TV Viewing and ADHD

An article recently published in Pediatrics (Christakis et al., 2004) received a lot of media coverage because it claimed to demonstrate that TV viewing in toddlerhood increased the risk for later ADHD. However, there were a number of significant methodological problems with this study that cast doubt on the conclusions:

Firstly, these children were never clinically examined or diagnosed. Their behavior at age 7 was assessed using only a brief parent checklist of 5 behaviors, that included items such as "confused" and "obsessive" which are not typical of ADHD. Thus, it is impossible to say whether or not they met clinical diagnostic criteria for ADHD - or any other condition - at age 7.

Secondly, ADHD behavior is often apparent by age three. Thus it is quite possible that some of the three year olds in the study already were exhibiting signs of ADHD and that their increased TV viewing was the *result and not the cause of their ADHD*. For example they may have had less patience for other forms of play like looking at picture books or playing with blocks.

Thirdly, there is no control for the possibility that the parents of these kids themselves may have had ADHD. We know that ADHD is highly heritable and that parents with ADHD are more likely to have children with ADHD. Parents with ADHD may be less likely to set limits on such activities as TV viewing. Thus it may easily be the case that the kids with ADHD at age seven inherited the condition from their parents and that their TV viewing habits at age 3 were *in response to the behavior of their parents with ADHD*.

Even if one were to ignore all of these methodological problems and accept the results of this study at face value, an increase in risk of 9% (the actual figure reported in the study) does not indicate that TV viewing is a major cause of ADHD. It also does not indicate that restricting TV viewing will prevent ADHD.

Reference

Christakis, D, Zimmerman, FJ, DiGuiseppe, DL et al. (2004), Early television exposure and subsequent attentional problems in children. Pediatrics 113: 708-713