THE CORELLATION BETWEEN STUNTING, WASTING, AND CHILDREN'S COGNITIVE ABILITY: INDONESIA FAMILY LIFE SURVEY 2000 – 2014

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ABSTRACT

Background: Nowadays, lack of children nutritional status fulfillment is still a problem experienced by developing countries, including Indonesia. The most nutritional problems among children in Indonesia are stunting and wasting. Stunting and wasting are indicators of growth disorders including cognitive impairment. This study aimed to analyzed the correlation between stunting, wasting, and children's cognitive ability using Indonesia family Life Survey 2000-2014.

Subjects and Method: This was a cross sectional study conducted using secondary data analysis of the 3rd, 4th, and 5th Indonesian Family Life Survey (IFLS). The study took place in June-July 2020. The study subjects were children aged 7-14 years amounting to 4781 children. The dependent variable was cognitive ability. The independent variables were stunting and wasting. The data obtained from IFLS was cleansed using STATA 15 and analyzed using multilevel logistic regression using SPSS 16.1.

Results: The prevalence of stunting among children were 35.5%, wasting were 10.6%, and cognitive abilities below the average were 41.1%. Children who were not stunted were 1.33 times more likely to have cognitive abilities that matched or were above the average age of children (OR= 1.33; 95% CI= 1.18 to 1.50; p< 0.001). Children who did not experience wasting had 1.20 times the likelihood of having cognitive abilities that matched or were above the average age of children (OR= 1.33; 95% CI= 1.00 to 1.45; p< 0.001).

Conclusion: Stunting and wasting are associate with children's cognitive ability.

Keywords: stunting, wasting, children's cognitive ability, Indonesian family life survey

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