



# ADOLESCENT PREGNANCIES AND AGE SPECIFIC PHYSICAL COMPLICATIONS

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## INTRODUCTION

Adolescent pregnancies are a major health concern. It is a time of vulnerability and a period of profound biological, social and emotional changes. The implications are enormous.

Prevention alone may be insufficient as it remains culturally acceptable in certain parts of the world. The objective of this study is to identify age specific physical complications of adolescent pregnancies. This is an essential step as we endeavour towards achieving the Millennium Development Goals.

## 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 19,946 adolescent pregnancies were analysed.

Specific variables were extracted from the National Obstetric Registry of Malaysia from all the participating hospitals which totalled to 399,274 patients.

## RESULTS

The adolescent birth rate in Malaysia was 50/1000 deliveries. 16% of them were below the age of 16

Age of mother (years)	Maternal outcomes											
	Pre-eclamptic toxemia (PET)					Prematurity below 32 weeks						
	Yes		No		OD (95% CI)	P value	Yes		No		OD (95% CI)	P value
N	%	N	%	N			%	N	%			
≤14	4	0.19	4	0.07	2.71 (0.68, 10.84)		14	0.22	189	0.08	2.85 (1.65, 4.90)	
15 & 16	27	1.26	23	0.41	3.18 (1.82, 5.56)		121	1.88	1,340	0.57	3.47 (2.88, 4.19)	
17 & 18	47	2.20	43	0.77	2.96 (1.95, 4.49)	<0.001	254	3.95	4,730	2.01	2.06 (1.81, 2.35)	<0.001
19	50	2.34	53	0.95	2.56 (1.73, 3.77)		201	3.13	4,466	1.90	1.73 (1.50, 2.00)	
20-34	2,009	94.01	5,443	97.79	1.00 (ref.)		5,833	90.81	224,190	95.43	1.00 (ref.)	

Table 1: Age of mother and maternal outcomes

OD: Odds Ratio CI: Confidence Interval ; P value is based on simple logistics regression

Age of mother (years)	Fetal outcomes											
	Birth Asphyxia				Stillbirth							
	Yes		No		OD (95% CI)	P value	Yes		No		OD (95% CI)	P value
N	%	N	%	N			%	N	%			
≤14	25	0.21	375	0.12	1.85(1.23, 2.77)		4	0.17	391	0.12	1.42(0.53, 3.82)	0.037
15 & 16	120	1.01	2,644	0.82	1.26(1.05, 1.51)		29	1.22	2,699	0.82	1.50(1.04, 2.16)	
17 & 18	418	3.53	8,554	2.65	1.35(1.23, 1.50)	<0.001	66	2.77	8,786	2.67	1.05(0.82, 1.34)	
19	351	2.96	7,459	2.31	1.30(1.17, 1.45)		65	2.73	7,650	2.33	1.18(0.92, 1.52)	
20-34	10,937	92.29	303,253	94.09	1.00(ref.)		2,219	93.12	309,083	94.06	1.00(ref.)	

Table 2: Age of mother and fetal outcomes

OD: Odds Ratio CI: Confidence Interval ; P value is based on simple logistics regression

Adolescent pregnancies are non significant risk factors for gestational hypertension, IUGR, dysfunctional labour and genital tract trauma.

## CONCLUSIONS

Adolescent pregnancies are highly prevalent in Malaysia as there is an urgent need for a most holistic approach in prevention.

Pre eclamptic toxemia, prematurity, birth asphyxia and stillbirth are the commonest physical complications, with the highest risk for those below 16. The benefit of aspirin and other prophylactic measures of preeclampsia for adolescent pregnancies needs to be evaluated in future trials.

## REFERENCES

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