

# Letters

## COMMENT & RESPONSE

**In Reply** Solanto asks whether the exclusion of inattentive symptoms in childhood—based on *DSM* criteria at the time of study inception—resulted in a reduced occurrence of childhood attention-deficit/hyperactivity disorder (ADHD) among adults with ADHD in 2 recent longitudinal epidemiological cohort studies from Brazil<sup>1</sup> and New Zealand,<sup>2</sup> possibly artificially inflating rates of the newly observed group of late-onset ADHD.

Our study,<sup>3</sup> using data from a contemporary longitudinal cohort in the United Kingdom, also reports a high rate of late-onset ADHD among the population of adults with ADHD (68%). However, we did not identify an excess of inattentive vs hyperactive/impulsive symptoms in childhood among individuals with late-onset ADHD: Table 1 of our article<sup>3</sup> indicates that late-onset individuals had an average of 1.7 inattentive symptoms in childhood compared with 2.4 hyperactive/impulsive symptoms. Additionally, eFigure 1 in the Supplement to our article<sup>3</sup> illustrates that the distribution of inattentive symptoms was very similar to that of hyperactive/impulsive symptoms at age 12 years among the late-onset ADHD group. This distribution is similar to that of participants who never met diagnostic criteria for ADHD (than to those with persistent or remitted ADHD). This suggests that in childhood, inattentive symptoms do not appear to be overrepresented among those with late-onset ADHD at age 18 years.

The question remains whether Dunedin Study cohort members who were diagnosed as having ADHD in their 30s, but never diagnosed as having it as children, might have had inattentive subtype when young. Could their condition have gone undiagnosed in childhood because the then-current *DSM* lacked an inattentive subtype? This possibility is intriguing but unlikely to explain adult-onset cases in the Dunedin Study. There are 3 lines of evidence. First, Dunedin Study adult-onset ADHD cases performed normally on all childhood neuropsychological tests and therefore had no evidence of attentional deficits that typify childhood ADHD.<sup>2</sup> Incidentally, the adult-onset cases also performed normally on adult attention tests, including a continuous-performance test of attentional vigilance and the Wechsler Working Memory index. Second, the adult-onset cases did not meet diagnostic criteria in childhood according to *DSM-III*, which, in addition to impulsivity/hyperactivity criteria, required the child meet at least 3 of 5 inattention criteria. Figure 3 of the article<sup>2</sup> showed adult-onset ADHD cases lacked symptoms in childhood. In addition to the diagnosis of “ADD with Hyperactivity” (314.01),

*DSM-III* included a diagnosis of “ADD without Hyperactivity” (314.00), which the study made if criteria were met. Third, in the 1980s, the Dunedin Study was among the first to report a syndrome of inattention separable from hyperactivity in a series of articles that helped push *DSM-IV* to include the inattentive subtype.<sup>4,5</sup> Thus, the cohort included children who had a primary inattentive presentation, but these were not the same individuals who emerged with adult-onset ADHD.

Solanto calls for caution with implementing a new “adult-onset ADHD” diagnosis. We agree and also believe that more research is needed to better understand the heterogeneity in the population of young adults with ADHD identified in these recent population-based longitudinal studies. We need further research not only to clarify the differences between clinical and epidemiological samples, but also to elucidate the causes, course, and optimal treatment of late-onset ADHD.

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