Spanish validation of the adult Attention Deficit/Hyperactivity Disorder Rating Scale (ADHD-RS): relevance of clinical subtypes.


Abstract

INTRODUCTION:
Adult attention deficit hyperactivity disorder (ADHD) has a prevalence between 2.5% and 4% of the general adult population. Over the past few decades, self-report measures have been developed for the current evaluation of adult ADHD. The ADHD-RS is an 18-items scale self-report version for assessing symptoms for ADHD DSM-IV. A validation of Spanish version of the ADHD-RS was performed.

MATERIAL AND METHOD:
The sample consisted of 304 adults with ADHD and 94 controls. A case control study was carried out (adult ADHD vs. non ADHD). The diagnosis of ADHD was evaluated with the Structured Clinical Interview for DSM-IV (SCID-I) and the Conners Adult ADHD Diagnostic Interview for DSM-IV (CAADID-II). To determinate the internal validity of the two dimensions structure of ADHD-RS an exploratory factor analysis was performed. The \( \alpha \) coefficients were taken as a measure of the internal consistency of the dimensions considered. A logistic regression study was carried out to evaluate the model in terms of sensitivity, specificity, positive predictive value (PPV) and negative predictive values (NPV).

RESULTS:
Average age was 33.29 (SD=10.50) and 66% of subjects were men (there were no significant differences between the two groups). Factor analysis was done with a principal component analysis followed by a normalized varimax rotation. The Kaiser-Meyer-Olkin measure of sampling adequacy tests was .868 (remarkable) and the Bartlett's test of sphericity was 2 (153)=1,835.76, P<.0005, indicating the appropriateness of the factor analysis. This two-factor model accounted for 37.81% of the explained variance. The \( \alpha \)-coefficient of the two factors was .84 and .82. The original strategy proposed 24 point for cut-off: sensitivity (81.9%), specificity (74.7%), PPV (50.0%), NPV (93.0%), kappa coefficient .78 and area under the curve (AUC) .89. The new score strategy proposed by our group suggests different cut-off for different clinical presentations. The 24 point is the best cut-off for ADHD combined presentation: sensitivity (81.9%), specificity (87.3%), PPV (78.6%), NPV (89.4%), kappa coefficient .88 and AUC .94, and 21 point is the best cut-off for ADHD predominantly inattentive presentation: sensitivity (70.2%), specificity (76.1%), PPV (71.7%), NPV (74.8%), kappa coefficient .88 and AUC .94.

CONCLUSIONS:
In this study, the Spanish version of the ADHD-RS is a valid scale to discriminate between ADHD adults and controls. The new proposed score strategy suggests the relevance of clinical presentations in the different cut-offs selected.