

ABSTRAK

**LAPORAN  
PEMANTAUAN BERAT BADAN LAHIR RENDAH (BBLR)  
DI WILAYAH PROVINSI BALI  
TAHUN 2004**

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## ABSTRACT

**OBJECTIVE:** To monitor the prevalence of low birth weight (less than 2500 grams) in Province Bali. The study was also aimed to examine the influence of possible risk factors, mainly prepregnancy BMI/body mass index, pregnancy nutrition status (chronical energy deficiency and anemia), pregnancy disease pattern, and food pattern during pregnancy (energy intake) on the prevalence of infants with low birth weight. **STUDY DESIGN:** Retrospective study. **SETTING:** Mothers who had children under 12 months in all public health center (*Puskemas*) in Province Bali. **METHODS:** data was collected from 1575 samples mainly used healthy book for mother and child (*Buku Kesehatan Ibu dan Anak/KIA*). Bivariate and multivariate analysis were performed. Multiple regression models, including prepregnancy BMI, pregnancy nutrition status (chronical energy deficiency and anemia), pregnancy disease pattern, energy intake during pregnancy and also maternal age, parity were constructed to examine relative effect of these factors on the risk of low birth weight. **RESULTS:** The prevalence of low birth weight infants was 5.7 % in the study sample. Significant risk factors for low birth weight from the bivariate analysis were maternal age in pregnancy less than 20 years and more than 35 years (18.9% vs 8.1%,  $P < 0.05$ ). Compared with normal BMI subjects (18.5-23 kg/m<sup>2</sup>), underweight women (BMI < 18.5 kg/m<sup>2</sup>) were at elevated risk for low birth weight delivery (26.7% vs 15.2%,  $P < 0.01$ ). Energy intake during pregnancy also influenced on birthweight ( $p < 0.01$ ). Multiple linier regression revealed the independent influence prepregnancy BMI and energy intake during pregnancy. There were no significant difference noted between the groups regarding with maternal age, parity, pregnancy nutrition status (chronical energy deficiency and anemia), pregnancy disease pattern and health and nutritional knowledge ( $P > 0.05$ ). **Conclusion:** Improving prepregnancy body mass index and consuming energy base on RDA during pregnancy are effective strategies which reduce and prevent low birth weight.

**Keywords:** low birth weight, pregnancy, nutrition