



Non Communicable Diseases in Malaysia: The Impact in Obstetrics



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INTRODUCTION

Non communicable diseases (NCD) are the leading cause of death and disability worldwide. It is the modern health challenge and the associated physical, social and economic implications are significant. It remains highly prevalent in Malaysia despite being potentially preventable.

The impact on Obstetrics remains unstudied although the implications are significant. The long term fetal implications are a major concern.

The objective of this study is to highlight the significance of NCDs in Malaysia and to evaluate its Obstetric implications. This is a vital step to create awareness of the gravity of NCD's; as Obstetricians now play a greater role in ensuring a future generation of healthy individuals. Prevention remains the principle goal.

METHODS

This is a retrospective cohort study. The study period was from 1st January 2011 till 31st December 2012 and **87,513** pregnant mothers with non-communicable diseases were studied.

Specific variables were extracted from the National Obstetric Registry of Malaysia (NOR) from all the participating hospitals in Malaysia, which totalled to 260,959 patients.

RESULTS

NCDs are highly prevalent in Malaysia with an incidence of 33.5% in pregnancy

NCD	Obstetric Complications			P value
	Yes N (%)	No N (%)	OD (95% CI)	
1) Anaesthetic complications & maternal collapse				
Yes	13 (56.5)	87,500 (33.5)	2.58 (1.13-5.88)	0.024
No	10 (43.5)	173,436 (66.5)	1.00 (ref)	
2) Caesarean section				
Yes	27,826 (44.1)	58,169 (30.1)	1.74 (1.71-1.77)	<0.001
No	35,332 (55.9)	135,107 (69.9)	1.00 (ref)	
3) Primary PPH				
Yes	614 (44.0)	86,899 (33.5)	1.42 (1.28-1.58)	<0.001
No	780 (56.0)	172,666 (66.5)	1.00 (ref)	

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

NCD	Fetal Complications			P value
	Yes N (%)	No N (%)	OD (95% CI)	
1) Fetal macrosomia				
Yes	2,497 (71.4)	85,016 (33.0)	4.78 (4.43-5.15)	<0.001
No	998 (28.6)	172,448 (67.0)	1.00 (ref)	
2) Shoulder dystocia				
Yes	247 (53.7)	87,226 (33.5)	2.16 (1.79-2.60)	<0.001
No	213 (46.3)	173,233 (66.5)	1.00 (ref)	
3) Prematurity				
Yes	9,675 (32.7)	77,838 (33.6)	0.92 (0.90-0.95)	<0.001
No	19,933 (67.3)	153,513 (66.4)	1.00 (ref)	

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

The implications are significant despite being corrected for age and ethnicity

CONCLUSIONS

Non Communicable diseases are highly prevalent in Malaysia, which affects **1 in 3** pregnant mothers.

The maternal and fetal implications are extremely significant.

Prevention of non-communicable diseases should be the main aim. This may only be possible with a more holistic approach and a comprehensive national health policy. This global strategy will not be successful without political interest and declaration.

REFERENCES

WHO. Global action plan for prevention and control of NCDs 2013-2020.

CDC. Global Health – Non Communicable Diseases.

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