

## LETTER TO THE EDITOR

## It's More Complicated than Myth Busting: Parents Deciding About Stimulant Use for their Children

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Recently the Journal published a letter to the Editor titled "Stimulant use in attention deficit hyperactivity disorder (ADHD) kids – triumph or tribulation?" (Naguy, 2016). Although I appreciated the author's intent to summarize psychoeducational points with which to combat perceived myths that may serve as barriers to parents moving forward in considering stimulants for their child's ADHD, I believe there are both technical and conceptual problems in the letter.

Concerns about stunting from stimulants were raised first. I found it curious that this was flagged as a leading concern as in my clinical experience few if any parents raised this as an issue in contrast to say risks of zombification. Of course appetite suppression and its impact on weight are a frequent concern for both parent and treating physician. The author suggested adding mirtazapine to address stimulant-induced anorexia. While such an approach could be studied, it is clearly an off-label practice in Canada. Trying approved non-stimulant ADHD medications, if stimulants are not tolerated, is an approach more consistent with best practice recommendations (Pliszka et al., 2006).

The belief that stimulant use might lead to substance abuse is a parental worry that I have heard in clinical practice. I would agree that there is not compelling evidence that prescribed stimulant use leads to increased substance abuse. However, there should be a sober second thought before promoting the notion that stimulant use is *protective* against future substance abuse. While some early work suggested a possible protective effect (Wilens et al., 2003), the most rigorous ADHD intervention study to date, the Multimodal Treatment Study of Children with ADHD (MTA), did not

find that stimulant use provided any protective effect from subsequent substance use or abuse at follow-up (Molina et al., 2013).

The author recommended that the proposed myth buster information be disseminated. However, several questions need to be addressed first. Does the accuracy of the provided information need greater scrutiny before dissemination? Is there a need for more systematic assessments of psychoeducational needs of parents rather than assume this type of information is broadly needed? Is the presumption that parents' misunderstanding about stimulant risks is a key barrier for stimulant use in children with ADHD correct? In our enthusiasm to be imparters of knowledge, we may overly subscribe to a superficial knowledge-driven model of behaviour. More developed models attempt to identify the potential role of factors in addition to "knowledge," such as the influence of the meaning of medication use to parents (dosReis & Myers, 2008). Using consumer preference modeling may be one approach to more accurately identify key factors influencing decision-making (Schatz et al., 2015).

An additional concern is the implied outcome, i.e., that addressing parents' "wariness" will lead to more children with ADHD taking stimulants which will prevent negative long-term sequelae. While we do have evidence of shortand medium-term benefits of stimulants on some specific domains (e.g., reduced ADHD symptoms), we do not have evidence of long-term benefits and only weak evidence for robust positive impacts on various functional domains. The longer-term outcomes from stimulant use reported from the MTA study are humbling (Molina et al., 2009) and suggest

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that we have much more work to do to try and figure out how we might better improve long-term outcomes for children with ADHD.

A final concern relates to the belief in the categorical existence of ADHD which underpins the formula: (i) the child meets criteria for a categorical diagnosis (ADHD); (ii) a treatment (stimulants) addresses that diagnosis, therefore; and, (iii) the child should be on stimulants. However, several lines of research suggest ADHD is not a categorical diagnosis, but rather the tail end of a continuum that does not have clear discontinuity with trait distribution in the general population (McLennan, 2016). Consideration of interventions (e.g., stimulants) then needs a more nuanced risk-benefit dialogue with stakeholders (e.g., parents) factoring in different levels of functional severity and other contextual factors. Our field needs to step up its game to better address this complex and grey world.

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