

SCHOOL-BASED INTERVENTION TO REDUCE THE RISK OF OBESITY IN CHILDREN: A META-ANALYSIS

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ABSTRACT

Background: Childhood obesity remains a serious nutritional problem in both developed and developing countries. The prevalence of school-age children with obesity has increased more than ten times, from 11 million in 1975 to 124 million in 2016. One of the efforts to overcome the increase in childhood obesity is providing school-based intervention. This study aimed to estimate the effect of a school-based intervention to reduce the risk of obesity in children according to data from primary studies.

Subjects and Method: This was a meta analysis and systematic review. Studies published from 2007 to 2018 were collected from Google Scholar, PubMed, BMJ, ScienceDirect, BMC, and Sage databases. Keywords used (preschool OR school) AND (intervention OR program OR prevention) AND ("children obesity" OR "children overweight") AND "randomized control trials". The inclusion criteria were full text, in English language, using randomized controlled trial study design, and reporting risk ratio. The selected articles were analyzed by PRISMA guideline and Revman 5.3.

Results: 8 studies from China (3), Meksiko, United States (2), Portugal, and German showed that school-based intervention reduced the risk of obesity in children (RR= 0.91; CI 95%= 0.84 to 0.99; p=0.040) with (I²=35%; p=0.150).

Conclusion: School-based intervention can reduce the risk of obesity in children.

Keywords: school-based intervention, obesity, children

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