

Re: Revisiting the Prevalence of Autism Spectrum Disorder among Omani Children

A multicentre study

رد: إعادة النظر في معدل إنتشار إضطراب طيف التوحد بين الأطفال العمانيين
دراسة متعددة المراكز

Dear Editor,

I read with interest the original study by Al-Mamri *et al.* published in the November 2019 issue of *SQUMJ*.¹ Based on the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), the authors estimated the prevalence of autism spectrum disorder (ASD) among Omani children and compared it with Oman's estimate from 2011. They found that ASD prevalence was 20.35 per 10,000 children, which was 15-fold higher than the estimate from 2011 (1.4 cases per 10,000 children).¹ They attributed this increased prevalence to many factors, namely improvement in the diagnostic services, increased awareness of ASD, improved screening programmes and changes in the criteria of diagnosing ASD.¹ However, the last explanatory factor should be taken cautiously. My assumption is based on the following point: Al-Mamri *et al.* employed the DSM-5 criteria in their study methodology while the ASD estimate from 2011 was based on DSM-IV criteria.^{1,2} It is noteworthy that compared to the DSM-IV criteria, evaluation of the DSM-5 criteria revealed good sensitivity and excellent overall specificity. The specificity and sensitivity were noticed to be strongest for children meeting the DSM-IV criteria for ASD, but poor for those meeting criteria for pervasive developmental disorder and Asperger's disorder.³ Older age, higher intelligence quotient, female gender and less evident ASD manifestations were noted to be correlated with higher discordance.³ Importantly, DSM-5 criteria could impact which children fulfil the ASD diagnostic criteria, that ultimately influences the access to healthcare services.⁴ Accordingly, the adoption of the DSM-5 criteria would likely lower the ASD prevalence estimate compared to DSM-IV diagnostic criteria.⁵ Surprisingly, ASD prevalence reported by Al-Mamri *et al.* was much greater than that reported in 2011 despite the variation in the version of ASD diagnostic criteria.¹ With the notion that the studied population in Al-Mamri *et al.*'s study involved a hospital-based sample, I presume that the worryingly high reported ASD prevalence (20.35 per 10,000 children) represents only the tip of the iceberg of a sizable paediatric health problem in Oman.¹ Therefore, I agree with Al-Mamri *et al.*'s recommendation of implementing strategic action, including registry, screening and rehabilitations programmes that are deemed justifiable to contain a further spike in ASD prevalence among the Omani paediatric population.

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References

1. Al-Mamri W, Idris AB, Dakak S, Al-Shekaili M, Al-Harathi Z, Alnaamani AM, et al. Revisiting the prevalence of autism spectrum disorder among Omani children: A multicentre study. *Sultan Qaboos Univ Med J* 2019; 19:e305–9. <https://doi.org/10.18295/squmj.2019.19.04.005>.
2. Al-Farsi YM, Al-Sharbati MM, Al-Farsi OA, Al-Shafae MS, Brooks DR, Waly MI. Brief report: Prevalence of autistic spectrum disorders in the Sultanate of Oman. *J Autism Dev Disord* 2011; 41:821–5. <https://doi.org/10.1007/s10803-010-1094-8>.
3. Mazurek MO, Lu F, Symecko H, Butter E, Bing NM, Hundley RJ, et al. A prospective study of the concordance of DSM-IV and DSM-5 diagnostic criteria for autism spectrum disorder. *J Autism Dev Disord* 2017; 47:2783–94. <https://doi.org/10.1007/s10803-017-3200-7>.
4. Burns CO, Matson JL. An evaluation of the clinical application of the DSM-5 for the diagnosis of autism spectrum disorder. *Expert Rev Neurother* 2017; 17:909–17. <https://doi.org/10.1080/14737175.2017.1351301>.
5. Maenner MJ, Rice CE, Arneson CL, Cunniff C, Schieve LA, Carpenter LA, et al. Potential impact of DSM-5 criteria on autism spectrum disorder prevalence estimates. *JAMA Psychiatry* 2014; 71:292–300. <https://doi.org/10.1001/jamapsychiatry.2013.3893>.

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