

## Commentary

# Randomised controlled trial of the short-term effects of osmotic-release oral system methylphenidate on symptoms and behavioural outcomes in young male prisoners with attention deficit hyperactivity disorder: CIAO-II study: commentary, Fazel

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**Keywords**

Methylphenidate; attention-deficit hyperactivity disorders; mental health services; randomised controlled trial; prisoners.

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**Response**

One important potential explanation for the lack of efficacy of methylphenidate in this trial is that there was a systematic overdiagnosis of attention-deficit hyperactivity disorder (ADHD) in the sample. Of the 1183 young men in prison that were screened, 432 (24%) met DSM-5 criteria for ADHD. It is notable that the mean age at randomisation was 21 (range 16–25). This prevalence of ADHD is higher than the upper 95% confidence interval of a prevalence estimate reported in a 2021 meta-analysis of adolescents in prison. This meta-analysis estimated a prevalence of 17% (95% CI: 14–21%)<sup>1</sup> and was based on around 25 000 male adolescents from 20 primary studies. Furthermore, the mean age of those included in this meta-analysis was 16 years – the prevalence of ADHD would very likely be lower if an older sample was studied. Although other work has estimated much higher prevalences of ADHD, including one that reported 26% in adults in prison,<sup>2</sup> these have been criticised for not adequately accounting for inclusion of small primary studies, which tend to report extreme findings.<sup>3,4</sup> Such high ADHD prevalences lack face validity or triangulation with other research in prisons. Thus, it is possible that the lack of efficacy was primarily due to the trial sample having mostly subthreshold ADHD, where ADHD medications will not show efficacy.

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**Data availability**

Data availability is not applicable to this article as no new data were created or analysed in this study.

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**Declaration of interest**

S.F. was Chair of the Data Monitoring Committee for the CIAO-II trial.

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