

Mercury, Lead & ADHD

“ To our knowledge, this study is the first to identify an association between prenatal MeHg (methylmercury, sic.) and ADHD symptomatology in childhood and the first to replicate previously reported associations between low-level childhood Pb (lead, sic.) exposure and ADHD in a population exposed to Pb (lead, sic.) primarily from dietary sources” (p. 1456).

Mercury, Lead & ADHD (Continued)

This was a longitudinal study of 279 First Canadian Inuit children (mean age 11.3 years). The researchers found that children whose mothers had eaten fish with high mercury content and whose children had high levels of mercury in their cord blood had significantly higher levels of AD/HD-like behavior later. These effects were found to be more significant than maternal prenatal smoking. They also found that the higher the blood level of lead children had due to eating fish containing lead the higher their AD/HD symptomatology.

Mercury, Lead & ADHD (Continued)

Boucher, O., Jacobson, S.W., Plusquellec, P., Dewailly, E., Ayotte, P., Forget-Dubois, N., Jacobson, J.L. and Muckle, G. (October 1, 2012). Prenatal Methylmercury, Postnatal Lead Exposure, and Evidence of Attention Deficit/Hyperactivity Disorder among Inuit Children in Arctic Québec. Environmental Health Perspectives, 120, 1456-1461.

Dyslexia A Phonetic Discrimination Deficit?

“Three experiments demonstrate that a group of adult dyslexics studied here is impaired in phonetic discrimination (e.g., *ba* vs. *pa*), and their deficit compromises even the basic ability to identify acoustic stimuli as human speech. Remarkably, the ability of these individuals to generalize grammatical phonological rules is intact...”

Dyslexia A Phonetic Discrimination Deficit? (Continued)

“...The contrast between the phonetic and phonological capacities of these individuals demonstrates that the algebraic engine that generates phonological patterns is distinct from the phonetic interface that implements them. While dyslexia compromises the phonetic system, certain core aspects of the phonological grammar can be spared.

**Berent, I., Vaknin-Nusbaum, V., Balaban, E., Galaburda, A.M. (September 19, 2012).
Dyslexia Impairs Speech Recognition but Can Spare Phonological Competence.
PLoS ONE, 7(9): e44875. doi:10.1371/journal.pone.0044875.**

Significant Strides Made Toward a Genetic Test for Autism

- About 20% of the cases of autism are caused by known genetic differences.
- Researchers at the University of Melbourne, Australia, have developed a test that looks for 237 genetic markers called single-nucleotide polymorphisms (SNPs). Some are thought to raise the risk of autism; others seem to protect against it. The test correctly predicted autism with more than 70% accuracy in people of Central European descent, but only 54% in those of Chinese descent... “(Beck, 2012).

Beck, M. (September 24, 2012, 7:45 PM EST). Progress in Identifying the Genetic Roots of Autism. The Wall Street Journal. From Website:

<http://online.wsj.com/article/SB10000872396390444813104578016280501020620.html>.

Skafidas, E., Testa, R. , Zantomio, D., Chana, G., Overall, I.P. and Pantelis, C. (September 11, 2012). Predicting the diagnosis of autism spectrum disorder using gene pathway analysis. Molecular Psychiatry, doi: 10.1038/mp.2012.126.

Eye Movements and Diagnosis

Researchers from University of Southern California and Queen's University, Ontario, Canada discovered a method recording eye movements of older patients with Parkinson's Disease, and children with either Fetal Alcohol Spectrum Disorder, or AD/HD while they were watching a 15 minute long video beyond chance. Reportedly they had a 89.6% accuracy of telling older adults with Parkinson's Disease...

Eye Movements and Diagnosis (Continued)

...from a group of non-impaired age-matched controls, and 77.3% of the children with either AD/HD, or Fetal Alcohol Spectrum Disorder when matched with control children. Regarding this the researchers wrote, “Our technique provides new quantitative insights into which aspects of attention and gaze control are affected by specific disorders. There is considerable promise in using this approach as a potential screening tool that is easily deployed, low-cost, and high-throughput for clinical disorders, especially in young children and elderly populations who may be less compliant to traditional evaluation tests”.

Po-He, T., Cameron, I.G.M., Pari, G., Reynolds, J.N., Itti, L. (August, 2012). High-throughput classification of clinical populations from natural viewing eye movements. *Journal of Neurology*, DOI 10.1007/s00415-012-6631-2. From website: <http://link.springer.com/article/10.1007%2Fs00415-012-6631-2>.

Girls, AD/HD and Suicide

A recent 10 year longitudinal study of girls with inattentive AD/HD and Combined Type AD/HD indicated those with Combined Type AD/HD had significantly more suicide attempts and self-injurious behavior than inattentives. Both groups were significantly more impaired globally than controls.

Hinshaw, S.P. et al. (2012). Prospective Follow-Up of Girls With Attention-Deficit/Hyperactivity Disorder Into Early Adulthood: Continuing Impairment Includes Elevated Risk for Suicide Attempts and Self-Injury. Journal of Consulting and Clinical Psychology, DOI: 10.1037/a0029451. From website: <http://www.apa.org/pubs/journals/releases/ccp-ofp-hinshaw.pdf>.

Medicaid Waivers

“Each state has its own programs, but all of these must meet the minimum federal standards for covering certain services. These plans also include whatever optional coverage the state chooses. These state plans must be basically the same everywhere inside the state, so that people have equal access to these services statewide...”

Medicaid Waivers (Continued)

“...States can also use ‘waivers’ to provide services to people with other needs, such as people with disabilities. In many cases, waivers also cover all of the services given under the basic state plan, plus the extra services. For example, most state plans cover regular visits to the doctor. A Medicaid waiver for people with I/DD might cover these visits but also provide an in-home nurse or personal attendant...”

Medicaid Waivers (Continued)

“...These waiver programs may not have enough money to offer all of the services needed to all of the people who need them. They usually have only a certain number of ‘slots.’ States do not have to provide services covered by waivers to everyone who meets the requirements, and so there are often waiting lists for these programs...”

Medicaid Reference Desk (The Arc) (2012). Frequently Asked Questions: What’s The Difference Between a State Plan and a Waiver? From website: <http://www.thedesk.info/what-is-medicaid/faqs/>.