ABSTRACT

Management of diet and physical activity is essential during pregnancy. For non-diabetic mother, management of diet and exercise are important to maintain a normal weight, while mothers with diabetes mellitus in addition to maintain a normal body weight also to maintain normal blood glucose levels. Maternal hyperglycemia and nutritional status can lead to large birth-weight infants. The purpose of this study was to analyze differences in birth weight between mother diabetics and non-diabetics by looking at blood glucose control from dietary patterns, precision diet and exercise habits of the two groups of respondents in Haji Hospital of Surabaya.

Analytic survey research conducted in the comparative study with cross sectional design. The samples was each of 10 people taken by simple random sampling. Analysis for comparative studies using Independent T-test and Chi-Square $\alpha=0.05$.

Results of research and statistical analysis showed that in comparison Independent T-Test, there was no difference in birth weight between mother diabetics and non-diabetics ($p = 0.208$), which is supported by the absence of differences in pregnancy’s blood glucose control, ranging from diet management and physical activity. Chi-Square comparative study on the level of consumption shows that there is no difference in the level of energy consumption ($0.119$) and fat, but there are differences in carbohydrate consumption ($p = 0.024$) and protein ($p = 0.014$). Chi-Square test differences showed no difference in exercise habits ($p = 0.141$) between normal mothers and mothers with diabetes mellitus. Distribution known that mothers with good blood glucose control resulting in normal birth weight infants, otherwise mothers with bad blood glucose control resulting in large birth weight infants.

Mothers diabetics and non-diabetics should be set according diet to the needs calorie diet and balanced nutrition and physical activity to achieve successful pregnancy. Mothers diabetics should consult with a nutritionists related to the management of diet and physical activity during pregnancy before conception.

Keywords: Diabetes Mellitus; Pregnancy; Maternal Diabetes Mellitus; Diet; Birth Weight Infants