

OBESITY AND IT EFFECT ON DEPRESSION AMONG ADOLESCENTS: META-ANALYSIS

Riski Anisa¹⁾, Yulia Lanti Retno Dewi²⁾, Hanung Prasetya³⁾

¹⁾Masters Program in Public Health, Universitas Sebelas Maret

²⁾Faculty of Medicine, Universitas Sebelas Maret

³⁾Study Program of Acupuncture, Health Polytechnics, Ministry of Health Surakarta

ABSTRACT

Background: Obese adolescents experience numerous psycho-social problems that significantly affect their quality of life and wellbeing. Associations between obesity and risk of depression have also been wide observed, although results are inconsistent. Thus, it is important to consider these factors when investigating risks of anxiety and depression in adolescents with obesity. The purpose of this study was to investigate the effect of obesity on depression among adolescents.

Subjects and Method: This systematic review and meta-analysis were conducted based on PRISMA diagram. The article search was conducted based on the PICO research question, i.e Population: adolescents, Intervention: obesity, Comparison: normal body weight, and Outcome: depression. 3 electronic databases (Google Scholar, Pubmed, and Science Direct) were explored. The search strategy was structured using the following concept of keywords, [(adolescent OR teenager OR children) AND (“body mass index” OR BMI OR obesity) AND (depression OR “depression symptom”)]. The inclusion criteria were cohort studies, published from 2010 to 2022, and reporting adjusted Odds Ratio. Meta-analysis was conducted using Review Manager 5.3.

Results: 9 cohort studies from United States, Texas, Australia, Netherlands, and Norwegia were involved for meta-analysis. This study found that obese adolescents had higher risk to depression 1.50 times compared to those with normal body weight (aOR= 1.50; 95% CI= 1.20 to 1.88; p= 0.004).

Conclusion: Obesity increases the risk of depression in adolescents.

Keywords: adolescents, obesity, depression, meta-analysis

Correspondence:

Riski Anisa. Masters Program in Public Health, Universitas Sebelas Maret. Jl. Ir. Sutami 36A, Surakarta, Central Java 51726. Email: riskianisa93@gmail.com. Mobile: +6285-749027212.