

Can the Prevalence of ADHD Really be 0.3%?

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We would like to draw attention on the flaws of the article entitled "ADHD Diagnosis and Drug Use Estimates in France: A Case for Using Health Care Insurance Data," recently published by Ponnou and Haliday (2020).

Firstly, the method chosen by the authors is unsuitable to calculate the prevalence of ADHD. Indeed, the authors start from the number of French children who were prescribed methylphenidate, and then calculate the total number of children with ADHD. For this purpose, they use the estimate of 36.5% of French children with ADHD who receive a treatment, from the study by Lecendreux et al. (2011). The authors seem to equate treatment with methylphenidate, however this is incorrect. The study by Lecendreux et al. (2011) does not mention methylphenidate at all, indeed it only reports the rate of all treatments together (as confirmed by Lecendreux, personal communication). In France, methylphenidate is not the first-intention treatment for ADHD, it is prescribed only "when psychological, educational and social treatments have proven insufficient" (indications from the French drugs agency). Therefore, the rate of methylphenidate prescription cannot be deduced from the treatment rate, and it may be very far from the 36.5% reported in Lecendreux et al. Thus it is impossible to determine the prevalence of ADHD from the data analyzed by the authors.

Secondly, the method used by the authors is not only inappropriate, it is also applied incorrectly. In fact, all the calculations are wrong. In Section 3.1, if one follows their reasoning, the number of children who take methylphenidate in 2008 should be $19613/(1.13 \times 1.44) = 12,053$ (instead of 9,555). This would change the methylphenidate prescription rate from 0.2% to 0.25%. In Section 3.2, if one follows their reasoning, if 36.5% of children with ADHD take methylphenidate, then $9,555 \times (100/36.5) = 26,178$ should have ADHD (rather than 15,622).

To conclude, this article applies incorrectly an inappropriate method. From there, it draws conclusions that are very far from the scientific consensus on ADHD prevalence, which would on the contrary require a very high standard of evidence.

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