

Session Handout: ADHD & Addiction; an Often Overlooked Problem

Selected key/relevant research findings. (all quotes from article abstracts)

- **There is a strong correlation between addiction and ADHD**
 - “Studies have shown that ADHD increases the risk of SUD and that 25–40 % of adults and adolescents with SUD have ADHD...Early pharmacotherapy of ADHD does not increase SUD and in fact, appears to reduce cigarette smoking and SUD.”
 - Carrellas, N., et al. (2016). "Treatment of comorbid substance use disorders and ADHD in youth." *Current Treatment Options in Psychiatry*, 3(1): 15-27.
 - “Internet Addiction was positively associated with ADHD among adolescents and young adults. Clinicians and parents should pay more attention to the symptoms of ADHD in individuals with IA, and the monitoring of Internet use of patients suffering from ADHD is also necessary.”
 - Wang, B. Q., et al. (2017). "The association between attention deficit/hyperactivity disorder and internet addiction: a systematic review and meta-analysis." *BMC Psychiatry*, 17(1): 260.
 - “Self-reported ADHD symptoms were found to be associated with adult smoking outcome variables in this nationally representative sample, providing further evidence of a likely link between ADHD symptoms and risk for tobacco use.”
 - Kollins, S. H., et al. (2005). "Association between smoking and attention-deficit/hyperactivity disorder symptoms in a population-based sample of young adults." *Archives of general psychiatry*, 62(10): 1142-1147.
- **Stimulant medication treatment of childhood ADHD does not lead to substance abuse later in life. In fact, it may reduce the risks for addiction (ie. Medications may offer a protective effect).**
 - “ADHD medication was not associated with increased rate of substance abuse. Actually, the rate during 2009 was 31% lower among those prescribed ADHD medication... Also, the longer the duration of medication, the lower the rate of substance abuse.”
 - Chang, Z., et al. (2014). "Stimulant ADHD medication and risk for substance abuse." *J Child Psychol Psychiatry*, 55(8): 878-885.
 - “These studies also suggest that ADHD pharmacotherapy in childhood reduces the risk for substance use disorders. Misuse and diversion of prescribed stimulants occur among a minority of ADHD patients. Long-acting stimulants may be less likely to be misused or diverted.”
 - Faraone, S. V., & Wilens, T. E. (2007). Effect of stimulant medications for attention-deficit/hyperactivity disorder on later substance use and the potential for stimulant misuse, abuse, and diversion. *J Clin Psychiatry*, 68, 15-22.
 - “Consistent with findings in untreated ADHD in adults, untreated ADHD was a significant risk factor for SUD in adolescence. In contrast, pharmacotherapy was associated with an 85% reduction in risk for SUD in ADHD youth.”
 - Biederman, J., et al. (1999). "Pharmacotherapy of attention-deficit/hyperactivity disorder reduces risk for substance use disorder." *Pediatrics*, 104(2): e20-e20.

- **Stimulant medication can be beneficial for people with ADHD in addiction treatment**
 - *“This <ADHD> subpopulation of cocaine abusers may be one of the most difficult-to-treat ... groups, particularly if the ADHD remains undetected. To provide effective treatment for cocaine abusers, clinicians may need to identify subpopulations of patients, such as those with ADHD, and target both pharmacologic and nonpharmacologic interventions for these groups.”*
 - Levin, F. R., et al. (1998). "Prevalence of adult attention-deficit hyperactivity disorder among cocaine abusers seeking treatment." *Drug and alcohol dependence*, 52(1): 15-25.
 - *“Treatment for adults with ADHD and substance abuse should include a combination of addiction treatment/psychotherapy and pharmacotherapy.”*
 - Wilens, T. E. (2004). "Impact of ADHD and its treatment on substance abuse in adults." *J Clin Psychiatry*, 65 Suppl 3: 38-45.
- **People with both ADHD and addiction problems need to have these two issues treated concurrently**
 - *“We suggest that Internet video game playing might be a means of self-medication for children with ADHD. In addition, we cautiously suggest that MPH might be evaluated as a potential treatment of Internet addiction.”*
 - Han, D. H., et al. (2009). "The effect of methylphenidate on Internet video game play in children with attention-deficit/hyperactivity disorder." *Compr Psychiatry*, 50(3): 251-256.
 - *“These findings suggest that a considerable proportion of treatment-seeking problem gamblers report ADHD...They highlight the need for specialist gambling agencies to develop screening, assessment, and management protocols for co-occurring ADHD to enhance the effectiveness of treatment.”*
 - Waluk, O., et al. (2016). "The relationship between problem gambling and attention deficit hyperactivity disorder." *Journal of Gambling Studies*, 32(2): 591-604.
 - *“Adult ADHD should be surveyed and treated among college students to decrease the vulnerability to Internet addiction, and strategies to prevent Internet addiction should be provided for college students with ADHD, especially for females.”*
 - Yen, J. Y., et al. (2009). "The association between adult ADHD symptoms and internet addiction among college students: the gender difference." *Cyberpsychol Behav*, 12(2): 187-191.
- **Neurotransmitters such as Dopamine are involved with both ADHD and Addiction**
 - *“This study reveals depressed dopamine activity in <brain> regions in adults with ADHD ... and ... suggests that dopamine dysfunction is involved with symptoms of inattention but may also contribute to substance abuse comorbidity in ADHD.”* Nora Volkow, Director of the National Institute on Drug Abuse (NIDA)
 - Volkow, N. D., et al. (2007). "Depressed dopamine activity in caudate and preliminary evidence of limbic involvement in adults with attention-deficit/hyperactivity disorder." *Arch Gen Psychiatry*, 64(8): 932-940.