



# Diabetes in Obstetrics: A Silent Malaysian Epidemic

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## INTRODUCTION

Obesity is a global epidemic while diabetes is highly prevalent in Malaysia. The synergistic combination of both; diabetes may have far greater Obstetric implications. The long term implications on the newborn is a significant health care concern.

The objective of this study is to highlight the significance of diabetes in Malaysia and to evaluate its Obstetric implications. This is a vital step as we endeavour towards achieving safe motherhood and also a future generation of healthy individuals.

## METHODS

This is a retrospective cohort study. The study period was from 1<sup>st</sup> January 2010 till 31<sup>st</sup> December 2012 and **17,770 pregnant mothers with diabetes** were studied.

Specific variables were extracted from the National Obstetric Registry of Malaysia (NOR) from all the participating hospitals, which totalled to 399,274 patients.

## RESULTS

Diabetes is highly prevalent in Malaysia with an incidence of 4.5% in pregnancy

Diabetes	Obstetric Complications			
	Yes N (%)	No N (%)	OD (95% CI)	P value
	1) Caesarean section			
Yes	7,663 (8.1)	9,888 (3.3)	<b>2.57 (2.49-2.65)</b>	<.0001
No	86,939 (91.9)	287,845 (96.7)	1.00 (ref)	
	2) Prematurity			
Yes	2,382 (5.7)	15,388 (4.3)	<b>1.34 (1.28-1.40)</b>	<0.001
No	39,460 (94.3)	340,597 (95.7)	1.00 (ref)	
	3) Primary PPH			
Yes	190 (9.5)	17,580 (4.4)	<b>2.25 (1.93-2.61)</b>	<0.001
No	1,819 (90.5)	378,238 (95.6)	1.00 (ref)	
	4) Shoulder dystocia			
Yes	113 (15.1)	17,657 (4.4)	<b>3.82 (3.12-4.67)</b>	<0.001
No	636 (84.9)	379,421 (95.6)	1.00 (ref)	

**Table 1: Diabetes and Obstetric complications**  
 OD: Odds Ratio CI: Confidence Interval ; P value is based on simple logistics regression

Diabetes	Fetal Complications			
	Yes N (%)	No N (%)	OD (95% CI)	P value
	1) Macrosomia			
Yes	1,038 (19.7)	16,732 (4.3)	<b>5.50 (5.13-5.90)</b>	<0.001
No	4,239 (80.3)	375,818 (95.7)	1.00 (ref)	
	2) Stillbirth			
Yes	199 (6.2)	17,571 (4.5)	<b>1.43 (1.24-1.65)</b>	<0.001
No	2,993 (93.8)	377,064 (95.5)	1.00 (ref)	
	3) Birth Asphyxia			
Yes	683 (4.8)	17,087 (4.5)	<b>1.09 (1.00-1.17)</b>	0.041
No	13,501 (95.2)	366,556 (95.5)	1.00 (ref)	
	4) Birth injuries			
Yes	13 (12.1)	17,757 (4.5)	<b>2.96 (1.66-5.29)</b>	<0.001
No	94 (87.9)	379,963 (95.5)	1.00 (ref)	

**Table 2: Diabetes and fetal complications**  
 OD: Odds Ratio CI: Confidence Interval ; P value is based on simple logistics regression

Diabetes is not a significant risk factor for DVT, thromboembolism and anaesthetic complications

## CONCLUSIONS

Diabetes is a modern epidemic and is also highly prevalent in Malaysia. The maternal and fetal implications are extremely significant and perturbing.

There is an urgent need for a greater awareness. Prevention should be the main focus. This will only be feasible with a comprehensive national health policy with governmental involvement and declaration.

## REFERENCES

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