EFFECTIVENESS OF SELECTIVE SCREENING FOR GESTATIONAL DIABETES IN MALAYSIA

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Objective:
Gestational diabetes (GDM) is common and has significant maternal and fetal implications. Active intervention has shown to improve pregnancy outcomes. Despite recommendations for universal screening in a high risk population, Malaysia has opted for selective screening, due to concerns with cost and resources. The objective is to review the relevance of selective screening for GDM in Malaysia.

Methodology:
This is a retrospective cohort study. The study period was from 1st January 2011 till 31st December 2012 and 22,044 patients with GDM were analyzed. Specific variables were extracted from the National Obstetric Registry of Malaysia from all the participating hospitals, which totalled to 260,959 patients.

Results:
The incidence of GDM in Malaysia is 8.4%. The current practice of screening based on maternal booking BMI, weight, age, parity, hypertension and previous stillbirth are inappropriate. Majority of these patients were identified following complications of GDM. Booking BMI 27.0kg/m² has an OR 1.08 (0.94-1.24, p 0.001) compared to BMI between 27.0kg/m² to 29.9kg/m². Booking weight of less than 80kg has an OR 1.38 (1.23-1.54, p 0.001) compared to weight of 80kg and more. Age below 25 has an OR of 0.98 (0.81-1.18, p 0.001) which is similar to those between the age of 25-34 OR 1.00. Hypertension OR 0.54 (0.47-0.61, p 0.001), previous stillbirth OR 0.64 and parity are not significant risk factors for GDM.

Conclusions:
The current practice of selective screening in Malaysia is inappropriate. Screening following disease complications contradict the benefits of screening. Universal screening for GDM in Malaysia may be a more accurate measure.