ASSOCIATIONS BETWEEN KNOWLEDGE IN ANTENATAL NUTRITION, FAMILY INCOME, PLACENTA WIDTH, AND FETAL WEIGHT, AT MOTHER AND CHILD HOSPITAL ARVITA BUNDA, SLEMAN, YOGYAKARTA

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ABSTRACT

Background: Fetal growth and development are influenced by many factors, including maternal knowledge in nutrition intake. The nutrients obtained from maternal food intake are transferred to the fetus through placenta, thereby affecting placental width. This study aimed to investigate the associations between knowledge in antenatal nutrition, family income, placental width, and fetal weight.

Subjects and Method: This was an analytic observational study using cross-sectional design. The study was carried out at Maternal and Child Health Hospital Arvita Bunda, Sleman, Yogyakarta, from 20 November to 20 December 2016. A sample of 48 pregnant women were selected for this study by purposive sampling. The independent variables were maternal knowledge in antenatal nutrition, family income, and placental width. The dependent variable was fetal weight. The data on placental width and fetal weight were obtained by Ultrasonography (USG). The other data were collected by a set of pre-tested questionnaire. Logistic regression was employed for data analysis.

Results: Placental width (OR = 4.18; 95% CI = 0.24 to 13.02; p = 0.573), maternal knowledge in antenatal nutrition (OR = 1.77; 95% CI = 0.24 to 13.02; p = 0.573), and family income (OR = 1.61; 95% CI = 0.31 to 8.27; p = 0.568) were associated with fetal weight.

Conclusion: Fetal weight is associated with placental width, maternal knowledge in antenatal nutrition, and family income.

Keywords: maternal knowledge in antenatal nutrition, family income, width of placenta

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