Prevalence of attention deficit and hyperactivity disorder in children in China: a systematic review and Meta-analysis

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Abstract

Objective: To understand the prevalence of attention deficit and hyperactivity disorder (ADHD) in children in China and provide scientific basis for early prevention and treatment of ADHD in children.

Methods: A systematic literature retrieval was conducted by using CNKI, Wanfang data, CBM and VIP databases for the information about the prevalence of ADHD in children in China published from 1979 to 2017. Pubmed database was used to retrieve the literatures about ADHD prevalence in children in China published from 1946 to 2017. The quality of literature was evaluated based on the cross-sectional study criteria according to STROBE statement. Stata 12.0 was used for combined prevalence and subgroup analyses, including gender, regions, publication year, diagnostic criteria, sampling methods, and so on. Egger testing and the evaluation of funnel graph were used to evaluate the publication bias of these literatures, and sensitivity analysis was done by using different models and eliminating the influence of any one of these articles on combined effect value.

Results: Twenty articles were included. The total sample size was 88 755, including 46 216 boys and 42 539 girls. The prevalence of ADHD in children in China was 5.6% (95%CI: 5.0%-6.3%). The prevalence was 7.7% (95%CI: 6.7%-8.8%) in boys and 3.4% (95%CI: 3.0%-3.8%) in girls, the difference was statistically significant (P<0.05). No statistically significance difference in the ADHD prevalence was observed between different regions publication years, diagnostic criteria and sampling methods.

Conclusions: The prevalence of ADHD in children in China was high, and boys tended to have a higher prevalence compared with girls. Appropriate screening methods for early detection and intervention conduction of ADHD should be taken among children in China.