

ABSTRACT

Objectives –To compare risk factor based testing versus universal testing for gestational diabetes mellitus.

Study design – Cross sectional study

Study setting – Ward 9 Antenatal Clinic of Sri Jayewardenepura General Hospital

Method – 876 pregnant mothers at period of Amenorrhea (POA) 24- 28weeks were selected. Risk factors were determined using a questionnaire. Modified 75g oral glucose tolerance (OGTT) was done in all pregnant mothers irrespective of risk factors. An abnormal glucose tolerance was defined according to recommendation of fourth international workshop conference criteria. (Fasting 5.3mmol/l, 1hr – 10mmol/l, 2hr – 8.6mmol/l) two or more values above cutoff limits considered as gestational diabetes mellitus.

Result –128 out of 876 (14.6%) pregnant mothers had GDM. 336 (38.4%) of pregnant women had at least one risk factor. The most commonly identified risk factors were positive family history of diabetes mellitus (26.5%), maternal age over 35 yr (11.2%). Family history of GDM, previous history of GDM, history of unexplained neonatal death and age over 35 yr were significantly associated with GDM. Screening based on traditional risk factors identified 56.3% of GDM. Only traditional testing is to be used instead of universal testing 43.7% of GDM would have been missed.

Conclusion –For the pregnant population attending to Sri Jayewardenepura General Hospital, universal testing for GDM is superior to risk factor based testing as it detects significantly more cases.

43.7% of GDM cases would have been missed if traditional risk factors based testing was applied to this population.