Session 7

Sadie Knott: Thoughts about increase in stimulant prescriptions written for adults and rates of misuse?

- Dr. Baumann: Great question... Not sure about the relationship between number of prescriptions and incidence of misuse.
- Dr. Baumann: However, there are studies showing misuse of stimulant medications in some sub-populations, e.g., as study aids for college students during mid-term or final exams
- Laura Swain: Yes in Colorado we see methamphetamine dependent patients - being DX with ADD- ADHD - and Adderall or Ritalin- Strattera etc. being per prescribed. It seems to increase relapses in most cases from my experience.
- Adam Rosen: Any thoughts on MDMA-assisted psychotherapy?

Juliette Perzhinsky: What is the prevalence of these severe adverse effects? In practice, there is a significant number of pts that use crack/cocaine, but they have never presented with any of the cardiovascular/psychiatric effects. Very difficult to treat.

- Dr. Baumann: Adverse effects are dose-dependent. Most users are able to titrate their dose to maintain desired level of intoxication. In some cases, binge dosing can lead to adverse effects.
- Dr. Baumann: Powerful euphoria produced by crack/cocaine is a primary driver of misuse. Agreed, very difficult to treat.
- Karl Wittnebel: Both cocaine and meth cause congestive heart failure in chronic users, even very young ones. I see end stage heart failure due to meth and cocaine in the hospital all the time.

Ali Damji: What are your thoughts and advice we should give patients re co-ingestion of cocaine and alcohol leading to cocaethylene formation? Is this commonly seen?

- Dr. Baumann replied: Cocaine is often used in conjunction with alcohol. As you are aware, combined use of cocaine and alcohol leads to formation of cocaethylene, a unique metabolite that is bioactive and interacts at the dopamine transporter (DAT) similar to cocaine itself. Thus, combined use can extend the length of time for intoxication.
- Sunil Khushalani: Any toxic effects of the doses used in research for MDMA used for psychiatric indications along with psychotherapy?

Maria Robles: what is the mechanism for dehydration?

- Dr. Baumann: Great question... dehydration is associated with sweating, but not sure of underlying mechanism.
- Angela Venuto-Ashton: evaporative cooling due to hyperthermia

Abbie Ewell: In neurobiology of addiction lecture they showed slides of DA increase with various drugs. Have there been similar studies with drugs like MDMA where you do not have the same level of repeated use when compared to opioids, alcohol, etc?

- Dr. Baumann: Acute MDMA increases extracellular dopamine like other drugs, but its predominant effect is to increase extracellular serotonin (5-HT). Effects of 5-HT eclipse dopaminergic effects, thereby mediating the unique entactogenic effects of MDMA.

Leslie Hayes: Am I understanding correctly that reward and mood are different pathways?

David Roll: Have there been studies of SSRIs for treatment of MDMA use disorder? Based on mechanism, one would think they would work.

- Dr. Baumann: Great question about utility of SSRIs. Not sure about clinical efficacy of SSRIs for MDMA use disorder. However, co-ingestion of SSRIs plus MDMA can be dangerous. Many SSRIs, e.g. fluoxetine, block cytochrome 2D6 which is necessary for the metabolism of MDMA. Thus, serious drug-drug interactions can occur.

Vamsi Garlapati: Please comment on rationale to use MDMA in clinical trials for ptsd. Thank you.

- Dr. Baumann: A number of studies show that single low-dose administrations of MDMA for various indications, including PTSD, are safe and efficacious.

ST Weiss: What are your thoughts about using stimulant agonist therapies for stimulant use disorders analogous to what we do for nicotine and opioids (and obviously assuming we could get it through the FDA review!)?

YVONNE SMIKLE, MD: Any comments on the increasing availability/use of oral methamphetamine pills?

Ali Damji: Some clinicians prescribe topiramate for stimulant use disorders based on early study data. Anecdotally it seems to work well. Thoughts on this practice?

Leslie Hayes: Most of my patients trying to stop methamphetamine are already on buprenorphine for OUD. Is it worth trying bupropion on its own in these patients?

Abbie Ewell: with stimulant intoxication treatment, is it best to use anti-psychotics vs BZD for agitation?

Erin: Will meth crystalize as well if they mix in the fentanyl? Is using the rock formation 'safer' from that standpoint?

Erin: How strongly should I monitor my patients coming off meth for suicide risk? I believe there is a signal of increased suicidality in meth detox? Any increased precautions people take

Emily Kuzma: I actually find a lot of patient testing positive for meth who report (adamantly) only using fentanyl/heroin. So I wonder if the mixture is common in both cartels peddling meth and fentanyl?

Linda Kinch: Can you talk about Baclofen and Topiramate as treatment for cocaine use?