

AB002. Association low-birthweight babies with environmental factors in Indonesia: a cross-sectional study

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Background: In 2017, Indonesia's under-five mortality rate reached 34 per 1,000 births. This value is 4 times greater than under-five mortality in European countries. The main cause of mortality among children under five is low birthweight, which is suspected to be associated with environmental hazards exposure. The environmental health condition in Indonesia was poor at that time, with a low implementation of good hygiene and sanitation (49.3%) and a lack of quality monitoring of drinking water (22.8%). This study aims to identify the association between the incidence of low birth weight with environmental factors.

Methods: This is a cross-sectional study with multivariate analysis using binary logistic regression test (IBM SPSS 25). Using data from Indonesia Demographic and Health Survey (2017). Variables included are baby size and weight, maternal factors, and environmental factors.

Results: This study found an association between baby size with type of sanitation facility (OR 1.25; P value 0.000) and floor type (OR 1.25; P value 0.001) which was also influenced by the mother's education level (OR 1.20; P value 0.005). In addition, another correlation was found between the baby's weight with the type of cooking fuel (OR 1.32; P value 0.000) which is influenced by the mother's age,

education level, and literacy skill.

Conclusions: Low-birthweight babies were born from mothers under 30 years of age with low education and literacy levels. Furthermore, from this study policymakers could start to conduct supervision of sanitation and floor construction using improved materials, and urged the use of clean cooking fuel.

Keywords: Low-birth-weight infant; environments; risk factor; cross-sectional study

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Footnote

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Ethical Statement: The author is accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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