Abstract 7

Knowledge in gestational diabetes mellitus and its associations with socioeconomic and pregnancy factors among pregnant mothers attended antenatal clinic at Teaching Hospital, Jaffna

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Background and objective: Gestational diabetes mellitus (GDM) is a common complication during pregnancy that causes risks to both mother and fetus. The global prevalence of GDM is increasing, especially in South Asia. Adequate knowledge on GDM is essential to promote prevention, timely screening and effective management. This study determined the knowledge on GDM and its association with socioeconomic and pregnancy factors among pregnant mothers undergone Oral Glucose Tolerance Test at antenatal clinic, Teaching Hospital Jaffna.

Methods: This hospital-based cross-sectional study was conducted from August to November 2024. It included 350 non-diabetic pregnant women selected systematically. Data were collected using an interviewer-administered structured questionnaire and a data extraction sheet for pregnancy-related variables. Knowledge was assessed using this questionnaire, which consists 20 items, covering meaning of GDM, risk factors, screening, complications, management and preventive measures of GDM, giving a maximum score of 20. The questionnaire was developed based on FIGO and WHO guidelines and validated through a pretest among 20 mothers. Knowledge scores were classified as satisfactory or unsatisfactory, using a 50% threshold. Data analysis was performed with SPSS 26 using descriptive statistics and chi-square tests.

Results: Among the 350 participants, 48.3% demonstrated satisfactory overall knowledge. However, this differs domain wise: 28.6% for meaning of GDM, 19.4% for risk factors, 33.4% for screening and management, and 53.7 % for complication. Increasing age and higher educational status were significantly associated with better knowledge on GDM (p=0.029, p=0.036 respectively). Employed women exhibited higher knowledge than housewives (76, 37.1%) and women from rich (78.9%) households demonstrated more satisfactory knowledge than poor counter parts (31.1%). Partner's education level showed a positive association. Among pregnancy related variables multiparous women showed higher satisfactory knowledge (50.3%) than primi-parous women (46.8%). Knowledge did not significantly differ by trimester (P=0.275), BMI (p=0.187), or previous GDM history (p=0.705). However, having a relative with DM was significantly associated with better knowledge (p=0.021).

Conclusion: In conclusion, knowledge on GDM is inadequate, particularly on risk factors. Sociodemographic factors such as education and income level influence the awareness. It is recommended to include GDM as a topic in Health Science to help mothers to take preventive strategies from early age onwards.

Keywords: gestational diabetes mellitus, pregnant women, knowledge, socioeconomic factors, Jaffna