

Poster 18

Influence of Pre-pregnant BMI and Gestational Weight Gain on Pregnancy Outcomes in A Teaching Hospital of Northern Sri Lanka

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Background/Objective: Pre-pregnancy BMI & Gestational weight gain (GWG) are one of the major determinants of pregnancy outcome. This study aimed to describe the influence of pre-pregnant BMI and gestational weight on pregnancy outcomes among pregnant mothers

Methodology: 264 pregnant mothers admitted for delivery in teaching hospital, Jaffna, Sri Lanka were recruited for the study. Data collected by Interviewer administered questionnaire.

Results: Among those pregnant mothers 58.3%, 22%, 15.2% and 4.5% of the mothers were having normal BMI, low BMI, over weight and obesity respectively. 137(51.9%) women gained less and 51(19.3%) more weight, than it is recommended by the institute of medicine (IOM). Low BMI common in teenage group and High BMI was (BMI > 25) common in elder mothers. ($p=0.03$). There is a significant association of incidence of PIH ($p=0.002$), GDM ($p=0.006$) with increase on BMI. And no significant association of incidence of UTI ($p=0.297$), anemia ($p=0.715$), PROM ($p=0.578$), PPH ($p=0.198$). Increase in pre-pregnant BMI significantly influences in mode of delivery ($p=0.005$), length of hospital stay ($p=0.012$), induction of labor ($p=0.033$), small for gestational age ($p=0.037$), large for gestational age ($p=0.009$). GWG was influenced by parity ($p=0.022$), maternal education ($p=0.001$), monthly family income ($p=0.025$). High GWG was common in nulliparous mothers & low GWG common among non-primi mothers.). Development of GDM was significantly associated with increase in BMI ($p=0.033$). But development of PIH ($p=0.243$), UTI ($p=0.919$) or Anemia ($p=0.447$) wasn't associate with the level of GWG. Length of hospital stay, & incidences of caesarean section ($p=0.049$) were increase with GWG. In neonatal outcomes birth weight ($p=0.031$) & large for gestational age ($p=0.004$) were significantly influenced by GWG.

Conclusion: Pre-pregnant BMI & GWG have influence in several important pregnancy outcomes. So proper attention should be paid on maintaining normal pre pregnant BMI and normal GWG.