



SELECTIVE SCREENING FOR GESTATIONAL DIABETES IN MALAYSIA: EFFECTIVENESS OF CURRENT PRACTICE



Ganeshan Muniswaran¹, H Suharjono¹, SA Soelar², SD Karalasingam², R Jeganathan³

1- Sarawak General Hospital, Kuching, Sarawak, Malaysia

2- Clinical Research Centre, Kuala Lumpur, Malaysia

3- Hospital Sultanah Aminah, Johor Bahru, Johor, Malaysia

Sarawak General Hospital,
Jalan Hospital, 93586,
Kuching, Sarawak
Hp. No: 0125871220
Email: gmuniswaran@yahoo.com

INTRODUCTION

Gestational Diabetes is common in Malaysia and has significant maternal and fetal implications. Active intervention has shown to improve pregnancy outcomes.

Pregnancy is an opportunistic time for screening as the future implications of Diabetes can be significant. An ideal screening tool should not be based on complications of the disease or following an adverse event.

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 effectiveness of the current practice 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, with a total 260,959 patients.

RESULTS

The incidence of GDM is 8.4%. Majority of these patients were identified following GDM complications such as fetal macrosomia, polyhydramnios or increased weight gain.

VARIABLE	GESTATIONAL DIABETES				CRUDE OR (SIMPLE LOGISTICS REGRESSION)
	YES		NO		
	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE	
Age					(95% CI) P value < 0.006
<25	1,750	8.6	141	8.3	0.98 (0.81-1.18)
25-34	11,903	58.5	938	55.0	1.00 (ref)
35 and beyond	6,687	32.9	625	36.7	0.84 (0.76-0.94)
Booking BMI (kg/m ²)					P value < 0.001
<27	8,588	42.4	631	37.2	1.08 (0.94-1.24)
27-29	4,085	20.2	324	19.1	1.00 (ref)
30 and more	7,572	37.4	741	43.7	0.81 (0.71-0.93)
Booking weight (kg)					P value < 0.001
<80	16,074	79.1	1,249	73.3	1.00 (ref)
80 and beyond	4,240	20.9	454	26.7	0.73 (0.65-0.81)
Parity					P value 0.717
<5	16,747	82.4	1,409	82.7	1.00 (ref)
5 and more	3,580	17.6	294	17.3	1.02 (0.90-1.17)
Hypertension					P value < 0.001
No	17,967	88.3	1,368	80.3	1.00 (ref)
Yes	2,373	11.7	336	19.7	0.54 (0.47-0.61)
Previous Stillbirth					P value 0.063
No	20,109	98.9	1,676	98.4	1.45 (0.98-2.16)
Yes	231	1.1	28	1.6	1.00 (ref)

CONCLUSION

The current practice of selective screening in Malaysia is inappropriate. Screening following disease complications contradicts the benefits of screening.

Universal screening for GDM in Malaysia may be a more accurate measure.

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