META ANALYSIS THE EFFECT OF SCHOOL BASED INTERVENTION TOWARD PHYSICAL ACTIVITY ON BODY MASS INDEX

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ABSTRACT

Background: The lack of physical activity and increasing time spent in sedentary behavior during childhood place importance on developing low cost and easy to implement interventions to increase physical activity in children. Researchers have identified schools as a strategic place to promote physical activity. The purpose of this study was to investigate the effect of school based intervention toward physical activity on body mass index among high school students.

Subjects and Method: A systematic review and meta analysis was conducted by collecting articles from PubMed, ScienceDirect, and Google Scholar databases. The determination of selected articles based on eligible criteria using PICO: (1) Population= high school students with obesity, (2) Intervention= school based intervention for physical activity, (3) Comparison= no intervention, and (4) Outcome= body mass index. Keywords used “School- based intervention” AND “Physical activity” AND “Obesity” AND “BMI” OR “Body Mass Index” AND “Randomized Controlled Trial”. The inclusion criteria were full text and randomized controlled trial study. The articles were collected by PRISMA flow diagram. The selected articles were quantitatively assessed using Review Manager 5.3

Results: There were 8 studies included for meta-analysis. This study showed that school based intervention for physical activity lowered body mass index (Standardized Mean Difference= -0.22; 95% CI= -0.45 to 0.0 p= 0.005). Funnel plot did not show bias publication.

Conclusion: School based intervention for physical activity lowers body mass index.

Keywords: school based intervention, physical activity, obesity, body mass index.

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