

Medication, AD/HD and Accidents

Recently Chinese and British researchers that children and adolescents with AD/HD who were taking medication to control their symptoms suffered signicantly fewer injuries that sent them to the emergency room than AD/HD youngsters who were not on medication.

Man, K., et al. (December 15, 2014). Methylphenidate and the Risk of Trauma. <u>Pediatrics</u>. DOI: 10.1542/peds.2014-1738

AD/HD, Conduct Disorder, & Tobacco Use

American scientists recently reported that the risk of tobacco use goes up by 8 to 10% per symptom for AD/HD teens, but the risk goes up by 31% for those with Conduct Disorder (CD) per symptom. The risk of tobacco use in teens with AD/HD and CD was 3 to 5 times greater than those without the disorders. AD/HD + CD teens are more likely to use alcohol, also.

Brinkman, W.B., et al. (December 1, 2014). Association of attention-deficit/hyperactivity disorder and conduct disorder with early tobacco and alcohol use. <u>Drug and Alcohol Dependence</u>. DOI: http://dx.doi.org/10.1016/j.drugalcdep.2014.11.018.

Community Based Psychiatric Care and AD/HD

A recent study indicated that community based psychiatric care of children with AD/HD is poor and there is a great need to improve the quality of care of this population. The researchers stated the changes must come at the practice and policy levels.

Epstein, J.N., et al. (November 3, 2014). Variability in ADHD Care in Community-Based Pediatrics. <u>Pediatrics</u>. DOI: 10.1542/peds.2014-1500.

Possible Link Between Magnesium and Externalizing Behavior

Australian researchers believe they may have found an possible link between low blood magnesium levels and aggressive externalizing behaviors. They caution, however, that replicated double-blind research is needed to confirm this.

Black, L.J., et al. (November 6, 2012). Low dietary intake of magnesium is associated with increased externalising behaviours in adolescents. Public Health Nutrition. DOI: http://dx.doi.org/10.1017/S1368980014002432.

Possible Problems with Bioequivalent Generic Versions of Concerta for AD/HD

The Food and Drug Administration (FDA) published a "concern" about two bioequivalent generics of methylphenidate hydrochloride extended release (Concert) made by the Mallinckrodt and Kudco corporations that they may not have the same therapeutic effect as the non-generic version (Concerta). The FDA is investigating this and says if patients have concerns they should speak to their prescribing physician and/or their pharmacist.

FDA (No Date). Methylphenidate Hydrochloride Extended Release Tablets (generic Concerta) made by Mallinckrodt and Kudco. Website:

http://www.fda.gov/Drugs/DrugSafety/ucm422568.htm

AD/HD and The Genetic Risk of Substance Use Disorder

Swedish researchers that the high comorbidity between AD/HD and substance abuse disorder is due to the genetics shared between the two disorders.

Skoglund, C., et al. (October 22, 2014). Attention-Deficit/Hyperactivity Disorder and Risk for Substance Use Disorders in Relatives. <u>Biological Psychiatry</u>. DOI:

http://dx.doi.org/10.1016/j.biopsych.2014.10.006.

Self-Monitoring and AD/HD

Researchers from Lousiana discovered college students with AD/HD can significantly improve their academic performance (academic behavior & grade point averages) by using self-monitoring.

Scheithauer, M.C., and Kelley, M.L. (October 15, 2014). Self-Monitoring by College Students With ADHD: The Impact on Academic Performance. <u>Journal of Attention Disorders</u>. DOI: 1087054714553050.

Combined Type & Inattentive Type AD/HD Brain Differences

Researchers in the U.S. set out to see if there are neurobiological differences between those with AD/HD, Combined Type and those with AD/HD, Inattentive Type volumetric MRI. The results indicated those with AD/HD, Combined Type had significantly smaller anterior cingulate cortexes than those with AD/HD Inattentive Type and non-AD/HD controls. This tend to indicate those with AD/HD, Combined Type are neurobiologically different than those with Inattentive Type AD/HD.

Semrud-Clikeman, M., et al. (December 8, 2014). Regional Volumetric Differences Based on Structural MRI in Children With Two Subtypes of ADHD and Controls. <u>Journal of Attention Disorders</u>. DOI: 1087054714559642.

Decision Making in Those with AD/HD

Norwegian scientists discovered adults with AD/HD have significantly impaired decision making abilities.

Mowinckel, A.M., et al. (December 4, 2014). A Meta-Analysis of Decision-Making and Attention in Adults With ADHD. <u>Journal Of Attention Disorders</u>. DOI: 1087054714558872.

Sluggish Cognitive Tempo Vs. AD/HD

A factor analysis done by scientist in Colorado indicated that Sluggish Cognitive Tempo has a different fact structure than AD/HD and when AD/HD is diagnosed multiple raters should be used.

Leopold, D.R., et al. (October, 10, 2014). Evaluating the Construct Validity of Adult ADHD and SCT Among College Students: A Multitrait-Multimethod Analysis of Convergent and Discriminant Validity.

Journal of Attention Disorders. DOI: 1087054714553051.

Anger Management, Social Sills Training, & AD/HD

Researchers in the US suggested that anger management and social skills training be done with AD/HD college students in therapy.

Sacchetti, G.M., et al. (November 17, 2014). ADHD Symptomology and Social Functioning in College Students. Journal of Attention Disorders. DOI: 1087054714557355.

AD/HD and Substance Use

Swedish scientists discovered AD/HD adults thought that substance and alcohol use help them to be normal and thus more accepted and respected. The scientists suggested strong investigations of the use and beliefs of adults with AD/HD about substance and alcohol use is a must when seeing them in therapy.

Nihlin, C., et al. (October 30, 2014). The Patient's Perspective on the Link Between ADHD and Substance Use: A Qualitative Interview Study. <u>Journal of Attention Disorders</u>. DOI: 1087054714554618.

Automaticity, Sleep, & Dyslexia

>Approximately 50% of dyslexics have failures of overnight sleep procedural memory consolidation of a simple motor skill.

Nicolson, R.I., Fawcett, A.J., Brookes, R.L., and Needle, J. (August, 2010). Procedural Learning and Dyslexia. <u>Dyslexia</u>, <u>16</u>(3), 194-212

➤ Bruni and colleagues discovered dyslexics have irregular EEGs durning non-REM sleep that appear to be related to their disability. The hippocampus is involved in this difference.

Bruni, O. et al. (2009). Slow Wave Amplitude Oscillations During NREM Sleep and Reading Disabilities in Children with Dyslexia. <u>Developmental Neuropsychology</u>. <u>34(5)</u>, 539-551.

Sleep & ASD

- >50% to 80% of Children with ASD have sleep problems
- **≻**Main problems:
 - ➤ Prolonged Sleep Latency, Disruption at Bedtime, Decreased Sleep Efficiency and Duration
 - Those with ASD may have a problem with the inhibitory neurotransmitter GABA and melatonin which may cause problems with circadian sleep-wake cycles

Durand, M.V. (2014). <u>Autism Spectrum Disorder: A Clinical Guide for General Practitioners</u>. Washington, DC: American Psychological Press.

Perceived Quality of Life and ASD

Scientists from Canada and the US investigated the perceived quality of life children with high functioning autism spectrum disorder (HFASD) experience and that of that neurotypical peers and found the HFASD children believed they had a significantly lower quality of life than their non-disabled peers. The parents of both groups of children saw no difference in their qualities' of life.

Potvin, M-C, et al. (January, 2015). Health-related quality of life in children with high-functioning autism. Autism. DOI: 10.1177/1362361313509730.