THE EFFECT OF EXCLUSIVE BREASTFEEDING ON UNDERWEIGHT IN CHILDREN UNDER FIVE: A META-ANALYSIS STUDY

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ABSTRACT

Background: Underweight is a form of malnutrition that has become global public health concern over the past few decades. Underweight prevalence was reported to reach 91.2 million or 13.5% of children worldwide. Data from WHO, UNICEF, and World Bank showed that global coverage of exclusive breastfeeding was still low, only 40% of children. The purpose of this study was to analyze the effect of exclusive breastfeeding on underweight in children under five using meta-analysis.

Subject and Method: Systematic review was carried out by searching articles from PubMed, SCOPUS, DOAJ, BASE, EBSCO, Emerald, ProQuest, ScienceDirect, ResearchGate, and Google Scholar databases. This study sought observational study with multivariate adjusted odds ratio (AOR) analysis. Underweight was defined as weight for age (WAZ) Z score <-2. Meta-analysis study was run on RevMan 5 with fixed and random effects model.

Results: There were 10 articles with 3 study design selected for meta-analysis. Cross sectional, case-control, and cohort studies reported that exclusive breastfeeding reduced the risk of underweight in children under five (OR= 0.58; 95% CI= 0.23 to 1.43; p= 0.230), (OR= 0.33; 95% CI= 0.15 to 0.69; p= 0.004), and (OR= 0.77; 95% CI= 0.48 to 1.25; p= 0.210), respectively. There was publication bias in this study.

Conclusion: Exclusive breastfeeding reduces the risk of underweight in children under five.

Keywords: exclusive breastfeeding, underweight, meta-analysis

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