



## To Assess the Effectiveness of Structured Teaching Programme on Knowledge and Skill of Antenatal Mothers Regarding Daily Fetal Movement Count in Selected Hospitals Wardha

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### ABSTRACT

**Background of the study:** Maternal assessment of fetal activity is a simple yet valuable method for monitoring the fetal condition. Daily fetal movement count is simple to understand, is non invasive, can be done at home and does not interfere with most daily routines. In general the presence of fetal movement is a reassuring sign of fetal health.

The opportunity for the expectant mother and her partner to participate in the assessment of the fetus is one positive aspect of monitoring of fetal movements. They are also able to become more aware of the fetus, this may foster attachment behavior. **Objectives:** 1) To assess the Knowledge of Antenatal Mothers regarding Daily Fetal Movement Count. 2) To assess the skill of Antenatal Mothers Regarding Daily Fetal Movement Count. 3) To evaluate the effect of structured Teaching program regarding Daily Fetal Movement Count in Terms of gain in knowledge and gain in skill. 4) To find out relationship between knowledge and skill of Antenatal Mothers regarding Daily Fetal Count.

**Material and Methods:** Quasi experimental Approach was used were participated 60 samples and one group pretest, post-test research design used. A structured questionnaire was used to collect the data by the researcher. **Results:** Overall Skill score mean difference  $2.96 \pm 0.70$  The tabulated value for  $n=60-1$  i.e 59 degrees of freedom was 1.98. The calculated 't' value are much higher than the tabulated value at 5% level of significance for overall skill score of antenatal mothers which is statistically acceptable level of significance. Overall knowledge score mean difference  $7.85 \pm 2.28$  The tabulated value for  $n=60-1$  i.e 59 degrees of freedom was 1.98. The calculated 't' value are much higher than the tabulated value at 5% level of significance for overall knowledge score of antenatal mothers which is statistically acceptable level of significance. **Conclusions:** Minor fetal ill health conditions affecting day-to-day life have a major burden on pregnancy period. If the antenatal mothers having good knowledge she has to minimize the complications about daily fetal movement count and also help for to reduced the complications.

**KEYWORDS :** Daily fetal movement count, knowledge, antenatal Mothers

### INTRODUCTION

Many information about the health of the unborn child can be gathered through a variety of assessment techniques. Fetal movement that can be felt by the mother which is called "quickening" begins at approximately 18 to 20 weeks.

A healthy fetus moves with a degree of consistency but a fetus affected by placental insufficiency will greatly decrease movement. Asking the mother to observe and record the number of movements the fetus makes daily offers a gross assessment of fetal well being.

A healthy fetus moves at least 10 times daily (Scoggin and Morgan, 1997). Because of variations in movements among normal, healthy fetuses as well as variations in different health care providers level of confidence in the technique, a variety of protocols have been developed by different institutions. There also is great variety in what is accepted as normal in different areas of country.

Maternal assessment of fetal activity is a simple yet valuable method for monitoring the fetal condition. Daily fetal movement count is simple to understand, is non invasive, can be done at home and does not interfere with most daily routines. In general the presence of fetal movement is a reassuring sign of fetal health. 90% of gross fetal movements are associated with FHR, accelerations. Input from various areas of the brain decreased in the presence of cerebral asphyxia and thus the viability decreases after failure of the fetal haemodynamic compensatory mechanisms to maintain cerebral oxygenation (Parer, 1994).

### Materials and methods:

Quasi experimental approach and One group pretest, post-test design was used for this study were participated 60 samples, samples was antenatal mothers, setting of the study was the selected hospitals and sampling technique was non probability convenient sampling technique. Inclusion criteria was antenatal mothers who was willing to participate and those who was available at the time of data collection and exclusion criteria was all multigravida mother and Antenatal mothers who are less than 20 weeks of gestation and above 32 weeks of gestation and all the primimothers who are in the age group of 35.

**Table 1: Percentage wise distribution of antenatal mothers according to their demographic characteristics. n=60**

Demographic Variables	No. of antenatal mothers	Percentage(%)
Age in years		
20-23 yrs	23	38.3
24-27 yrs	29	48.3
28-31 yrs	6	10.0
32-35 yrs	2	3.3
Gestational Age(weeks)		
20-24 weeks	9	15.0
24-28 weeks	22	36.7
28-32 weeks	29	48.3
Educational Status		
Primary	12	20
Secondary	18	30
Higher Secondary	20	33.3
Graduation	7	11.7
Post Graduation	3	5.0
Occupational Status		
Housewife	26	43.3
Government Service	21	35.0
Private Service	8	13.3
Labourer	5	8.3
Type of family		
Nuclear	13	21.7
Joint	20	33.3
Extended	27	45.0

Distribution of antenatal mothers according to their age in years shows that 38.3% of them were belonging to the age of 20-23 years, 48.3% in the age of 24-28 years, 10% in the age of 28-31 years and 3.3% in the age group of 32-35 years respectively.

Distribution of antenatal mothers according to their gestational age in weeks reveals that 15% of them were having 20-24 weeks of gestation, 36.7% were having 24-28 and 48.3% were having 28-32 weeks of gestation.

Distribution of antenatal mothers according to their educational status reveals that 20% of them were educated upto primary, 30% upto secondary, 33.3% upto higher secondary, 11.7% upto graduation and only 5% of them were educated upto postgraduation.

Distribution of antenatal mothers according to their occupational status reveals that 43.3% were housewife, 35% were government servants, 13.3% were doing private service and 8.3% were labourer.

Distribution of antenatal mothers according to their type of the family shows that 21.7% were belonging to nuclear family, 33.3% in joint and 45% were belonging to extended families respectively.

**Table 2 : Distribution of antenatal mothers with regards knowledge regarding daily fetal movement count n=60**

Level of knowledge score	Score Range	Percentage score	Knowledge Score	
			Pre Test	Post Test
Poor	1-5	0-25%	2(3.33%)	0(0%)
Average	6-10	26-50%	58(96.67%)	2(3.33%)
Good	11-15	51-75%	0(0%)	20(33.33%)
Excellent	16-20	76-100%	0(0%)	38(63.33%)
Mean±SD			7.90±1.17	15.75±1.74
Mean %			39.50±5.87	78.75±8.71
Range			5 to 10	10 to 18

The above table shows the levels of knowledge were seen into 4 categories, poor, average, good and excellent. 96.67% of the antenatal mothers in pre test and 3.33% in post test had average, 33.33% in post test had good and 63.33% in post test had excellent level of knowledge score. Mean knowledge score of antenatal mothers in pre test was 7.90±1.17 and in post test it was 15.75±1.74

**Table 3: Distribution of antenatal mothers with regards to skill about fetal movement count n=60**

Level of skill score	Percentage score	Skill Score	
		Pre Test	Post Test
Poor	0-25%	0(0%)	0(0%)
Average	26-50%	1(1.67%)	0(0%)
Good	51-75%	57(95%)	0(0%)
Excellent	76-100%	2(3.33%)	60(100%)
Mean±SD		6.40±0.65	9.36±0.30
Range		5 to 9.29	8.43 to 10

The above table shows the levels of skill were seen into 4 categories, poor, average, good and excellent. 1.67% of the antenatal mothers in pre test had average, 95% had good and 3.33% had excellent level of skill and all(100%) in post test had excellent level of skill score. Mean skill score of antenatal mothers in pre test was 6.40±0.65 and in post test it was 9.36±0.30.

**Table 4: Significance of difference between skill score in pre and post test of antenatal mothers n=60**

Overall	Mean	SD	Mean Difference	t-value	p-value
Pre Test	6.40	0.65	2.96±0.70	32.53	0.0001 S, p<0.05
Post Test	9.36	0.30			

This table shows level of significance for overall skill score of antenatal mothers which is statistically acceptable level of significance.

Hence it is statistically interpreted that the structured teaching programme on overall skill regarding daily fetal count among antenatal mothers was effective. Thus the  $H_1$  is accepted.

**Table 5: Significance of difference between knowledge score in pre and post test of antenatal mothers n=60**

Overall	Mean	SD	Mean Difference	t-value	p-value
Pre Test	7.90	1.17	7.85±2.28	26.62	0.0001 S, p<0.05
Post Test	15.75	1.74			

This table shows level of significance for overall knowledge score of antenatal mothers which is statistically acceptable level of significance. Hence it is statistically interpreted that the structured teaching programme on overall knowledge regarding daily fetal count among antenatal mothers was effective. Thus the  $H_1$  is accepted.

**Table 6: Correlation(Relationship) between knowledge and skill of antenatal mothers regarding daily fetal count n=60**

Overall	Knowledge	Skill	Correlation 'r'	p-value
Pre Test	7.90±1.17	6.40±0.65	0.17	0.17, NS
Post Test	15.75±1.74	9.32±0.49	-0.09	0.45, NS

This table shows the correlation of pretest and post test knowledge scores and skill score of antenatal mothers regarding daily fetal movement count. Positive correlation was found between pre test knowledge and skill score ( $r=0.17, p=0.17$ ) and negative correlation was found between post test knowledge and skill score ( $r=-0.09, p=0.45$ )

## DISCUSSION:

One of the study conducted on antenatal mothers on fetal movement count. And it was found that maternal perception of decreased fetal movements affects 5-15% of pregnancies. Decreased Fetal Movement is associated with Intrauterine fetal death and intra uterine Growth Retardation. It has been proposed that maternal perception of Daily Fetal Movements may be used as a screening tool for IUFD and IUGR. This study supported to my present study result i.e. the knowledge and skill are significant difference score pre and post test is significant. So it has been prove that antenatal mother's knowledge and skill use for daily fetal movement count. And it may be used as a screening tool for IUFD and IUGR.

## IMPLICATION:

**Nursing practice:** Mothers have a major role in identifying and providing necessary supportive care before delivery. This study will provide more insight regarding daily fetal movement count. Through CNE the nurses have gain the knowledge and she will give the knowledge through health education to the pregnant mothers who are attended antenatal out patient door and in patient door.

**Nursing education:** The lesson on daily fetal movement count in pregnancy can be used for teaching the student nurses and the questionnaire prepared for this study can be used for testing its effectiveness among student nurses and patients. The tool for data collections prepared for this study can be used on a routine to test the knowledge of women regarding daily fetal movement count in pregnancy. In-service education regarding this topic should be conducted to improve the knowledge of staff nurses who are working in obstetrics and gynecology department.

**Nursing administration:** Findings of the study can be used by the Nursing Administrator in creating policies and plan for providing education of the staff nurses and care takers. It will help the nursing administrator to be planned and organized and in giving continuing education to nurses and to others for applying and updating the knowledge of daily fetal movement count.

**Nursing research:** The findings of the study have added to the knowledge of the nursing profession. Other researchers may utilize

the suggestions and recommendations for conducting further study. The tool and technique used has added to the body of knowledge and can be used for further references. They can conduct further study in practice area regarding daily movement count.

**RECOMMENDATION:**

A structured teaching programme may be used in the hospitals, so that the entire nurses can participate in improving the knowledge regarding daily fetal movement count.

A comparative study may be conducted to assess the knowledge of primigravida and multigravida mothers regarding daily fetal movement count.

**CONCLUSIONS:**

Minor fetal ill health conditions affecting day-to-day life have a major burden on pregnancy period. Evidence based management guidelines and health promotion strategies are needed to control and prevent these conditions, in order to provide comprehensive, good quality maternal and fetal health care. If the antenatal women having good knowledge she has to minimize the complications about daily fetal movement count and also help for to reduced the IUFD and IUGR.

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