Reliability and validity of the Chinese version of Questionnaire - Children with Difficulties for Chinese children or adolescents with attention-deficit/hyperactivity disorder: a cross-sectional survey


Abstract

PURPOSE:
The Questionnaire - Children with Difficulties (QCD) has been developed and used to evaluate daily-life problems in children during specified periods of the day. The objective of this study was to evaluate the reliability and validity of the QCD for Chinese children or adolescents with attention-deficit/hyperactivity disorder (ADHD).

PATIENTS AND METHODS:
Outpatients with ADHD aged 6-18 years who visited psychiatry clinics were enrolled at four study centers in China. Patients with severe psychiatric disorders were excluded. Parents of all enrolled patients were given the QCD, the Swanson, Nolan and Pelham IV (SNAP-IV), and the Weiss Functional Impairment Scale-Parent (WFIRS-P) questionnaires and were asked to complete all three questionnaires. The reliability of the QCD was examined by Cronbach's alpha, which assessed the internal consistency of the questionnaire. Concurrent criterion validity of QCD scores was examined by Spearman's correlation of QCD with SNAP-IV and WFIRS-P scores.

RESULTS:
A total of 200 Chinese patients were analyzed (average age, 10.4±2.66 years). The majority of patients were male (77.5%), and 49.0% had the combined ADHD subtype. Cronbach's alpha for QCD was 0.88. Correlation coefficients of the QCD total score with SNAP-IV total score and WFIRS-P average score were -0.47 and -0.57, respectively. Correlations for the QCD with SNAP-IV and WFIRS-P were statistically significant (P<0.01). The area under the curve for sensitivity and specificity of the QCD compared with the SNAP-IV and WFIRS-P was 0.70 and 0.71, respectively. The ADHD severity discrimination threshold range of the QCD total score was 30-35.

CONCLUSION:
Our study results found the QCD to be a reliable and valid instrument and recommend its use in clinical practice to identify and evaluate daily-life problems of ADHD patients during specified periods of the day in China.