

Abstract

Pre-Pregnancy Weight and Weight Gain During Pregnancy and Their Effect on Child Birth Weight in Gaza Governorate: Cross-Sectional Study [†]

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Abstract: Excessive gestational weight gain (GWG), is a risk factor for several adverse pregnancy outcomes, including macrosomia or low birth weight. Diet and lifestyle factors are two of the few modifiable risk factors identified. However, most dietary assessment methods are impractical for use in maternal care. This study aimed to identify weight gain during pregnancy and its effect on child birth weight in the Gaza governorate. Interviewer questionnaires, anthropometric measurements of mothers and babies, and dietary risk factors scores (DRFSs) were used as predictors of excessive GWG in a retrospective study with 160 participants in three centers of the primary health care system of the ministry of health (MOH) in Gaza. DRFSs were transformed into 13 predefined dietary risk factors for an inadequate diet. This set of dietary risk factors was then used to calculate a combined dietary risk score (range 0–5). After conducting the descriptive statistical analysis of the participants there were 160 mothers aged from 18–35 (mean age 25.78 ± 4.83), and most of the participants had higher educational levels but did not have a job and had low monthly income. Also, most of the participants had low physical activity and were not smokers. The study found a significant differences between income and GWG ($p = 0.015$), intake of salty food and GWG ($p = 0.047$), and inadequate varied diet and birth weight ($p = 0.001$). In addition, this study found a significant difference between the DRFS score and GWG ($p < 0.001$). On the other hand, the results showed that there was a relationship between GWG and macrosomia, but this difference did not give statistically significant results, as well as with the other parameters of the study. Intake of an adequate diet and varied healthy food will improve the gestational weight and so will improve the birth weight. Nutritional education and public health awareness about the intake of balanced healthy food should be provided to pregnant women in primary and secondary health care. Other studies will be conducted with more participants, monitoring diet through the three trimesters of pregnancy to discover further explanations of the relationship between GWG and birth weight.

Keywords: gestational weight gain; GWG; child birth weight; pregnant women; Gaza



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