

KNOWLEDGE AND PRACTICE REGARDING PHYSICAL ACTIVITIES DURING PREGNANCY AMONG PREGNANT MOTHERS ATTENDING ANTENATAL CLINICS IN THE COLOMBO SOUTH TEACHING HOSPITAL

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INTRODUCTION

The study aimed to:

Assess knowledge regarding physical activities done by pregnant women throughout their pregnancy period.

Identify types of physical activities practiced by pregnant women throughout their pregnancy period.

Identify factors affecting knowledge and practice of a pregnant mother.

Pregnancy is a physiological condition. However, there are a number of physiological and psychological changes that occur in pregnancy (Teixeira, *et al.*, 2005). These physical changes lead to minor & major physical problems at several stages in the pregnancy period. Research conducted globally shows that most maternal morbidities and mortalities can be minimized by physical activities during pregnancy. A study shows that pregnant women are less active than non pregnant women and pregnancy leads to a decrease in physical activities (Evenson, *et al.*, 2002). But pregnant women should have a proper knowledge regarding physical activities to be put into practice (Hegarad and Gross, 2000). Such engagements help to increase the stretching ability of their pelvic muscles that facilitates the labour process. This prevents unnecessary tears, haematomas, infections, reduces mental tension and prolonged hospitalization of both the mother and the baby (Brown, 1986). Brisk walking, regular breathing exercises and climbing steps (mild to moderate physical activities) are advisable to be practiced during pregnancy. Cycling, running, swimming and heavy lifting (strenuous physical activities) should be prevented (Juhl, *et al.*, 2005).

METHODOLOGY

A descriptive cross sectional study was conducted using 210 pregnant mothers registered at Antenatal Clinics in the Colombo South Teaching Hospital. They were in various gestational periods, various educational levels, different parities & age spectrums. A systematic random sampling was done to pick pregnant mothers from the population. An interviewer administered questionnaire was used to collect data from the sample. Pregnant mothers who were unable to communicate either in English or Sinhalese were excluded. Data analyzing was done by using SPSS 16 version. Data collection proceeded after getting the ethical clearance from the Ethical Review Committee of Faculty of Medical Sciences and Colombo South Teaching Hospital.

RESULTS AND DISCUSSION

More than half of the study sample (55%) consisted of the age group of 25-31. 91% of pregnant mothers in the study sample had completed their secondary education (Table 1). Three quarters of the study sample were house wives. 63% of the study sample was in their third trimester. More than three quarters of mothers didn't have any morbidity conditions in their present gestation. More than half of the mothers (57%) were primi mothers.

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Table 1. Distribution of knowledge of the study sample by their highest educational level. (n= 210)

Characteristics	Highest Educational Level of the Subject			Total (N) (%)
	Primary Education (N) (%)	Secondary Education (N) (%)	Tertiary Education (N) (%)	
Good Knowledge (N)	0 0.0%	23 12.0%	3 37.5%	26 12.4%
Moderate Knowledge (N)	4 36.4%	107 56.0%	4 50.0%	115 54.8%
Poor Knowledge (N)	7 63.6%	61 31.9%	1 12.5%	69 32.9%
Total (N)	11 100.0%	191 100.0%	8 100.0%	210 100.0%

$\chi^2 = 10.455$, $df = 4$, $p < 0.033$

88% of pregnant mothers who had a tertiary education had good to moderate knowledge. Of the pregnant mothers who had secondary education only 68% had good to moderate knowledge. $\chi^2 = 10.455$, $df = 4$, $p < 0.033$. This indicates that the educational level of a pregnant mother influences knowledge of physical activities. The educational level of the husband also influence 88% the knowledge of physical activity during the pregnancy period ($\chi^2 = 10.656$, $df = 4$, $p < 0.031$). However, age, profession, gestational period, parity and risk factors to pregnancy did not affect the knowledge regarding physical activities during pregnancy.

95% of pregnant mothers engaged in walking before and after pregnancy, while 5% who walked before pregnancy didn't walk after they became pregnant, $\chi^2 = 29.652$, $df = 1$, $p < 0.000$ (Table 2). This statistical significant indicates that brisk walking is the common physical activity done by pregnant women in every gestation stage. 95% of pregnant mothers engaged in doing house hold activities before pregnancy and 5% mothers who did house hold activities before, stopped these activities after becoming pregnant ($\chi^2 = 62.746$, $df = 1$, $p < 0.000$). This indicates that pregnant women continue doing physical activities after becoming pregnant. 70% of pregnant mothers did breathing exercises before & after they became pregnant while 30% who did breathing exercises before pregnancy stopped doing it after they became pregnant ($\chi^2 = 66.815$, $df = 1$, $p < 0.000$). This practice by pregnant mothers indicates that they have realized the benefits of doing deep breathing exercises. Swimming after pregnancy is discontinued by mothers who have done it earlier ($\chi^2 = 9.610$, $df = 1$, $p < 0.02$). The statistical significant between prolong standing before and after pregnancy shows that they are keen over the disadvantages of it ($\chi^2 = 29.470$, $df = 1$, $p < 0.000$). Women who drive before pregnancy stopped it after becoming pregnant ($\chi^2 = 58.314$, $df = 1$, $p < 0.000$). 79 % who did heavy lifting before pregnancy stopped it after they became pregnant. $\chi^2 = 31.380$, $df = 1$, $p < 0.000$. This is statistically significant. Whereas cycling, running, & dancing don't show any significance before or after pregnancy period.

85% of pregnant mothers scored highly in their interview (Table 3). All of them continued practicing physical activities even after pregnancy ($\chi^2 = 7.599$, $df = 2$, $p < 0.022$). This indicates knowledge regarding physical activities motivates them to practice it even after becoming pregnant.

Table 2. Distribution of walking in the study sample after they became pregnant by before pregnancy. (n=210)

Characteristics	Before Pregnancy-		Total (N) (%)
	Walking		

		Yes (N) (%)	No (N) (%)	
After Pregnancy-Walking	Yes (N)	193	3	196
		95.1%	42.9%	93.3%
	No (N)	10	4	14
		4.9%	57.1%	6.7%
Total (N)		203	7	210
		100.0%	100.0%	100.0%

$\chi^2 = 29.652$, $df = 1$, $p < 0.000$

Table 3. Distribution of continuing physical activities in study group by knowledge. (n=210)

Characteristics	Total Marks Scored for the Questionnaire			
	Good Knowledge (N) (%)	Moderate Knowledge (N) (%)	Poor Knowledge (N) (%)	Total (N) (%)
Continue Physical activities				
Yes (N)	22	77	38	137
	84.6%	67.0%	55.1%	65.2%
No (N)	4	38	31	73
	15.4%	33.0%	44.9%	34.8%
Total (N)	26	115	69	210
	100.0%	100.0%	100.0%	100.0%

$\chi^2 = 7.599$, $df = 2$, $p < 0.022$

CONCLUSIONS AND RECOMMENDATIONS

Teenagers, married couples and pregnant women should be educated on advantages and disadvantages of doing physical activities throughout the pregnancy period. Education regarding physical activities should be given to the couple to get better results.

Both (husband & wife) should be motivated to have brisk walks together. Couples should be motivated to do their house hold activities together.

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