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"The use of Arabic version of Social Communication Questionnaires (SCQ) in School Screening for Autism Spectrum Disorder (ASD) in Qatar"

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Introduction

The prevalence rate of Autism Spectrum Disorder (ASD) in Qatar is uncertain, obtaining a reliable estimate is important in shedding the light on the magnitude of the problem, and help in better planning for providing the health care facilities needed for early detection and management of this disorder, since early intensive rehabilitation can improve the outcome of those affected tremendously.

Aims of the study

To estimate the prevalence rate of ASD among children age 5–12 years residing in Qatar.

Methodology

The research plan is to identify children with possible ASD among children attending ordinary primary schools as a "Low Probability Group", through using the Social Communication Questionnaires (SCQ), and those who score above the cut-off point will be further diagnosed using the Autism Diagnostic Interview-Revised (ADI-R) and/or the Autism Diagnostic Observation Schedule-2 (ADOS–2).

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Results

We worked on translating the English version of SCQ to Arabic, and we worked to validate this version through a pilot screening study that involved 35 cases of ASD and 778 controls from the schools. The pilot sample includes 813 (35 cases of ASD and 778 control children). The control children were selected in 8 schools, 3 for girls, 3 for boys and 2 mixed, between 14/6/2015 and 28/6/2015. The ASD children surveyed with the SCQ were selected from the Shafalla Center (N=35). The boy: girl ratio was 4.0:1 (61/41; 80% male) in the ASD group. In the control group, the corresponding values were 0.59:1 (287/488; 35.9% male). The mean SCQ total score was significantly higher in cases as compared to controls (18.06 (SD=7.2) vs 7.31 (SD=5.2); p<.0001); as expected, the variability was larger in cases than in controls as illustrated by the standard deviations. Figure 1 shows the distribution of the SCQ scores in the total sample, and the distribution separately for cases and controls. A total of 93 children (22 cases, 71 controls) had scores equal or above the cut-off of 15; the remaining 13 cases (37.1% of the cases) had scores below the cut-off.

Conclusions

The analysis to examine the overall performance of the SCQ showed excellent discrimination between cases and controls. An examination of the performance for each possible cut point on the SCQ showed that the sensitivity and specificity were optimal for the cut-offs of 10, compared to the published cut-off of the SCQ (15).