

Assessment of risk factors of Gestational Diabetes Mellitus among pregnant mothers attending antenatal clinics in Matugama MOH area

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Introduction

Gestational diabetes mellitus (GDM) is a subtype of diabetes that occurs for the first time during pregnancy as a result of insulin resistance produced by the placental hormones. GDM is associated with serious complications both in the mother and the offspring. The most recent prevalence of GDM in 2014 was 13.9% in Sri Lanka.

The present study aimed at assessing the presence of GDM related risk factors among a selected population of pregnant mothers.

Methodology

- Descriptive cross sectional study, N=150
- Study setting- 08 antenatal clinics conducted in Matugama MOH area
- Sampling method- convenience sampling
- Data collection instrument- interviewer administered questionnaire
- Ethical clearance- Ethics Review Committee, FMS, USJ
- Data analysis- SPSS version 23.0

Results

- Mean gestational age (\pm SD) was 12 \pm 5 weeks.
- 34.0% (N=51) were primigravida

Table 01: Risk factors for GDM among the participants

| Risk factor | Frequency (n) | Percent (%) |
|---|---------------|-------------|
| Age \geq 35 years | 31 | 20.7 |
| Maternal overweight (BMI \geq 25 Kgm ⁻²) | 43 | 28.7 |
| Maternal obesity ((BMI \geq 30 Kgm ⁻²) | 10 | 6.7 |
| History of delivering large babies (Birth weight \geq 3.5Kg) | 16 | 10.7 |
| Family history of diabetes in first degree relatives | 36 | 24.0 |
| History of GDM in previous pregnancies | 7 | 4.7 |
| History of pregnancy induced hypertension in previous pregnancies | 6 | 4.0 |
| History of miscarriages or still births | 23 | 15.3 |
| Long term use of antipsychotics/ antiepileptic drugs | 5 | 3.3 |

At least one risk factor was evident in 28.0% (N=42) while two in 20.7% (N=31) and \geq 3 risk factors were evident in 14.0% (N=21).

Conclusions

Early identification and proper education of GDM related risk factors is necessary to overcome development and complications associated with GDM in current and index pregnancies.

