

**MATERNAL RISK FACTORS
FOR LOW BIRTH WEIGHT INFANTS
AT FATMAWATI GENERAL HOSPITAL, JAKARTA,
INDONESIA**



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JIRAPORN CHOMPIKUL, Ph.D.**ABSTRACT**

The objective of this study was to determine the maternal risk factors of the occurrence of low birth weight infants at Fatmawati General Hospital, Jakarta, Indonesia. The sample was carried out with a sample size of 300, out of which 150 mothers with low birth weight (LBW) infants were selected as cases and 150 mothers with normal birth weight infants were selected as controls, during the period of 1st January to 31st December 2007. Secondary data from the hospital records was extracted and copied into a structured data collection form from 16th January to 5th February 2008. The study was an unmatched case control on maternal risk factors related to low birth weight infants. The maternal factors were classified into sociodemographic factors, biological factors and pregnancy factors.

Bivariate and multiple logistic regression were done and an odds ratio with 95% confidence interval calculated to show the strength of association. In the final model of regression, the variables found most significantly associated with low birth weight were less gestational age OR 13.98 (95% CI 6.424 – 30.436), poor weight gain during pregnancy OR 7.41 (95% CI 3.402 – 16.142), hypertension OR 5.99 (95% CI 2.634 – 13.645), less ANC visits OR 2.51 (95% CI 1.130 – 5.588) and extreme maternal age OR 2.47 (95% CI 1.155 – 5.314).

The five variables have an additive effect on each other. So, programs to improve maternal and child health (MCH) should focus on all these factors together. Antenatal care for pregnant mothers is an established factor to improve pregnancy outcome, appropriate nutritional education and food supplements must be given to the mothers with poor weight gain. Teenage women should be discouraged from early pregnancy and birth control should be provided for older mothers by health education and family planning systems.

KEY WORDS: MATERNAL RISK FACTORS/ LOW BIRTH WEIGHT

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