

# DOES EXCLUSIVE BREASTFEEDING PREVENT OVERWEIGHT IN CHILDREN UNDER FIVE? A PATH ANALYSIS EVIDENCE FROM KEDIRI, EAST JAVA

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## ABSTRACT

**Background:** Childhood overweight and obesity are a challenging global public health issue. The most significant health consequences of childhood overweight and obesity, that often do not become apparent until adulthood, include cardiovascular diseases (mainly heart disease and stroke), diabetes, and musculoskeletal disorders. This study aimed to determine the effect of exclusive breastfeeding on childhood overweight, using a path analysis model.

**Subjects and Method:** A case control study was conducted at 25 posyandus (integrated family health posts) in Kediri, East Java, from May 2018 to April 2018. A sample of 200 children under five was selected by fixed disease sampling, consisting of 57 overweight and 143 normal weight children. The dependent variable was child overweight. The independent variables were feeding pattern, exclusive breastfeeding, maternal employment, and nutritional status monitoring. Data on child overweight were measured by weight for height z-score. The other variables were collected by questionnaire. The data were analyzed by path analysis run in Stata 13.

**Results:** The risk of child overweight decreased with good feeding pattern ( $b = -1.40$ ; 95% CI = -2.23 to -0.57;  $p = 0.001$ ), exclusive breastfeeding ( $b = -0.90$ ; 95% CI = -1.88 to 0.08;  $p = 0.074$ ), and regular nutritional status monitoring ( $b = -4.41$ ; 95% CI = -6.47 to -2.35;  $p < 0.001$ ). Exclusive breastfeeding reduced with maternal working outside the house ( $b = -0.69$ ; 95% CI = -1.38 to -0.09;  $p = 0.047$ ).

**Conclusion:** The risk of child overweight decreases with good feeding pattern, exclusive breastfeeding, and regular nutritional status monitoring. Exclusive breastfeeding reduces with maternal working outside the house.

**Keywords:** overweight, child under five, exclusive breastfeeding, feeding pattern, nutritional status monitoring

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