

THE FULFILLMENT OF NUTRITION DURING PRECONCEPTION HAS AN IMPORTANT ROLE TO BIRTH OUTCOME

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ABSTRACT

Background: Chronic energy deficiency is the most widespread nutritional deficiency in pregnant women. The deficiency can lead to low birth weight (LBW) of the newborn. World Health Organization reported that South East Asia ranked the highest of LBW incidence worldwide (27%). The incidence of LBW in Indonesia in 2010 was the highest (11.1%), followed by Thailand (6.6%) and Vietnam (5.3%). LBW occurs when the mother has inadequate nutrition during pregnancy. This study aimed to analyze the relationship between chronic energy deficiency during preconception and birth outcome.

Subjects and Method: This was a systematic review. The data were taken from 15 studies published online from 2013 to 2017. The study subjects were women of reproductive age. Only cohort or experimental study was included in this systematic review. The time range used for searching 15 articles reviewed was 15 days. The dependent variable was birth outcome. The independent variables were chronic energy deficiency and micro nutrient intake.

Results: Nutrition in pre-conception has an important role in the birth outcome. One of the risk factors affecting low birthweight was chronic energy deficiency. In fact, chronic energy deficiency in pregnant women has occurred before conception. Women of reproductive age were susceptible to micro and macro nutritional deficiencies. Fulfillment of micronutrients during pregnancy has a positive result on birth outcome.

Conclusion: The fulfillment of nutrition during preconception has an important role to birth outcome.

Keywords: preconception, birth outcome, women reproductive age

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