The short form adult attention deficit/hyperactivity self-report scale is a useful diagnostic measure


Q Do the long and short forms of the attention deficit/hyperactivity disorder (ADHD) self-report scale effectively diagnose ADHD in adults?

**METHODS**

- **Design:** Prospective diagnostic cohort study.
- **Setting:** General population, USA; interviews conducted 2001–03.
- **Patients:** 1,549 people aged 18–44 years who participated in the US National Comorbidity Survey Replication study. Participants were selected from four groups: those reporting no childhood ADHD symptoms; those reporting some childhood ADHD symptoms, but not meeting diagnostic criteria; those meeting childhood ADHD diagnostic criteria but no current symptoms; and those meeting childhood ADHD diagnostic criteria and having current symptoms.
- **Test:** The adult ADHD self-report scale (ASRS) includes 18 items based on DSM-IV Criterion A symptoms of adult ADHD. Each item asks how frequently a symptom occurred in the preceding six months rated on a four-point scale (0 = never to 4 = very often). The optimal method for scoring each symptom as present or absent was developed by selecting a cutoff that resulted in the least difference between the false positive and false negative rate for that item. The optimal method for scoring the ASRS was found to be summing the overall number of symptoms present and diagnosing those with nine or more symptoms as having ADHD. Stepwise logistic regression was used to develop the optimal 6-item short form ASRS from the 18-item version. Interviewers administered the validated diagnostic interviews followed by the ASRS.

**Diagnostic standard:** All participants were assessed with the semistructured clinical ADHD rating scale (ADHD-RS) and the semistructured clinical interview for recent DSM-IV adult ADHD. Diagnosis of adult ADHD was made if participants had more than one ADHD Criterion A symptom before 7 years of age, clinically significant impairment in one or more areas of living, and some impairment in two or more areas of living during the previous six months plus more than five symptoms of either hyperactivity-impulsivity or inattention (DSM-IV).

**Outcomes:** Sensitivity and specificity; overall agreement between ASRS and the diagnostic standard; symptom concordance (Cohen’s k) between ASRS and clinical symptom ratings.

**MAIN RESULTS**

Using the optimal ASRS scoring method the 18-item ASRS had a sensitivity of 56.3%, a specificity of 98.3%, and a symptom concordance of 0.6. The ASRS classification (ADHD present or absent) agreed with the clinical diagnosis in 96.2% of participants. However, the short (6-item) version of the ASRS showed greater sensitivity (68.7%), specificity (99.3%), and symptom concordance (0.8) than the long (18-item) form ASRS.

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**CONCLUSIONS**

The 6-item short form ASRS is effective for screening adults for ADHD, and is a useful tool for identifying people with adult ADHD in community and clinical settings.

**NOTES**

Authors note that the clinical interview used as the diagnostic standard has not been validated, although it is commonly used.

**Commentary**

Adult ADHD affects 5–10% of children and 4% of adults. The clinical manifestations are not greatly dissimilar between adults and children. The inattention component comprises of daydreaming, distractibility, difficulty focusing, etc., whereas the hyperactivity component involves fidgeting, excessive talking, and restlessness. The adult disorder is now operationally defined in DSM-IV. However, in the setting of the increased responsibility of adults, the consequences for the individual and society of adult ADHD are vastly different. Thus, accidents, marital failure, impaired decision making, interpersonal violence, substance misuse, and comorbid psychiatric disorders are all potential consequences of this disorder in adulthood.

With the advent of new non-stimulant treatments for adult ADHD, the increased focus on the effective detection of this disorder is the setting of Kessler et al’s study. There are at least six scales already in existence with apparently satisfactory psychometric properties, so why another? The authors argue that the other instruments fail to include all 18 DSM-IV (Criteria A) symptoms or that (according to an expert World Health Organization working group) the questions are “suboptimally” phrased. In fact, the authors present us with not one but two more self-report instruments, a long (18-item) and a short (6-item) version of what they call the Adult ADHD Self-Report Scale (ASRS). Their work is supported by both the World Health Organisation and Eli Lily and Company. Both versions are available free online (see http://www.med.nyu.edu/psych/psychiatrist/adhd.html). The 18-item instrument (“ASRS-v1.1 Symptom checklist”) uses the DSM-IV diagnostic criteria and phrases them in a self-report, user-friendly manner. In the population tested (154 adults with a history of childhood ADHD), the sensitivity and specificity of the 18-item instrument appears very satisfactory compared to expert structured diagnostic interview. Following regression analysis, the questions for the 6-item version (“ASRS-v1.1 Screener”) were selected and administered to the same group and found, surprisingly, to have superior psychometric properties to the long version. The authors conclude the “Screener should be preferred to the full ASRS, both in community surveys and in clinical outreach and case-finding initiatives”.

The arrival of a well validated—and free—screening tool for an important condition must be welcomed. For practicing psychiatrists treating the spectrum of adult disorders, the possibility of rapidly identifying a treatable comorbid (or primary) disorder in their patients is good news indeed.

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