

Prevalence and factors associated with gestational diabetes among women registered to antenatal clinics in Kalutara MOH area

W.H.M. Wijenayaka¹, S.K. Hettiarachch¹, P.K.P.P. Hansamali¹, E.B.G.A.N. Dilshan¹, A.M.H.P.P. Adhikari¹, Senaka Pilapitiya²

¹*Faculty of Medicine, University of Moratuwa, Sri Lanka*

²*Dean, Faculty of Medicine, University of Moratuwa, Sri Lanka*

Introduction - Gestational diabetes mellitus (GDM) is a significant public health concern, leading to maternal and neonatal complications. This study aimed to estimate the prevalence of GDM and identify associated risk factors among pregnant women in the Kalutara MOH area.

Materials and Methods - A descriptive cross-sectional study was conducted from November 2023 to October 2024 among 203 pregnant women attending antenatal clinics in Kalutara MOH area. Participants were recruited via probability proportionate simple random sampling across eight clinics. Data was collected using an interviewer-administered questionnaire covering socio-demographic, obstetric, and lifestyle factors. Statistical analysis was performed using SPSS with Chi-square tests for associations.

Results - The prevalence of GDM was 5.9%. Significant associations with GDM were found for maternal age over 35 years ($p=0.03$), history of GDM in previous pregnancies ($p<0.001$), parity of two or more ($p=0.049$), previous macrosomic babies ($p<0.001$), family history of diabetes ($p=0.02$), and high maternal stress levels ($p=0.01$). No significant associations were observed for BMI, dietary habits, physical activity, or tobacco/alcohol use.

Discussion - The study highlights a moderate burden of GDM in the community, with advanced maternal age and previous GDM history as key risk factors. The lack of association with BMI and lifestyle factors suggests the need for targeted screening based on obstetric history and genetic predisposition. Integrating stress management into antenatal care and raising community awareness on GDM prevention are recommended to improve maternal and neonatal outcomes.

Key words - Prevalence, Gestational diabetes, Antenatal, MOH area, Kalutara