



PRETERM AND ITS RISK FACTORS AT DONG ANH DISTRICT, HANOI, 2014-2015

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BACKGROUND

- Preterms were newborns delivered under 37 week of gestation and could lead to long term consequences affect the mental and physical development.
- Estimated 9.6% of newborns all around the world was preterms in 2005 (equal to 12.9 millions)
- To evaluate preterm risk factors could help increasing population quality.



OBJECTIVES

- ***To describe the rate of preterm and to determine its risk factors in Dong Anh district, Hanoi in 2014-2015.***



METHODOLOGY

- This study was conducting in 1285 pregnant women and then delivered at health facilities in Dong Anh district.
- Study design: longitudinal follow-up study.



METHODOLOGY

Statistic analysis:

- Raw statistics were managed and analysed in SPSS 16.0
- Post analysed statistics were demonstrated in cross table and in numbers and percentage.
- Test χ^2 and p value were used to indicate the correlation between dependent and independent variables.
- Relative risk (RR) and 95% CI were employed to evaluate the relationship risk factors and preterms.



RESULTS AND DISCUSSION

Table 1: Mother's personal characteristics

Socio-demographic factors	Number	Percentage (%)
Age		
<20	24	1.9
20-29	897	69.8
30-39	349	27.2
40-49	15	1.2
Education level		
Primary school	24	1.9
Secondary school	229	17.8
High school	473	36.8
University	559	43.5

RESULTS AND DISCUSSION

Table 1: Mother's personal characteristics (cont.)

Occupation		
Government employee	209	16.3
Private employee	206	16.0
Worker	349	27.2
Farmer	168	13.1
Small trade	183	14.2
Others	170	13.2
Family economy status		
Poor	29	2.3
Nearly poor	910	70.8
Uncategorized	341	26.9

Table 2: Reproductive health status

Reproductive health status	n	%
Previous preterm		
Yes	31	2.4
No	1254	97.6
Previous low birth weight		
Yes	25	1.9
No	1260	98,1
Physical health status during pregnancy		
Excellence	160	12.5
Good	864	67.2
Normal	256	19.9
Poor	5	0.4

RESULTS AND DISCUSSION

Table 2: Reproductive health status (cont.)

Reproductive health status	Number	Percentage (%)
Mental health during pregnancy		
Excellence	407	31.7
Good	679	52.8
Normal	199	15.5
Emotional violation during pregnancy		
Yes	723	56.3
No	562	43.7
Physical violation during pregnancy		
Yes	157	12.2
No	1128	87.8
Sexual violation during pregnancy		
Yes	156	12.1
No	1129	87.9
Antenatal depression during pregnancy		
Yes	64	5.0
No	1216	95.0

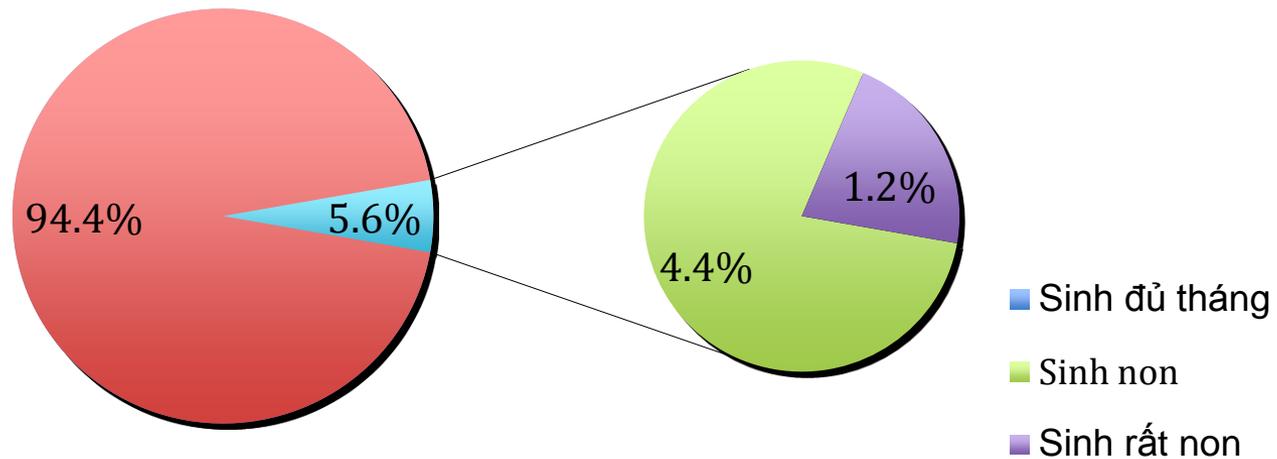


Figure 1: The rate of preterm and level of preterm

RESULTS AND DISCUSSION

Table 3: The relationship between preterm and risk factors

Risk factors	Preterm (%)	Non-preterm (%)	Bivariate analysis RR (95% CI)	Multivariate analysis RR (95% CI)
Age (years)				
Over 25	41 (4.9)	797 (95.1)	1	1
Under 25	34 (7.6)	413 (92.4)	1.6 (1.00-2.41)	1.6 (0.99-2.67)
Education level (years)				
10-12	60 (5.8)	972 (94.2)	1	1
1-9	15 (5.9)	238 (94.1)	1 (0.59-1.77)	1.1 (0.55-1.92)
Occupation				
Others	56 (5.2)	1017 (94.8)	1	1
Farmer	17 (10.1)	151 (89.9)	1.9 (1.16-3.25)	1.9 (1.03-3.51)

Table 3: The relationship between preterm and risk factors (cont.)

Risk factors	Preterm (%)	Non- preterm (%)	Bivariate analysis RR (95% CI)	Multivariate analysis RR (95% CI)
Household economic				
Poor	0	29 (100)	NA	NA
Non-poor	75 (6.0)	1176 (94.0)		
Mental health status				
Good	59 (5.4)	1027 (94.6)	1	1
Normal and poor	16 (8.1)	182 (91.9)	1.5 (0.87-2.53)	1.0 (0.45-2.18)
Physical health status				
Good	53 (5.2)	971 (94.8)	1	1
Normal and poor	22 (8.5)	238 (91.5)	1.6 (1.01-2.64)	1.6 (0.78-3.17)

Table 3: The relationship between preterm and risk factors (cont.)

Risk factors	Preterm (%)	Non- preterm (%)	Bivariate analysis RR (95% CI)	Multivariate analysis RR (95% CI)
Previous preterm				
No	72 (5.8)	1179 (94.2)	1	1
Yes *	3 (8.8)	31 (91.2)	1.5 (0.51-4.62)	1.6 (0.39-6.37)
Emotional violation				
No	39 (6.9)	523 (93.1)	1	1
Yes	36 (5.0)	687 (95.0)	0.7 (0.46-1.11)	2.1 (1.38-6.58)
Physical violation				
No	61 (5.4)	1067 (94.6)	1	1
Yes	14 (8.9)	143 (91.1)	1.6 (0.95-2.87)	1.6 (0.75-3.38)

RESULTS AND DISCUSSION

Table 3: The relationship between preterm and risk factors (cont.)

Risk factors	Preterm (%)	Non- preterm (%)	Bivariate analysis RR (95% CI)	Multivariate analysis RR (95% CI)
Sexual violation				
No	62 (5.5)	1067 (94.5)	1	1
Yes	13 (8.3)	143 (88.2)	1.5 (0.85-2.69)	1.6 (0.79-3.25)
Antenatal depression				
No	65 (5.3)	1151 (94.7)	1	1
Yes	10 (15.5)	54 (84.5)	2.9 (1.58-5.41)	3.0 (1.38-6.58)



RESULTS AND RECOMMENDATIONS

Preterm is still major public health problem in Vietnam.

Antenatal depression, violence during pregnancy and occupation are predictors of preterm birth.

Screening the antenatal depression, partner emotional violence and their interventions may help improve birth outcomes.



THANK YOU FOR YOUR ATTENTION!