CADDRA E-News: May 2012

At a Glance:

1. CADDRA 2012 Conference Update
2. CADDRA Board Vacancies
3. Survey Draw Results
4. CADDRA Representation at Outside Meetings
5. Ask the Expert: Bad Breath
6. Quebec Article on ADHD Treatment during Pregnancy and Breastfeeding
10. Journal Article Review: Can Parent Reports Serve as a Proxy for Teacher Ratings in Medication Management of Attention-Deficit/Hyperactivity Disorder?

1. CADDRA 2012 Conference Update

We hope to see as many members as possible at this year’s conference in Vancouver: Clinical Approaches to ADHD Challenges: Preschoolers to Seniors

Registration for the meeting will open in the next few weeks when the program is finalized. The meeting will begin the evening of Friday, November 2 and run all day Saturday and Sunday, November 3rd and 4th. New this year: networking sessions on Friday evening

All the presentations will be in English. If you can help us get the word out, a PDF (in English) about the meeting can be downloaded at: www.caddra.ca/cms4/pdfs/Conference2012_1stFlyer.pdf

2. CADDRA Board Vacancies

The CADDRA Board will have three vacancies on its board of directors from November 2012. The positions are open to full time (voting) members and are for a three year term. Members will be invited to provide input on identifying qualified and motivated individuals who would be interested in being board members. The guidelines and procedures for making nominations, including self-nominations, and board member responsibilities, are described here.
3. CADDRA Survey Draw Results

Over half of the members contacted by CADDRA to complete a members’ survey took the time to let the organization know how they see CADDRA is doing and where it should be going in the next five years. Of the 163 members contacted, 87 survey responses (53% response rate) were received.

A survey was also sent out to 670 healthcare professionals who are not currently CADDRA members but have either attended the CADDRA conference or contacted the organisation in the past. Of these, 22% completed the survey. Results from both surveys will be analysed over the next month and will be instrumental in crafting the future direction of the organisation.

Respondents from both surveys were entered in a draw for either a free membership renewal or a free membership in CADDRA. Congratulations to Dr. Jeffrey Simons who won a renewal of his CADDRA membership and to Dr. Neil Oliver, who will receive a free CADDRA annual membership.

4. CADDRA Representation at Conferences

- CADDRA was represented at this month’s Primary Care Today meeting, a family medicine conference now in its 10th year that took place in Toronto from May 10-12. Over 1,900 family physicians and 300+ nurse practitioners attended (85% from Ontario). Congratulations to Amy Pruett RN of the Kawartha North Family Health Team who won a draw for a free copy of CADDRA’s Canadian ADHD Practice Guidelines.

CADDRA will have a booth or a stand at the following meetings (please come by and say hello if you are attending):

- **2e Colloque international de langue française sur le TDAH**, French-language ADHD Conference in Quebec city from June 10-12.

- **Family Medicine Forum 2012**: Run by the College of Family Physicians of Canada, this is the largest primary medicine meeting in Canada and attracts 4,500-5,000 family physicians, teachers, researchers, residents and other health care professionals annually. It will be held in Toronto from November 15-17.

5. Ask the Expert Question: Bad Breath

*Please note that you MUST add your email address to your query if you would like to also get an email answer to your Ask the Expert query in addition to having the answer published on the members-only section of the CADDRA website, as we will not otherwise know your email address.*

**Q: Have you ever heard of bad breath associated with methylphenidate oros preparation?**

*CADDRA cannot comment on details of a specific case and any information provided should not be perceived as medical advice.*

**A: Bad breath can be a consequence of dry mouth which is associated with all stimulants. Regular brushing of teeth and good dental hygiene are recommended. There are a wide variety of products*
available for dry mouth in the pharmacy. If symptoms persist, it is suggested that a dentist be consulted to investigate other medical causes, such as cryptic tonsils, or dental problems that can contribute to bad breath. This website includes some further information: http://www.druginformer.com/search/side_effect_details/methylphenidate%20hydrochloride/halitosis.html

6. Quebec Article on ADHD treatment during Pregnancy and Breastfeeding

ADHD treatment during pregnancy and breastfeeding is a topic of great concern to many patients and their physicians, and there is limited research published in the area.

The following is a summary of an article entitled “ADHD treatment, pregnancy and lactation: A guide for patient counselling” by Josianne Malo, B.Pharm., M.Sc., Pharmacist and Associate Clinician, CHU Sainte-Justine and Université de Montréal, and Martin St-André, MD, CM, FRCP, Psychiatrist and Associate Clinical Professor, CHU Sainte-Justine and Université de Montréal.

Summary: An estimated 3 to 6% of the adult population, including women of childbearing age, manifest symptoms of ADHD. Yet there are no guidelines on the treatment of ADHD in pregnant women or nursing mothers, and scientific literature is generally limited on this subject. The goal of this paper is to review the existing data and to suggest clinical guidelines for affected women.

When deciding to pursue a psychopharmacological treatment for pregnant women or nursing mothers, the expected benefits always have to be measured with regard to the anticipated risks. When an interruption or modification in the treatment of ADHD is considered, one should take into account the potential risks of non-treatment such as substance or alcohol abuse, exacerbation of comorbidities, psychosocial impact of untreated ADHD on antenatal care and potential impact on the mother-infant relationship.

In early pregnancy, some women may be exposed to the medications they are taking for ADHD. The introduction of non-pharmacological interventions should be a priority for female patients whose symptoms are mild. Pregnancy can be an opportune moment to introduce specific behavioural or psychotherapeutic approaches to ADHD or its comorbidities. For most symptomatic female patients, the clinician may interrupt the medication only to resume it once the organogenesis is completed (i.e. after the eleventh gestational week). However, the degree of functional impairment could justify the continuation of the treatment throughout pregnancy. Moreover, pharmacotherapy may be continued post-natally in situations where ADHD could have a significant impact on the mother’s well-being or on the mother-child dyad. In each situation, an integration of non-pharmacological therapeutic measures and periodic reassessment is recommended.

Tables I to IV summarize the existing data on the safety of the main pharmacological treatments of ADHD during pregnancy and nursing. This data, however limited, tends to favour the use of amphetamine and dextroamphetamine, two of the better known medications for ADHD.

Table 1: Pregnancy safety data of the main ADHD approved drugs
Table 2: Pregnancy safety data of drugs not officially approved in the treatment of ADHD
Table 3: Breastfeeding safety data of the main ADHD approved drugs
Table 4: Breastfeeding safety data of drugs not officially approved in the treatment of ADHD
References
In conclusion, more research is needed on the use of medication to treat ADHD in pregnant women and nursing mothers. While the existing data is insufficient to fully determine the safety of various medications, certain clinical situations may require the continuation of psychopharmacological treatment during this vulnerable period for both mother and infant.


Special thanks to Quebec-based paediatrician and CADDRA member, Henriette Fortin M.D., for summarizing the French-language article for CADDRA.


**CADDRA Commentary:** The authors provide statistical evidence for a relative age effect on the frequency of diagnosis and treatment of ADHD in children aged 6 to 12 years in British Columbia. They incorrectly conclude that the findings "raise concerns about potential harms of over-diagnosis and over-prescribing". They raise concerns regarding problems with growth and cardiovascular events.

Their statistics do not provide any information that suggests over-diagnosis of ADHD in this age group. The prevalence rates for ADHD from the Ontario Child Health Study, an epidemiological community based study, were 9% for males and 3.3% for females for elementary school children. At least one third were not diagnosed or treated\(^1\). Marrow et al reported finding of an overall prevalence of ADHD diagnosis of 6.9% in boys and 2.2% in girls suggests under-diagnosis rather than over-diagnosis as the authors contend. A more reasonable interpretation of the data is an additive effect of chronologically immaturity in those children with ADHD. If a child has ADHD and is also significantly younger than their peer group, the likelihood of functional impairment increases. Clinical experience over 30 years in Ontario has shown that relative age effect of immaturity in the presence of ADHD is not remediated by having a child repeat the year which used to be the case. Unless ADHD and associated learning disabilities are identified and appropriately managed the child continues to have ongoing functional impairments.

The authors reveal their bias about the nature of pharmacological treatments with ADHD when they incorrectly cite problems with growth and increased risk of cardiovascular events. The one reference they quote relates to cardiovascular events. More recent studies of the effect of stimulants on growth or adverse cardiovascular events do not support significant negative outcomes related to either growth or cardiovascular morbidity or mortality\(^2, 3\).

The authors misunderstand the nature of clinical diagnosis of ADHD. This is based on functional impairment not on symptoms alone. The diagnosis should made by clinicians after a careful developmental and family history and assessment of functional impairment. In evaluating ADHD, functional impairment is critical in making the decision to treat. ADHD is not a static impairment. It is extremely context dependent. For children in elementary school the most functionally impairing environment is the classroom. The author's advice that "greater emphasis on a child's behaviour outside the classroom may be warranted when assessing children for ADHD to lessen the risk of inappropriate diagnosis" reveals their misunderstanding that the classroom demands on social, behavioural and academic performance rather than home or community contexts produce the most impairment in executive function in children with ADHD. Unfortunately it is still often the case that physicians who make the diagnosis and prescribe the medication have very little contact with teachers either in terms of establishing the diagnosis or indeed in monitoring effects of medication\(^4\). The erroneous conclusion that teacher identified ADHD automatically leads clinicians to make an erroneous diagnosis is not supported by the fact that there is relatively little communication between school and physician's office.
In evaluating the evidence in this paper it behooves us to remember Mark Twain’s quote “There are lies, damn lies and statistics!” It continues to be the unfortunate fact that many children in Canada are still unrecognized as having ADHD and not appropriately treated. Most prescriptions for stimulants are never renewed even in those diagnosed and managed appropriately. The erroneous conclusion by the authors of this article unfortunately perpetuates the myth of over-diagnosis and the dangers of pharmacotherapy neither of which stand up to empirical evidence.

Note: This review is adapted from letter submitted to the CMAJ.

Reviewer: Dr. Laurence Jerome, Adjunct Professor of Psychiatry, The University of Western Ontario, London, Ontario

References:


CADDRA Commentary: This study is the first of its kind to prospectively follow a cohort of identified children who were prenatally exposed to methamphetamine. The study had four sites and assessed children at ages three and five years old. The authors did their best to control for other substances exposure, change in caregiver, attachment issues, but in this population it was very difficult. What was identified is that methamphetamine-exposed children did show attentional issues and behaviour problems over and above children exposed only to alcohol and/or cocaine and at ages as young as three years. This represents a significant public health issue.

Reviewer: Andrew Hall, MD, FRCPC, Assistant Professor, University of Manitoba, Winnipeg, MB

**CADDRA Commentary**: ADHD experts have known for a long time now that children with ADHD have a much higher chance of developing some form of learning disability - especially a reading disability, which accounts for about 80 percent of all learning disabilities affecting ADHD patients. However, this important article, published in Pediatrics in September 2011, presents evidence from an American research group from the Mayo Clinic in Rochester, Minnesota directly linking ADHD and an increased risk of a Written Language Disorder. The increased risk is dramatic: children meeting criteria for ADHD, regardless of gender, are at a five times greater risk for having writing problems compared to all others who do not have ADHD. The added strength of this study is the fact that it was population-based and not restricted to a clinical research sample, hence more representative of the full spectrum of ADHD in the population at large.

Canadian clinicians and educators can view this study as strong reinforcement to the recommendations of multiple associations, including our own, that children with ADHD should be screened for coexisting disabilities, including written language disorder.

**Reviewer**: Carole O’Beirne, M.Sc., M.D., FRCPC Pediatrics, Lecturer, Department of Pediatrics, Faculty of Medicine, University of Toronto, Toronto, ON


**CADDRA Commentary**: Many physicians who monitor ADHD medications have their favourite way of determining when to titrate medications. Many physicians use rating scales as well as direct interviewing. This article is based on a twelve month study that set out to determine if there was a difference between using both parent and teacher scales versus parent only. Unfortunately, the magnitude of correlation between teacher and parent scales was low. The conclusion of the study is that teacher reports added to the parent reports are critical for optimal medication management. Even if it’s difficult to get teacher rating scales/reports, it is worthwhile.

**Reviewer**: Andrew Hall, MD, FRCPC, Assistant Professor, University of Manitoba, Winnipeg, MB

**CADDRA Commentary**: Many of us know that untreated ADHD increases the risk of motor vehicle accidents, citations, and related injuries. It has been strongly suggested that adequate and effective treatment for ADHD can reduce these risks. This study is the first to show that a long-acting medication (in this study, in the form of methylphenidate transdermal patch) can improve safety in routine driving while reducing ADHD symptoms. This study should be shown to every parent of a teenager who has ADHD.

**Reviewer**: Andrew Hall, MD, FRCPC, Assistant Professor, University of Manitoba, Winnipeg, MB

---

**Newsletter Editor, May 2012 Edition**: Andrew Hall, MD, FRCPC, Assistant Professor, University of Manitoba, Winnipeg, MB

---

*The Canadian ADHD Resource Alliance (CADDRA) is a non-industry, non-profit, multi-disciplinary alliance of experts working in the field of ADHD. The organization produces the Canadian ADHD Practice Guidelines (3rd edition, 2011). CADDRA increases the knowledge, skill and ability of professionals by providing support and training for medical professionals on Attention Deficit Hyperactivity Disorder. The CADDRA Annual Conference bridges the gap between research and clinical practice.*