discuss pros and cons for prescribing tobacco treatment medications to adolescents and young adults

Tobacco use continues to kill more people than all other substances combined and tobacco use rates are higher in people with substance use disorders than in the general population. Despite the imperative need, implementation of tobacco treatment with adolescents and young adults does not receive the attention that is warranted in substance use treatment settings. This workshop will offer practical information and demonstrate skills to routinely incorporate evidence-based brief interventions in the context of general substance use treatment with young people.

Dr. Martin will present a rationale for integrating tobacco treatment with treatment of other substances. She will identify opportunities for intervention and will address common myths about integrated tobacco treatment. Dr. Sparks will review the key elements of a brief, psychosocial assessment of tobacco use that incorporates information gathered with the assessment and treatment of other substances. He will discuss highlights of evidence-based, psychosocial treatment with a focus on brief interventions. Dr. Gray will discuss tobacco treatment medications. He will summarize strengths and limitations of knowledge about FDA approved medications as applied to this age group, providing guidance about decision-making amid a limited evidence base. He will discuss medications currently under study for tobacco treatment in youth. Dr. Kazura will lead the skills practice component, with the assistance of all presenters to optimize individualized attention. She will begin with a summary of critical elements covered in the talks and invite audience questions. She will then facilitate audience participation exercises using cases that illustrate ways that 3-5 minute interventions can be effective with adolescents and young adults.

Source of Funding: None
Disclosures: *Drs. Kazura, Sparks and Martin have nothing to disclose. Dr. Gray received research funding from Merck, Inc. and Supernus Pharmaceuticals.*

12:00 pm - 1:00 pm

Location: Conference Lobby

Poster Presentation Luncheon B - (CME Accredited)

(Poster #32-61 descriptions and disclosures on pages 43-56)

Saturday, December 6

Paper Presentations

Location: Grand Ballroom

Moderator: Carla Marienfeld, MD

1:00 pm - 1:15 pm
Attitudes towards Marijuana and Its Legalization in a Population of Substance Abusing Patients

Presenter: *Samuel Wilkinson, MD; Gerrit I. van Schalkwyk; and Cyril D'Souza, MD; Yale School of Medicine*

Learning Objectives:

1. Describe the way substance abusers conceptualize marijuana
2. Identify reasons many do not consider marijuana a drug of abuse
3. Identify that a significant minority of substance abusers differ in their views

Background: Marijuana is the most common illicit substance used throughout the world. In the last decade, cultural attitudes of medical and recreational marijuana have shifted drastically. The current study aimed to explore the views of individuals with a history of substance abuse towards marijuana – focusing primarily on their risk perception and attitudes towards legalization.

Methods: Qualitative, semi-structured interviews were conducted with veterans who were receiving treatment for a substance use disorder and explored participants' knowledge of marijuana and their attitudes towards its changing legal status. Interviews were recorded digitally, transcribed verbatim, and then analyzed using inductive thematic analysis.

Results: Thirty-one veterans (thirty male, one female), ranging in age from 24 to 65, completed interviews. A majority of participants conceptualized marijuana as being categorically different from other drugs of abuse in that it (1) is not addictive; (2) is not associated with any signs or symptoms of physical withdrawal, (3) is "naturally grown" and (4) has less overt behavioral effects than other substances. Because of these intrinsic properties, participants generally expressed that marijuana should be legalized and that legalization would move it out of the 'drug space', contributing to its acceptance by the medical and broader communities. A significant minority conceptualized marijuana as being a drug of abuse, similar in kind to other illicit drugs (i.e., cocaine, heroin, etc.). The seven participants who expressed this view emphasized their experience with marijuana as (1) having the capacity to cause profound social consequences, (2) act as a gateway to the use of other, more harmful substances, and (3) cause paranoia or worsening psychosis.

Conclusions: These results serve to highlight that there is a significant sense among individuals with substance use disorders that marijuana has few features of a drug of abuse. By extension, the legalization of marijuana is not only appropriate, but would serve to move it out of a space where it acts as a connection to other drugs and criminal activity. Although compelling, there is a contrasting narrative provided by a minority of participants, which drew attention to experiences that highlighted both the addictive qualities and negative social consequences of marijuana use. It is important that providers are well equipped to identify individuals who may be part of the unfortunate minority for whom marijuana is a real problem – it would appear that this is likely to become an increasingly marginalized perspective as the wave of legalization and acceptance continues.

Source of Funding: NIMH Grant 2R25MH071584-06A1.
Disclosures: *Drs. Wilkinson and van Schalkwyck have nothing to disclose. Dr. D'Souza received research grants from AbbVie and Pfizer; consultant for Bristol-Meyers Squibb and Johnson & Johnson.*

1:15 pm - 1:30 pm
Predictive Significance of Food Addiction in Patients with Obesity and Binge Eating Disorder

Presenter: *Carlos Grilo, PhD, Yale University School of Medicine*

Learning objectives:

1. Identify binge eating disorder
2. Describe the significance of food addiction
3. Discuss evidence-based treatment options for binge eating

Background: Emerging research has suggested that "food addiction" characterizes a subgroup of patients with obesity and binge eating disorder (BED) that may represent a more disturbed variant. We examined the predictive significance of "food addiction" in patients with co-existing obesity and BED in a randomized clinical trial.

Methods: Participants were 186 obese patients with BED (mean age 48, 71% female, mean BMI 39) assigned to six-month behavioral treatments. Assessments were independently performed at baseline, throughout- and post-treatment, and 6- and 12-month follow-ups with reliably-administered semi-structured interviews and measures. "Food addiction" was assessed using the Yale Food Addiction Scale (YFAS). intent-to-treat analyses were performed using mixed models.

Results: YFAS "food addiction" classification was met by 61% (N=114/186) of participants. ITT analyses of remission rates (defined as zero binges/month) at 12-month follow-up revealed that patients with "food addiction" (40%) versus without (51%) did not differ significantly. Mixed models analyses revealed significant main effects for "food addiction" on binge-eating frequency, eating-disorder psychopathology, and depression; post-hoc analyses indicated the "food addiction" group had significantly greater pathology at baseline and most time points throughout/following treatment. "Food addiction" did not show significant main effects for weight-loss. Mixed models did not reveal significant interaction effects between "food addiction" and time on any outcomes.

Paper Presentations continued

Conclusions: Our findings suggest that, among treatment-seeking adults with co-morbid obesity and BED, "food addiction" is common (61%) and signals a more disturbed variant of BED. Even though "food addiction" did not significantly predict worse or differential outcomes, it showed significant main effects on most variables (except weight loss) over time.

Source of Funding: NIH NIDDK grants R01 DK49587 and K24 DK070052
Disclosure: *Dr. Grilo receives royalties for academic books from Guilford Press and Taylor & Francis Press.*

1:30 pm - 1:45 pm
Mental Health Services and Psychiatric Prescription Fills Among Seriously Mentally Ill Patients in Methadone Maintenance Treatment Nationally in the Veterans' Health Administration

Carla Marienfeld, MD and Robert Rosenheck, MD Yale University School of Medicine

Objective: To examine the care and characteristics of people with serious mental illness (SMI) in methadone maintenance treatment (MMT) in a national sample.

Methods: Using national Veterans' Health Administration data from 2012, bivariate and multiple logistic regression were used to compare veterans in MMT who had a SMI (schizophrenia, bipolar disorder or major affective disorder) to MMT patients without SMI and SMI patients who were not in MMT.

Results: Only a small fraction of SMI patients receive MMT (0.65%), but a relatively large proportion in MMT had a SMI (33.2%). Compared to MMT patients without SMI, SMI patients in MMT are more likely to have lower incomes, have been homeless, have higher rates of other psychiatric diagnoses, and have had a recent psychiatric hospitalization; they use more outpatient substance use services and have had more overall outpatient and emergency department visits and more fills for psychotropic drugs. Compared to other SMI patients, patients with SMI in MMT are more likely to have a both liver disease and HIV and to fill psychiatric medications, and they were more likely to use outpatient substance use services, outpatient psychiatric services, and to have a mental health inpatient admission or an ER visit.

Conclusions: Patients with SMI and opiate addiction in MMT have high additional psychiatric co-morbidity and are more likely to use psychiatric and general health services and to fill psychiatric medications. Further study and clinical awareness of potential drug-drug interactions in this high medication and service using population are needed.

Source of Funding: None
Disclosures: *Drs. Marienfeld and Rosenheck have nothing to disclose.*

1:45 pm - 2:00 pm
Tobacco Treatment in Hospitalized Patients with Acute Psychiatric and Addictive Disorders

Presenters: *Smita Das, MD, PhD, MPH, Stanford University School of Medicine; Norval Hickman, PhD, MPH, University of California; and Judith J. Prochaska, PhD, MPH, Stanford University School of Medicine*

Background: Tobacco addiction is prevalent yet under-addressed and cessation is sometimes discouraged in individuals with mental health and substance use disorders (SUD). A barrier to treatment has been concerns that quitting smoking may compromise recovery.

Objectives: In a randomized controlled trial, relative to usual care, we evaluated the efficacy of a tobacco intervention among smokers with serious mental illness and co-occurring SUD.

Methods: Recruited in-hospital from two 100% smoke-free locked acute psychiatry units in the SF Bay Area and randomized to intervention or usual care, participants met criteria for SUD based on screening measures (AUDIT and DAST). Intention to quit smoking was not required to participate as the intervention was tailored to readiness to quit smoking and included a computer program, counseling, and nicotine replacement therapy (NRT). The usual care condition received NRT during hospitalization only and brief advice to quit. The outcomes of interest were verified 7-day point prevalence abstinence over 12-months post baseline and past 30-day reports of alcohol and illicit drug use.

Results: Sample (N=216, 34% female, 36% Caucasian, mean 19 cigarettes/day) characteristics did not differ by group at baseline. At 12 months, 22% of intervention versus 11% of usual care participants were tobacco abstinent (RR=2.01, 95%CI=[1.05, 3.83], p=0.03), and 22% of respondents reported total abstinence from alcohol/drugs in the last 30 days (group difference NS). At 12 months, there was a significant decrease in cannabis (18% versus 42%) and alcohol (22% versus 58%) use in those who quit smoking versus those who did not.

Conclusions: A tobacco treatment intervention among smokers with co-occurring mental illness and SUD was successful in aiding smoking cessation and did not adversely impact alcohol and illicit drug use. Further quitting smoking was associated with less alcohol and cannabis use at 12 month follow up. The findings support efforts to address alcohol, tobacco, and drugs (ATOD) in one integrated intervention.

Source of Funding: K23-DA018691, R01 MH083684 and P50 DA009253
Disclosures: *Drs. Das, Hickman, and Prochaska have nothing to disclose.*

Saturday, December 6

Paper Presentations continued

2:00 pm - 2:15 pm
Marijuana Use is Associated with Worse Outcomes in Symptom Severity and Violent Behavior in Patients with PTSD

Presenters: *Samuel T. Wilkinson, MD; Elina Stefanovics, PhD; and Robert A. Rosenheck, MD, Yale University School of Medicine*

Objective: An increasing number of states have approved Post-traumatic Stress Disorder (PTSD) as a qualifying condition for medical marijuana, though little evidence exists evaluating the effect of marijuana use in PTSD. We examined the association between marijuana use and PTSD symptom severity in a longitudinal, observational study.

Method: Veterans with PTSD (N=2276) were admitted to specialized VA treatment programs with assessments conducted at intake and four months after discharge. Subjects were classified into four groups according to marijuana use: those with no use at admission or after discharge ("Never used"); those who used at admission but not after discharge ("Stoppers"); those who used at admission and after discharge ("Continuing Users"); and those using after discharge but not at admission ("Starters"). Analysis of variance compared baseline characteristics and identified relevant covariates. Analysis of covariance then compared groups on follow-up measures of PTSD symptoms, drug and alcohol use, violent behavior, and employment.

Results: After adjusting for relevant baseline covariates, marijuana use was significantly associated with worse outcomes in PTSD symptom severity, violent behavior, and measures of alcohol and drug use. Stoppers and never users had the lowest levels of PTSD symptoms at follow up ($p<0.0001$). Starters had the highest levels of violent behavior ($p<0.0001$).

Conclusions: In this observational study, initiating marijuana use after treatment was associated with worse PTSD symptoms, more violent behavior and alcohol use. Marijuana may actually worsen PTSD symptoms or nullify the benefits of specialized, intensive treatment. Cessation or prevention of use may be an important goal of treatment.

Source of Funding: NIMH - 2R25MH071584-06A1.
Disclosures: *Drs. Wilkinson, Stefanovics and Rosenheck have nothing to disclose.*

2:30 pm - 3:30 pm
Location: Magnolia Courtyard

Dessert With the Experts

Co-Chairs:Timothy Fong, MD and Robert Millin, MD

This is a unique opportunity to have small group discussions with experts in the field. All attendees are encouraged to participate

Addiction in Health Care Professionals
Penelope Ziegler, MD

Addiction in LGBT Communities
Petros Levounis, MA, MD

ADHD and SUD
Timothy E. Wilens, MD

Adolescent/Youth Substance Use Disorders
Kevin M. Gray, MD

Agonist vs. Antagonist Strategies for Treating Opioid Dependence
Maria Sullivan, MD

Anti-Addiction Vaccines
Thomas Kosten, MD

Behavioral Addictions
Timothy Fong, MD

Buprenorphine Treatment Initiation and Maintenance
Laura McNicholas, MD, PhD

Cannabis Dependence in Youth With or Without Psychosis
Robert Milin, MD, FRCPC, DABPN

Co-occurring PTSD and Substance Use Disorder
Andrew Saxon, MD

Digital Technology in Addiction Treatment
Richard N. Rosenthal, MD

Family and Network Therapy
Marc Galanter, MD

Fellowship/Early Career
John A. Renner, Jr., MD

Forensics and Sports
Laurence Westreich, MD

Injectable Naltrexone
Edward V. Nunes, MD

Motivational Interviewing in Everyday Addiction Practice
Carla Marienfeld, MD

Overdose Education and Naloxone Distribution
Karen Drexler, MD

Pharmacogenetics
Albert Arias, MD

Psychodynamics
Edward J. Khantzian, MD

Racial and Ethnic Issues
William Lawson, MD, PhD

"Recovery" on Buprenorphine? -- What, When, How?
Richard Ries, MD

Role of Exercise in Treatment of Addiction
Peter R. Martin, MD

Smoking Cessation
Mary Brunette, MD

Substance Abuse Among Veterans
Ismene Petrakis, MD

Treatment of Cannabis Use Disorders
Frances Levin, MD

Treatment of Sedative-Hypnotic Use Disorders
John J. Mariani, MD

Women and Addiction
Shelly F. Greenfield, MD, MPH

Saturday, December 6

3:30 pm - 5:30 pm
Location: Conference Lobby

Highlights from Industries
Poster Session (Not CME Accredited)

(Descriptions and disclosures on pages 57-62)

3:30 pm - 5:00 pm
Location: Salons VI/VII

NIAAA Workshop: Medications for the Treatment of Alcohol Dependence, Other Alcohol Use Disorders, and Related Comorbidities: A Brief Guide

Workshop Presenter: *Domenic Ciraulo, MD, Boston Medical Center*

Current evidence shows that medications are underutilized in the treatment of alcohol use disorders, including abuse and dependence. To clarify the situation, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and the Substance Abuse and Mental Health Services Administration (SAMHSA) jointly convened a Consensus Panel on New and Emerging Pharmacotherapies for Alcohol Use Disorders. The panel, which brought together experts in alcohol research, clinical care, medical education, and public policy reviewed current evidence on the effectiveness of available medications in the treatment of alcohol use disorders and developed guidance and developed working guidelines for the use of such medications in clinical practice. The proposed workshop will review these newly proposed guidelines (Title: Medications for the Treatment of Alcohol Dependence, Other Alcohol Use Disorders, and Related Comorbidities: A Brief Guide). The goals of these guidelines will focus on the following: 1) Screening Patients and Assessing Their Need for Treatment; 2) Developing a Treatment Plan; 3) Initiating Medication-Assisted Treatment; and 4) Monitoring Patient Progress and Adjusting the Treatment Plan. In addition, a current focus on those medications that have been empirically-supported for the treatment of alcohol use disorders will be reviewed.

At the end of the workshop participants will be able to:

1. Review the proposed medication guidelines for the treatment of alcohol use disorders and related comorbidities
2. Discuss these specific guidances and determine how to put them in practice

Disclosure: *Dr. Ciraulo is a consultant for Merck, Inc.*

3:30 pm - 4:30 pm
Location: Salon I

Marijuana Special Interest Group

The marijuana special interest group aims to inform both treatment of marijuana addiction and marijuana-related policies from an evidence-based perspective. The group is off to a fast start with members from all over the United States. Members share our clinical experiences treating marijuana addiction as well as the challenges and concerns we have about the changing landscape of marijuana policy as state after state faces questions about medical marijuana and legalization of marijuana.

3:30 pm - 5:30 pm
Location: Veranda East

Maintenance of Certification Workshop (MOC)

AAAP was awarded a grant from the Agency for Healthcare Research and Quality (AHRQ) to develop educational resources for physicians to complete their Maintenance of Certification (MOC) and Performance in Practice (PIP) requirement. During this workshop, course instructors will guide participants through the process of completing a PIP.

Attention Attendees

You must wear your AAAP Name Badge at all times to attend conference events and for meals.

Make sure to congratulate AAAP Travel Scholarship Awardees!

If you see attendees with a special star on their name tag, please take a moment to congratulate them! These stars are in recognition of excellence as awardees as they pursue further study in the field of Addiction Psychiatry.

Questions? Find a AAAP staff member or stop by the registration desk.

Saturday, December 6

7:00 pm - 9:00 pm **Location: Garden Room**

Gala and Awards Ceremony
Trainee Competition Game Show

Travel and Research Awards are supported by AAAP, National Institute on Drug Abuse and Professional Risk Management Services, Inc.

Medical Student Travel Award Recipients

The medical student travel scholarships offer the opportunity for medical students interested in pursuing residency and education in the field of Addiction Psychiatry to attend the Annual Meeting.

Kristen Mazoki, RN, BSN

Robert Rymowicz, BSc

PGY I-IV/Resident Travel Award Recipients

The resident travel scholarship offers the opportunity for PGY I-IV residents interested in learning about the etiology, diagnosis and treatment of substance use disorders to attend the Annual Meeting.

Vishesh Agarwal, MD
Smita Das, MD, PhD, MPH
Huiqiong Deng, MD, PhD
Yilang Tang, MD, PhD
Brittany Albright, MD, MPH
Michelle Davids, DO
Neil Paterson, MD, PhD

PGY-V/Fellow Travel Award Recipients

The PGY-V travel scholarship offers the opportunity for PGY-V+ Addiction Psychiatry residents interested in furthering their careers in the field of Addiction Psychiatry to attend the Annual Meeting.

Kara Bagot, MD
Akiva Daum, MD
Beth Grunschel, MD, ScM
Mario Hitschfeld, MD
Kevin Buford, MD
Gibson George, MD
Scott Hadland, MD, MPH
Sanchit Maruti, MD, MS

Early Career Recipient

The Early Career Addiction Psychiatry Award is chosen based on the quality of original research conducted by the applicant and their demonstrated commitment to the field of Addiction Psychiatry. This award-winning research will be presented during the Paper Session on Saturday, December 6, 2014.

Samuel Wilkinson, MD

Regional Travel Awards

Nicole Albrecht, MD, *Area IV*
Kathleen Broad, MD, *Area IX*
Brian Holoyda, MD, *Area VI*
Akshay Lohitsa, MD, *Area II*
Iman Parhami, MD, MPH, *Area III*
Elie Aoun, MD, *Area I*
Nitin Chopra, MD, *Area V*
Jyothsna Karlapalem, MBBS, *Area II*
Walter Stan Mathis, MD, *Area VIII*

International Travel Award

Shobhit Jain, MBBS

7:00 am - 8:00 am

Location: Veranda East & West

Program and Scientific Committee Meeting

Timothy Fong, MD, Chair and Robert T. Milin MD, FRCPC, DABPN, Co-Chair

The Annual Meeting Program and Scientific Committee is charged with developing a high-quality scientific program for the AAAP Annual Meeting and Symposium. The Program and Scientific Committee receives guidance from the Board of Directors and AAAP membership on the content and sessions to be offered.

8:00 am - 9:00 am

Location: Grand Ballroom

Medical Update: Traumatic Brain Injury, Substance Misuse and Substance Use Disorders

Presenter: *John D. Corrigan, PhD, Professor, The Ohio State University*

This presentation will describe the nature and extent to which traumatic brain injury (TBI) co-occurs with substance misuse and substance use disorders. A theoretical model for conceptualizing opportunities for intervention will be presented and unique characteristics of treatment will be discussed.

At the end of the activity participants will be able to:

1. Describe the extent of co-occurring TBI with substance misuse and substance use disorders
2. List sources of increased morbidity
3. Discuss opportunities for intervention

Source of Funding: None
Disclosure: *Dr. Corrigan is a consultant for NeuroRestorative.*

9:00 am - 11:00 am

Location: Grand Ballroom

Symposium IV: Cocaine and Stimulant Dependence: New Strategies for an Old Problem

Symposium Chair: *Edward V. Nunes, MD, NYS Psychiatric Institute, Columbia University College of Physicians and Surgeons*
Presenters: *Andrew Saxon, MD, University of Washington; Theresa Winhusen, PhD, University of Cincinnati College of Medicine; and Madhukar Trivedi, MD, University of Texas Medical Center*

Dependence on cocaine and stimulants (mainly methamphetamine) remain widespread, serious public health problems. Behavioral treatments (e.g. Cognitive Behavioral Relapse Prevention, Contingency Management, 12-Step Facilitation) have demonstrated effectiveness in controlled trials. However, a substantial proportion of cocaine/stimulant dependent patients fail to respond to behavioral treatments, and the goal of developing medication treatments has remained elusive. This symposium will present primary outcome data from recently completed clinical trials from the NIDA Clinical Trials Network (CTN) that have tested "outside the box" strategies for cocaine/stimulant dependence, namely: 1) Aerobic exercise; 2) Treating co-occurring nicotine dependence; 3) The opioid partial agonist and putative kappa antagonist buprenorphine; 4) The 5HT-1A partial agonist and putative D4 antagonist buspirone. Discussion will focus on what we can learn from these trials about the management of cocaine/stimulant dependent patients who fail to respond to standard behavioral therapies.

At the conclusion of this activity participants will be able to:

1. Recognize effective behavioral treatments for cocaine/stimulant dependence, and their limitations, namely the substantial rate of non-response
2. Discuss recent therapeutic strategies tested for cocaine/stimulant dependence, their rationales, and findings from clinical trials
3. Apply this knowledge to the development of treatment strategies for individual patients, particularly those who do not respond readily to initial behavioral treatments.

Source of Funding: NIDA U10DA020024, 5U10DA013714, U10DA01373, U10DA013035, K24DA022412
Disclosures: *Dr. Nunes received medication for research studies from Alkermes/Cephalon, Inc., plans to serve on Advisory Board for Alkermes in October 2014, received medication for research studies from Reckitt Benckiser and Duramed Pharmaceuticals, received web-based behavioral intervention for research study from HealthSim, LLC and received devices under investigation and travel reimbursement for investigators' meeting from Brainsway. Dr. Saxon is a paid section editor for UpToDate, Alkermes and Reckitt Benckiser provided study medication. Dr. Winhusen received grant support from Pfizer.*

Location: Conference Lobby

Poster Session A - (CME Accredited) ◆ Friday, December 5

At the conclusion of this session participants will be able to:

1. Identify an evidence-based hypothesis which will enhance knowledge areas of research related to the field of Addiction Psychiatry
2. Evaluate the research methods, key findings and results and conclusions of each poster reviewed
3. Determine what further recommendations and conclusions can be formulated based on this new knowledge
4. Consider a change in practice behavior in key areas of competency, knowledge or patient outcomes based on the information

Poster 1: Mental Health and Quality of Life of Youth with Prescription Opioid Dependence: A Comparison to Adults

Kimberly Corace, PhD, The Royal Ottawa Mental Health Centre, University of Ottawa, Institute of Mental Health Research; Melanie Willows, MD, CCFP, CASAM, CCSAM, The Royal Ottawa Mental Health Centre, University of Ottawa; Glen Howell, MA, The Royal Ottawa Mental Health Centre, Carleton University; Mark Kaluzienski, MD, FRCPC, The Royal Ottawa Mental Health Centre, University of Ottawa, The Ottawa Hospital; and Robert Milin, MD, FRCPC, DABPN, The Royal Ottawa Mental Health Centre, University of Ottawa

Background: There is little research on mental health comorbidities and quality of life of prescription opioid dependent youth and the literature comparing youth to adults is scant. This study seeks to address these gaps by comparing the characteristics of treatment seeking prescription opioid dependent youth and adults.

Methods: 45 youth (64% male) and 30 adults (57% male) with prescription opioid dependence were evaluated as part of their intake assessment at the Regional Opioid Intervention Service in a large mental health facility in Ottawa, Canada. Patients completed measures of substance use, mental health, and quality of life on their initial visit and at multiple time points thereafter. Additional data was gathered through medical chart review. Youth and adults were compared on measures using Chi Square and t-tests.

Results: Compared to adults, youth reported fewer years of opioid use (M = 27 vs 42 months, p =.04), greater drug use severity requiring intensive intervention (39% vs. 10%, p < .01), and higher rates of opioid use by injection (54% vs. 18%, p < .01). As well, youth engaged in more cannabis use (66% vs. 41%, p = .04), polysubstance use (2.8 vs. 1.8 substances other than opioids, p = .01), and harmful/hazardous alcohol use (39% vs. 24%, p = .04). More youth than adults tended to struggle with behavioral health problems, particularly interpersonal violence and criminal behavior (40% vs. 20%, p = .07). Youth and adults' rates of depression (48% and 52%) and anxiety disorders (39% and 57%) were high (ns). Both youth and adults presented with impairment in mental (81% and 70%) and physical (31% and 52%) quality of life (ns).

Conclusions: There are significant differences in the clinical characteristics of treatment seeking prescription opioid dependent youth and adults. Our findings suggest that treatment programs should be tailored to address the unique needs of youth, including the need to treat mental health, substance use, and behavioral health problems concurrently. Tailoring care for youth may increase treatment access and improve outcomes.

Source of Funding: Academic Health Sciences Centre AFP/Ministry of Health Innovation Fund
Disclosures: *Dr. Corace received an unrestricted educational grant to The Royal Ottawa Mental Health Centre from Reckitt-Benckiser and received a speaker fee from Vertex. Dr. Willows received an unrestricted educational grant to The Royal Ottawa Mental Health Centre from Reckitt-Benckiser. Dr. Kaluzienski received speaker fees and is on the advisory board for BMS, Lundbeck, and Janssen and Sunovion. Dr. Milin is a speaker for Bristol-Myers Squibb. Glen Howell has nothing to disclose.*

Poster 2: Two Mirtazapine Pilot Trials in Depressed Alcoholics

Jack Cornelius, MD, MPH; Antoine Douaihy, MD; and Dennis Daley, PhD, University of Pittsburgh

Background: To date, pharmacotherapy trials of depressed alcoholics have focused on SSRI medications, with disappointing results, so effective treatments for that comorbid population are lacking. Mirtazapine is an FDA-approved antidepressant with a unique pharmacological profile. Recent reports suggest that its efficacy may exceed that of SSRI antidepressants. To date, no studies have evaluated its safety and efficacy for treating the drinking and depression of depressed alcoholics. We now report findings from two pilot studies involving mirtazapine in depressed alcoholics, including an open-label study and an ongoing double-blind placebo-controlled pilot study. We hypothesized that mirtazapine would decrease their drinking and depression.

Methods: An 8-week open label study was conducted involving adults with DSM-IV diagnoses of comorbid major depression and alcohol dependence. Participants received mirtazapine 15 mg orally, which was increased to 30 mg after two weeks, and also received motivational therapy. A similar 12-week double-blind placebo-controlled study remains ongoing. Assessments were conducted weekly for 4 weeks and bi-weekly thereafter. Depression was monitored with the BDI and drinking with the TLFB.

Results: Twelve subjects entered the open-label trial. During that trial, large magnitude (>50%) statistically significant (p<.01) decreases were noted in both depressive symptoms and level of drinking. To date, twelve subjects have participated in the double-blind placebo-controlled study, which remains blinded. No participants demonstrated significant medication side effects in either pilot study.

Conclusions: These preliminary findings suggest safety and efficacy for mirtazapine for decreasing the drinking and depression of depressed alcoholics. Large double-blind studies are needed to clarify its safety and efficacy in depressed alcoholics.

Poster Session

Location: Conference Lobby

Summary: Information concerning the safety and efficacy of mirtazapine for treating persons with MDD/AUD will be presented. This information has the potential to improve the treatment of persons with that comorbid condition.

Source of Funding: NIH Grants: R21 AA022123; P50 05605; NIDA Clinical Trials Network; R21 AA022863
Disclosures: *Drs. Cornelius, Douaihy, and Daley have nothing to disclose.*

Poster 3: Efficacy of Extended-Release Naltrexone in the Treatment of Alcohol Use Disorders: A Post-Hoc Analysis of VA Patients

Stefania Faraca, PharmD, University of Minnesota; Patricia Dickmann, MD, VA Medical Center Minneapolis, University of Minnesota; Paul Thuras, PhD, VA Medical Center, Minneapolis, University of Minnesota; and Scott McNairy, MD, VA Medical Center, Minneapolis

Background: According to the World Health Organization, alcohol use disorders are the third leading cause of disease burden in developing countries. Unfortunately, the percentage of patients receiving pharmacotherapy to treat this condition is still very small. Naltrexone is a mu opioid antagonist that reduces the neurobiological reward obtained from drinking alcohol by causing a lesser dopamine release, which leads to a reduced alcohol intake. Naltrexone has better outcomes when taken for a long period of time, but unfortunately people suffering from alcohol use disorders often have notoriously low medication compliance. A solution to this problem has been the development of a depot naltrexone (Vivitrol), which provides a sustained release of medication for four weeks. The objective of this study was to determine whether naltrexone long-acting injectable is an effective treatment option for treatment-refractory and high relapse-prone patients with alcohol use disorders.

Methods: This study entailed a retrospective chart review of 25 Minneapolis VA Medical Center patients >= 18 years old with a diagnosis of alcohol dependence receiving naltrexone-long acting injectable at any time during their treatment course. The efficacy of the medication was determined by how many alcohol related emergency room visits took place, the Blood Alcohol Level (BAL) and/or breathalyzer value at the time of each emergency room visit, and whether the patient was on or off the naltrexone long-acting injectable at the time of the visit.

Results: The percentage of emergency room visits while not on naltrexone long-acting injectable (43.29%) was nearly twice as much that of the percentage of emergency room visits while on the injectable (23.76%).

Conclusions: Naltrexone long-acting injectable reduces the occurrence of alcohol-related emergency room visits during the 4-week period it is active in the bloodstream.

Source of Funding: None
Disclosures: *Drs. Faraca, Dickmann, Thuras, and McNairy have nothing to disclose.*

Poster 4: Prescription Drug Abuse: Case Series

Tanuja Gandhi, MD, Einstein Healthcare Network and Thomas Richardson, DO, Belmont Behavioral Health

Background: The CDC has officially declared prescription drug abuse as an epidemic. Per the NIDA update, in 2010, around 7 million people were using psychotherapeutic drugs non-medically of which, 5 million people were using pain relievers. As per the CDC Morbidity and mortality weekly report 2012, since 2003, opioid analgesic overdose has caused more deaths that heroin and cocaine combined. We present a series of cases highlighting the issue and present a simple yet effective protocol adopted on the co-occurring disorders inpatient unit of our facility.

Methods/Results: Retrospective chart review with PubMed and Google scholar search using keywords “prescription drug abuse”. Case Presentation: 1. Mr.A, a 61y/o male with schizoaffective disorder and polysubstance abuse presenting post intentional overdose on klonopin and xanax reported that when unable to get his prescription methadone, he started using a prescription of oxycontin and percocet prescribed after ankle surgery. 2. Mr.D, a 51y/o male with a history of depression, anxiety and multiple suicide attempts presented after an impulsive suicide attempt by overdosing on his prescription Klonopin. 3. Mr.E, a 42y/o male with depression, multiple suicide attempts and chronic pain presented after a failed suicide attempt. He was on oxycontin and frustrated with the recent discontinuation of his benzo’s. 4. Mr.B, a 48y/o male with bipolar disorder presented with extensive abuse of opiates and benzodiazepines.

Conclusions: A burgeoning public health crisis, prescription drug abuse could be reduced by a collaborative approach to prescribing controlled substances. Despite the emphasis on responsible prescribing, education for clinicians and preventing diversion, the problem prevails. Furthermore, cost limitations have prevented NASPER (national all schedules prescription electronic reporting act) from taking into effect. We propose a simple protocol adopted on our co-occurring disorders unit, the implementation of which would streamline prescribing and enable a collaborative approach to face this crisis.

Source of Funding: None
Disclosures: *Drs. Gandhi and Richardson have nothing to disclose.*

Poster 5: E-Cigarettes: Overview of Legal Issues and Review of Literature

Tanuja Gandhi, MD and Thomas Richardson, DO, Einstein Healthcare Network, Belmont Campus

Background: Electronic cigarettes (E-Cigarette), a growing trend, with around 160,000 students reporting use while never having tried conventional cigarettes (4) use nicotine solution that forms an aerosol inhaled with the tobacco smoke. But, despite being tobacco-products, the regulations for E-cigarettes aren’t akin to regular cigarettes. They emit propylene glycol, a primary component of the aerosol, the inhalation of which with vaporized nicotine is not FDA approved (7). According to a CDC report, poison centers received around 215 calls/month about E-Cigarette liquid in February when compared to 1 call/month in September (3) with more than half the calls involving children < 5yrs and about 42% involving people 20yrs and older.

Poster Session

Location: Conference Lobby

Methods: Review of literature using keyword "E-cigarettes" on PubMed and Google scholar.

Results: A "Tobacco product" is any product made or derived from tobacco that's intended for human consumption. Currently, only cigarettes, smokeless tobacco and roll-your-own tobacco are under the FDA's regulation. Though at least 34 US states have prohibitions on E-cigarettes sales, they are not required to be childproof and hence the increased risk of poisoning (3). Eventually, due to health concerns, in April 2014, the FDA proposed regulations to include E-cigarettes and other alternative tobacco and nicotine products (2,9) which is open for public comments until July 2014.

Conclusions: Many countries have banned or strictly regulated E-cigarettes (10) but their availability through the Internet makes it challenging. If we aim to reduce sale to minors and exposure to second-hand smoke per the Healthy People 2020 objectives, it is imperative to have comprehensive smoke-free policies including E-cigarettes rather than state-specific regulations.

Source of Funding: None
Disclosures: *Drs. Gandhi and Richardson have nothing to disclose.*

Poster 6: Pharmacotherapy for Alcoholism after Liver Transplantation: Case Report and Literature Review

Shaojie Han, MD, MS; Anbreen Khizar, MD; and Rashi Aggarwal, MD, Rutgers New Jersey Medical School

Background: Liver transplantation (LT) is the only cure for end-stage alcohol liver disease. Relapse to alcohol after LT to the level of harmful drinking is reported in about 15%-20% and impacts the long-term survival. Pharmacotherapy plays an important role in controlling alcohol consumption. The objective is to understand the status quo of pharmacotherapy in LT patients regarding its necessity, efficacy and safety.

Methods: A literature search was conducted using PubMed and Ovid-Medline for articles published after January 1st, 1991. Related MESH terms were used. We also did cross-checks of reference list cited in existing articles.

Results: Two major factors hinder pharmacotherapy as an option to treat alcoholism after LT: the degree of medical complexity and the concern about a risk of hepatotoxicity. Naltrexone is considered to be safe in patients with newly transplanted livers. However, clinical studies failed in testing its efficacy in LT recipients due to difficulty in recruiting participants. Acamprosate, topiramate and ondansetron have safe profiles in alcoholic patients, but none of them has been tested in alcoholic patients with advanced liver disease or in LT recipients. Baclofen represents the only anti-craving medication formally tested in a randomized clinical trial in patients with alcoholic cirrhosis. Our case report described a liver transplant patient and our management for alcoholism.

Conclusions: Pharmacotherapy for alcoholism is generally safe in post-liver transplant non-cirrhotic patient. Above medications, especially baclofen, are promising enough to call for further studies to define their roles in alcoholism treatment.

Source of Funding: None
Disclosures: *Drs. Han, Khizar, and Aggarwal have nothing to disclose.*

Poster 7: Electronic Cigarettes: Have we Gone From Bad to Worse?

Nahil Chohan, MD and Rashi Aggarwal, MD, Rutgers New Jersey Medical School

Background: Electronic cigarettes are the latest fad devices to assist with smoking cessation that are becoming increasingly popular in the United States. These devices are marketed as safer alternatives. This is a review of the available literature evaluating whether the chemicals in these devices are carcinogenic.

Methods: Literature review using multiple electronic databases.

Results: Limited studies were found evaluating specifically carcinogenic effects of electronic cigarettes. Only two studies specifically suggested potential carcinogenic effects. One study showed the vapors found in electronic cigarettes contain toxic and carcinogenic carbonyl compounds, such as formaldehyde and acetaldehyde. High voltage electronic cigarettes may expose users to high levels of these carbonyl compounds. Another study suggested nicotine from the liquid in electronic cigarettes could potentially remain on surfaces for weeks to months, possibly reacting with nitrous acid to produce tobacco-specific nitrosamines leading to subsequent inhalation, ingestion, or dermal exposure to carcinogens.

Conclusions: Electronic cigarettes do have some toxic substances present however in trace amounts and at levels that are comparable in nicotine alternatives, and most certainly at much lower levels than tobacco cigarettes. However, insufficient data was found evaluating the carcinogenic effects. Fully developed carcinomas take quite some time to manifest. Electronic cigarettes were first introduced into the market around 2003. The data is inconclusive and warrants further studies to better decipher whether electronic cigarettes truly are suitable alternatives to tobacco cigarettes or indeed just a fad that have a slew of health consequences lurking amidst the hype.

Source of Funding: None
Disclosures: *Drs. Chohan and Aggarwal have nothing to disclose.*

Poster 8: Factors Affecting Therapeutic Adherence to Suboxone Among Opioid Dependent African Americans

Suneeta Kumari, MD, MPH, Howard University; Partam Manalai, MD; William B. Lawson, MD, PhD, DLFPA, Howard University Hospital; and Kelsey Ball, BA, Howard University

Introduction: Treatment with buprenorphine-naloxone (Suboxone®) is an effective and convenient option for patients with opioid use disorders. However, adherence and retention in Suboxone treatment remain clinical challenge for patients. Identification of factors leading to non-adherence to Suboxone therapy can provide invaluable information in improving Suboxone adherence and reduce illicit drug use. To achieve this objective, we conducted a retrospective chart review of patients treated at Faculty Practice Plan (FPP) at Howard University Hospital in Washington DC.

Poster Session

Location: Conference Lobby

Method: A retrospective analysis of 40 ambulatory patients diagnosed with opioid dependence receiving Suboxone treatment between January 2003 and December 2013 in FPP at Howard University Hospital was conducted. All patients went through initial clinical assessment which included baseline interviews, random urine drug screenings (UDS), and psychiatric rating scales including Mood Disorders Questionnaire (MDQ), Patient Health Questionnaire (PHQ-9) and a PTSD questionnaire. All participants were encouraged to attend a Suboxone CBT group conducted by a psychologist and/or psychiatric residents under supervision. The dependent variable, adherence to Suboxone, was defined as taking buprenorphine at least 80% of the time as shown by urine drug screen results. Chi-square test was used to analyze the data.

Results: There were 22 males, 15% of subjects were employed, and 75 % had other co morbid DSM-IV TR axis I disorders. There was no significant relationship between another axis I co morbidity (e.g. Bipolar Disorder, Major Depressive Disorder, and PTSD) and adherence to Suboxone. Of the participants who were using other substances, opioid use (p=0.001), benzodiazepine use (p=0.003), alcohol use (p=0.049) and cocaine use (p=0.049) were significantly more common in non-adherent group; cannabis use and Phencyclidine (PCP) use were not associated with adherence to Suboxone. Surprisingly, unemployment was not significantly associated with non-adherence.

Discussion: Our preliminary data in a chart review study show that concurrent use of other substances, especially opioids, are risk factors for non-adherence with Suboxone treatment. Presence of other axis I disorders and unemployment may be contributory but our data did not find an association between these factors and Subxone adherence. Further larger prospective studies are needed to validate and determine the generalizability of our findings.

Source of Funding: NIDA STRIDE IRB-11-MED-29
Disclosures: *Dr. Ball has nothing to disclose. Drs. Kumari, Manalai, and Dr. Lawson received a NIDA grant. Dr. Lawson also received a grant from ENVIVO and serves on the Speaker Bureau for OTSUKA.*

Poster 9: Psychiatric Interventions for Cannabinoid-Induced Hyperemesis Syndrome in a Diabetic Patient

Ryan K. Louie, MD, PhD and June C. Lee, DO, Department of Psychiatry, John A. Burns School of Medicine, University of Hawaii at Mānoa

Background: Cannabinoid-Induced Hyperemesis Syndrome has been reported in chronic users of cannabis, with the features of intractable cycles of nausea and vomiting. Patients have reported relief by taking hot showers. The condition is believed to be underdiagnosed among clinicians. We aim to present a case of cannabinoid-induced hyperemesis syndrome in a patient with concomitant medical issues, describe the current state of the science regarding the phenomenon, and to discuss opportunities of intervention from a psychiatric perspective.

Methods: Case study and literature review.

Results: We present a clinical case of a 47 year old Caucasian and Part-Hawaiian male with a 30-year history of marijuana use, in the context of multiple medical issues including type 1 diabetes mellitus, hypertension, hyperlipidemia, chronic kidney disease stage 3, and possible gastroparesis. The patient experienced chronic symptoms of abdominal bloating, nausea and vomiting, and restlessness for which he took hot showers for relief. Motivational interventions were provided to encourage the patient's efforts for cannabis use cessation.

Conclusions: Cannabinoid-Induced Hyperemesis Syndrome presents a condition with unique features that is gaining increasing clinical awareness among providers, and which has a scientific mechanism which is not yet completely understood. Coordination of care by a multi-disciplinary group of care providers including medical teams, Addiction Psychiatry, consultation-liaison psychiatry, and research teams can offer patients with this condition the opportunity for early assessment and treatment, as well as new methods of intervention for patients with cannabis substance use disorder.

Source of Funding: None
Disclosures: *Drs. Louie and Lee have nothing to disclose.*

Poster 10: Gaming is No Longer a Child's Play: Literature Review on Internet Gaming Disorder

Subani Maheshwari, MD; Vishesh Agarwal, MD; and Kimberly Best, MD, Einstein Medical Center

Background: DSM-5 has considered internet gaming disorder for further studies and possible inclusion in future editions. Internet gaming disorder is a pattern of excessive and prolonged online gaming that leads to a cluster of cognitive and behavioral symptoms, including progressive loss of control over gaming, tolerance and withdrawal symptoms. Gaming becomes an addiction when it starts to interfere with a person's daily life, work and relationships. It includes only non-gambling Internet games.

Methods: A PubMed search was conducted using the keywords gaming addiction, gaming disorder, internet gaming and massive multiplayer online role-playing game (MMORPG).

Results: A number of gaming motives are linked to excessive online gaming. Some studies on internet gaming addiction have used electroencephalograms and neuroimaging techniques. A systematic review revealed that Internet gaming addiction appears similar to other addictions at molecular, neurocircuitry and behavioral levels. internet gaming industry is massive; revenue in 2013 was $13.5 billion and is estimated to grow to $16.1 billion by end of 2014. Studies have reported benefits of cognitive behavioral approaches and psychotropic agents such as antidepressants and stimulants in reducing internet usage and craving for Internet video game play.

Conclusion: Online and video gaming is gaining popularity among the youth. They have a complex effect on players. The reasons for playing online games serve as a first step to understand how initial high engagement can develop into a potential behavioral addiction. As clinicians, we should take steps towards spreading awareness, early identification and treatment of gaming disorder. It will encourage those who suffer to seek professional help, reduce stigma and morbidity. Further research will facilitate a formal diagnosis of the disorder and treatment by actively training clinicians and therapists.

Source of Funding: None
Disclosures: *Drs. Maheshwari, Agarwal and Best have nothing to disclose.*

Poster Session

Location: Conference Lobby

Poster 11: Fentanyl Laced Heroin use deaths: Rising Epidemic in Philadelphia

Vishesh Agarwal, MD and Subani Maheshwari, MD, Einstein Medical Center

Background: Fentanyl is a highly potent, synthetic opioid analgesic about 50-100 times more potent than morphine. It is typically used as a post-operative analgesic or to treat patients with severe pain. In its prescription form, fentanyl is known as Actiq, Duragesic, and Sublimaze. It is sometimes mixed with heroin or sold by itself as a cheaper alternative and can be deadly when used. In 2006, more than 260 people died due to its overdose in Philadelphia, with more than 2000 deaths across the country.

Methods: We collected data from the National Institute of Drug Abuse (NIDA) and (Philadelphia Department of Behavioral Health & Intellectual Disability Services (DBHIDS). We also reviewed reports from PubMed to collect some historical data. We included information from recent news reports about cases that were identified in the Philadelphia area.

Results: Close to 30 people have died in the past couple of months in Philadelphia due to fentanyl overdose. There have been dozens of more deaths confirmed in Western Pennsylvania, Delaware and Maryland, and many more in other parts of the country. Some addicts overdose not knowing what they bought on the street, while others try it knowingly in an attempt to get an increasingly better high. Heroin use has been increasing across the country. Due to fluctuating quality and supply, some distributors have considered adding fentanyl with street-sold heroin or cocaine to amplify the potency, but also potential dangers. It is sold in stamped bags named "Theraflu" and "Bud Ice" that have been confirmed to have this combination, while other names like "Income Tax," "Coors Light," "Diesel" and "Magic City" are being tested. Overdoses of fentanyl should be treated immediately with Naloxone, an opiate antagonist.

Conclusions: Health officials have launched public information campaigns to counter overdoses, reduce stigma of seeking treatment and spreading awareness about available resources. Some have training programs to help family and friends learn to administer naloxone; additionally in high prevalence areas, ambulances now carry naloxone. As authorities continue to trace the sources of these deadly drug cocktails and curtail its use, it is our responsibility to pay particular attention to identify and educate at risk patients about the fatal consequences of its use while also looking for suspected use and work with authorities to help prevent this epidemic.

Source of Funding: None
Disclosures: *Drs. Maheshwari and Agarwal have nothing to disclose.*

Poster 12: Interdisciplinary Peer Assisted Learning for the SBIRT Model for Alcohol Use Disorder

Monique James, MD; Erick Hung, MD; Demian Rose, MD, PhD; Maria Wamsley, MD; Jason Satterfield, PhD; Patrick Yuan; and Patricia O'Sullivan, EdD, University of California, San Francisco

Background: Internal Medicine (IM) faculty have traditionally taught IM residents substance abuse screening and management through the Screening, Brief Intervention and Referral to Treatment (SBIRT) model. An alternative approach is with Peer Assisted Learning (PAL), a widely used teaching method. However, most educators and learners in PAL programs are within the same discipline of study. In this pilot curriculum, psychiatry residents taught SBIRT plus alcohol use disorder pharmacology to IM residents. Our team sought to evaluate this interdisciplinary PAL approach.

Methods: Psychiatry residents (PGY 2-4) taught the 3-hour required curriculum to categorical IM residents (PGY 2-3), which was offered twice to accommodate learner schedules. The curriculum included an introduction to SBIRT concepts, objectives, skills practice, and pharmacologic management of alcohol use disorders. Teaching methods included didactics, large group demonstration, small group discussion, and role-play using patient cases. We developed a 5-item Likert questionnaire based on literature review and expert consultation to assess resident perceptions of PAL and satisfaction with the SBIRT curriculum. Residents completed the items immediately after each session, rating items from 1 – "strongly disagree" to 5 – "strongly agree". We calculated means and standard deviations for all items.

Results: In education session one, 3 psychiatry residents taught 8 IM residents; 7 psychiatry residents taught 19 different IM residents in session two. IM resident learner surveys revealed this model helped their learning (mean 4.13, std dev 0.33; and 4.21,0.33, respectively for the two sessions), peer educators better understood challenges faced in clinic (3.88,0.93; 3.95,0.93), peer educators were more effective at teaching at their learning level (3.88,0.60; 3.79,0.60), and they better appreciated peers' roles (4.00,0.50; 4.11,0.50). Most rated at the "agree" level to future sessions facilitated by interdisciplinary peers (4.13,0.60; 4.16,0.60). Some wrote, "they provided practical knowledge with resident perspectives", and "great to interact with different specialties." Psychiatry resident educators indicated this model improved appreciation of peers' roles and challenges in clinics (4.67,0.47; 4.57,0.47). All psychiatry residents, in both groups, "strongly agreed" this model reinforced their knowledge (5.00,0.00). All wanted more opportunities to teach in interdisciplinary settings (5.00,0.00). Some wrote it was "excellent experience, should continue", and it was "reinforcement and inspiration."

Conclusions: Based on the groups of residents surveyed, this interdisciplinary PAL between psychiatry and IM residents is a helpful and satisfactory method of teaching the SBIRT curriculum.

Source of Funding: SAMHSA 1U79TI020295
Disclosures: *Drs. James, Hung, Rose, Wamsley, Satterfield, and O'Sullivan have nothing to disclose.*

Poster 13: Prevalence of Pre-diabetes in a Dual Diagnosis Population

Rohini Mehta, BSc, MD Candidate 2015 and Anita Kablinger, MD, Carilion Clinic

Background: This study aims to determine the prevalence of pre-diabetes in a clinically realistic yet understudied population, with the dual diagnoses of schizophrenia and substance use disorder treated with atypical antipsychotics, a medication class associated with weight gain and insulin resistance.

Methods: 140 subjects age 18+ accessing the Carilion Clinic healthcare system in Roanoke, VA between August 2010-August 2013 with an ICD-9 diagnosis of schizophrenia (295.00-295.99) treated with an atypical antipsychotic and a diagnosis of substance abuse or dependence (304.00-305.99) excluding Tobacco Use Disorder (305.1) were identified. Using a retrospective review of electronic medical records, the 2010 ADA criteria were used to determine parameters for the diagnosis of pre-diabetes. Those with a known history of type II diabetes mellitus were excluded from the data.

Results: Only 24.3% of subjects (34/140) had ever been screened for pre-diabetes with either a Hemoglobin A1c, fasting plasma glucose, or 2 hour oral glucose tolerance test value. Of those screened, 41.2% (14/34) met the criteria for pre-diabetes set forth by the American Diabetes Association in 2010. A1c, Body Mass Index, and Low Density Lipoprotein values did not vary significantly based on antipsychotic medication or substance of abuse.

Conclusions: This study is the first to provide data on the prevalence of pre-diabetes in a dual diagnosis population. As well, it underscores the need for better metabolic monitoring of patients treated with atypical antipsychotics by healthcare professionals. The initial data suggests a higher prevalence of pre-diabetes if a co-diagnosis of substance use disorder is present, based on a previously reported value of 37% in the literature. Further studies are needed to more completely develop the link between co-morbid substance use disorders and pre-diabetes in schizophrenia.

Source of Funding: None
Disclosures: *Dr. Mehta has nothing to disclose. Dr. Kablinger has served as an investigator for Pfizer, Sunovian, and Forest.*

Poster 14: Relationship between Alcoholism Severity, Psychiatric Symptomology and Plasma Cytokine Levels in Alcoholism

Rohini Negi, MD; Albert B. Poje, PhD; Elizabeth C. Penick, PhD; Merlin G. Butler, MD, PhD; Ann M. Manzardo, PhD, University of Kansas School of Medicine

Background: Chronic alcohol use is associated with increased oxidative stress related to alcohol toxicity and associated nutritional deficiencies which impact on adaptive immunity and cytokine activity. Cytokines are small proteins that regulate immunological and hormone responses, inflammation, and wound healing. Alcoholism is associated with bone marrow suppression as well as increased inflammatory mediators in blood and brain. Activation of inflammatory mediators is believed to contribute to alcoholism pathology and impact upon the course of alcoholism. We examined the relationship between plasma cytokine levels, psychiatric symptomology and severity of illness in alcohol dependent men.

Methods: Thirty males (mean age 47±8yrs; range 21-59yrs) who met DSM-IV-TR criteria for current Alcohol Dependence were recruited for study and given psychometric tests including the SCL-90-R, Barratt Impulsivity Scale (BIS) and a derived alcoholism severity score. Peripheral blood samples were obtained and plasma was separated and frozen within 30 minutes of collection. Cytokine levels were determined using multiplex sandwich immunoassays with the Milliplex Human 42 Cytokine/Chemokine Premixed Kit (Millipore; Billerica, MA) according to manufacturer's protocols and using Luminex magnetic-bead technology (Luminex Molecular Diagnostic; Toronto, Canada). Plasma cytokine concentrations were calculated using a standard curve. Log-transformed values with at least two-thirds of samples in the detectable range were correlated with psychiatric measures of impulsiveness and mood using Pearson correlation.

Results: Twenty-three of the 42 cytokines met criteria for inclusion in the analysis. The derived alcoholism severity score was negatively correlated ($p<0.05$) with levels of the bone marrow derived hematopoietic cytokines: interleukins [(IL-17, IL-12(p70)], fibroblast growth factor 2 (FGF-2), Fractalkine, and a chemokine [monocyte chemotactic protein 3 (MCP3)]. Inflammatory cytokines, growth regulated oncogene-alpha (GRO) and regulated on activation, normal T expressed and secreted (RANTES), were positively correlated with impulsivity from multiple BIS subscales [e.g., total impulsivenessGRO ($r=0.34$, $p<0.05$); total impulsivenessRANTES ($r=0.41$, $P<0.01$)].

Conclusions: Alcoholism is associated with generalized suppression of bone marrow and other immunological factors that are reflected in decreased cytokine activity for bone marrow derived hematopoietins and the chemokine, MCP3). The activity of several pro-inflammatory cytokines is elevated (e.g., RANTES) and correlated with impulsivity in alcoholism. RANTES is a chemotactic cytokine involved with T cell activation, expression and secretion while GRO is involved in the stimulation of neutrophils which may impact upon brain pathways associated with behavioral regulation and control propagating abuse behaviors. RANTES has been previously postulated to play a role in psychiatric disorders such as mood disorders, schizophrenia and cognitive impairment and now may be implicated in alcoholism.

Source of Funding: Hanlon Charitable Trust
Disclosures: *Drs. Negi, Poje, Penick, Butler, and Manzardo have nothing to disclose.*

Poster 15: Characteristics and Drinking Patterns of Veterans with Alcohol Dependence with and Without Post-Traumatic Stress Disorder

Ismene Petrakis, MD, Yale University, VA CT Healthcare System

Background: Alcohol use disorders and post-traumatic stress disorder (PTSD) are highly prevalent and commonly co-occur, notably in veterans. We explored differences in the pre-treatment characteristics of veterans with alcohol dependence (AD) alone compared to those with co-occurring AD and PTSD.

Methods: Veterans were recruited to participate in two different treatment studies and baseline characteristics were compared. Both studies were randomized, placebo-controlled, 12-week treatment studies designed to evaluate a pharmacotherapy for the treatment of AD. Study #1 (n=51) evaluated the efficacy of mecamylamine in reducing alcohol use in alcohol dependent individuals. Study #2 (n=64) evaluated the efficacy of prazosin in reducing alcohol use and symptoms of PTSD among veterans with AD and current PTSD. Baseline drinking variables (90 days prior to randomization) were compared for these groups as well as psychiatric and personality characteristics.

Poster Session

Location: Conference Lobby

Results: Those with co-occurring illnesses demonstrated significantly higher pre-treatment pathology across all psychopathological domains. While those with AD alone averaged more days of drinking than those with AD and PTSD (59.1 vs. 40.1 respectively, F1, 114=15.1, p= .000) and had more heavy drinking days (53.6 vs. 35.1 respectively, F1, 114 = 14.3, p= .000), those with co-occurring illnesses reported more drinking-related symptoms. The presence of a major depressive episode had no effect on drinking. Within the PTSD group, combat exposure was associated with increased drinking independent of the severity of PTSD symptoms. Other demographic, diagnostic, and personality related differences will be discussed.

Conclusions: This study underscores the importance of screening for comorbidity in clinical treatment settings, and for collecting detailed drinking histories and assessing psychiatric symptoms across all domains of psychopathology.

Source of Funding: Department of Defense (DoD) NIAAA (RO1AA016834)
Disclosure: *Dr. Petrakis served as a consultant to Alkermes and Rivermend Health.*

Poster 16: The Role of Aldosterone and Cortisol in Alcohol Use Disorders in a Baclofen Treatment Study

Elie G. Aoun, MD; Carolina L. Haass-Koffler, PharmD, Brown University Medical School; Robert M. Swift, MD, PhD, Brown University Medical School, Veterans Affairs Medical Center; Giovanni Addolorato, Institute of Internal Medicine, Catholic University of Rome, Italy; George A. Kenna, Brown University Medical School; Lorenzo Leggio, Brown University, NIAAA-NIDA Section on Clinical Psychoneuroendocrinology and Neuropsychopharmacology

Background: Hormones of the adrenal cortex, specifically cortisol and aldosterone have been identified in numerous studies to play a significant role in the course of alcohol use disorders (AUD). Specifically, alcohol is viewed as a physiological stressor, which, similar to psychosocial stressors increases glucocorticoid levels. Patients with AUD have an attenuated cortisol response to stress when compared to social drinkers. Early alcohol withdrawal is marked by elevated cortisol levels while late withdrawal is marked by low levels of cortisol. In early abstinence, it is thought that low levels of cortisol is a predictor of relapse. Aldosterone levels are increased during alcohol withdrawal, and were found to correlate with craving scales. Baclofen has been investigated as a treatment modality for AUD and its effectiveness has been supported in many trials. The current study aims at investigating dysregulations of HPA hormones as biomarkers of alcohol craving and relapse, and the effects of anxiety, depression and/or aggressiveness on such interactions in the context of a randomized controlled trial of baclofen for alcohol dependent subjects over 12 consecutive weeks.

Methods: Forty-two treatment-seeking subjects were randomly assigned to baclofen 10 mg t.i.d. or 20 mg t.i.d. or placebo in a 12-week double-blind placebo-controlled randomized clinical trial. The Timeline Follow Back (TLFB) was used to assess for the number of drinks consumed during the 12-week period, and measurements of blood levels for cortisol and aldosterone were taken. Additional questionnaires were administered to evaluate their craving for alcohol (Penn Alcohol Craving Scale (PACS) and the Obsessive Compulsive Drinking Scale (OCDS) and its two subscales ODS for obsessions and CDS for compulsions, as well as anxiety (State and Trait Inventory (STAI)), depression (Zung Self-Rating Depression Scale (Zung)) and aggression (Aggressive Questionnaire (AQ)).

Results: We found the mean cortisol concentration to be significantly lower at week 0 than at week 12 (117.33ng/mL Vs 153.5 ng/mL, t=2.58, dF=29, p=0.015). At week 0, no significant correlations were found between aldosterone or Cortisol and the craving or psychometric scales, however, at week 12, there were significant correlations between aldosterone levels and the number of drinks consumed when subjects relapse (r=0.606, p<0.001), as well as with OCDS (r=0.439, p=0.022), its obsessive subscale ODS (r=0.424, p= 0.027), and its compulsive subscale CDS (r=0.414, p=0.032), and with STAI-Y1 (r=0.422, p=0.028). Hormone levels were not found to be different across the three groups (baclofen 10mg t.i.d., 20mg t.i.d., and placebo) either at week 0 or at week 12. Controlling for the medication condition, abstinent subjects had a lower aldosterone level at week 12 (232pg/mL Vs 134 pg/mL, F(1,23)=4.3, p=0.049).

Conclusions: If confirmed in larger samples, these findings could be used as biomarkers for the severity of symptoms, and prognosis in alcohol dependence.

Source of Funding: The European Foundation for Alcohol Research (ERAB) and by 'Associazione Ricerca in Medicina' (Rome, Italy).
Disclosures: *Drs. Aoun, Haass-Koffler, Kenna, and Leggio have nothing to disclose. Dr. Swift served as a consultant with Pharmaceutico, an advisory committee member with D&A Pharma, and a symposium speaker with Lundbeck. Dr. Addolorato served as a consultant with Ortho-McNeil Janssen Scientific Affairs; a member of the advisory committee, consultant and paid speaker with D&A Pharma; a consultant and paid speaker CT Drug Company; and a member of the advisory committee, consultant, paid speaker and teacher at Lundbeck Italia SpA.*

Poster 17: Combined Naltrexone and Topiramate Treatment of Veterans with Alcohol Use Disorder: A Case Series

Steven L. Batki, MD; Brandi Schmeling, MS; Brooke Lasher, BA; David Pennington, PhD; Ellen Herbst, MD; Zachary Plaut, MD; Joan Striebel, MD; Sally Vrana, MD; John Straznickas, MD; University of California, San Francisco and San Francisco VA Medical Center

Background and Aims: Naltrexone is an efficacious FDA-approved treatment for alcohol use disorder (AUD), but with only a modest to moderate effect size that may be limited by patient variables such as genetic factors, gender, family history, and presence of alcohol craving. Topiramate is also an efficacious medication for AUD, but not FDA-approved, and has dose-related adverse effects that limit its use. It may be possible to combine these medications using lower doses of topiramate in order to obtain: 1) a higher proportion of patients who respond, and 2) a greater degree of treatment response. The combination has been tested in animals and humans but there have been no reports of outpatient clinical trials. We have used this combination clinically in veterans with AUD who have not responded adequately to either medication alone.

Methods: We conducted a retrospective chart review of six veterans diagnosed with AUD who were treated with combined NTX and TOP.

Poster Session

Location: Conference Lobby

Results: Mean patient age was 50.0 ± 14.3 years (range: 33-68 years). Five (83.3%) were male. Mean NTX and TOP doses were 67 and 191mg/day, respectively. Mean duration of treatment was 19.5 weeks; all were still on the combination at the time of review. 3/6 (50%) had full response (abstinence), 2 (33%) had partial response (reduction); 1 (16%) had no response. 2 (33%) had side effects from TOP, consisting of sedation and dizziness. Liver function tests showed improvement in 2 (33%) and no change in 4 (66%).

Discussion: Combined NTX+TOP appeared to have been well tolerated, and appeared to have been associated with improvement in 5 of 6 (84%) patients with AUD and previous inadequate response to medication trials. This report is preliminary in nature; there is a need for prospective controlled trials of NTX+TOP in patients with AUD.

Acknowledgement: San Francisco VA Medical Center

Source of Funding: None
Disclosures: *Dr.Batki served as a consultant to Gilead Sciences. Drs. Pennington, Plaut, Striebel, Vrana, and Straznickas have nothing to disclose.*

Poster 18: The Effects of Intranasal Oxytocin and Attachment Avoidance on Response to Social and Drug-related Stimuli in Patients with Opioid Use Disorder Receiving Opioid Replacement Therapy

Christopher Stauffer, MD, UCSF, SFVAMC; Vivek Musinipally; Steve Batki, MD; Sophia Vinogradov, MD; and Joshua Woolley, MD, PhD, UCSF, SFVAMC

Background: This pilot study aims to examine the effects of intranasal oxytocin and attachment avoidance on response to drug-related stimuli in patients with opioid use disorder (OUD) receiving opioid replacement therapy (ORT). ORT, the current OUD standard of care, effectively treats withdrawal and craving; however, physiological dependence on opioids persists, and relapse rates remain high. Substance use disorder treatment also requires psychosocial interventions and social support. For example, a recent meta-analysis found that the most important components of Alcoholics Anonymous are the reparation and maintenance of supportive social networks. Attachment avoidance, "the tendency to fear interpersonal dependency and closeness", has been linked to OUD and may impair engagement in crucial psychosocial treatments. The hypothalamic neuromodulatory peptide, oxytocin, has well-demonstrated anti-addiction effects in animals. In humans, oxytocin has been shown to increase trust and cooperation in individuals with high attachment avoidance and is safely administered intranasally, making it a novel pharmacological treatment candidate for OUD.

Methods: Provide a description of the methods used: study design, setting, population, measures, and analytic procedures. 26 male patients with OUD receiving ORT at the San Francisco Veterans Affairs Medical Center received oxytocin 40-IU or placebo at each of two testing sessions ≥1 week apart in a double-blind, placebo-controlled, cross-over study. We examined oxytocin's effects on: 1) impulsivity toward drug-related stimuli using a Delayed Discounting (DD) task and 2) the relationship of drug images to "self" words or "other" words using an Implicit Association Test (IAT). Attachment avoidance was measured as a possible moderating variable using the Relationship Structures (ECR-RS) questionnaire.

Results: We found that oxytocin: 1) reduced impulsivity toward hypothetical heroin rewards [DD k-score, M±SE:oxytocin = .99±.29, placebo = 1.72±.37; $t(17) = 2.11$, $p = .05$, $d = 0.52$] and 2) that attachment avoidance moderated oxytocin's effect on IAT scores. Specifically, after receiving oxytocin, "low avoidance" participants associated drugs with self (M±SE = -.25±.20) while "high avoidance" participants associated drugs with others (.29±.11), $t(10) = 2.23$, $p = .02$, $d = 1.02$. This is a change from the placebo condition, in which "low avoidance" participants slightly associated drugs with others (.18±.13, compared to OT group, $p = .09$) and "high avoidance" participants showed no significant association of drugs to either self or others (.06±.12, compared to OT group, $p = .04$).

Conclusions: Oxytocin may attenuate impulsivity toward, and shift implicit self-associations with, opioids in OUD patients receiving ORT. Patients with high attachment avoidance may selectively benefit from oxytocin. Further investigation into the role of oxytocin in OUD treatment is warranted.

Source of Funding: UCSF San Francisco Treatment Research Center: Pilot Study Program, UCSF Clinical and Translational Science Institute.
Disclosures: *Drs. Stauffer, Musinipally, and Woolley have nothing to disclose. Dr. Batki served as a consultant for Nizyme and Gilead Sciences. Dr. Vinogradov served as a consultant for Posit Science, Inc.*

Poster 19: Strengthening Interprofessional Collaborative Practice to Intervene with Substance Use in Rural Populations using Online Technology

Kathy Puskar, DrPH, RN, FAAN; Ann Mitchell, PhD, RN, FAAN; Irene Kane, PhD, RN, CNAA, HFS; Linda Frank, PhD, MSn, ACRN, FAAN; Holly Hagle, PhD; and Susan A. Albrecht, PhD, RN, CRNP, FAAN

Background: Strengthening evidence-based Screening, Brief Intervention, Referral to Treatment (SBIRT) skills for interprofessional (IPCP) rural healthcare teams promotes client-centered health for timely alcohol/drug reduction/increased treatment interventions representing a critical educational need targeting Healthy People Objectives 2020.

Methods: Upon completion of eight online hours SBIRT substance use modules, interactive case studies, interprofessional dialogue, multiple-site practitioners (administrators, nurses, social workers, mental/behavioral health professionals) were prepared as site-respective SBIRT IPCP teams. Continuing education units, SBIRT material access, online resources were provided: no cost. Participant demographics, knowledge change, alcohol/drug perceptions, interprofessional learning outcomes data were collected.

Results: Twenty rural counties represented by over 150 enrolled participants from hospitals (27%), universities (21%), community health centers (16%), and other sites including correctional facilities and private practice participated in the project. Results on the Alcohol and Alcohol Problems/Perceptions questionnaire pre to-post intervention show increases on the Role subscales, indicating adequate professional support to work with patients' alcohol-use.

Poster Session

Location: Conference Lobby

Conclusions: Strengthening IPCP rural SBIRT practice for unified client-centered care not only improves professional care but broadens rural public safe substance use practice. Diverse professionals working collaboratively deconstructs substance use stereotypes, promotes rural client prevention, treatment, recovery linkages to increase effective healthcare.

Source of Funding: DHHS, HRSA, Grant UD7HP25060
Disclosures: *Drs. Puskar, Mitchell, Kane, Frank, Hagle and Albrecht have nothing to disclose.*

Poster 20: Legality of Cannabis in United States of America and Its Implication on Healthcare: A 6-Year Retrospective Study

Abhishek Rai, MD; Clarice Chan, MD; Fadi Georges, MD; and Michael Fox, MD, St. Mary Mercy Hospital

Background: According to DSM-V, substance-related disorders encompass 10 separate classes of drugs: alcohol; caffeine; cannabis; hallucinogens; inhalants; opioids; sedatives, hypnotics, and anxiolytics; stimulants; tobacco; and other substances. All drugs that are taken in excess have in common direct activation of the brain reward system, which is involved in the reinforcement of behaviors and the production of memories. They produce such an intense activation of the reward system that normal activities may be neglected. Marijuana is one of the most commonly abused drugs in America, and its use has been increasing since 2007 (Rai et al., 2014). So far, two out of the 50 states in USA have legalized marijuana for adult recreational use, and 21 other states have legalized its use for certain medical conditions. This study evaluated the trend of cannabis use (ICD code 304.3) in different states in U.S.A from 2007 to 2012 based on their cannabis policies and its impact on the healthcare system.

Methods: This is a retrospective study that utilized the data on Healthcare Cost and Utilization Project (HCUP) website. HCUP is a family of health care databases maintained by a Federal-State-Industry partnership sponsored by the Agency for Healthcare Research and Quality (AHRQ). All the data presented are obtained from the HCUP Nationwide Emergency Department Sample (NEDS) and HCUP Nationwide Inpatient Sample (NIS). By using ICD-9 diagnostic codes, we are able to obtain the total number of emergency department visits, number of hospital admission, mean hospital charge and patient demographics.

Results: Over a period of six years, the percentage difference in cannabis use in the state where cannabis use is legal for both recreational and medical uses is as follows: Colorado (+50.4%). The percentage differences in cannabis use in the states where it is legal only for medical use are as follows: Arizona (+32%), Michigan (+14.1%), Hawaii (+55%) and New Jersey (+49.1%). On the other hand, in states where cannabis use is illegal, the percentage differences in cannabis use are as follows: Oklahoma (+7.21%), Texas (+43.2%), Wisconsin (-0.35%) and South Carolina (+0.75%).

Conclusions: In general, abuse of cannabis has increased over the six-year period of 2007 to 2012, with the most significant increase in cannabis abuse in states where cannabis use is legal. This has significant implication in our healthcare system, because in our previous paper (Rai et al, 2014, cannabis alone stands out in both number of hospital admission, mean hospital charge and thus, burden to our healthcare system. This paper also draws our attention how the increase in cannabis abuse is nearly same in state which legalize "medical and recreational use" as compared to those states which legalize "only medical use."

Source of Funding: None
Disclosures: *Drs. Rai, Chan, Georges, and Fox have nothing to disclose.*

Poster 21: Eight-week Depression Program Decreases Usage of Benzodiazepines

Francisco Ramirez, MD and Neil Nedley, MD, Nedley Clinic

Background: Abuse of benzodiazepines is a prevalent problem in today's society. We assessed the effect that a community based depression recovery program of 8 weeks can have in decreasing the usage of benzodiazepines. During the program, emphasis is given to overcoming the usage of substances that can create an addictive relationship. The program teaches lifestyle interventions (exercise, rest, nutrition), temperance (overcoming addictions) and usage of spiritual resources to improve depression. The participants meet once a week for a two hour program.

Methods: Data from 4271 participants (71% women and 29% men) of the depression program was used from multiple sites done in 7 countries. All participants completed, at baseline and at the end of the eight weeks, the Nedley DSM-Depression test, a previously validated 75-item self-report tool that assesses depression, anxiety, Emotional-Quotient, demographic data, and benzodiazepine usage. Usage of benzodiazepines was determined dichotomously using their answers on the test.

Results: Patients at the beginning of the program had on average a PQ9 level of depression of 13 (SD = 7.67) which is equivalent to moderate depression, not all the participants were depressed. 7.8% (n=335) of participants acknowledged at the beginning of the program use of benzodiazepines on an irregular basis and 6.76% (n=289) of participants acknowledge using them more than twice a month. After the eight week program the PQ9 level of depression was 6.78 (SD=6), among those using benzodiazepines, 12.8% (n=43) had stopped using them on an irregular basis and 24% (n=70) had decided to stop using the benzodiazepines all together or less than twice a month.

Conclusions: This study demonstrates that an 8 week community based depression recovery program can be an effective tool to help participants overcome the usage of benzodiazepines. Further studies are required to show what will happen after the eight week program.

Source of Funding: None
Disclosures: *Drs. Ramirez and Nedley have nothing to disclose.*

Poster 22: Substance Use Amongst Medical Students in Their Pre-Clinical Years

Robert Rymowicz, BSc, Western University

Background: Medical school is physically and emotionally demanding, requiring students to maintain a constant and focused effort, often by sacrificing restful and leisurely activities. This study was conducted to assess the physical and psychological well-being of medical students in their pre-clinical years, and explore the use of adaptive strategies such as performance enhancement and self-medication through substance use.

Poster Session

Location: Conference Lobby

Methods: Data was collected from surveys of pre-clinical medical students conducted online in May of 2013 and May of 2014, allowing for a comparison of respondents from the Class of 2016 at the end of their first pre-clinical year, to respondents from the same class at the end of the year second pre-clinical year. Both surveys included questions concerning ADHD diagnosis, stimulant medication use, non-prescription stimulant use, alcohol use and habits, feelings of depression, and feelings of anxiety, amongst others. The 2014 survey also included the Quality of Life Enjoyment and Satisfaction Questionnaire, and several PROMIS instruments to help quantify quality of life and relate it to reported results.

Results: In the second year of the survey, respondents from the Class of 2016 were more likely to report a diagnosis of ADHD, half of whom reported having been diagnosed as adults. Students were also more likely to report having ever used prescription stimulant medications, and having obtained such medications without a prescription. Respondents reported more frequent alcohol intake, but reported drinking lesser daily quantities on average, and a greater frequency of students reported feeling unable to stop drinking once they have started. Students reported an increase in feelings of depression, and increased sedative use. The findings were further investigated with respect to specific populations, demonstrating a correlation between alcohol intake and depression, and showing increased feelings of depression amongst students who have admitted to prescription stimulant use without a prescription.

Conclusions: Students pursuing performance enhancement and self-medication through substance use report above average levels of depression and anxiety for a population already notable for high levels of depression and anxiety.

Source of Funding: None
Disclosure: *Dr. Rymowicz has nothing to disclose.*

Poster 23: Teaching SBIRT Using Chart-Stimulated Recall

Maria Wamsley, MD; Nathaniel Gleason, MD; Katherine Julian, MD; Patricia O'Sullivan, EdD; Scott Steiger, MD; Michelle Guy, MD; Patrick Yuan, BA; and Jason Satterfield, PhD

Background: It is widely recognized that there is a critical need for more screening, brief intervention and referral to treatment (SBIRT) for alcohol use disorders (AUDs) in primary care settings. Barriers include inadequate provider skills and confidence as well as systems-related factors such as time pressures in the clinical setting and lack of referral resources. The optimal format for curricular interventions to address physician-related barriers remains unclear. One potential solution to systems-related issues is to better support SBIRT for alcohol use disorders using tools in the electronic health record (EHR). We implemented a 5-hour curriculum to instruct primary care internal medicine (IM) residents in SBIRT skills. We also developed a set of tools in the EHR to serve as a scaffold for the SBIRT curricular content, facilitate documentation of alcohol use, and to provide patients with tailored resources.

Methods: The curriculum consisted of three sessions. We developed charting tools for the EHR (EPIC) to prompt residents to consider curricular content and to facilitate appropriate and efficient documentation of alcohol use. These included alcohol use history (HPI) and assessment and plan (A/P) charting tools and patient information resources (PI) with a list of referral resources. We introduced charting tools to learners after SBIRT curriculum completion. We evaluated the SBIRT curricular intervention utilizing chart review and chart-stimulated recall (CSR). Six months after curriculum completion, we provided residents a list of their patients seen in the preceding 12 months who were drinking at or above the recommended drinking limits and asked the residents to select up to 3 patients for review with a faculty member. Faculty reviewed charts to determine whether patients were seen in the 6-month period after curriculum completion and used a 25-item checklist to assess resident use of SBIRT skills and charting tools. Faculty met with residents individually, performed a CSR for each patient using a structured interview form and provided feedback to the residents. Residents subsequently evaluated the CSR process.

Results: Eighteen residents participated in the chart review; 38 charts met criteria for our study. Residents did reasonably well at documenting alcohol use in the medical record (84%) including quantity and frequency of use (71%) and documenting their recommendation for patients to reduce their alcohol use (61%). Residents correctly diagnosed the patient, documented an appropriate follow-up and plan only about half of the time. Resident reported barriers included time, resident discomfort, competing issues in the visit (medical/mental health), and perceived willingness of the patient to engage. Only 3 charts (8%) included the use of the electronic HPI tool, 2 charts (5%) used the A/P tool, and 5 (13%) used the PI tool. Resident reported barriers to EHR tool use included lack of awareness of the tools and lack of use of electronic charting tools in their normal workflow. Overall satisfaction with the CSR process was high; residents felt that the CSR reinforced SBIRT curriculum and provided valuable feedback and planned to make changes in their clinical practice.

Conclusions: A more intensive curriculum with opportunities for skills practice and feedback over time may be required to improve resident SBIRT skills. For EHR tools to be useful, additional reinforcement including simulation to practice integration of the tools into the visit workflow is essential. CSR is a potentially useful tool to assess curricular materials and to provide individualized feedback.

Source of Funding: Substance Abuse and Mental Health Services Administration (SAMHSA), Grant #1U79TI020295
Disclosures: *Drs. Wamsley, Gleason, Julian, O'Sullivan, Steiger, Guy, Satterfield, and Mr. Yuan have nothing to disclose.*

Poster 24: Buprenorphine Tapering - With and Without Long Acting Antagonist

Jaswinder Singh, MD

Background: Opioid use disorders is chronic relapsing disorder. MAT with Buprenorphine is proven to be safe and effective since its approval in year 2003 in USA. This treatment once started is generally advised to be continued for indefinite period since different studies report high relapse back to illicit opioids once the treatment is discontinued. However some patients stable with buprenorphine want to stop buprenorphine after a period of time due to different reasons. Reasons most commonly quoted are cost factor, difficulty in travelling to get buprenorphine, travelling abroad, challenging jobs, patient belief that they are cured of addiction, side effects with medicine etc.

Poster Session

Location: Conference Lobby

Methods: We report a series of 34 patients in which we tapered buprenorphine. After stopping buprenorphine in the first group of 16 patients, only comfort medicines were given and the second group of 18 patients were implanted with two long acting opioid antagonist naltrexone along with comfort medicines. All the patients in both the group were psycho-socially stable at least six months before stopping buprenorphine. In all the patients a gradual detox from buprenorphine was done in 7-10 days. In all these patients weekly telephonic calls were made and urine was tested regularly either on office visit or by significant others at home for six months.

Results: In first group of 16 patients only comfort medicines were given after seven days. After three months eight patients tested negative for illicit opioid in urine, two patients went out of country permanently, one patient was untraceable and five had relapsed back to opioid use. After six months 4 patients tested negative to urine opioids (25%), 3 were untraceable and 7 had relapsed back to opioid use. In second (Naltrexone implant) group of 18 patients first implant was done after 7-10 day of detox and second implant was put after 12 weeks of first implant. After 3 months 13 patients tested negative for opioid and were re-implanted, 2 were untraceable and 3 had relapsed. After 6 months 11 implanted patients tested negative for opioid (61%), 2 were untraceable and 5 had relapsed.

Conclusions: We find that long acting preparation of opioid antagonists are safe and effective method to reduce the incidence of relapse after stopping buprenorphine in patients of opioid use disorders

Source of Funding: None
Disclosure: *Dr. Singh has nothing to disclose.*

Poster 25: Treatment Outcomes and Predictors of Abstinence for Prescription Opioids, Heroin and Combined Users: Systematic Literature Review

Anatoliy Vasilov, MD; Julia Arnsten, MD; and Merrill Herman, MD, AECOM/Montefiore

Background: Prescription opioid abuse has become a significant U.S. public health problem with growing overdose rate. In response to this epidemic, FDA has mandated new safety measures for opioid medications in 2012. Some prescription opioid abusers shift back to heroin due to multiple reasons. Is there any difference in treatment outcomes between prescription opioid, heroin and combined users?

Methods: Literature review was conducted to identify existing studies in search databases. MeSH terms and the keywords were included: "opioid use", "treatment outcome" and "abstinence predictors." The articles were reviewed and data was extracted systematically.

Results: The lifetime heroin users were less likely to complete treatment and predict poorer treatment outcome. Prescription opioid users more likely to complete treatment and have better treatment response. Methadone and Buprenorphine has the same potential in treatment of opioid subgroups.

Conclusions: Multiple predictors, associated with treatment outcomes, vary by gender for opioid subgroups and appear important. Prescription opioid users entering treatment earlier. Gender-specific treatment programming may improve treatment retention among female prescription users.

Source of Funding: None
Disclosures: *Drs. Vasilov, Arnsten, and Herman have nothing to disclose.*

Poster 26: Does Early Response to Buprenorphine-Naloxone Predict Treatment Outcome in Prescription Opioid Dependence?

Roger Weiss, MD, McLean Hospital/Harvard Medical School

Background: The 10-site Prescription Opioid Addiction Treatment Study, conducted in the NIDA Clinical Trials Network, examined different lengths of buprenorphine-naloxone (bup-nx) plus medical management, with or without additional counseling, for patients dependent upon prescription opioids. Among patients (N=360) receiving 12 weeks of bup-nx stabilization, 49% achieved successful opioid use outcomes at week 12. The aim of this secondary analysis is to examine the ability to predict outcome (and thus potentially alter the treatment) based on early (weeks 1-4) treatment response.

Methods: Outcome was defined in 2 ways: 1) success, as defined in the main outcome paper, i.e., abstinence in week 12 of Phase 2 (the last week of bup-nx stabilization) and ≥2 of the previous 3 weeks; or 2) a stricter definition, i.e., opioid abstinence in weeks 9-12. Positive and negative predictive values were calculated based on the degree to which opioid abstinence or use in weeks 1, 1-2, 1-3, and 1-4 predicted outcomes in weeks 9-12.

Results: Outcome was best predicted by response after 2 weeks of treatment. Abstinence in the first two weeks was moderately predictive of treatment success in weeks 9-12 (positive predictive value = 71%), while opioid use in both of the first two weeks strongly predicted unsuccessful outcome at the end of bup-nx stabilization (negative predictive value = 84%), especially when outcome was defined as complete abstinence from opioids in weeks 9-12 (94%). Predictive values in week 1 alone were of only moderate strength (63% positive predictive value for abstinence, 70% negative predictive value for use), and data from weeks 3 and 4 added little to the predictive power of the first two weeks.

Conclusions: Evaluation (including urine testing) during weeks 1 and 2 of bup-nx stabilization can assist in predicting individualized treatment course and need for increased intensity of treatment services.

Source of Funding: NIDA grants U10DA015831, K24DA022288
Disclosure: *Dr. Weiss has nothing to disclose.*

Poster Session

Location: Conference Lobby

Poster 27: Prescription Medication Misuse among Opioid Abusers

Timothy E. Wilens, MD, Massachusetts General Hospital; Harvard Medical School; Courtney Zulauf, BA, Massachusetts General Hospital; Denece Ryland, RN, Andrew House Detox Center; Nicholas Carrellas, BA, Massachusetts General Hospital; Isela Catalina-Wellington, RN, BSN, Andrew House Detox Center

Objective: Opioid related morbidity and mortality is heightened in context to the concomitant use of psychotropic medications. A number of psychotropics anecdotally appear to be misused in this population. The aim of this project was to examine to what extent opioid dependent patients seeking detoxification are using and misusing specific psychotropic agents.

Methods: As part of a quality assurance/improvement project, we systematically assessed consecutive admissions to a public detoxification program using a self-report questionnaire to query for specific psychotropic medication use. Patients were asked about having a current prescription, appropriate use, and/or medical misuse (higher doses, using without prescription) of clonazepam, gabapentin, pregabalin, clonidine and amphetamine salts.

Results: We had data on 196 admissions including 162 patients with opioid dependency. Patients receiving detoxification from opioids compared to alcohol had statistically significant higher rates of medication misuse (30% vs. 0%, respectively; $\chi 2=13.12$, $p<0.0003$). Of opioid dependent patients receiving prescription medication, 28% reported using higher amounts of each medication than prescribed (7% of those prescribed clonidine, 40% gabapentin, 50% pregabalin, 33% clonazepam, and 31% amphetamine salts.) Likewise, overall, 10% of the total opioid sample self-reported misusing clonidine, 22% gabapentin, 7% pregabalin, 25% clonazepam, 11% amphetamine salts, and 36% any of these medications.

Conclusion: Despite the "nonaddictive nature" of some medications (e.g. gabapentin, clonidine) high rates of medication misuse in opioid dependent patients admitted for detoxification was found and appeared similar to rates of misuse among controlled substances such as clonazepam and amphetamine salts. These data suggest that opioid dependent patients should be queried for the appropriate use of prescribed medications and that practitioners need to monitor for medication misuse in opioid dependent patients.

Source of Funding: None
Disclosures: *Dr. Zulauf, Ms. Ryland, Mr. Carrellas, and Ms. Catalina-Wellington have nothing to disclose. Dr. Wilens has received grant support from NIDA and has served as a consultant for Ethymics/Neurovance, NIDA, Theravance, the U.S. National Football League, and TRIS. Dr. Wilens provided clinical services to U.S. Minor/Major League Baseball, and Bay Cove Human Services. Dr. Wilens has published a book with Guilford Press. Dr. Wilens currently serves as the Director of the Center for Addiction Medicine at Massachusetts General Hospital.*

Poster 28: Characteristics of Young Adults Who Misuse Stimulant Medications

Timothy Wilens, MD; Massachusetts General Hospital; Harvard Medical School; Courtney Zulauf and Marykate Martelon, MPH, Massachusetts General Hospital

Background: Limited information is available on the clinical and neuropsychological characteristics of individuals who endorse non-medical use (misuse) of stimulants in a college setting. The objective of this study was to evaluate the characteristics of college students who misuse stimulants.

Methods: The data presented are from the prospective study in college students. College students with (misusers) and without (controls) the misuse of stimulants were assessed blindly by structured psychiatric interview (SCID) and completion of the BRIEF rating form.

Results: The analysis included 200 controls (age 20.6 ± 2.6 years) and 100 stimulant misusers (age 20.6 ± 1.7 years) matched for age, gender, and SES. Misusers, when compared to controls, were more likely to endorse alcohol use, drug use, as well as any SUD (all p values <0.01). Misusers also had higher rates of conduct disorder (10% vs. 3%; p=0.02) and ADHD (including sub threshold cases; (27%) vs. (16%); p=0.02). There was also more clinical evidence among misusers of executive dysfunction on the BRIEF (inhibition, initiation, organization; all p values <0.05), and lower global assessment of functioning (GAF); ($p< 0.05$).

Conclusions: Our data suggest that compared to controls, college students who misuse stimulant medications are more likely to have SUD, ADHD, executive function impairment, and other psychopathology.

Source of Funding: NIH grants K24 DA016264 and R01 DA12945.
Disclosures: *Ms. Zulauf and Ms. Martelon have nothing to disclose. Dr. Wilens has received grant support from NIDA and has served as a consultant for Ethymics/Neurovance, NIDA, Theravance, the U.S. National Football League, and TRIS. Dr. Wilens provided clinical services to U.S. Minor/Major League Baseball, and Bay Cove Human Services. Dr. Wilens has published a book with Guilford Press. Dr. Wilens currently serves as the Director of the Center for Addiction Medicine at Massachusetts General Hospital.*

Poster 29: Substance and Nicotine Use in Young Adults with Bipolar Disorder: Initial Findings of a Controlled Longitudinal Study

Timothy Wilens, MD; Massachusetts General Hospital; Harvard Medical School; Courtney Zulauf and Marykate Martelon, MPH, Massachusetts General Hospital

Background: Bipolar Disorder (BPD) is an increasingly recognized, serious psychopathologic condition affecting children and adolescents. Little data exist evaluating the course of BPD from adolescence into young adulthood, focusing on comorbid substance use disorders (SUD). We now present SUD data derived from a controlled, family-based 5-year follow-up of adolescents with BPD and adolescents without a mood disorder (controls). We hypothesized that young adults with BPD would have higher levels of nicotine use and SUD than controls.

Poster Session

Location: Conference Lobby

Methods: Data are based on the 5-year follow-up of an initial 105 BPD (age 13.6 ± 2.5 years) and 98 controls (age 13.7 ± 2.1 years). We reascertained 73% of the sample: 68 BPD and 81 control probands. We detected and controlled for differences in SES. By way of structured interviews, BPD probands were stratified into persistent and non-persistent BPD based on the presence or absence of active symptoms at follow-up.

Results: The BPD probands, when compared to controls, had more new onset cases of any SUD (31% vs. 23%) and nicotine use (25% vs. 14%). Similarly, at follow-up, adolescents with BPD, compared to controls, were more likely to endorse higher rates of lifetime SUD (51% vs. 26%; p=0.001) and cigarette smoking (51% vs. 17%; p=0.001), as well as earlier-onset of SUD (14.9 ± 2.6[SD] years vs. 16.5 ± 1.6 years; p=0.01). Subjects with the persistence of a BPD diagnosis were also more likely to endorse cigarette smoking and SUD in comparison to controls, or those who lost a BPD diagnosis at follow-up.

Conclusions: Adolescents and young adults with BPD are at a significantly increased risk for nicotine dependence and SUDs when compared to their non-mood disordered peers. Furthermore, the persistence of BPD appears to be related to the severity of this risk.

Source of Funding: R01DA12945
Disclosures: *Ms. Zulauf and Ms. Martelon have nothing to disclose. Dr. Wilens has received grant support from NIDA and has served as a consultant for Ethymics/Neurovance, NIDA, Theravance, the U.S. National Football League, and TRIS. Dr. Wilens provided clinical services to U.S. Minor/Major League Baseball, and Bay Cove Human Services. Dr. Wilens has published a book with Guilford Press. Dr. Wilens currently serves as the Director of the Center for Addiction Medicine at Massachusetts General Hospital.*

Poster 30: CHIL: An Innovative Practice Model to Encourage Trainees and Early Career Psychiatrists to Engage in Dual Diagnosis Treatment of Patients with Opioid Use Disorders

Christopher Marett, MD, MPH, University of Cincinnati; Daniel Nelson, MD, Cincinnati Children's Hospital Medical Center, University of Cincinnati; Ernest Pedapati, MD, Center for Health and Innovative Learning; Elizabeth Tiffany, MD, University of Cincinnati, Center for Health and Innovative Learning; and John Vraciu, DO

Background: While patients with comorbid substance use disorders and psychiatric diagnoses are becoming the norm, psychiatry training has largely failed to adequately prepare residents for the challenges of working with patients with these complex problems. In addition, there is a nationwide discrepancy between the magnitude of substance use disorders and access to treatment for addicted individuals; this is partly attributed to inadequate addiction medicine training. Studies have shown that even psychiatry residents manifest stigma with patients with addiction. There is an increasing call for psychiatrists to be part of new integrative models of treatment, though few published models on how to do this. Southwestern Ohio, like much of the nation, is at the epicenter of an opioid use epidemic. The use of opioids as a drug of choice in Ohio has increased from 8.9 to 24.3% in 2013. There is a growing need for clinicians with experience managing buprenorphine in Ohio and particularly among psychiatry residents and early-career psychiatrists. While many residents have been eager to learn how to manage patients on buprenorphine, relatively few have engaged in ongoing use of such training during their careers. In one study, barriers cited were buprenorphine education and training (83%), available consultation (19.2%), and on-site counselors (18.2%). The most frequent reasons for not prescribing buprenorphine were lack of knowledge or training (47.5%) and lack of time (25.3%). In addition, early-career psychiatrists often have difficulty in establishing mentorship relationships. While there are numerous web-based certification and ongoing training programs, few offer ongoing personalized and in-vivo instruction and mentorship. There are even fewer that offer ongoing support in establishing a practice model that sets best practice for office-based buprenorphine treatment.

Methods: The Center for Health and Innovative Learning is a psychiatrist-run private practice center developed to help treat patients with addiction and comorbid psychiatric conditions. The practice was founded by a senior psychiatrist, who combines over 25 years of psychiatric experience, including time in methadone clinics, therapeutic milieu programs, and buprenorphine treatment. Four aims of this practice include: 1. Finding the best way to provide excellent, holistic care to patients, 2. Reciprocal learning, that is, each clinician has as much to offer each other as the next in terms of learning and clinical acumen, 3. Provide ongoing education and innovation, through peer mentorship and consultation, and 4. Expose practitioners to aspects of a fee-for-service private practice model. This poster will further elaborate how to set up such a model as well as qualitative findings from provider attitudes and behaviors as a result of this model.

Results: In under one year's time, the practice has served over 200 people with opioid and other addictions and has expanded to include 6 physicians, most of whom are still in training or early career psychiatrists. A primary benefit of this model is the direct teaching and mentoring to more junior colleagues, who have completed training in aspects of Addiction Psychiatry, including buprenorphine and other treatment modalities, but seek such hands-on mentorship. Patients are seen in a fee-for-services model and given both full time and attention in each appointment to a holistic approach to psychiatric care. The practice model also mandates provider participation in a monthly journal club as well as peer supervision. This model allows for members to address quality improvement issues both within the clinic and throughout the community, as well as introduce them to aspects of facilitating a private practice. Practitioners are also encouraged to use therapeutic modalities targeted to each patient, such as motivational interviewing, cognitive behavioral therapy, group therapy, and supportive therapy. It is common for family members to be invited to sessions to help facilitate the healing process. Finally, this model serves as an engine for research and innovation in meeting the needs of those with dual diagnoses in our community, through data collection and innovative instruction models. Further research from the clinic will examine topics such as the epidemiology of opioid use in our location, use of targeted psychotherapies as part of integrated treatment, dosage and prescribing patterns, prognostic factors for outpatient based treatment, and outcomes for treatment of comorbid psychiatric conditions.

Conclusions: The Center for Health and Innovative Learning practice model is an innovative way to address the opioid epidemic, encourage residents and early career psychiatrists to treat people with opioid use disorders, to provide mentorship, and to serve as a hub for research and innovation in this area. It is a model that addresses current gaps in addiction training and is easily reproducible in similar settings throughout the country.

Source of Funding: None
Disclosures: *Drs. Marett, Nelson, Pedapati, Tiffany and Vraciu have nothing to disclose.*

Poster Session

Location: Conference Lobby

Poster 31: Incorporating SBIRT into Health Professional Training: Outcomes from an Interdisciplinary Cohort

Rebecca Payne, MD, University of South Carolina; Shilpa Srinivasan, MD; Dave Murday, PhD; Suzanne Hardeman, NP; and Camille Wood, MA, University of South Carolina

Background: Approximately 1/3 of the population uses substances at risky levels (Jonas et al, 2012). However, less than one-third of physicians screen patients for substance use (National Center on Addiction and Substance Abuse 2000). Substance use and its consequences can have significant impact on health outcomes, yet treatment for medical conditions and substance use often occurs with little to no coordination (Weisner et al., 2001). Screening, Brief Intervention and Referral to Treatment (SBIRT) is a simple and effective strategy providers can use to efficiently screen for substance use and conduct a brief intervention for patients identified as being at-risk of an alcohol or drug problem. The expanding scope of SBIRT is noted in interprofessional and interdisciplinary settings with diverse healthcare providers. This poster illustrates preliminary outcomes from an interdisciplinary approach customizing SAMHSA developed SBIRT core educational materials to develop an interprofessional curriculum for master's level social work, nursing, and rehabilitation counseling students and to psychiatry, internal medicine, preventative medicine, and family medicine residents.

Methods: Demographic data was collected from each trainee prior to initiation of SBIRT training and included questions about previous training and experience with patients with substance use. Knowledge about substance use and treatment of substance use and attitudes towards people who use substances was assessed before and after SBIRT training.

Results: To date, 34 trainees have completed SBIRT training: 22 nursing students and 12 rehabilitation counseling students. A brief seven question test of knowledge was administered pre and post SBIRT training. Overall scores improved 11% after the training ($p<.01$). Attitude change was measured using a 5-point Likert scale ranging from "strongly agree" to "strongly disagree" and included statements such as: "An alcohol or drug dependent person cannot be helped until he/she has hit rock bottom," "An alcohol or drug addicted person who has relapsed several times probably cannot be treated," and "Alcoholism is a treatable illness." Overall, trainees were more likely to report substance use disorders as a treatable illness and view patients with substance use more favorably post SBIRT training. While the preliminary data show most changes did not approach significance, after the training participants were more likely to disagree with the following statements ($p<.01$): • Long-term outpatient treatment is necessary for the treatment of drug addiction • Lifelong abstinence is a necessary goal in the treatment of alcoholism • Active participation in a program such as AA is essential for a patient to recover from alcohol or drug dependence. By mid-November, an estimated 185 trainees (80 nursing students, 60 social workers, 20 rehabilitation counselors, 25 residents) will have completed SBIRT training and results will reflect data from the larger cohort.

Conclusions: SBIRT is an important intervention and provides an effective mechanism to identify patients who are using substances at harmful levels, increase patient and provider knowledge about the consequences of substance use, encourage reduction in use and prompt treatment in patients with substance use disorders. As psychiatrists and addictions psychiatrists, collaboration with providers and trainees in other disciplines to successfully disseminate SBIRT will benefit patients with risky substance use and substance use disorders, providing services to a typically underserved patient population. Understanding what providers and trainees in other disciplines may need to successfully espouse and utilize SBIRT will aid in dissemination.

Source of Funding: SAMHSA Grant 1U79T1025374-01
Disclosures: *Drs. Payne, Srinivasan, Murday, Hardeman and Ms. Wood have nothing to disclose.*

Poster Session B - (CME Accredited) ◆ Saturday, December 6

Poster 32: Pain and Addiction Education: A Comparative Study of Fellowship Directors in Pain Medicine and Addiction Psychiatry

Ellen Edens, MD, MPE; Beth Grunschel, MD, ScM; Yale School of Medicine; Seddon Savage, MD, MS, Dartmouth Medical School; Inbal Gafni, MD, MSc, Women's College Hospital, Toronto; and John Encandela, PhD, Yale School of Medicine

Background: Despite growing evidence of clinical overlap between chronic pain, mental illness, and opioid misuse and addiction, there is limited consensus among fellowship training programs in Pain Medicine (PM) and Addiction Psychiatry (AP) about what competencies must be developed. We conducted a study of U.S. training directors in PM and AP to identify themes and build consensus that may confirm need for and inform new curricula.

Methods: We designed and distributed a survey (after acquiring IRB exempt status) through Survey Monkey to all 140 fellowship directors of identified ACGME-accredited PM (N=95) and AP (N=45) training programs. The survey included quantitative and qualitative questions focused on curricular content such as clinical, didactic, and research opportunities, as well as institutional resources and barriers. Using descriptive statistics, we compared the two specialty responses and performed content analysis on qualitative answers to reach consensus about categories and themes. Additionally, we conducted separate focus groups of intentionally selected AP and PM fellowship directors. We compared focus group themes and findings with those from the surveys.

Results: Thirty PM (32%) and 28 AP (62%) program directors responded to the survey. Despite roughly equivalent past training in the co-occurring condition and deeming training in that condition to have comparable or greater value than other rotations, AP programs were more likely than PM to require any clinical rotation in the management of chronic pain and addiction (64% v. 13%). Several themes emerged from the narrative portion of the survey and the focus group sessions. First, PM and AP fellowship directors have different perceptions about purpose of cross-training. Second, barriers to implementation of cross-training are different between PM and AP. Focus group findings suggested that APs may resist promoting a formal curriculum given that psychiatrists are generally wary of "owning" the pain diagnosis. Finally, the focus group showed a lack of awareness of what other programs are doing around training fellows in issues of pain.

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Conclusions: PM physicians largely practice in a specialty referral setting and are primarily interested in minimizing risk, identifying addiction, and making appropriate referrals. Curricula that emphasize a collaborative model between AP and PM may be particularly valuable. APs often play a more generalist role than PM where referring patients is often not an available option. APs are being called on to help manage patients with co-occurring conditions. The unique needs of each specialty suggest independent curricula are warranted. Within each specialty, agreement on the most important curricular elements to present to fellows would be beneficial. Given the wide variation in resources throughout training programs, there may be a strong reason to develop a centralized, "at-minimum" didactic curriculum for AP and PM fellowship programs.

Source of Funding: None
Disclosures: *Drs. Edens, Grunschel, Savage, Gafni, and Encandela have nothing to disclose.*

Poster 33: Suicide Following Physician Fitness-for-Duty Evaluation

Alistair James Reid Finlayson, MD, Vanderbilt University School of Medicine

Background: Rates of suicide among male physicians are modestly higher and suicide rates for female physicians are much higher than among the general population. Higher rates among doctors may be explained by knowledge about and access to suicide methods. Although there is now evidence that appropriate management for physicians with substance use disorders often results in return to safe and effective practice, data is scarce on the identification and treatment of physicians at risk for suicide.

Methods: A retrospective analysis of suicidal behavior in a convenience sample of 141 physicians who participated in fitness-for-duty evaluation at Vanderbilt Comprehensive Assessment Program (2001-2009) using mean comparisons, Chi-square non-parametric statistical tests on longitudinal descriptive data. All reported findings were significant ($p > 0.05$) but extremely small call size increases risk for type 1 error. The state physician health program that had referred the 141 physicians for a variety of behavioral health issues adversely affecting clinical practice also provided descriptive outcome data.

Results: Seven of the 141 physicians were known to have attempted suicide and five (3.5%) died as the result. Two of the deaths occurred in the first month after evaluation and three 2 to 7 years afterwards. Compared to the other physicians, those in the suicide behavior group were more frequently 1) unfit to practice (71% v. 31%); 2) engaged in solo practice (86% v. 32%); and 3) using benzodiazepine drugs (57% v. 9%). No differences found on interviews, psychometrics (PAI, MMPI-2, BDI) or self-report instruments.

Conclusions: The 3.5% suicide rate in this sample is alarmingly 175 times higher than the general population (0.02%). Traditional assessment tools did not predict suicide in this physician sample. Solo practitioners may have less peer support, and relatively higher costs. Those unfit to practice face shame and stigmatization plus financial tension and uncertainty. Once thought protective, the chronic use of benzodiazepine drugs is increasingly associated with poor psychiatric outcomes, morbidity and suicide.

Source of Funding: This study was approved (IRB #08060 and IRB #060459) by the Institutional Review Board, Vanderbilt University. The project (publication) described was supported by CTSA award no. UL1TR000445 from the National Center for Advancing Translational Sciences. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the National Center for Advancing Translational Sciences or the National Institutes of Health.
Disclosure: *Dr. Finlayson has nothing to disclose.*

Poster 34: Tobacco Use in Buprenorphine-Maintained Patients Receiving Primary Care in a Community Mental Health Clinic

Amy Harrington, MD, University of Massachusetts

Background: Patients on opioid replacement therapy (ORT) use tobacco products at rates 4-5 times higher than the general population. Clinics that offer buprenorphine maintenance in conjunction with primary care services and mental health services are in an ideal position to make cessation of tobacco use a treatment goal. In this study, we examined patterns of tobacco use among buprenorphine patients who are also receiving primary care services through the Primary Behavioral Health Care Integration (PBHCI) project at our clinic.

Methods: This study was a chart review of all buprenorphine patients who were also participating in PBHCI at Community Healthlink, a community mental health center in Worcester, MA. In this project, consumers' physical health indicators (blood pressure, height, weight, CO levels, and waist) are collected at enrollment and every 6 months thereafter, and labs are collected once a year. Results for buprenorphine-maintained patients were compared with results for PBHCI participants as a whole. Buprenorphine-maintained patients were classified as smokers or non-smokers, and Chi-square analysis was used to compare the two groups.

Results: A total of 31 patients treated with buprenorphine were enrolled in the PBHCI program. Of these, 24 patients used tobacco, 5 did not, and there was missing data for 2. There was no significant difference between the two groups regarding presence of a co-occurring disorder, gender, use of cannabis, use of tobacco or other illicit drug use. As a group, buprenorphine patients in PBHCI were slightly younger than the entire CHL sample (39 years versus 41 years on average), and their physical health indicators are slightly less at risk for chronic medical conditions. However, these patients are more likely than patients in the overall sample to have used tobacco 30 days prior to enrollment (84% versus 57%). Mean expired CO was 17, compared with 11 for the overall sample.

Conclusions: Tobacco use is prevalent among buprenorphine-maintained patients receiving primary care from the PBHCI project at this community mental health center.

Source of Funding: Patient data are derived from the SAMHSA PBHCI Program at Community Healthlink.
Disclosure: *Dr. Harrington has nothing to disclose.*

Poster Session

Location: Conference Lobby

Poster 35: QTc Prolongation in Veterans with Heroin Dependence on Methadone Maintenance Treatment

Sameer Hassamal, MD, PYG-4 Psychiatry Resident, Virginia Commonwealth University

Objective: Since the advent of methadone maintenance programs, there has been an overall increase in the life expectancy of heroin users. However, there are numerous concerns regarding the disturbance of cardiac rhythm among individuals receiving methadone maintenance treatment, e.g., in the form of ventricular tachycardia secondary to rate-corrected QT interval prolongation (QTc). The objective of this study was to compare the QTc before and after the veteran was on a stable dosage of methadone for an average of 8.72±4.50 years to treat heroin dependence. Risk factors were correlated with the QTc once the veteran was on a stable dose of methadone. Differences in the clinical risk factors in subgroups of veterans with below and above mean QTc change was compared.

Methods: ECG data was obtained from a 12-lead electrocardiogram (pre-methadone and on methadone). Clinical data was gathered from the medical records.

Results: The mean QTc at baseline was 426±34 msec and after being on methadone for an average of 8.72±4.50 years was significantly higher at 450±35 msec. No significant relationships were found between QTc prolongation and risk factors (age, hypokalemia, hypomagnesaemia, hypophosphatemia, systolic congestive heart failure, hepatic cirrhosis, antidepressant medication use, antipsychotic medication use, other QTc prolonging medications and gender) except for calcium. Methadone dosage was significantly higher in veterans with a QTc change above the mean change of ≥ 24 msec (88.48±27.20 mg versus 68.96±19.84 mg). None of the veterans experienced any cardiac arrhythmia.

Conclusion: The low power of the study and low prevalence and complexity of medical co-morbidities may explain the lack of a significant correlation between any risk factor with the QTc except methadone dosage and calcium. The absence of TdP may be explained by the low prevalence of QTc values > 500 msec as well as the retrospective design of the study.

Source of Funding: None
Disclosure: *Dr. Hassamal has nothing to disclose.*

Poster 36: Motivational Interviewing Education of General Psychiatry Residents

Manish K. Jha, MBBS, Chief Psychiatrist, BMT Program, North Texas State Hospital; Misoo Abele, MD, Staff Psychiatrist, Portland VA Medical Center; and Julie Brown, MD, Staff Psychiatrist, VA North Texas Medical Center

Background: According to the Substance Abuse and Mental Health Administration, more than 40% patients with substance use disorder (SUD) have a comorbid mental illness and more than 25% patients with serious mental illness also have SUD. Motivational interviewing (MI) skills have been proven to be effective in treatment of substance use disorders. In a national survey, 83.3% of general psychiatry, 87.8% of child/adolescent and 94.7% of Addiction Psychiatry training directors reported that general psychiatry residents should be trained in MI skills. However, competency in MI skills was not recommended by the psychiatry milestones project of the Accreditation Council of Graduate Medical Education and the American Board of Psychiatry and Neurology. In this study, we surveyed chief residents of general psychiatry training programs and UT Southwestern (UTSW) general psychiatry residents in the academic year 2011-2012 about their training in MI skills and its influence on attitudes towards treatment of substance use disorder.

Methods: The institutional review board of UT Southwestern Medical Center provided exemption for this study. An anonymous survey was developed. Chief residents of general psychiatry training programs were invited to participate via online survey (https://www.surveymonkey.com/s/3BSPJQL) through a listserv maintained by American Psychiatric Association and paper surveys were handed out to 49 UTSW general psychiatry residents. Forty-five out of 206 (21.8%) chief residents and 32 out of 49 (65.3%) UTSW residents responded. Summary statistics were used to present means, standard deviations and percentages. T-test with unequal variance was used to compare the PGY level of chief residents and UTSW residents. Logistic regression analyses were conducted to evaluate the effect of motivational interviewing education on resident responses for the questions, "I feel that my interventions are largely ineffective with actively substance using population" and "I prefer that a trained addiction counselor or specialist address substance use in my patients with comorbid substance use."

Results: Of the respondents, 77.8% chief residents and 65.6% UTSW residents reported receiving motivational interviewing education. A large majority of respondents had positive attitude towards motivational interviewing education and 97.8% chief residents and 100% UTSW residents thought that motivational interviewing is an important skill for general psychiatrist. There was a significant difference in PGY level of chief residents and UTSW residents (mean difference 1.14 years; $t = -5.9356$, degrees of freedom = 47, p value < 0.001). Among chief residents, but not UTSW residents, training in motivational interviewing skills was associated with 87.16% decrease in report of feeling that interventions are ineffective with actively substance using patients and 88.63% decrease in preference for trained addiction counselor or specialist to address substance use in patients with comorbid substance use even after adjusting for PGY level.

Conclusions: A majority of residents report receiving MI education, though the reported numbers were lower than the report of 90.9% by general psychiatry residency training directors in a previous national survey. Among the chief residents of general psychiatry training programs, education in MI skills was associated with increased feeling of effectiveness of interventions in actively substance using patients and decreased preference for addiction counselor or specialist to manage active substance use in their own patients. The low response rates, though consistent with previous survey of chief residents, is a limitation of our study. Further studies are indicated to evaluate the effect of motivational interviewing education of psychiatry residents on their competency in managing patients with substance use disorders.

Source of Funding: None
Disclosures: *Drs. Jha, Abele, and Brown have nothing to disclose.*

Poster Session

Location: Conference Lobby

Poster 37: Quetiapine Use Disorder: A Case Report

Darrow Khosh-Chashm, MD, University of Texas Health Science Center at Houston

Background: Present this case report of my clinical experience of a patient whose pattern of behavior fulfilled the criteria for a quetiapine use disorder as listed in the DSM 5 criteria for a sedative, anxiolytic, and hypnotic use disorder. Quetiapine is an atypical antipsychotic FDA approved for the treatment of schizophrenia and manic and depressive episodes associated with bipolar disorder. It is also prescribed off-label for severe treatment-resistant anxiety and insomnia. A literature review found quetiapine dependence or abuse being documented in five other case reports and one systematic review of previous case reports. To date there have been few studies that directly examine quetiapine dependence or abuse. The goal of this presentation will be to provide further evidence that quetiapine can indeed cause dependence.

Methods: Describe a case of a 46-year-old male with a diagnosis of MDD, recurrent, with psychosis whose behavior while hospitalized in an inpatient psychiatric facility met criteria for a diagnosis of a quetiapine use disorder. This will include a brief summary, background, clinical course, differential diagnosis, discussion, conclusion, and reference. I will also provide a summary of findings from previous case reports and other literature sources related to quetiapine use disorders.

Results: The poster will present clinical data from a review of previous case reports and related studies but does not include primary data.

Conclusions: This is a case that supports previous reports that quetiapine, when used alone, can indeed cause dependence.

Summary: At present quetiapine is not listed as a controlled substance and not considered to be an addictive substance when used in primary psychiatric settings. I hope this presentation of a clinical experience can further discussion about the abuse and dependence potential of quetiapine.

Source of Funding: None
Disclosure: *Dr. Khosh-Chashm has nothing to disclose.*

Poster 38: Illicit Drug Use and Motivations among Adolescents with and without Inflammatory Bowel Disease

Analice Hoffenberg, MD, MSPH; Edward Hoffenberg, MD; Christian Hopfer, MD; and Jay Markson, MD, University of Colorado Denver

Background: Cannabis may have anti-inflammatory effects in inflammatory bowel disease (IBD); nicotine may be beneficial in ulcerative colitis, and opiates for pain. Since there is biological plausibility for their abuse, we sought to determine the frequency and nature of illicit drug use by our adolescents with and without IBD, as well as their motivations.

Methods: We conducted a cross-sectional pilot study using validated questionnaires targeted to adolescents with (IBD) and without IBD (non-IBD). Recruitment was from an academic pediatric IBD center and from an urban private primary care outpatient office. Electronic surveys included PUCAI, sPCDAI, CIDI supplement which assesses both substance use and substance use disorders. Questions on cannabis, tobacco and opiates included lifetime use, pattern of use, ages of onset and of regular use, motivations for use and sources of drug supply were analyzed. At completion of the survey, all subjects received substance use counseling information.

Results: Surveys were completed by 65 IBD and 100 non-IBD adolescents. The groups were similar for gender but the IBD group was younger (16.3 vs. 17.0 y, p =0.04) and more likely to be Caucasian (88% vs 65%, p =0.001). There were no differences in lifetime use for tobacco 31% vs. 26%, cannabis 31% vs. 40%, opiates 1.5% vs. 1.5%. However, the IBD group used cannabis more intensely (use > 1 time per week 55% vs 24%, OR 3.54 (1.1-11.1,) p<0.03); and for more days in the past 6 months (76±77 vs 35±59, p =0.03). Among users of tobacco and cannabis, the IBD group was younger: for tobacco users the mean age was (IBD 17.5±1.3 vs. non-IBD 19.4±2.2, p<0.001), and similarly for cannabis the mean age was (IBD 17.4±1.3 vs. non-IBD 18.5±2.4, p<0.03). Very few patients endorsed opiate use (1 IBD, 4 non-IBD). There were no differences in source of drug use between the groups, except that IBD users were less likely to get cannabis from friends than non-IBD users (OR(95%)= 0.39 (0.18-0.81), p=0.01. There were no differences in substance dependence and abuse between groups. There were no differences in regard to drug use motivations, except for physical symptoms help. IBD adolescents endorsed items reflecting drug use to help with physical problems more often than other adolescents (Kruskal-Wallis test, p=0.0349).

Conclusions: Our data suggests that adolescents with IBD use primarily tobacco and cannabis as often as non-IBD controls, but are younger and exhibit more intense cannabis use. Among IBD patients, an important motivational factor seems to be self-medication. Cannabis exposure during adolescent brain development may lead to higher risk for future substance use disorders. Care providers should consider screening adolescents with IBD for substance use.

Source of Funding: T32 MH015442. This study was funded by the Developmental Psychobiology Endowment Fund, and received support by NIH/NCATS Colorado CTSI Grant Number UL1 TR001082.
Disclosures: *Drs. Analice Hoffenberg, Edward Hoffenberg, Hopfer, and Markson have nothing to disclose.*

Poster 39: Synthetic Marijuana: A Clinician's Conundrum

Nitin Chopra, MD and Cletus Carvalho, MD, University of Kentucky

Background: In the U.S., synthetic marijuana has developed into a $5 billion industry and is the second most frequently used illicit substance after cannabis. After an apparent stabilization of reported cases to the American Association of Poison Control Centers in 2011 and 2012, there is an upward trend so far in 2014. In emergency room settings, clinicians frequently see presentations of psychotic or anxious patients secondary to synthetic marijuana intoxication. A clinical case scenario of a 26 year old African American female, presenting to a local emergency room with confusion, agitation, paranoia, sexual delusions and thought disorganization- twice in a one month span following the self-reported use of “Serenity” which she described as being a “synthetic marijuana” will be described. Cases like this have prompted the need to review the literature to improve our understanding of various substances identified as “synthetic marijuana.”

Poster Session

Location: Conference Lobby

Methods: A PubMed review of the literature on identified chemical composition and reported street or brand names of various substances identified as "synthetic marijuana," as well as practice guidelines, including lab and diagnostic measures, as well as antidotes or effective anti-psychotics were reviewed.

Results: 111 street/brand names for "synthetic marijuana" were identified. 36 distinct chemicals have been identified to be present in these substances, some of which have properties similar to other designer drugs, like bath salts. There is tremendous variation among the labs for synthetic marijuana. There is no anti-dote present. There are no definitive practice guidelines for the management of psychosis secondary to synthetic marijuana.

Conclusions: Synthetic marijuana continues to be a conundrum to clinicians. In 2014, there has been a trend of increased reports to Poison Control, indicating that despite imposition of legislative barriers, the problem remains very real. Paucity of diagnostic measures, inability to identify actual composition, and lack of evidence-based treatment guidelines, leaves us in a precarious situation.

Summary: Presenting a concise review of the literature on synthetic marijuana serves to create awareness, in addition to drawing attention to current limitations in knowing what is in "synthetic marijuana" and how to treat changes in behavior or thought processes while altered. Clearly continued investigation and advocacy are warranted.

Source of Funding: None
Disclosures: *Drs. Chopra and Carvalho have nothing to disclose.*

Poster 40: Examining the Relationship Between Depression and Alcohol Use in Youth Being Treated for a Cannabis Use Disorder

Albert Arias, MD, Yale University School of Medicine and VA Connecticut Health System

Background: We examined the relationship between cannabis use, alcohol use, and depressive symptoms in a sample of youth with a Cannabis Use Disorder (CUD) receiving psychosocial treatment.

Methods: N= 600 adolescents (age 12-18) with CUD received 3 months of active treatment for substance use with one of 5 psychosocial treatments and were followed up to 1 year. Analyses: A two-level, hierarchical linear model (HLM) assessed the linear change across time in each of the three measures.

Results: CANNABIS USE: There was (1) a significant overall decrease in frequency of cannabis use across time, γ_{10} = -0.087(0.007), p < .001. In addition, (2) the higher the frequency of cannabis use at BLγ_{06} = -0.013(0.006), p < .05, and (3) the lower the level of conduct disorder at BL, γ_{08} = -0.024(0.010), p < .05, the more the decrease in frequency of cannabis use across time. ALCOHOL USE: Frequency of Alcohol Use- Change in Use: (1) There was no significant overall decrease in frequency of alcohol use across time, γ_{00} = -0.01, p = .25. However, (2) the younger the youth, γ_{11} = 0.02, p < .001, (3) non-White more than White, γ_{13} = -0.05, p = .002, the more the decrease in frequency of alcohol use from BL to 12-months. DEPRESSION SYMPTOMS: Change in Use: (1) There was a significant decrease in level of depression across time, γ_{10} = -0.07, p < .001. In addition, (2) Whites more than Non-Whites, γ_{03} = 0.03, p = .005, (3) the lower the frequency of alcohol use at BL, γ_{07} = 0.01, p = .020, the more the decrease in the depression.

Conclusions: Cannabis use improved with all forms of treatment, as did depression. Alcohol use DID NOT significantly decrease over time, suggesting that additional interventions aimed at reducing drinking in this population may be beneficial. Higher baseline alcohol use was associated with less improvement in depressive symptomatology. Additional alcohol-specific therapies may help improve overall outcomes and depression in this subpopulation.

Source of Funding: SAMHSA (CSAT) Grant Nos. TI11317, TI11320, TI11321, TI11323, and TI11324. NIAAA 1K23AA017689-01A2.
Disclosure: *Dr. Arias has nothing to disclose.*

Poster 41: Prognosis of Cerebellar Ataxia in Alcohol Dependent Patients: A Case Report

Daniel Lache, MD; Michael Ascher, MD; Tamer Wassef, MD; and Vasant Dhopesh, MD, University of Pennsylvania and Philadelphia VA Medical Center

Background: It is our observation that on medical services, patients admitted who are wheelchair-bound seldom regain the ability to ambulate by the time of discharge. In the case of ataxia, as a result of chronic alcoholism, the extent and timing of recovery remains unclear. One cross-sectional study found that long term abstainers from alcohol had less severe ataxia that short term abstainers (Smith 2011), suggesting that improvement over months is possible with continued sobriety. Another recent longitudinal study contradicts this, finding no improvement in the ataxia of abstinent patients from 10 weeks to 1 year (Fein 2013). In the last 5 years, we observed that four of our patients with severe Alcohol Use Disorder who were wheelchair-bound on admission were able to walk with a cane at the time of discharge. We present the following case and a video of the patient with ataxia to illustrate the potential for recovery over a short period of abstinence.

Methods: Case report of a patient admitted for a 3 week inpatient hospital admission at the Philadelphia Veteran's Affairs Medical Center (PVAMC).

Results: A 59 year-old Caucasian male with a history of daily, heavy alcohol use for many years was admitted to the PVAMC's inpatient psychiatry unit for management of alcohol withdrawal. At the time of admission, he was in a wheelchair due to ataxia and balance problems. The patient's physical exam was remarkable for a very wide based gait. The rest of the neurological and physical exams were within normal limits. The patient's head CT scan showed non-specific changes and his EEG was within normal limits. Lab values were within normal limits. A neurology consult was performed, which diagnosed the patient with ataxia due to alcoholic cerebellar degeneration. The patient was continued on thiamine 100 milligrams twice daily. The patient was subsequently evaluated by physical therapy and provided with gait training. A few days post admission, the patient was able to walk with the assistance of a walker. At the time of discharge from our unit, his gait improved and he was able to ambulate with the use of a cane.

Conclusions: Patients with a history of heavy alcohol use may develop ataxia. In cases where alcohol use is thought to be the cause, ataxia of stance and gait is most commonly attributed to degeneration of the superior cerebellar vermis. Our experience suggests that patients with Alcohol Use Disorder with severe cerebellar ataxia resulting in severe functional impairment (i.e wheelchair-bound) at the time of admission can have a good prognosis for ambulation in the setting of a period of abstinence, a balanced diet, thiamine supplementation, and physical therapy. In addition, the improvement may occur over a period of several weeks. It remains unclear whether further improvement can be expected with months to years of abstinence.

Source of Funding: None
Disclosures: *Drs. Lache, Ascher, Wassef, and Dhopesh have nothing to disclose.*

Poster 42: The Acute Pharmacological Effect of Nicotine Enhances Responding for Intrinsically Rewarding Stimuli

Gina Matteson, MD, Baylor Scott and White Health and Matt Palmatier, PhD, East Tennessee State University

Background: Nicotine dependence continues to be a major health threat to millions of people. Interestingly, studies using animal subjects have shown nicotine to be a relatively weak primary reinforcer. This has led researchers to investigate the important question: how can nicotine, a mild intoxicant, support one of the most addictive habits worldwide? Recent studies have shown that nicotine can potently enhance the reinforcement value of non-pharmacological stimuli. In rats, nicotine enhances the reinforcing value of non-drug stimuli such as sucrose, saccharin, and intrinsically rewarding visual stimuli. The present studies investigated whether nicotine could enhance responding for non-reinforcing stimuli, and whether the reinforcement enhancing effects of nicotine are mediated by the acute action of nicotine at cholinergic receptors.

Methods: Subjects: Sixty-two male Sprague-Dawley rats were used for Experiments 1 and 2.

Apparatus: Study sessions were conducted in 26 operant conditioning chambers. Each chamber was equipped with two retractable levers, a speaker which produced an 83 dB tone, white stimulus lights located above the levers, and a house-light located between the two levers near the chamber ceiling. Drugs: Nicotine was injected subcutaneously at a dose of 1 mg/ml and a dose of 0.4 mg/kg was used for Experiments 1 and 2. Data Analyses: Statistical reliability of all group and drug effects on response rates and reinforcers earned was determined using ANOVAS. The standard used for determining significance was set at the $p<0.05$ alpha level. Procedure: In Experiment 1, rats responded on an active lever for one of two different audio-visual stimuli. After response rates stabilized, rats received a pre-session subcutaneous injection of either nicotine or saline. Rats responding for a 5 s extinction of the house-light (HL-OFF) showed a greater increase in response rates following nicotine administration than rats responding for a 5 s illumination of a cue light (STIM-ON). In Experiment 2, naive rats responded for the more reinforcing stimuli from experiment 1 and were randomly assigned to one of 3 groups (Pre-NIC, Post-NIC, or SAL). Injections were given 5 min before and 1 h after each test session. Pre-NIC rats received nicotine 5 min before test sessions and placebo 1 h after test session. This order was reversed for the Post-NIC group. SAL rats received placebo before and after test sessions.

Results: Nicotine robustly increased responding for the more reinforcing stimuli (HL-OFF), but did not affect response rates for the less reinforcing stimulus. In Experiment 2, there was an increase in response for the HL-OFF stimulus in rats receiving nicotine injections 5 min before test sessions. However, Post-NIC rats did not differ from saline controls. These experiments demonstrated that nicotine enhances responding for intrinsically reinforcing stimuli and that the pharmacological effects of nicotine must occur concomitantly with reinforce availability.

Conclusions: The present studies demonstrate that the reinforcement enhancing effects of nicotine depend on two important factors- the intrinsic reward value of the stimulus and the acute pharmacological action of nicotine at cholinergic receptors. As a result, nicotine can potently enhance the reward value of relatively strong reinforcers, but will exert little or no enhancement effects for neutral or weakly reinforcing stimuli. While knowledge of the underlying physiology responsible for this effect is limited, an increased understanding is likely to play an important role in nicotine cessation treatments.

Source of Funding: NIH grants DA-10464, DA-12655, and DA-19278
Disclosures: *Drs. Matteson and Palmatier have nothing to disclose.*

Poster 43: Accessing Addiction Services in Hospital: Is it a Problem? An Update

Katherine McKay, MD, McMaster Psychiatry and Behavioural Neurosciences, McMaster University; Diana Whellams, MD, Medical Microbiology, McMaster University; Joseph Pellizzari, PhD, St. Joseph's Healthcare Hamilton – Charlton Campus Service Leader, CL Psychiatry; and Tim O'Shea, MD, MPH, FRCPC, McMaster University

Background: Substance abuse in inpatients can be challenging for both substance users and hospital staff. If addressed, physical and emotional distress can be reduced. Little is known about if and how substance use is identified and addressed on inpatient medical and surgical units within the hospital systems in Hamilton, Ontario, Canada.

Methods: A brief survey was electronically distributed to staff physicians and allied health professionals within the hospital systems in Hamilton, Ontario, Canada. Data was then analyzed including aggregation and measures of central tendency.

Results: 45 staff members completed the survey (48 responded, 3 incomplete) over 60% who completed were physicians. 28 respondents felt that a service gap exists and that patients are not really being managed. The majority of respondents felt "not very well informed" or "clueless" about addiction services in Hamilton. 96% of respondents reported they would be somewhat or very likely to access an inpatient addiction service, were it offered.

Poster Session

Location: Conference Lobby

Conclusions: Medical and surgical inpatient services have regular contact with individuals with substance abuse issues. In Hamilton, Ontario, Canada it appears that there is an opportunity to enhance addiction services for medical and surgical inpatients. Further, respondents would access it were it available. This provides a potential opportunity for psychiatry, medicine and those interested in addictions in general to further enhance patient care.

Source of Funding: None
Disclosures: *Drs. McKay, Whellams, Pellizzari, and O'Shea have nothing to disclose.*

Poster 44: The Impact of Opioid Prescriber Surveillance on Doctor-Patient Relationships and Drug Markets

Sonia Mendoza, MA and Helena Hansen, MD, PhD, New York University and Nathan Kline Institute for Psychiatric Research

Background: Prescription opioids have been responsible for a staggering increase in overdose deaths over the past decade, and the increase in their use has informed debate about the impact of medicalization and the pharmaceuticalization of everyday life. Up to now, social mechanisms driving prescription opioid markets and the social effects of the drug policies instituted in reaction to this national epidemic have received little empirical attention. Staten Island, a microcosm of the suburban regions with the highest levels of non-medical prescription opioid use in the U.S., is experiencing four times the number of opioid overdose deaths of any New York City borough, and its opioid prescribers have been subject to enhanced surveillance by law enforcement. This study aims to assess the impact of the prescription monitoring program mandated by New York State in 2013 on doctor-patient interactions in Staten Island and its surrounding boroughs, as well as its impact on the movement of opioid users between legal-clinical and illicit drug markets.

Methods: Semi-structured interviews and ethnographic observations of physicians and their patients, recruited with respondent driven sampling, using the Substance Abuse and Mental Health Services Administration list of all opioid maintenance-certified prescribers in Staten Island and New York City.

Results: Preliminary findings suggest that, because of the new prescription monitoring program, opioid prescribers are refusing patient requests for opioids, are abruptly discontinuing patients from long term narcotic treatment, including benzodiazepine treatment, and are refusing to accept new patients that are at risk of non-medical narcotic use. At the same time, these prescribers report a lack of resources to provide substance abuse treatment and referrals for such patients. Respondents anticipate a resulting increase in heroin and illicit opioid use among those dependent on prescription opioids, and increased crossing of state borders to obtain prescriptions.

Conclusions: Our preliminary findings suggest that drug policies that target prescribers for sanctions in an effort to maintain boundaries around "legitimate" medical use of opioids, may paradoxically be leading patients to use illicit drug markets and to higher risk narcotic use. Additional interventions to educate prescribers and provide support for substance abuse treatment, patient referrals, and harm reduction interventions, such as Naloxone kits for overdose prevention, are needed to complement prescription monitoring programs.

Source of Funding: National Institute on Drug Abuse DA 032674
Disclosures: *Ms. Mendoza and Dr. Hansen have nothing to disclose.*

Poster 45: Final Results of an Interprofessional Emergency Department Screening, Brief Intervention, and Referral to Treatment (SBIRT) Implementation Project

Ann Mitchell, PhD, RN, FAAN; Kathy Puskar, DrPH, RN, FAAN; Holly Hagle; and Dawn Lindsay

Background: Alcohol and other drug use contribute to emergency department admissions otherwise attributable to injury or illness. While necessary to address the presenting condition in the emergency department, an opportunity exists to provide screening, brief intervention, and referral to treatment (SBIRT) to reduce risks associated with alcohol and other drug use.

Methods: Over 150 interprofessional emergency department personnel in four hospitals were trained in the evidence-based practice of screening, brief intervention and referral to treatment. Training consisted of a one-hour in-person training, online review, and practice in the emergency department with questionnaires administered throughout the training process.

Results: Final analysis of four hospitals, pre-training to post-training, indicated statistically significant increases in all subscales of the Alcohol and Alcohol Problems Perceptions Questionnaire (AAPPQ) and the Drug and Drug Problems Perceptions Questionnaire (DDPPQ) with the exception of the Task-Specific Self Esteem subscale of the AAPPQ. The knowledge of SBIRT scale also increased significantly pre-to-post.

Conclusions: Emergency department personnel are receptive to learning practices relevant to their roles. Reinforcing risk-reduction, rather than abstinence, provides options for staff to intervene and educate during "teachable moments" in the ED.

Source of Funding: U.S. DHHS, Health Resources and Services Administration (HRSA), Grant Number D11HP22206
Disclosures: *Drs. Mitchell, Puskar, Hagle, and Ms. Lindsay have nothing to disclose.*

Poster 46: Contingency Management (CM): A Behavioral Therapy for Patients with Stimulant Use Disorders

Lindsey Neuman, LCSW, CADC

Background: CM is an evidence-based treatment intervention that was funded by the VHA as a national initiative to increase the delivery of evidence based practices. CM was implemented in the Outpatient Addiction Treatment Program (ATP) at Hines VA Hospital in October 2012. CM is a behavioral therapy and is the only known evidenced-based treatment currently available that has been shown to be effective in treating patients with stimulant disorders. CM is based on the concept of Contingent Reinforcement, the direct relationship between a specific behavior and a specific outcome. The goal is to integrate this concept into the traditional substance use disorder treatment already provided in ATP clinic, i.e. group and individual psychotherapy. CM monitors a specific target behavior (stimulant use) and provides tangible positive reinforcements (canteen vouchers) each time the target behavior occurs (negative urine screen results) and withholds reinforcement (canteen vouchers) if the target behavior does not occur (positive stimulant urine screen results).

Poster Session

Location: Conference Lobby

Methods: CM was implemented in ATP at Hines VA Hospital in October 2012. Veterans who are currently enrolled in ATP and report current stimulant use are eligible for enrollment in the program. CM is provided in addition to traditional treatment of substance use disorders. Additionally, the veteran should have multiple attempts at treatment prior to admission into CM. Once a veteran is identified as eligible to participate in CM, a CM clinician meets with the veteran individually to conduct the orientation session (Brief Addiction Monitor is administered, informed consent is signed and schedule is given). On following visits, veterans will receive a stat lab test prior to group psychotherapy sessions three times per week: Monday, Wednesday and Friday for 8 weeks or 24 sessions. After group psychotherapy, the veteran will meet with treatment provider for CM session. For the first negative sample, the veteran will get one draw from the prize bowl. If the next sample tests negative, they will get two draws that day. The number of draws earned increases by one for each sample in a row that tests negative until the veteran reaches a maximum of 12 draws. Veterans are again administered the Brief Addiction Monitor and an individual session is conducted to terminate their participation in the CM program.

Results: According to research, CM has been shown to increase retention in treatment by 25%, and increase abstinence from cocaine by 25% over the course of an eight week period of treatment. There is also an increase in abstinence at one year post treatment, by 20%. To date, there have been 31 patients enrolled in the CM program in ATP at Hines VA Hospital. A retrospective analysis of the CM implementation at Hines shows that of the 31 patients enrolled, 15 have successfully completed the program. A successful completion requires the veterans to have completed all 24 sessions, maintained engagement in substance use disorder treatment and attained treatment goals.

Conclusions: Using evidenced based treatment, such as CM, when treating patients with substance use disorders increases engagement and retention along with more days abstinent from substances.

Source of Funding: None
Disclosure: *Dr. Neuman has nothing to disclose*.

Poster 47: Cannabis Use Disorders Are a Predictive Factor for the Development of Bipolar Disorders

Daniel Notzon, MD; Carlos Blanco, MD; Maria Oquendo, MD; Frances Levin, MD; and Shuai Wang, PhD, Columbia University

Background: Cannabis use is increasing in prevalence among young people and has a low perceived risk. Cannabis use disorders (CUD) are highly comorbid with bipolar disorder (BD). Cannabis use is associated with the onset of schizophrenia, which is increasingly found to share genetic and cognitive features with bipolar disorder. The aim of this study was to identify whether cannabis use disorders were a predictive factor in the development of bipolar disorder.

Methods: Structural equation modelling was used to examine the relationship between CUD and BD using data from Wave 1 (2001-02) and Wave 2 (2004-05) of the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), a large, national representative sample of U.S. adults (N= 43,093). Common risk factors for BD and CUD were included to control for potential confounding.

Results: Diagnosis of CUD at Wave 1 was associated with BD at Wave 2 ($r=0.173$, $p<0.001$), but BD at Wave 1 was not associated with CUD at Wave 2 ($r=0.025$, $p=0.538$). After adjusting for covariates CUD at Wave 1 predicted CUD at Wave 2 ($r=0.594$) and BD at Wave 1 predicted BD at Wave 2 ($r=0.699$,). Similar associations and significance were found with CUDs when BD was stratified into bipolar I and bipolar II groups.

Conclusions: The diagnosis of a CUD is a predictive factor for the development of bipolar disorder. Other relevant risk factors to both conditions do not appear to account for the variance between Wave 1 and Wave 2. Prospective cohort studies are warranted in this population to confirm these findings and guide public health and treatment interventions.

Source of Funding: NIDA T32 research fellowship
Disclosures: *Drs. Notzon, Blanco, and Wang have nothing to disclose. Dr. Levin received medication for a study from US World Meds and is a consultant with GW Pharmaceuticals. Dr. Oquendo received financial compensation for safety evaluation of a clinical facility and education grants/lecture fees from Pfizer and educational grants/lecture fees from Bristol-Myers Squibb, Eli Lilly, Astra-Zeneca, Janssen, Otsuka, Sanofi-Aventis, Shire, Research Foundation for Mental Hygiene and owns stock in Bristol-Myers Squibb.*

Poster 48: Impact of Smoking on Mental Health Symptoms in Adults with Depressive Disorders

Roopali Parikh, MD; Mario Cuervo, MD; Yusef Canaan, MD; and Juan Oms, MD, Larkin Community Hospital

Background: It has been widely documented that patients with depression exhibit higher rates of smoking. In this study, we sought to assess if smoking was predictive of poor mental health in adults diagnosed with a depressive disorder.

Methods: The 2008 Centers for Disease Control's Behavioral Risk Factor Surveillance Survey was utilized to identify a cohort of 8,025 patients that reported being diagnosed with a depressive disorder. Of these, 3,503 patients were excluded due to absence of information regarding smoking history. Demographic data and clinical history were recorded from the remaining 4,522 patients. The outcomes of interest were frequency of the following symptoms over a 14 day period: depressed mood, lack of interest, lack of energy, hopelessness, lack of concentration, change in appetite, and change in sleep patterns.

Results: Among 4,522 patients studied, a total of 2,053 (45.4%) were smokers while 2,469 (54.6%) were non-smokers. Smokers reporting a depressive disorder tended to be younger (48 vs 57 years, $p<0.001$), female (72 vs 68%, $p=0.008$), Hispanic (5% vs 3%, $p<0.001$), unmarried (63% vs 50%, $p<0.001$), and possess lower annual incomes. They were also less likely to have health insurance and reported higher rates of financial barriers to medical care (32% vs 15%, $p<0.001$) with less recent checkups. Smokers also had lower rates of diabetes mellitus (14% vs 18%, $p=0.001$) and no difference in rates of prior heart attack or stroke. With regards to symptoms, smokers reported more frequent mental health symptoms over a 14 day period, including lack of interest (4.7 vs 2.9 days, $p<0.001$), depressed mood (4.8 vs 3.0 days, $p<0.001$), change in sleep patterns (7.1 vs 5.1 days, $p<0.001$), little energy (8.0 vs 6.2 days, $p<0.001$), changes in appetite (5.3 vs 3.8 days, $p<0.001$), hopelessness (3.8 vs 2.3 days, $p<0.001$), difficulty concentrating (3.8 vs 2.4 days, $p<0.001$).

Poster Session

Location: Conference Lobby

Conclusions: In adults diagnosed with a depressive disorder, smoking is associated with more frequent mental health symptoms. Smoking cessation counseling and therapy may be warranted in individuals diagnosed with depressive disorders.

Source of Funding: None
Disclosures: *Drs. Parikh, Cuervo, Canaan and Oms have nothing to disclose.*

Poster 49: Assessing Barriers to Use of Specific Pharmacotherapies for Substance Use Disorders in Psychiatric Residents

Nicholas Piotrowski, MD and Matthew Byerly, MD, UT Southwestern Medical Center

Background: Pharmacotherapy is effective and shares a broad evidence base in the management of substance use disorders, but remains underutilized. System, provider, and patient-level barriers contribute to the limited use of pharmacotherapy. Provider-level barriers include both informational and perceptual barriers. Frequently cited informational barriers include inadequate training and lack of knowledge. Frequently cited perceptual barriers include lack of belief in pharmacotherapy effectiveness, low patient demand, difficulties in prescribing medications, concerns for misuse or diversion, poor patient compliance, lack of time, medico legal risks, and medication side effects. Broad changes in medical education have been recommended to overcome barriers in the treatment of substance use disorders. Provider-level barriers to the use of specific pharmacotherapies for substance use disorders amongst psychiatry residents are not fully understood. Knowledge as to where specific barriers exist would guide targeted interventions in residency training and curricula.

Methods: Current general psychiatry residents (n=49) at the University of Texas Southwestern Medical Center were surveyed about their perception of frequently cited provider-level barriers to the use of FDA approved pharmacotherapies for nicotine, alcohol, and opioid use disorders. Provider-level barriers were sorted into informational and perceptual barriers. PGY-3/4 residents were also surveyed about the likelihood of using specific pharmacotherapies in their future practices. Informational barriers were surveyed using a 2 question screening instrument on a 4 point Likert scale (scored 0 – 3). Perceptual barriers were surveyed using a 6 question screening instrument on a 4 point Likert scale (scored 0 – 3). Likelihood of using specific pharmacotherapies were surveyed using a 5 point Likert scale (scored 0 – 4). Potential barriers to the use of specific pharmacotherapies for nicotine, alcohol, and opioid use disorders were described using the sample mean and standard error. A completely within-subjects omnibus linear mixed model analysis of repeated measures was used to identify differences among the types of substance use disorders. Descriptive statistics was used to evaluate the PGY-3/4 likelihood of use of specific pharmacotherapies.

Results: Informational barriers were significantly different between medications used to treat nicotine use disorders ($p = 0.002$). No other statistically significant differences in informational or perceptual barriers were observed between medications within specific categories of substance use disorders (nicotine, alcohol, and opioid). Descriptively, informational barriers were higher between all pharmacotherapies compared with nicotine replacement therapy or buproprion. Similarly, PGY-3/4 residents reported an increased likelihood of prescribing nicotine replacement therapy or bupropion compared with other medications.

Conclusions: Informational barriers, including lack of knowledge and lack of training, may be contributing to decreased use of pharmacotherapies for substance use disorders amongst general psychiatry residents.

Source of Funding: None
Disclosures: *Dr. Piotrowski has nothing to disclose. Dr. Byerly served as a paid speaker at Novartis and Merck, Inc., a consultant at Otsuka, and a research grant awardee from Otsuka.*

Poster 50: Two Cases of Treatment-Resistant Psychosis Triggered by Spice Use

Mariam Rahmani, MD and Mathew Nguyen, MD, University of Florida

Background: The use of spice (synthetic cannabinoids) in youth is on the rise. In 2012, eleven percent of 12th graders admitted to spice use. It is sold under many names, including K2, Fake Weed, Yucatan Fire, Skunk, Moon Rocks, Spice Diamond, Mr. Nice Guy, and Dream; and is not detectable in routine urine drug screens. Here we present two cases of adolescent males who developed psychosis after spice use. Their psychosis was refractory to treatment with commonly used agents, and required the use of clozapine.

Methods: Case reports of two patients who presented with treatment-resistant psychosis triggered by spice use.

Results: Both adolescent males were treated with commonly used agents to target their psychotic symptoms (including risperidone, haloperidol, chlorpromazine, lorazepam, valproic acid) with no improvement. Finally, clozapine (which is usually reserved for treatment-resistant schizophrenia in adults) was used, and resolved their psychotic symptoms.

Conclusions: 1. The psychosis triggered by spice (synthetic cannabinoids) is likely more refractory to treatment than the psychosis triggered by natural cannabinoids. 2. Such treatment-refractory psychosis requires the use of clozapine.

Source of Funding: None
Disclosures: *Drs. Rahmani and Nguyen have nothing to disclose.*

Poster 51: Sublingual Suboxone (Buprenorphine/Naloxone) Leading to Acute Urinary Retention Requiring Emergent

Abhishek Rai, MD and Clarice Chan, MD, St. Mercy Hospital

Background: Acute urinary retention (AUR) is the inability to urinate and is the most common urologic emergency. Etiologies include trauma, medication, neurologic disease, infection and occasionally, psychological issues. AUR is commonly associated with epidural or intrathecal buprenorphine. It is, however, rarely reported with the use of sublingual buprenorphine with naloxone preparation (Suboxone). We report a case of acute urinary retention precipitated by initiating sublingual buprenorphine and naloxone (Suboxone).

Methods: Mr. X is a 58-year-old Caucasian male with a history of opiate dependence, benzodiazepine dependence, and cannabis dependence, depression with no prior hospitalization for mental health issues or substance detoxification. Patient was started on pain medications for his osteoarthritis and chronic pain. Two years ago, he started abusing his pain medications. His opioid use was associated with regular abuse of cannabis and benzodiazepine. His medical history was significant for benign prostatic hyperplasia (BPH, treated with tamsulosin which was diagnosed during the hospital stay) and hepatitis C. Patient never reported any episode of urinary retention in the past. Mr. X was admitted to the chemical dependency unit (CDU) for opioid dependence. He was started on sublingual Suboxone, phenobarbital taper and gabapentin to treat his opioid and benzodiazepine dependence. Initial dose of Suboxone was 8mg daily. The dose was further titrated to 12mg daily on day 2. Patient then complained of urinary retention on day 3 of his admission to CDU. His complaint of inability to urinate was complicated by suprapubic discomfort and bladder distention which was only relieved by immediate urethral catheterization. Because of the persistence of urinary retention, the patient was transferred to the medical unit for further urological assessment. Urology was consulted, and cystoscopy was done. Patient was found to have mild to moderate BPH and was started on tamsulosin with a long-term plan of prostatectomy. At that point, it was believed that Suboxone contributed partially to his urinary hesitancy. His dose of Suboxone was tapered to 4mg daily. Patient was discharged home with regular self-catheterization and 4mg of Suboxone daily. Patient continued his self-catheterization while at home as his urinary retention decreased but never resumed to spontaneous urination. 3 days later, patient again presented to the emergency department with severe withdrawal symptoms of opioid dependence. Patient was re-admitted to CDU, and decision was made to discontinue Suboxone and detoxify him using the traditional method of using clonidine and phenobarbital. On day 2 of discontinuation of Suboxone, patient resumed spontaneous urination. Patient was detoxified using traditional method for the next 5 days and discharged home with no Suboxone with plan for intensive outpatient treatment.

Results: Suboxone, a sublingual tablet consisting of buprenorphine and naloxone, is very commonly used to treat opioid dependence. Buprenorphine is a partial agonist at mu opiate receptor and antagonist to kappa receptor. Naloxone, a competitive antagonist at the mu opioid receptor is inactive when used sublingually. The inhibition of bladder afferents at the dorsal horn via mu receptor activation decreases bladder sensation and thereby leading to urinary hesitancy and chronic urinary retention with only long term use. Acute urinary retention associated with suboxone is much less common. Only few case reports and case series has been published with urinary retention requiring emergency attention and intervention.

Conclusions: Initial management of AUR requires prompt bladder decompression by urethral or suprapubic catheterization. Over 50% of AUR are precipitated by BPH. It is likely that in our case, the patient's urinary symptoms are due to BPH exacerbated by initiation of Suboxone. In elderly male patients with a known history of urinary hesitancy or BPH, it becomes important to take that into consideration before initiating Suboxone. Patients should also be checked routinely for urinary symptoms after the medication is initiated.

Source of Funding: None
Disclosures: *Drs. Rai and Chan have nothing to disclose.*

Poster 52: 5-Year Retrospective Study on the Trend of Substance Use, Its Burden and Rising Concern on Americans

Abhishek Rai, MD, St. Mary Mercy Hospital

Background: According to DSM-V, substance-related disorders encompass 10 separate classes of drugs: alcohol; caffeine; cannabis; hallucinogens; inhalants; opioids; sedatives, hypnotics, and anxiolytics; stimulants; tobacco; and other substances. All drugs that are taken in excess have in common direct activation of the brain reward system, which is involved in the reinforcement of behaviors and the production of memories. They produce such an intense activation of the reward system that normal activities may be neglected. Such list of substances is not comprehensive, and new substances that can lead to clinically significant impairment or distress are frequently being added. This study evaluated the trend of substance use in U.S.A from 2007 to 2011 and its impact on the healthcare system. This study clearly reflects the raising concerns with respect to some of the drug use in U.S.A.

Methods: This is a retrospective study that utilized the data on Healthcare Cost and Utilization Project (HCUP) website. HCUP is a family of health care databases maintained by a Federal-State-Industry partnership sponsored by the Agency for Healthcare Research and Quality (AHRQ). All the data presented are obtained from the HCUP Nationwide Emergency Department Sample (NEDS) and HCUP Nationwide Inpatient Sample (NIS). By using ICD-9 diagnostic codes, we are able to obtain the total number of emergency department visits, number of hospital admission, mean hospital charge and patient demographics.

Results: Here are some of the results from our retrospective study. Over a period of five years, 10,532,658 of emergency department visits had substance abuse being one of the diagnoses. The percentage differences (i.e. increase or decrease) in number of emergency department visits related to substance abuse are as follows: Alcohol (ICD code 303), +49.0%; cannabis (ICD code 304.3), +67.8%; cocaine (ICD code 304.2), -67.9%. Other substances also have upward trend with their percentage difference being +42.0%, +40.0% and +40.4% for opioid (ICD code 304.0), sedative (ICD code 304.1) and hallucinogen (ICD code 304.5), respectively. There is also a +20.6% and +21.0% increase in amphetamine and other substance abuse. With alcohol and cannabis being the substances with the most significant increase in emergency department visits, we further evaluated their data to determine their burden on the healthcare system. For number of hospital admission, alcohol has an increase of +8.6% and cannabis +13.3%. Mean hospital charge due to alcohol abuse increases by +29.5% over the five-year period, and that of cannabis increases by +39.0%.

Conclusions: In general, abuse of all substances has increased over the five-year period of 2007 to 2011, with the most significant increase in cannabis abuse and decline in cocaine abuse. In terms of burden to healthcare system, cannabis alone stands out in both number of hospital admission and mean hospital charge. Our retrospective study draws attention to the growing trend in the use of cannabis. It should raise alarm that we need to be very vigilant and careful when it comes to the use and prescription of cannabis as we all know its legalized in certain states. This study indicates that cannabis use and prescription needs more strict rules and policy to prevent it's over growing burden on American health system.

Source of Funding: None
Disclosure: *Dr. Rai has nothing to disclose.*

Poster Session

Location: Conference Lobby

Poster 53: Impact of Group Motivational Interviewing on Enhancing Treatment Engagement for Homeless Veterans with Nicotine Dependence and other Substance Use Disorders: A Pilot Investigation

Elizabeth Santa Ana, PhD; Steve LaRowe, PhD; Kayla Lamb, BA; Michelle Tompkins, BA, and Karen Hartwell, MD, Ralph H. Johnson VA Medical Center and the Medical University of South Carolina

Background: We evaluated whether a motivational enhancement therapy component targeting smoking behaviors combined with an existing manualized Group Motivational Interviewing intervention, referred to as 'Tobacco-GMI' (T-GMI), would increase treatment engagement in smoking cessation programming and improve use of NRT compared to GMI (alone without smoking cessation component) in nicotine dependent homeless dually diagnosed veterans.

Methods: The study was a repeated measures A-B design, with two treatment conditions (T-GMI versus GMI) and smoking behavioral outcomes assessed at pre-treatment and 3-month follow-up. 35 treatment seeking participants aged 18 to 70 years, history of smoking cigarettes daily for the past 12 mos, smoking ≥ 10 cigarettes daily, and an expired CO reading of ≥10 parts/million prior to beginning study, were included. GMI sessions (n = 15) consisted of structured activities consistent with the spirit of MI (Miller & Rollnick, 2012) with the goal of eliciting and strengthening change talk. Participants in T-GMI (n = 20) received GMI-plus-an MET component targeting smoking.

Results: At baseline, between group differences were NS in age, cigarettes smoked per day, CO levels, scores on FTND, number of reported smoking quit attempts, or years of smoking between treatment conditions. By 3-month follow up, a significantly larger proportion of participants in T-GMI used NRT compared to participants in GMI (T-GMI: 45%, n = 9 versus GMI; 7%, n =1; Chi Square = 6.1, $p < .05$). A similar (although NS) pattern was observed for attendance at smoking cessation clinic sessions, with 25% of participants in T-GMI (n = 5) having attended a smoking cessation class during follow-up, compared to 7% in GMI (n = 1).

Conclusions: A significantly larger proportion of participants in T-GMI were taking NRT medications by 3-month follow up compared to their counterparts in GMI. Although participants in T-GMI attended more smoking cessation classes than those in GMI, the difference was NS.

Source of Funding: American Cancer Society, Institutional Research Grant #IRG-97-219-14.
Disclosures: *Drs. Santa Ana, LaRowe, Lamb, Thompkins and Hartwell have nothing to disclose.*

Poster 54: NBOMe: A Novel Class of Synthetic Hallucinogens

Joji Suzuki, MD, Brigham and Women's Hospital; Michael Dekker, DO, Southern Arizona VA Healthcare System; and Erin Valenti, MD, Harvard Longwood Psychiatry Residency Training Program

Background: Since 2013, reports have begun to appear describing adverse events associated with the abuse of a novel class of synthetic hallucinogen called NBOMe. They have become available on the internet most commonly as 4-iodo-2,5-dimethoxy-N-(2-methoxybenzyl)-phenylethylamine or simply as 25I-NBOMe. Sometimes sold under the names "N-Bomb" or "Smiles", NBOMes are structural analogues of "2C" phenethylamines (i.e. 2CI, 2CB, 2CC) initially developed as research tools due to their high potency as 5-HT-2A receptor agonists.

Methods: In order to better characterize the known effects in humans, we conducted a systematic review of the published reports of NBOMe use in humans.

Results: In total, 10 citations were included in this review. User accounts indicate NBOMes produce a powerful hallucinogenic experience, with visual and sensory effects similar to that produced by LSD. Due to their high potency, dose as small as 100µg may produce powerful effects. NBOMe ingestion was associated with a variety of adverse events, including agitation, aggression, seizures, tachycardia, hypertension, tachypnea, pyrexia, respiratory and metabolic acidosis, elevation of creatine kinase, impaired renal function, elevated transaminase, and death.

Conclusions: Our results indicate NBOMes produce effects similar to LSD, and reports of severe adverse effects are accumulating. Clinicians should become knowledgeable about this drug so that patients and their families can be informed of the potential dangers. In addition, because NBOMe may be sold as LSD, clinicians should have suspicion for NBOMe ingestion in anyone using LSD.

Source of Funding: Harvard Medical School Eleanore and Miles Shore Fellowship Program for Scholars in Medicine (JS). NIDA R25 DA033211.
Disclosures: *Drs. Suzuki, Dekker, and Valenti have nothing to disclose.*

Poster 55: Characterizing Adolescent Inpatient Psychiatric Patients with Current or Past Synthetic Cannabinoid Use

Scott Schmidt, DO and John Huxsahl, MD, Mayo Clinic

Background: Herbal marijuana alternatives such as K2 and Spice have become common, internet-sold substances of abuse in Europe in the 2000's and more recently in the United States. These compounds are typically synthetic cannabinoids with psychoactive affects similar to marijuana. Several case reports demonstrate potential severe psychiatric adverse effects including paranoia, psychosis, delusions and suicide. This study further characterizes the presentations of inpatient psychiatric patients who are current or past synthetic cannabinoid users.

Methods: We conducted a retrospective chart review of all adolescent patients at the Mayo Clinic in Rochester, MN who reported "K2" or "Spice" use prior to an inpatient psychiatric hospitalization. All of the child and adolescent hospital service notes in the electronic medical record from 1997 to January 2014 were searched using "K2" or "Spice" as key words. We reviewed each identified chart to confirm acknowledgement of substance use and recorded data such as sex, age, date of admission, chief complaint, past psychiatric history, comorbid substance use, family history, suicidality, final diagnosis and presenting symptoms.

Results: We identified 56 charts using search criteria and 38 met the requirement of the patient reporting K2 or Spice use. All of the admissions were from December 2010 to January 2014. 39% (15/38) of the patients were male with the mean age of 15.5 years and ranged from 13-18. 34% (13/38) of the patients reported current use of K2 or Spice, 42% (16/38) reported past use and 24% (9/38) did not specify.

Poster Session

Location: Conference Lobby

84% (32/38) of patients reported a previous psychiatric diagnosis and 95% (36/38) of patients reported using other substances in addition to K2 and Spice with marijuana being most common. 78% (29/37) of the patients reported suicidality and the final primary diagnosis in 61% (23/38) was a mood disorder with major depressive disorder being the most common. Of note, 31% (4/13) of current K2 users presented with hallucinations or delusions which were not present in any of the 16 past users.

Conclusions: Adolescents admitted to the psychiatric hospital service who disclosed current or past use of synthetic cannabinoids are very likely to have psychiatric comorbidities, especially major depression, suicidality and comorbid substance use. Screening for psychiatric comorbidities, suicidality and comorbid substance use should be considered when evaluating patients who report synthetic cannabinoid use. Also, psychosis or delusions were only observed in current users and synthetic cannabinoid use may be included in the psychosis differential diagnosis.

Source of Funding: None
Disclosures: *Drs. Schmidt and Huxsahl have nothing to disclose.*

Poster 56: Delusional Infestation Following Misuse of Prescription Stimulus

Cornel Stanciu, MD and Thomas Penders, MD, Brody School of Medicine, East Carolina University

Delusional parasitosis is an uncommon disorder that has been described as a primary disorder and also in association with a variety of psychiatric disorders. There are only a few descriptions of delusional parasitosis in association with misuse of mixed amphetamine salts (Adderall). Increasing misuse of prescription stimulants place greater numbers at risk for consequent psychiatric morbidities including, rarely, delusional parasitosis.

A description of a case of a somatic delusion following chronic use of mixed amphetamine salts is detailed alerting clinicians to the probability of causation and rapid resolution following elimination of the misused stimulant.

Source of Funding: None
Disclosures: *Drs. Stanciu and Penders have nothing to disclose.*

Poster 57: New Drugs of Abuse: Psychiatry Resident Education and Awareness

Mary Turner, MD, Addictions Psychiatry Fellow/Oregon Health & Science University; Jonathan Fellers, MD, PhD, Oregon Health & Science University/Portland VA; Erin Wallace, MD, Oregon Health & Science University, (past contributor/no longer involved with project)

Background: As drug usage patterns and usage of new drugs, including synthetic drugs and "legal highs," can change rapidly, psychiatry residents might be required to evaluate and treat patients using substances that they have little to no familiarity with. The slow nature of curriculum changes in residency training might further contribute to residents feeling unprepared to treat patients with these new presentations. Our objectives in this study were to ascertain psychiatric resident exposure to new drugs of abuse, their feelings about their training on this issue and about the seriousness of this clinical problem. Our hypotheses were that residents felt poorly prepared for dealing with these situations and that resident perceptions of the seriousness of this problem are tied to their level of exposure to patients using new drugs of abuse.

Methods: Survey questions were designed to collect background information, patient exposure information as well as general thoughts and attitudes regarding new drugs of abuse among psychiatry residents. REDCap, a web based data management and collection tool specifically designed for university research studies, was used for the design and implementation of the survey. Contact information for psychiatry residency program coordinators was obtained by searching the American Medical Association's FREIDA Online website and through the American Osteopathic Association's listing of psychiatry residency programs. Program coordinators were then asked to forward an email to their residents describing the purpose of the study, accompanying instructions and a link to the survey. Surveys were collected over a one month period. Data collected from the survey was kept confidential and no personally identifying information was obtained. Stata was used to perform the statistical analysis. We received a waiver from the Oregon Health & Science University Institutional Review Board.

Results: We received 154 survey responses, of which 87% (n=134) had complete answers. 19.6% (n=30) of our respondents were PGY-1s, 32.0% (n=49) were PGY-2s, 26.1% (n=40) were PGY-3s, and 22.3% (n=34) were PGY-4 or higher. Residents who completed the survey trained in 28 different states. 96.2% (n=125) of participants had treated patients using synthetic cannabis and 65.4% (n=85) had treated patients using bath salts. We found statistically significant regional differences in exposure to new drugs of abuse ($p = 0.008$) and in feelings of competency dealing with new drugs of abuse ($p = 0.002$), with residents in the South both encountering and feeling more competent dealing with new drugs of abuse treatment related issues. We also found that residents at higher levels of training felt more prepared to treat cases of new drugs of abuse ($p = 0.027$) and that residents who see more cases of new drugs of abuse are more likely to define it as a significant problem ($p < 0.001$).

Conclusions: Significant findings from our study showed that that residents commonly encounter newer drugs of abuse during training, regional differences in comfort treating patients with newer drugs of abuse problems mirrors the regional exposure to these cases, comfort with treating patients with problems related to newer drugs of abuse increases with training level, and residents who see more cases of newer drugs of abuse, view these drugs as more problematic. The use of new drugs of abuse, including synthetic cannabinoids and bath salts, is a common problem. Limitations of our study include a modest response rate which raises the question of how generalizable our results are to the intended study population of U.S. psychiatry residents in training. Also, our results are based in part on the estimated number of cases reported by psychiatry residents rather than the actual number of cases.

Source of Funding: None
Disclosures: *Drs. Turner, Fellers, and Wallace have nothing to disclose.*

Poster 58: Alcohol and Benzodiazepine Withdrawal and the Use of the CIWA-Ar scale and the Beth Israel Experience

Sari Waisbren, MD, Beth Israel Mount Sinai; Jessica Silberlicht, MD; and Kira Krivy, DO

Background: In the United States alcohol is the most commonly abused substance.1 Approximately 1 in 4 patients admitted to general hospitals meet criteria for alcohol use disorder.2 In addition, benzodiazepine abuse is a significant problem. Benzodiazepine withdrawal can be clinically challenging as withdrawal symptoms can vary from anxiety to seizure and death.3 Failure to treat alcohol and benzodiazepine withdrawal appropriately carries a high mortality, whereas overtreatment of symptoms can lead to sedation and respiratory depression.4 Variation in the approach to treating patients with alcohol and benzodiazepine use disorders is not uncommon within individual institutions. Despite several validated measures for symptom triggered withdrawal, no one measure has been widely accepted. Furthermore, specific medication type used to treat withdrawal symptoms in a symptom triggered approach is also not widely agreed upon.5 The purpose of our study is to further explore in detail the current practice within our institution to improve the treatment of patients with alcohol and benzodiazepine withdrawal.

Methods: • Retrospective chart review, using EMR PRISM • Single site – Mount Sinai Beth Israel • Inclusion criteria: • Last 111 patients admitted to BIPD with discharge ICD diagnosis of alcohol withdrawal (4/6/13 – 12/30/13) • Medical/neurology/surgical floors • 3 or more documented CIWA-Ar scores • Exclusion criteria: • Patients admitted to ICU, detox or psychiatry • Patients who did not score on their CIWA-Ar • Patient with less than 3 CIWA-Ar scores • IRB exemption granted for this study • De-Identified data collection as per IRB protocol • Data collected: • Date of admission/discharge • Subspecialty/hospital unit • Age/sex • Psychiatric diagnosis/medications • Medical diagnosis/medications • Interinstitutional transfers (ICU, psychiatry).

Results: Of the 111 patients only 100 fulfilled criteria for our study and were analyzed. Of these patients 86% were male and 16% female. The age range was 21 – 77 years old with average age of 50.27 years. When looking at CIWA-Ar scores, the average score for CIWA-Ar 1 was 8.36 with 6.45, 6.10, 5.89 for subsequent documented CIWA-Ar scores. The percent of patients to receive a PRN at time of CIWA-Ar was 37% for CIWA-Ar 1 and 26%, 26%, 25.6% for subsequent CIWA-Ar scores. Using regression analysis we looked at which items of the CIWA-AR uniquely predicted medication administration after controlling for effects of all other CIWA-Ar items. According to our regression analysis the items of Tremor, Paroxysmal Sweats, Nausea/Vomiting, Anxiety, Headache and Tactile Disturbances were all found to be statistically significant predictors of medication treatment. When looking at vital signs only 64% of the patients had vital signs documented in EMR either 1 hour before or after the documented CIWA-Ar score. We further looked at the difference between patients who had elevated vitals ($p > 100$, BP >140/90) as compared to patient who had normal vitals. It was found that elevated pulse and blood pressure was not correlated with administration of PRN for withdrawal. In addition, when comparing these 2 groups there was no statistically significant difference in the CIWA-Ar individual item scores for patients with elevated blood pressure and pulse.

Conclusions: Future Research Questions: 1. Should we be focusing more on Tremor, Paroxysmal Sweats, Nausea/Vomiting, Anxiety, Headache and Tactile Disturbances when evaluation for severity of withdrawal? 2. How does concurrent medications and medical co-morbidity and effect severity of withdrawal? 3. Does concurrent benzodiazepine use place patients at a higher risk for severe/prolonged withdrawal? 4. After identifying patients as "high risk", how do we manage their withdrawal?

Source of Funding: None
Disclosures: *Drs. Waisbren, Silberlicht, and Krivy have nothing to disclose.*

Poster 59: Lack of Insight Among Inpatients with Primary Psychotic Disorders: The Role of Co-Morbid Substance Use Disorders

Arthur Robin Williams, MD, MBE, Columbia University; Kevin McMahon, BA; Lori Bennett-Penn, MD, PhD; and Stephen Ross, MD, New York University

Background: Pilot study investigating the relationship between substance use disorders and levels of insight into having a mental illness and need for treatment among inpatients with primary psychotic disorders.

Methods: 40 inpatients at an urban public hospital with; 1). Primary psychotic disorders and 2). A range of substance use (from none to severe substance use disorders) were assessed for levels of insight into having a mental illness and need for treatment on admission and discharge with modified versions of the Schedule for the Assessment of Insight Expanded Version (SAI-E), Beck Cognitive Insight Scale (BCIS), and the Hanil Alcohol Insight Scale (HAIS).

Results: Preliminary analyses reveal that on admission patients with primary psychotic disorders have limited insight into having a mental illness or need for treatment irrespective of substance use. Over the course of admission (average length of stay 28 days), insight into having a mental illness and need for treatment improved among subjects with severe substance use disorders on the SAIE and HAIS (with a similar effect size) but declined among subjects who had little or no substance involvement. Scores on the BCIS (measuring self-certainty and self-reflectiveness) were largely unchanged between admission and discharge for subjects irrespective of substance involvement.

Conclusions: Inpatients with primary psychotic disorders had comparable levels of insight on admission irrespective of substance use. However subjects with co-occurring severe substance use disorders showed improvement in their levels of insight into having a mental illness and need for treatment over the course of their hospitalization, suggesting a state-dependent element to lack of insight among dually diagnosed patients. However little change was noted on the BCIS suggesting cognitive constructs such as self-certainty and self-reflectiveness are trait-dependent and less likely to fluctuate with severity of symptomatology or time-course. Further analyses are necessary to explore relationships between levels of insight, psychosis, and substance use disorders in the inpatient setting.

Source of Funding: NYU Department of Psychiatry
Disclosures: *Drs. Williams, Bennett-Penn, Ross and Mr. McMahon have nothing to disclose.*

Poster 60: Personality Correlates of Methamphetamine Dependence from the Perspective of Risk Propensity
Xiaonian Luo, MD, Beijing An Ding Hospital Affiliate of Capital Medical University

Background: Taking methamphetamine is a risky choice. Although previous studies suggest that specific aspects of risk propensity, such as impulsivity and sensation seeking, may be related to drug use, few studies have investigated the personality traits of risk propensity in methamphetamine dependence.

Methods: 37 subjects of methamphetamine-dependent participants and 24 healthy controls were recruited. Self-report levels of impulsivity, sensation-seeking and general risk propensity were measured by Barratt Impulsiveness Scale version 11 (BIS-11), Sensation-Seeking Scale Form V (SSS-V), and Risk Propensity Scale (RPS), respectively. Univariate analysis of covariance was performed to test the group differences; partial correlations were used to explore the relationships among cumulative exposure; binary logistic regression was used to find possible risk propensity traits could predict the group classification of a subject.

Results: Methamphetamine-dependent males had significantly higher scores than drug-free males on the self-report measures of impulsivity, sensation seeking, and general risk propensity. Their motor impulsiveness was correlated with cumulative exposure. Motor impulsiveness and experience-seeking were significantly associated with methamphetamine dependence status (all $p<.05$).

Conclusions: These findings suggest that the personality facets of risk propensity, including impulsivity, sensation seeking, and general risk propensity, are relevant to methamphetamine dependence. Using multiple personality traits of risk propensity may be a way to improve the classification accuracy of the methamphetamine dependence status.

Source of Funding: National Key Technology R&D Program (2012BAI01B07)
Disclosure: *Dr. Luo has nothing to disclose.*

Poster 61: Physicians' Beliefs, Attitudes and Knowledge Toward Medical Marijuana Use
Aman Mahajan, MD and Ayame Takahashi, MD, Southern Illinois University School of Medicine

Background: Medical marijuana is now permitted in 22 states and the District of Columbia. On August, 2013, the Compassionate Use of Medical Cannabis Pilot Program Act was passed in Illinois and took effect from January 1, 2014. The Illinois State Medical Society described their stand for allowing use of medical cannabis as “neutral”. We do not have much information about physicians’ attitudes toward medical marijuana use. A survey done in 2005, found that physicians were not very supportive of medical marijuana use as compared to the general public. Another survey of oncologists found that one-third supported rescheduling of marijuana for medical purposes by the Drug Enforcement Administration. A study of Colorado family physicians’ attitudes toward medical marijuana found that most family physicians were not convinced of the health benefits of marijuana, believed its use carried risks and all agreed regarding the need for further education about medical marijuana.

Objective: Assess attitudes of physicians at Southern Illinois University School of Medicine (SIU) toward medical marijuana. We hypothesize that physicians will be conservative, poorly prepared and need more education for prescribing medical marijuana.

Methods: An online survey was sent to all physicians at SIU. Follow-up e-mail reminders were sent every week for 2 more weeks.

Results: An equal number (56%) recommended marijuana as a medical treatment and not having substantial physical health benefits to using marijuana and legalizing marijuana would lead to increased use by physicians. A substantial number (77%) concluded that it had substantial health and mental health risks to using medical marijuana. About 62% suggested that DEA should reclassify and remove marijuana from list of schedule I drug and should legalize for recreational use. A majority (80%) agreed that they did not have sufficient knowledge to recommend marijuana and needed formal training and 64% thought formal training should be integrated into our residency curriculum.

Conclusions: The above finding highlighted that most physicians were not convinced of the health benefits of marijuana, believed its use carried risks and agreed the need for further education about medical marijuana.

Source of Funding: None
Disclosures: *Drs. Mahajan and Takahashi have nothing to disclose.*

Posters (Not CME Accredited)

The New ASAM Criteria & Validation of the New ASAM Software in Norway

David Gastfriend, MD, Treatment Research Institute; Marianne Stallvik, PhD, Central Norway Health Trust; and Hans Nordahl, PhD, NTNU Psychological Institute of Norway

Background: The new 2014 ASAM Criteria includes extensive explanation and addresses multiple special populations. The ASAM Criteria Software is a new, SAMHSA-funded, clinical decision support structured interview that guides clinicians through validated tools (e.g., ASI/CIWA/CINA) via a hierarchical algorithm for patient matching to optimal level-of-care (LOC).

Methods: In a prospective, multi-site (N=10), double-blind study, substance use disordered patients (N=261) were naturalistically placed into Residential (Level-3) or Outpatient (L-1) programs. Interviewers independently determined the Software-recommended LOC at baseline and 3-month follow-up, when we analyzed: 1) retention, 2) improvement and 3) readiness for stepdown LOC.

Results: Patients (N=261) averaged 32.08±10.63 years, 66% male gender, 79% never married and 10.62±1.87 years of education. At post-test, there was differential group retention (χ^2=7.48 (2), p=.024): under-matched=45% vs. matched=62% vs. over-matched=70%. The numbers of ASI subscales (out of 7) showing significant improvement (p<.05) from BL were: under-matched=2 vs. matched=6 (all p<.001), vs. over-matched=3. The proportions of patients who were ready for lower LOC (i.e., stepdown) were: under-matched=46%, matched=61%, and over-matched=17%. Patients who had received matched treatment later reported less use of alcohol (paired sample t-test: t=2.39, p=.03) and cannabis (t=2.66, p=.03) vs. undermatched patients. Overmatched patients had no better or worse outcomes (vs. matched). Discrepancies in TAU LOC recommendations vs. the Software were in line with previous research. Patients rated as needing co-occurring services had higher psychiatric, legal and family ASI severity and higher drop-out rates.

Conclusions: In this prospective, double-blind, multi-site study, the ASAM Criteria Software demonstrated predictive validity in determining LOC using all three prospectively planned outcomes. These outcomes are consistent with four prior studies in the U.S. and Belgium and suggest that programs should avoid both under- and over-matching patients. Future studies using the SAMHSA-funded web-based application should include the full complement of LOC specified in the ASAM Criteria, properly characterized, with larger samples.

Source of Funding: Development of the ASAM Criteria Software was supported by the National Institute on Drug Abuse grants RO I-DA08781 and K24-DA0042 (DRG), and by the U.S. Substance Abuse and Mental Health Services Administration. This study was funded by Helsedirektoratet, Rusbehandling Midt-Norge (the Central Norway Health Trust). Marianne Stallvik and Hans Nordahl report no financial relationships with commercial interests. Dr. David R. Gastfriend is President and CEO of RecoverySearch Inc. and was contracted for training and scientific participation by Helsedirektoratet, Rusbehandling Midt-Norge.

Cytochrome P450 2B6*6 Allele is Associated with Illicit Drug Use in Methadone-treated Patients with Chronic Pain

Naissan Hussainzada, PhD, Millennium Laboratories; Edwin Salsitz, MD, Mount Sinai, Beth Israel; Matthew Ruehle, BA; Kenneth Kirsh, PhD; and Steven Passik, PhD, Millennium Laboratories

Background: Despite potential challenges in safe prescribing and a generally complex clinical disposition observed in many patients, methadone use is increasing in the U.S. Previous genotyping studies have reported an association between the presence of CYP2B6 allele variants and patient drug-taking behavior, risk of methadone-induced fatality, and need for lower methadone doses in patients being treated for addiction. In the present study, we retrospectively evaluated whether patients with CYP2B6 variant genotypes that were receiving methadone therapy for chronic pain were more likely to engage in drug-taking behaviors as detected by routine urine drug testing (UDT).

Methods: Retrospective database analysis of chronic pain cohort (N=486) receiving methadone treatment at specialty pain clinics across the U.S. Patients were genotyped for CYP2B6 using primer-extension PCR techniques and had at least one laboratory-based tandem LC/MS urine drug test (UDT) result within 90 days of genotyping. Pearson's Chi-square test was used to determine associations between patient CYP2B6 genetic variation and the presence of illicit drugs or non-prescribed medications in UDT results. Odds ratios were calculated for associations found to be significant (p<0.01).

Results: We report that patients carrying at least one copy of the reduced function CYP2D6*6 allele variant were twice as likely to test positive for illicit drugs compared to other variants evaluated or the reference (or wild-type) allele. Moreover, this association was statistically significant (p<0.001) and not found with unreported (i.e. non-prescribed) medications.

Conclusions: To our knowledge, this represents the first study to demonstrate an association between CYP2B6*6 genotype status and illicit drug-taking as measured by UDT in a chronic pain cohort receiving methadone therapy. Overall, these results may suggest a role for the CYP2B6*6 allele in susceptibility or likelihood of abusing illicit drugs during pain management with methadone.

Source of Funding: Millennium Laboratories

Induction, Stabilization, Adherence and Retention Trial (ISTART): Efficacy of Advanced-Formulation Buprenorphine/Naloxone Sublingual Tablet Versus Buprenorphine/Naloxone Film for the Treatment of Opioid Dependence

Erik Gunderson, MD, FASAM, University of Virginia; Peter Hjelmström, MD, PhD; Orexo AB, Sweden; and Michael Sumner, MB, BS, MRCP(UK), Orexo U.S. Inc.

Background: Medication-assisted treatment is an important component for treating opioid-dependent adults. In this study, the early treatment efficacy of the newly developed advanced-formulation Zubsolv® (buprenorphine/naloxone [BNX] CIII sublingual tablet) was compared with BNX film.

Methods: The Induction, Stabilization, Adherence and Retention Trial (ISTART) was a randomized, non-inferiority, multicenter study. The co-primary endpoints were retention in treatment at Day 3 and Day 15. Secondary assessments included the Clinical Opiate Withdrawal Scale (COWS), Subjective Opiate Withdrawal Scale (SOWS), and opioid cravings Visual Analogue Scale (VAS). On days 1 and 2, patients received a fixed dose of BNX tablet (5.7/1.4 mg and 5.7/1.4 or 11.4/2.8 mg, respectively) or generic buprenorphine (8 mg and 8 or 16 mg, respectively). On Day 3, patients receiving generic buprenorphine were switched to BNX film. Stabilization doses were titrated to a maximum daily dose of 17.1/4.2 mg and 24/6 mg for BNX tablet and BNX film, respectively, based upon clinical symptoms.

Results: The 758 opioid-dependent patients randomized were comparable demographically and by clinical history. During the induction phase, a similar number of patients who received BNX tablet or generic buprenorphine monotherapy were retained at Day 3 (BNX tablet: 93.3% [309/329]; buprenorphine: 92.6% [302/326]). At Day 15, no difference was observed in retention between the BNX tablet and film (per protocol population: BNX tablet: 83.0% [273/329]; BNX film: 82.5% [269/326]). Improvements were observed for both groups in the COWS, SOWS, and opioid cravings VAS total scores.

Conclusions: This study establishes that Zubsolv® BNX tablet provides comparable efficacy with BNX film when measured by treatment retention and clinical response. BNX sublingual tablets are effective for induction of buprenorphine maintenance therapy.
Summary: This poster will describe the efficacy and safety results of a phase 3, comparative clinical trial of advanced-formulation buprenorphine/naloxone tablet (Zubsolv®) versus buprenorphine/naloxone film in the treatment of opioid-dependent adults. Poster will also present data on induction of buprenorphine maintenance therapy with buprenorphine/naloxone tablet.

Source of Funding: Orexo AB, Uppsala, Sweden

Observational Study to Calculate Addictive Risk to Narcotics Due to Genetic Predisposition

Brian Meshkin, BA; Tobore Onojighofia, MD; Bilikis Akindele, MD; Dan Schwarz, MD; and Derrick Holman, Proove Biosciences

Background: Genetic susceptibility is generally known to be an important factor in understanding the problem of prescription narcotic pain medication abuse. In practice however, this is not given the importance it deserves and not usually evaluated by clinicians before commencement of narcotic prescription regime.

Methods: Subjects were 672 chronic pain patients randomly selected from 15 clinical sites across the U.S. 143 were found to have been diagnosed with opioid dependence (OD, ICD code series 304) and 157 diagnosed with chronic pain syndrome (CPS, ICD Code 338.4). 327 were free or not diagnosed with either/both conditions. Subjects were genotyped with the Proove Narcotic Risk Genetics Profile using TaqMan SNP genotyping assays (Life Technologies, Carlsbad, CA). A scoring algorithm, the Narcotic Risk Index (NRI) score was calculated to determine elevated risk based on genetic susceptibility. The NRI is a scale of 12-36 measuring genetic susceptibility to opioid abuse or misuse. <19 means increased genetic susceptibility to opioid abuse while 19 and greater means higher genetic susceptibility to opioid abuse or misuse.

Results: A cross tab analysis using IBM SPSS, found a NRI score of greater than or equal to 19 to be more associated with subjects diagnosed with either OD or CPS. (PPV= 62% Pearson Chi-Square =0.011, Fishers Exact= 0.013, OR= 1.490 Sensitivity=55.58 % (50.46 % to 60.62 %) Specificity= 54.36 %(48.40 % to 60.22 %). An independent Sample T-Test shows that there is statistically significant difference in the NRI score between both groups (F=1.136, P=0.2425) (T=3.811, P= 0.0002).

Conclusions: This study suggests that an NRI of greater than or equal to 19 is more likely to be associated with patients with OD or CPS. Thus, by using a Narcotic Risk Index (NRI) score, clinicians may be able to identify patients at greater risk for prescription narcotic medication misuse/abuse using genetic information. Since many chronic pain patients are given narcotic medications and some become addicted or abuse them, the role of genetics in predisposition to addiction or misuse of prescription opioids has become even more important for clinicians to understand.

Source of Funding: Proove Biosciences

Counselors' Use of Drug Testing Results in Their Psychotherapy of People with Addictions

Adam Rzetelny, PhD; Steven Passik, PhD; Kenneth Kirsh, PhD; Nick, Miller, BA; and Matt Ruehle, BS, Millennium Laboratories

Background: A consensus is emerging that drug testing may play an important psychotherapeutic role in the treatment of substance use disorders (SUDs) in the variety of settings where such treatments are delivered. In order to help build a greater understanding of how drug testing may impact the treatment of SUDs, we sought detailed vignettes and perspectives from substance-use counselors about the clinical use of drug testing and its potential impact on their work with their clients. Addiction counselors were recruited from an urban residential and day program. The counselors were interviewed by phone and were asked questions regarding experiences with patients being switched to the new quantitative LC-MS/MS laboratory drug testing and the impact it had on the treatment of the patient.

Methods: Addiction counselors were recruited from an urban residential and day program. The counselors were interviewed by phone and were asked questions regarding experiences with patients being switched to the new quantitative LC-MS/MS laboratory drug testing and the impact it had on the treatment of the patient.

Results: Out of the 24 patients discussed, 75% of them had a change made to their treatment plan or goals, 63% had an increase in their treatment intensity, and 58% had an improvement on drug taking behavior. Twelve of the patients denied the initial positive toxicology and later admitted to relapse and positive tox.

Conclusions: The results of the study clearly indicate that laboratory-definitive drug testing results can be used in a fashion that can clearly be called psychotherapeutic.

Source of Funding: Millennium Laboratories

Constipation in Opioid-dependent Patients Switched from Buprenorphine-naloxone Tablets or Films to a Novel Buccal Formulation

James Sullivan, MD, Parkway Medical and Adrian Hepner, MD, PhD, BioDelivery Sciences International

Background: Many opioid-dependent patients are treated with buprenorphine-naloxone (BN) combination products, which are available as sublingual tablets or films (SLBN) and buccal films (BBN). In previous research with opioid-dependent subjects converted from SLBN to BBN, constipation declined 68% after switching from SLBN to BBN for 12 weeks. The extent to which prior SLBN dosing may have influenced post-switch constipation is further analyzed by examining the 12-week constipation rates among BBN subjects based on the SLBN dose at baseline.

Methods: This was an open-label study in 249 adult opioid-dependent subjects stabilized on a daily dose of SLBN 8/2 mg–16/4 mg (n=197) or 24/6 mg–32/8 mg (n=52) tablets or films for ≥30 days. Subjects were converted to a single bioequivalent BBN dose and maintained for 12 weeks.

Results: A total of 31% of subjects receiving a stable dose of SLBN had constipation at baseline. Among subjects with a prior dose of 8/2 mg–16/4 mg SLBN or 24/6 mg–32/8 mg, constipation was reduced by an average of 67% and 72%, respectively, after 12 weeks of BBN treatment.

Conclusions: Constipation was present across stabilized SLBN dosages of 8/2 mg–16/4 mg and 24/6 mg–32/8 mg at study entry. After switching to BBN, subjects in both SLBN treatment groups experienced substantial reductions in constipation over 12 weeks. Subjects with a prior dose of 24/6 mg–32/8 mg SLBN had greater reductions in constipation after BBN treatment than subjects with a prior dose of 8/2 mg–16/4 mg. Reductions were not dose-dependent. Experiencing constipation can affect patient adherence to therapy for their opioid dependence.

Source of Funding: BioDelivery Sciences International

Efficacy of Sublingual and Buccal Film Formulations of Buprenorphine-Naloxone for Maintenance Treatment of Opioid Dependence

James Sullivan, MD, Parkway Medical and Adrian Hepner, MD, PhD

Background: Maintenance treatment of opioid dependence often involves buprenorphine-naloxone (BN) combinations, which are available in sublingual tablets and films (SLBN) and a novel buccal formulation (BBN). This study reviews the efficacy of SLBN and BBN using urinalyses from separate clinical studies.

Methods: BBN data were obtained from an open-label study in 249 opioid-dependent adults stabilized for ≥30 days on 8/2 to 32/8 mg/day SLBN prior to being switched to a bioequivalent dose of BBN for 12 weeks. SLBN data were extrapolated from the 48-week open-label phase following an initial 4-week multicenter, randomized, placebo-controlled trial in 326 opioid-dependent subjects treated with 16/4 mg/day SLBN tablets. Urine toxicology screens were performed at screening, baseline, and on Days 7, 14, 28, 42, 56, 70, and 84 in the 12-week BBN study and every 4 weeks for 48 weeks in the SLBN open-label study.

Results: Compliance with BBN dosing was high (≥106%), with >99% of collected urine samples testing positive for buprenorphine. In total, 92.3% of urines tested negative for non-prescribed opioids; similar rates were seen for cocaine (96.4%) and for benzodiazepines (87.8%). With SLBN, the proportion of urine samples negative for non-prescribed opioids after 12 weeks was ≈50%; substantially higher rates were observed at 12 weeks for cocaine (≈65%) and benzodiazepines (≈90%).

Conclusions: The low incidence of positive urine samples for non-prescribed opioids in the 12-week BBN study and urine assessments in the SLBN study support the efficacy of BBN and SLBN for the maintenance treatment of opioid-dependent patients.

Source of Funding: BioDelivery Sciences International

Efficacy of Treatment with Zubsolv®, an Advanced Formulation of Sublingual Buprenorphine/Naloxone Tablets, in Adults with Opioid Dependence

Lynn Webster, MD, FACPM, FASAM, PRA Health Sciences; Peter, Hjelmström, MD, PhD, Orexo AB, Sweden; and Michael Sumner, MB, BS, MRCP(UK), Orexo U.S. Inc.

Background: Induction and maintenance therapy with buprenorphine products is an effective treatment for patients with opioid dependence. The objective of this study was to assess the efficacy of advanced formulation Zubsolv® (buprenorphine/naloxone class III sublingual tablet) in reducing opioid withdrawal symptoms and cravings in opioid-dependent patients.

Methods: A prospective, randomized, multicenter, blinded, parallel-group, active-controlled study assessed the efficacy of buprenorphine/naloxone sublingual tablets vs. generic buprenorphine for treatment of opioid-dependent adult patients. Patients received a blinded fixed dose of buprenorphine/naloxone or generic buprenorphine on days 1 and 2. All patients received open-label buprenorphine/naloxone on day 3, and doses were individually titrated on days 4 through 28 (5.7/1.4–17.1/4.2 mg). Efficacy assessments during the open-label, maintenance phase included mean change from baseline in total scores on the Clinical Opiate Withdrawal Scale (COWS), Subjective Opiate Withdrawal Scale (SOWS), and Visual Analogue Scale (VAS), which assessed opioid cravings.

Results: A total of 310 patients received induction treatment with buprenorphine/naloxone or generic buprenorphine (full analysis population); 199 patients completed treatment with buprenorphine/naloxone for the duration of the study. In the overall population, mean improvements from baseline in COWS total scores were observed at day 4 (–8.9±5.8) and continued to improve through day 29 (–11.9±5.3). Similar improvements were observed in SOWS total scores at day 4 (–21.6±15.1) and day 29 (–27.2±15.3). Mean improvements from baseline in VAS scores were observed at day 4 in the buprenorphine/naloxone and buprenorphine induction groups (–40.1±28.6 and –34.2± 29.4, respectively) and continued to improve through day 29 (–52.7±29.1 and –45.1±29.8, respectively).

Conclusions: Treatment with an advanced formulation of sublingual buprenorphine/naloxone reduced opioid withdrawal symptoms and opioid cravings in adult patients with opioid dependence. These reductions were observed early in treatment and continued through the end of study.

Source of Funding: Orexo AB, Uppsala, Sweden

Titrating to Effective Dose of Zubsolv®, an Advanced Formulation of Sublingual Buprenorphine/Naloxone, in Adults with Opioid Dependence

Lynn Webster, MD, FACPM, FASAM, PRA Health Sciences; Peter Hjelmström, MD, PhD, Orexo AB; and Michael Sumner, MB, BS, MRCP (UK), Orexo U.S. Inc.

Background: Medication-assisted treatment is an important treatment component for opioid-dependent adults. We assessed the efficacy of advanced-formulation Zubsolv® (buprenorphine/naloxone CIII sublingual tablet) for the treatment of opioid dependence.

Methods: This prospective, randomized, multicenter, blinded, parallel-group, active-controlled study compared buprenorphine/naloxone versus generic buprenorphine monotherapy for induction of opioid maintenance therapy. On days 1 and 2, patients received a blinded, fixed dose of buprenorphine/naloxone (5.7/1.4 mg and 5.7/1.4 or 11.4/2.8 mg, respectively) or buprenorphine (8 mg and 8 or 16 mg, respectively). On day 3, all patients received open-label buprenorphine/naloxone (5.7/1.4 or 11.4/2.8 mg) and individually titrated doses of buprenorphine/naloxone on days 4 through 28 (5.7/1.4-17.1/4.2 mg). Efficacy assessments included mean change from baseline in total scores on the Clinical Opiate Withdrawal Scale (COWS) and Visual Analogue Scale (VAS), which assessed opioid cravings.

Results: A total of 310 patients received induction treatment with buprenorphine/naloxone or buprenorphine (full analysis population); 199 patients completed open-label treatment with buprenorphine/naloxone. At day 3, most patients (91.8%; 259/282) received buprenorphine/naloxone at a dose of 11.4/2.8 mg; 8.2% (23/282) of patients received a lower dose (5.7/1.4 mg). By day 22, 25.8% (54/209) of patients received 11.4/2.8 mg buprenorphine/naloxone; 16.7% (35/209) of patients received a lower dose and 57.4% of patients (120/209) received a higher dose. In the overall population, mean (±SD) improvements in COWS total scores were observed at day 4 (-8.9±5.8) through day 29 (-11.9±5.3). Similar improvements were observed in VAS scores through day 29.

Conclusions: Patients new to treatment, who have recently undergone induction therapy with advanced-formulation buprenorphine/naloxone, may benefit from dosing based on clinical assessment. For the COWS assessment, physicians could titrate the dose as needed, which may have resulted in additional clinical improvements. Dosing of sublingual buprenorphine/naloxone during therapy should be individualized to optimize clinical response.

Source of Funding: Orexo AB, Uppsala, Sweden

Assessing Buprenorphine/Naloxone Efficacy During Induction Therapy in Opioid-Dependent Patients: What Is the Ideal Measure?

Lynn Webster, MD, FACPM, FASAM, PRA Health Sciences; Peter Hjelmström, MD, PhD, Orexo AB; and Michael Sumner, MB, BS, MRCP (UK), Orexo U.S. Inc.

Background: Induction therapy with buprenorphine products is effective for opioid-dependent patients. Although different endpoints have been utilized in studies assessing buprenorphine efficacy, there is no consensus on the most appropriate measure. We assessed the efficacy of advanced-formulation Zubsolv® (buprenorphine/naloxone [BNX] CIII sublingual tablet) for induction therapy.

Methods: This prospective, randomized, multicenter, blinded, active-controlled study compared advanced-formulation BNX versus buprenorphine monotherapy for induction. On days 1 and 2, patients received a blinded, fixed dose of BNX (5.7/1.4 mg and 5.7/1.4 or 11.4/2.8 mg, respectively) or buprenorphine (8 mg and 8 or 16 mg, respectively). Efficacy assessments included retention in treatment at day 3 (primary endpoint) and scores on the Clinical Opiate Withdrawal Scale (COWS), Subjective Opiate Withdrawal Scale (SOWS), and Visual Analogue Scale (VAS), which assessed opioid cravings.

Results: A total of 279 of 310 patients (90%) were retained at day 3 (full analysis set). Reasons for withdrawal included: protocol driven (n=6), lost to follow-up/requested discontinuation (n=9), withdrawn by investigator (n=11), adverse events (AEs; n=2), and not withdrawn but no day 3 dosing (n=3). Significant improvements from baseline through day 29 were observed for COWS, SOWS, and craving scores. Of 31 patients not retained at day 3, no patient met the criteria for precipitated withdrawal (increase in COWS baseline score at day 1 [0.5 and 1.5 hour timepoints]). Four patients had insufficient data.

Conclusions: Both BNX and buprenorphine are effective for induction. While retention is a goal of treatment, it is inadequate as a single measure of clinical efficacy. Retention may be influenced by factors not related to treatment efficacy, including protocol violations, withdrawal of patient consent, and AEs not caused by treatment. Therefore, both retention and clinical response should be utilized when assessing the treatment effectiveness.

Source of Funding: Orexo AB, Uppsala, Sweden

Comparison of Healthcare Resource Use and Costs in Prescription Opioid-Dependent Patients Treated with Buprenorphine/Naloxone And Patients Without Pharmacological Treatment: Retrospective Analysis of Medicaid Insurance Claims

Vladimir Zah,Phd(c), ISPOR CEE Executive Committee Chair; Elizaveta Kharitonova, Msc; Creativ-Ceutical USA; Jane Ruby, PhD; Reckitt Benckiser; Emilie Clay, MSc, Creativ-Ceutical USA; and Samuel Aballea, MSc, Creativ-Ceutical USA

Background: The buprenorphine/naloxone combination is used in the treatment of prescription opioid dependence (OPD). Objective of this study was to determine if there were health economic and patient outcome advantages related to treatment compared to no pharmacological treatment.

Methods: A retrospective cohort analysis was performed using insurance claims extracted from the U.S. MarketScan Medicaid database from January 2007 to December 2012. Two groups were considered: 1) patients treated with buprenorphine/naloxone and 2) OPD patients with no pharmacological treatment. Final study groups were selected with one-to-one matching on demographic characteristics, comorbidities at baseline and cost of outpatient and inpatient care over six months before index date. Resource use (pharmacy claims, outpatient claims, emergency room admission and hospital admission) and corresponding costs over twelve months after index date were compared between groups.

Results: The two matched groups each included 2,789 patients, followed over 14.7 months on average. Amounts of resources used and costs were higher for the group without pharmacological treatment in all categories but pharmaceuticals. Total costs over 12 months were $13,782 and $16,731 in groups with and without pharmacological treatment, respectively ($p = 0.0012$). The differences originated from visits and admissions related to mental disorders, skin and musculoskeletal disorders and injuries and poisonings. Hospitalization costs were twice lower among treated patients ($p<0.0001$).

Conclusions: Untreated patients have significantly more claims for outpatient and emergency room visits, non-psychiatric admissions, and longer hospital stays than treated patients.

Summary: Untreated patients have higher costs in all categories except medication.

Source of Funding: Reckitt Benckiser Pharmaceutical

Estimation of the Effect of Buprenorphine/Naloxone Dosing in Medicaid Opioid-Dependent Patients

Vladimir Zah, Phd(c), ISPOR CEE Executive Committee Chair; Elizaveta Kharitonova, Msc; Creativ-Ceutical USA; Jane Ruby, PhD; Reckitt Benckiser; Emilie Clay, MSc, Creativ-Ceutical USA; and Samuel Aballea, MSc, Creativ-Ceutical USA

Background: Buprenorphine/naloxone (BUP/NAL) combination is a treatment for opioid dependence. The dose of BUP/NAL should be adjusted to a level that suppresses craving and opioid withdrawal symptoms and holds the patient in treatment. The objective of this study was to estimate the impact of BUP/NAL dosing on treatment persistence, resource utilization and healthcare costs among Medicaid population.

Methods: A retrospective cohort analysis was conducted on Medicaid insurance claims database (TruvenHealth MarketScanR Medicaid) from January 2007 to June 2012. Patients were classified into two groups using an average daily dose of 15mg/day as cut-off value, and matched according to baseline characteristics. Discontinuation was defined as a gap of at least 31 days without prescription renewal following the theoretical end date of the previous prescription. Resource use and related costs were calculated over the 12-month period after the date of treatment initiation.

Results: The matching algorithm resulted in the selection of 1,041 patients in each group, with 27% males and an average age of 34 years. Patients in the high dose group had an 11% lower chance of discontinuation compared to patients in the low dose group, after adjustments (p=0.0377). The number of days of psychiatric hospitalization in the following year after treatment initiation was 17% lower in the high dose patients (p=0.0218) and there were no differences in total health care costs (p=0.6486).

Conclusions: Treatment duration was better among patients treated with doses above 15mg/day.

Summary: Despite higher medication costs associated with doses above 15mg/day, total health care costs were similar between the two groups due to lower healthcare resource use.

Source of Funding: Reckitt Benckiser Pharmaceutical.

Exhibitors

A-Fordable Billing Solution **Booth 32**
A-Fordable Billing Solution is a Pasadena California based medical billing company that has worked in the field of substance abuse and mental health developing an expertise at providing billing services tailored to these industries. Our staff members have decades of experience working with industry leaders and continue to receive additional training to ensure they are able to meet and exceed our clients' expectations.

Alkermes **Booth 8**
Alkermes is a fully integrated biopharmaceutical company that applies its scientific expertise and technological know-how to develop innovative medicines designed to yield better therapeutic outcomes for patients with central nervous system (CNS) disorders, including addiction, schizophrenia and depression. For more information, please visit www.alkermes.com.

American Board of Psychiatry and Neurology **Booth 25**
The American Board of Psychiatry and Neurology serves the public interest and the professions of psychiatry and neurology by promoting excellence in practice through its certification and maintenance.

American Professional Agency, Inc. **Booth 3**
American Professional Agency is the administrator of the only Psychiatrists Medical Liability insurance endorsed by the American Psychiatric Association and AACAP. Our policy is underwritten by Allied World Assurance Company and provides superior protection, unparalleled risk management services with access to attorneys 24/7. www.APAmalpractice.com, psychiatry@americanprofessional.com.

American Society of Addiction Medicine **Booth 9**
ASAM is a professional society representing over 3,000 physicians, clinicians and researchers dedicated to increasing access and improving quality of addiction treatment, educating physicians and the public, and supporting research and prevention in the care of patients with addictions. Stop by the ASAM booth to learn more about ways to earn CME and CEU credits.

BioDelivery Sciences **Booths 14-15**
BioDelivery Sciences (BDSI) is a specialty pharmaceutical company with a focus on pain and addiction medicine. BDSI utilizes novel Bio-Erodible MucoAdhesive (BEMA®) and other drug delivery technologies to develop and commercialize, either on our own or in partnership, new applications of proven therapies to address important unmet medical needs.

Bridges to Recovery **Booth 31**
Bridges to Recovery is a premier licensed residential behavioral health facility designed for adults suffering with psychiatric disorders. We combine intensive, individual psychodynamic psychotherapy (4-5 sessions per week) with group therapy (2-3 sessions per day). Our goal is to empower our patients to succeed out in the world.

Exhibitors

Carolina Liquid Chemistries, Corp. **Booth 12**
Carolina Liquid Chemistries Corp. (CLC) is a medical device company known for bringing new tests and chemistry analyzers to market. CLC offers cost-effective, innovative lab equipment including: the CLC480 benchtop, the CLC720 floor model and the CLC6410 high through-put chemistry analyzers. In addition, CLC offers an extensive test menu with over 25 urine drug tests including hydrocodone.

Connections in Recovery **Booth 2**
Operating with foremost integrity, Connections in Recovery's mission is to facilitate optimum recovery for individuals and families suffering from addiction and mental health disorders.

Elements Behavioral Health **Booth 11**
Elements Behavioral Health is a family of behavioral health care programs that includes Promises Treatment Centers®, The Ranch, The Recovery Place, Lucida Treatment Center, Clarity Way, Journey Healing Centers, The Sundance Center, the Sexual Recovery Institute and Right Step. Elements offers comprehensive, innovative treatment for substance abuse, sexual addiction, trauma, eating disorders and other mental health disorders. We are committed to delivering clinically sophisticated treatment that promotes permanent lifestyle change, not only for the patient but for the entire family system. For more information about Elements Behavioral Health, visit www.elementsbehavioralhealth.com.

Elmhurst Professionals Program **Booth 24**
The Elmhurst Professionals Program offers unique, comprehensive and confidential treatment for adults with serious substance use disorders with or without psychiatric symptomatology. We provide an opportunity for examined living through an intensive group-based program and therapeutic residences. This experience promotes increased self-awareness, solid recovery and enduring behavioral change.

Lab USA, Inc. **Booth 33**
Lab USA, Inc. is a clinical diagnostic laboratory specializing in urine drug testing.

Lakeview Health **Booth 6**
Lakeview Health is a nationally recognized residential addiction treatment program in Jacksonville, FL. We believe complete health, wellness and life balance are possible for everyone.

Lucida Treatment Center **Booth 10**
Located just a few steps from Florida's beautiful Intracostal Waterway in Palm Beach County. Lucida is a luxury substance abuse and mental health treatment center that offers three distinct programs: a Dual Diagnosis Addiction Program, a Mood Disorder Program for Women and a Multicultural Program for Spanish Speakers. As a member of the Elements Behavioral Health family of treatment centers, the team at Lucida provides the highest quality of care by utilizing the latest evidenced-based approaches to help people build the resilience and skills needed to enjoy long-term recovery. For more information about Lucida Treatment Center please visit our website www.lucidatreatment.com.

McLean Hospital **Booth 29**
The Alcohol and Drug Treatment Programs at Harvard Medical School-affiliated McLean Hospital offers a full continuum of care: inpatient detox, residential, partial, and outpatient services. We offer both short- and long-term residential care; buprenorphine treatment in adult programs; clinical expertise in treating co-occurring psychiatric disorders; and individualized treatment plans.

National Institute on Alcohol Abuse and Alcoholism **Booth 26**
The NIAAA exhibit highlights the importance of alcohol research, prevention, and treatment for maintaining the health of the individual, the family, and the Nation.

Orexo U.S., Inc. **Booths 17-18**
Orexo U.S. Inc. Is an emerging specialty pharmaceutical company marketing improved treatments for opioid dependence using proprietary drug delivery technology. U.S. Headquarters: 150 Headquarters Plaza, East Tower 5th Floor, Morristown, NJ 07960 www.zubsolv.com.

Professional Risk Management Services, Inc. **Booth 30**
PRMS manages The Psychiatrists' Program, a full-service medical professional liability insurance program designed for psychiatrists. No other program offers the same risk management expertise, aggressive defense strategies and comprehensive policy. Coverage for forensic services, telepsychiatry, and administrative defense costs. Discounts include part-time, early career, child/adolescent and more!

Reckitt Benckiser Pharmaceuticals **Booth 13**
Reckitt Benckiser Pharmaceuticals is at the forefront providing educational resources and treatment options to physicians and patients dealing with the chronic relapsing disease of opioid dependence. Please visit their exhibit where Reckitt Benckiser clinical liaisons will be available to discuss the indications and provide scientific information, and answer your questions about a unique treatment option.

Reckitt Benckiser Pharmaceuticals **Booth 23**
Reckitt Benckiser Pharmaceuticals is at the forefront of providing educational resources and treatment options to physicians and patients dealing with opioid dependence. Please visit the company's medical booth where Reckitt Benckiser Pharmaceutical's medical personnel will be standing by.

Exhibitors

Recovery Village **Booth 7**
The Recovery Village provides complete rehabilitation for individuals who suffer from substance abuse, mental health issues and eating disorders. Located near the beautiful Ocala National Forest of Florida, The Recovery Village is accredited by the Joint Commission. Patients enjoy the benefits of a caring, licensed staff, luxurious facilities and amenities. For more information, please visit www.therecoveryvillage.com.

Ridgeview Institute **Booth 20**
Ridgeview Institute, a private, not-for-profit hospital treating people with addiction or mental health problems, has earned a national reputation for care and service. Since 1976, more than 70,000 people have turn to Ridgeview. Programs include Women's Eating Disorder Program, Young Adult Program, Youth Addiction Program and a Professional Program.

Serenity Now, CHMC **Booth 16**
Serenity Now, CHMC, is located in Palm Beach Gardens, FL. We can accept those clients with a primary Mental Health diagnosis, with or without substance abuse. We offer PHP (with optional community housing), IOP and OP treatment and have a Psychiatrist on staff. Serenity Now is DCF and JACHO accredited.

Silver Hill Hospital **Booth 28**
Founded in 1931, Silver Hill Hospital is a nationally recognized non-profit psychiatric hospital located 50 miles north of New York City. Silver Hill provides evidence-based treatments for adolescents and adults with psychiatric disorders, including addiction. Silver Hill Hospital offers both inpatient programs as well as residential Transitional Living Programs.

Sovereign Health Group **Booth 4**
Sovereign Health Group provides rehabilitation treatment for addiction, mental health disorders and dual-diagnosis, serving adults, adolescents and families.

Stratus EMR **Booth 22**
Stratus EMR and Stratus Practice are designed around the principle of freeing up your time so you can see more patients. Our software features help you increase efficiency and stay focused on treating patients.

Sunspire Health **Booth 19**
Sunspire Health is a national network of addiction treatment providers, offering abstinence-, evidence-, and holistic-based therapies for those with substance use, co-occurring mental health and eating disorders, problem gambling, and sex addiction. Sunspire Health is headquartered in Lyndhurst, New Jersey, and currently includes six residential treatment facilities in California, Florida, Massachusetts and Oregon.

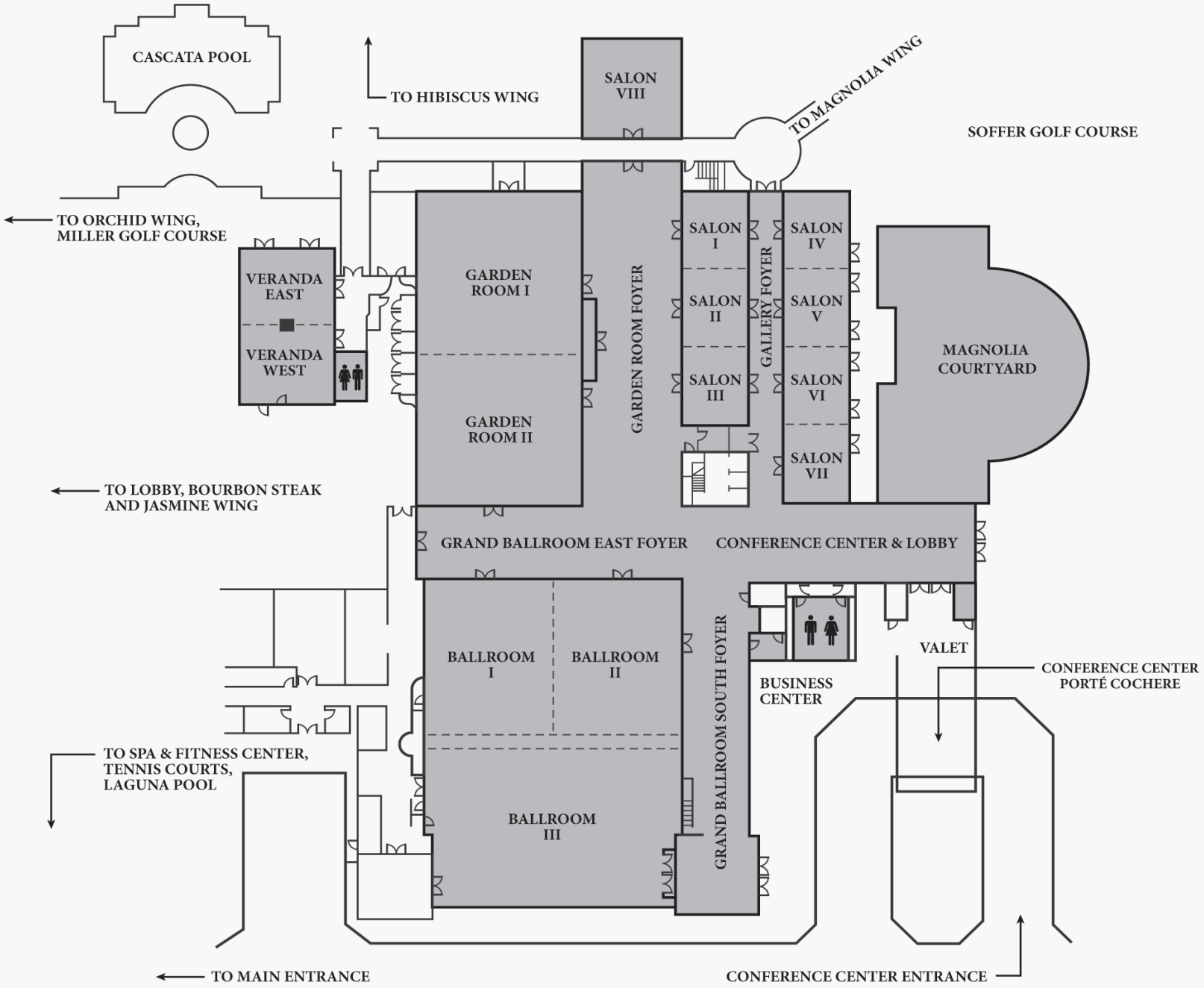
We use the highest quality clinical care and innovative programming, with individualized treatment programs designed by doctoral and masters level clinicians and physicians. People are treated with respect for their unique needs and diverse lifestyles, and provided with the tools and support to help them live life in long-term recovery.

Talbott Recovery **Booth 27**
Talbott Recovery is recognized nationally as a leader and pioneer in the assessment and treatment of substance abuse and co-occurring psychiatric disorders with two locations in Metro Atlanta and one in Columbus, GA. We offer specialty programs for professionals, adults, and young adults. More information contact Talbott Recovery- www.talbottrecovery.com or call (800) 445-4232.

The Farley Center at Williamsburg Place **Booth 1**
The Farley Center at Williamsburg Place is a partial day hospital program designed for individuals who have primary Substance Use Disorders, requiring intensive, in-depth psychotherapeutic intervention, safe detoxification, as well as educational and experiential approaches to assist them into recovery. We take pride in our ability to prepare the professional to return to their chosen field safely and in recovery.

Wexford Health Sources **Booth 5**
Wexford Health Sources, the nation's leading innovative correctional health care company, provides clients with experienced management and technologically advanced services, combined with programs that control costs while ensuring quality. For the past two decades, Wexford Health has consistently delivered proven staffing expertise and a full range of medical, behavioral health, pharmacy, utilization management, provider contracting, claims processing, and quality management services.

Wolters Kluwer Health **Booth 21**
Wolters Kluwer Health's power brands include traditional publishers of medical and drug reference tools and textbooks, such as Lippincott Williams & Wilkins and Facts & Comparisons® and electronic information providers, such as Ovid® and UpToDate®, Medi-Span® and ProVation® Medical.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SALON VIII
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SOFFER GOLF COURSE
TO ORCHID WING, MILLER GOLF COURSE
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VERANDA WEST
GARDEN ROOM I
GARDEN ROOM II
GARDEN ROOM FOYER
SALON I
SALON II
SALON III
GALLERY FOYER
SALON IV
SALON V
SALON VI
SALON VII
MAGNOLIA COURTYARD
TO LOBBY, BOURBON STEAK AND JASMINE WING
GRAND BALLROOM EAST FOYER
CONFERENCE CENTER & LOBBY
BALLROOM I
BALLROOM II
BALLROOM III
GRAND BALLROOM SOUTH FOYER
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