RELATIONSHIP BETWEEN VITAMIN A DEFICIENCY AND PNEUMONIA INCIDENCE OF CHILDREN UNDER FIVE YEARS OF AGE IN WEST JAVA

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ABSTRACT

Background: The leading cause of mortality in children under five years of age is acute lower respiratory tract infections, especially bronchiolitis and pneumonia. Vitamin A supplement has been studied as a potential intervention to decrease severity and prevent acute lower respiratory tract infections from subsequent episodes. This study aimed to determine the relationship between vitamin A deficiency and pneumonia incidence of children under five years of age in West Java.

Subjects and Method: A cross-sectional study was conducted using the secondary data from Indonesian Demographic and Health Survey, 2017 in West Java. A sample of 594 toddlers under 5 years of age was obtained for this study. The dependent variable was pneumonia. The independent variable was vitamin A intake. The data were collected using questionnaires. The data were analyzed by chi-square.

Results: As many as 38.6% children under five years of age did not get vitamin A supplement. 26.8% of children suffered pneumonia. Inadequate vitamin A intake increased the risk of pneumonia in children under five years of age (OR= 1.011, 95% CI 0.690 to 1.481; p= 1.000).

Conclusion: Inadequate vitamin A intake increases the risk of pneumonia in children under five years of age, but it is not statistically significant.

Keywords: vitamin A deficiency, pneumonia, prevention, under five years of age, children

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