

A Study to Evaluate the Effectiveness of Video Demonstration on Knowledge Regarding Antenatal Exercises among Antenatal Mothers at Selected Hospitals, Chitradurga

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Abstract: Background: Regular exercise plays an important role in the fight against stress. It provides recreation and mental reliability, besides keeping the body physically and mentally fit. It is nature's best tranquilizer. As the baby develops in the womb, the increasing load in the abdomen creates tension in the muscles of the back and waist. Physical exercises prevent the overstretching of muscles and strengthen them there by enabling her to carry the additional weight without strain. Walking is the best exercise for the expectant mother. Hence the focus of this study was to evaluate the effectiveness of Video demonstration on Antenatal Exercises among Antenatal Mothers at Government District Hospitals, Chitradurga, Karnataka. Objectives: 1. To assess the pre - test knowledge scores of Antenatal Mothers regarding Antenatal exercises. 2. To assess the effectiveness of video demonstration on knowledge regarding antenatal exercises by comparing pre test and post - test knowledge scores. 3. To determine the association between the pre test knowledge scores of Antenatal mothers with their selected demographic variable. Methods: A pre - experimental design and evaluative research was used in the study. The data was collected from 50 subjects in Government District Hospital, through convenient sampling technique. Data was collected using structured questionnaire. Results: Major findings of the study majority 56.7% of the Antenatal Mothers had inadequate knowledge and 42% had moderate knowledge in the pre test. After administration of Video xi demonstration 72% of the subjects had adequate knowledge, 22% had moderate knowledge and only 6% had inadequate knowledge regarding Antenatal Exercises in the post test. The overall analysis of level of knowledge of Antenatal Mothers regarding Antenatal Exercises showed that mean knowledge scores of the subjects at pre - test were 13.56 (45.2%) with standard deviation 4.953 found to be inadequate knowledge regarding Antenatal Exercises. After administration of Video demonstration mean knowledge scores of the subjects was 24.04 (80.13%) with standard deviation 5.631 found to be improvement in the level of knowledge among Antenatal mothers. Conclusion: Findings of the study show that there was a significant difference in pre test and post test level of knowledge of Antenatal mothers. From this it is concluded that the Video demonstration is effective in improving the level of knowledge of Antenatal mothers. And there was a significant association between level of knowledge of Antenatal mothers and selected demographic variables such as age, occupation and source of information.

Keywords: Knowledge; Antenatal mothers; Antenatal exercises; Knowledge; Video demonstration

1. Introduction

Pregnancy should be seen as an opportunity to embrace exercise routines and women should be encouraged to maintain those habits. Antenatal Exercises are tailored to promote health benefits to both pregnant women and fetuses¹.

Physical activity and exercise programs improve fitness and well - being across the lifespan of the general population and are an effective means to prevent and manage acute and chronic health conditions. The World Health Organization (WHO) recommends that "women who, before pregnancy, habitually engaged in vigorous intensity aerobic activity or who were physically active, can continue these activities during pregnancy and the postpartum period"²

Encouraging pregnant women to engage in exercise programs is crucial in managing their weight gain and maintaining a healthy lifestyle³.

Assumptions

This study assumes that

1) The Antenatal Mothers may not have adequate

knowledge about Antenatal Exercises.

2) Video demonstration may increase the knowledge of Antenatal Mothers regarding Antenatal Exercises.

2. Research Methodology

- **Research design:** A pre - experimental design and evaluative research was used in the study.
- **Sampling technique:** Convenient sampling technique
- **Sample size:** The data was collected from 50 subjects in Government District Hospital
- **Setting:** The present study was undertaken at Government District Hospital, Chitradurga

Variables

- **Independent variable:** Video demonstration regarding Antenatal Exercise
- **Dependent variables:** knowledge of Antenatal Mothers at Government District Hospital.
- **Demographic variables:** Age, education status, occupation, religion, type of family, family income and source of information.

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Criteria for selection of samples Inclusion Criteria

- Who are At Government District Hospitals
- Who are willing to participate
- Who are available at the time of data collection

Exclusion Criteria

- Who are sick or having critical illness.
- Who are not willing to participate in the study

Part - I: Demographic Data This section consisted of 7 items seeking personal information such as Age, education status, occupation, religion, type of family, family income and source of information.

Part - II: Knowledge questionnaires the knowledge questionnaires consisted of 30 items on four knowledge aspect such as Meaning and concept of antenatal exercises, Benefits of Antenatal Exercises, Method and Procedure of Antenatal Exercises.

3. Results

Section i: Demographic characteristics of Antenatal Mothers

Table 1: Frequency and percentage distribution of demographical N=50

Variables	Frequency	Percentage
1. Age		
a. Less than 25 years	8	16
b.26 - 30 years	16	32
c.31 - 35 years	22	44
d.36 years and above	4	8
2. Education		
a. Illiterate	1	2
b. Primary education	13	26
c. Secondary education	9	18

d. PUC	17	34
e. Degree and above	10	20
3. Occupation		
a. House wife	33	66
b. Coolie	5	10
c. Private employee	7	14
d. Government employee	5	10
4. Religion		
a. Hindu	41	82
b. Muslim	5	10
c. Christian	4	8
5. Type of family		
a. Nuclear family	45	90
b. Joint family	5	10
6. Family income		
a. Less than Rs.5000	4	8
b. Rs.5001 - 10000	15	30
c. Rs.10001 - 15000	25	50
d. More than Rs.15001	6	12
7. Source of information		
a. Mass media	3	6
b. Friends	15	30
c. Relatives	17	34
d. Health personnel	15	30

Section ii: knowledge level of Antenatal Mothers regarding the Antenatal Exercises Table 2: Overall pre test and post test knowledge scores of the mothers.

Knowledge level	Pre test		Post test	
	Frequency	%	Frequency	%
Inadequate knowledge	29	58.0	3	6.0
Moderate knowledge	21	42.0	11	22.0
Adequate knowledge	0	0	36	72.0
Total	50	100	50	100

Table 3: Area wise analysis of pre test knowledge scores of Antenatal Mother

Knowledge aspects	Number of items	Maximum score	Mean	Mean%	Median	SD
a. Meaning and concept of Antenatal exercises	5	5	1.8	36.6	1.5	1.088
b. Benefits of Antenatal Exercises	5	5	2.8	56.0	3	1.654
c. Method and Procedure of Antenatal exercises	20	20	8.96	44.8	10	3.505
Overall	30	30	13.56	45.2	14.5	4.953

Table 4: Area wise Analysis of post test knowledge scores of Antenatal Mothers

Knowledge aspects	Number of items	Maximum score	Mean	Mean%	Median	SD
a. Meaning and concept of antenatal exercises	5	5	3.98	76.6	4	0.892
b. Benefits of Antenatal Exercises	5	5	4.14	82.8	5	1.069
c. Method and Procedure of antenatal exercises	20	20	15.92	79.6	17	4.416
Overall	30	30	24.04	80.13	25	5.631

Section iii: Comparison of the knowledge level of Antenatal Mothers Table 4: Area - wise comparison of knowledge scores of Antenatal Mother

S. No.	Knowledge aspects	Pre test		Post test		Mean Difference	T value	Inference
		Mean	SD	Mean	SD			
1	Meaning and concept of Antenatal Exercises	1.8	1.088	3.98	0.892	2.18	13.773	S
2	Benefits of Antenatal Exercises	2.8	1.654	4.14	1.069	1.34	6.233	S
3	Method and Procedure of Antenatal Exercises	8.96	3.505	15.92	4.416	6.96	11.817	S
	Overall knowledge	13.56	4.953	24.04	5.631	10.48	14.693	S

Table 5: Association of pre test knowledge score of Antenatal Mothers with the demographic variables

Variable	Below median	Median and above	Chi square	Df	P value (0.05)	Inference
1. Age						
a. Less than 25 years	4	4	7.992	3	0.048	S
b.26 - 30 years	11	5				
c.31 - 35 years	5	16				
d.36 years and above	0	4				
2. Education						
a. Illiterate	0	1	2.805	4	0.591	NS
b. Primary education	4	9				
c. Secondary education	5	4				
d. PUC	8	9				
e. Degree and above	3	7				
3. Occupation						
a. House wife	10	23	8.206	3	0.044	S
b. Coolie	5	0				
c. Private employee	4	3				
d. Government employee	1	4				
4. Religion						
a. Hindu	16	25	0.183	2	0.913	NS
b. Muslim	2	3				
c. Christian	2	2				
5. Type of family						
a. Nuclear family	18	27	0.000	1	1.000	NS
b. Joint family	2	3				
6. Family income						
a. Less than Rs.5000	3	1	3.847	3	0.278	NS
b. Rs.5001 - 10000	5	10				
c. Rs.10001 - 15000	11	14				
d. More than Rs.15001	1	5				
7. Source of information						
a. Mass media	1	2	8.490	3	0.042	S
b. Friends	7	8				
c. Relatives	10	7				
d. Health personnel	2	13				

The finding of the study revealed that the Antenatal mother had moderate knowledge regarding the importance of Antenatal exercises. In the study majority 44% of subjects in belong to the age group of 31 - 35 years and 16% were aged Less than 25 years. Regarding the education 34% mothers had pre - university education and 20% completed graduation. Majority 66% mothers were house wives and 10% were government employees. Majority 82% of subjects belongs to Hindu religion and 10% were Muslims.90% of subjects lives in nuclear family and only 10% of them lives in joint family.60 Regarding family income majority of the mothers (50%) reported family income between Rs.10001 - 15000 per month and 8% mother’s family income was less than Rs.5000. Among the participants 30% of Antenatal Mothers had information from friends, and 30% mothers had information from Health personnel. Over all mean knowledge score of the subjects in pre test were 13.56, found to be Inadequate. Over all mean knowledge score of the subjects in post test was 24.04 (80.13%) with standard deviation 5.631, found to be improvement in the knowledge. The total difference in the mean of overall knowledge score was 10.48 with the ‘t’ value of 14.693 and found to be significant at the level of $p < 0.05$.

4. Implications of the study

1) Nursing Practice: Nurses are the key persons of the health team, who play a major role in health promotion and maintenance. The nursing personnel need to prepare

the instructional materials and provide teaching program which should be understandable to the pregnant mothers. Health teaching is an integral part of child and family welfare services.

- 2) Nursing Education: As a nurse educator, there are abundant opportunities for nursing professionals to educate the mothers as well as their family members regarding Antenatal exercises. The study emphasizes significance of short term in - service education programmes for nurses related to health education regarding Antenatal exercises. Nursing personnel working in maternity hospital should be given in - service education.
- 3) Nursing Administration: Nursing administrators should take interest in motivating the nursing personnel’s especially nurses in maternity hospital to improve their professional knowledge and skill by attending the health conferences, workshops, seminars and training program on Antenatal exercises. The nursing administrator should arrange regular in - service education program on Antenatal Exercises.
- 4) Nursing Research: Research provides nurses credibility to influence decision making, policy and protocol formulation regarding Antenatal Exercises. Findings of the present study suggest that educators and administrator should encourage nurses to read, discuss and conduct research studies so as to enable the nurse to make data based decision rather than intuitive decisions.

5. Conclusion

This chapter presents the conclusions drawn, implications, limitations, suggestions and recommendations. The focus of this study was to assess the effectiveness of video demonstration on knowledge regarding Antenatal exercises by comparing pre test and post - test knowledge scores at the in Government District Hospital, Chitradurga, Karnataka. A pre - experimental design and evaluative research was used in the study. The data was collected from 50 samples through Convenient sampling technique. The data collected was subjected to analysis using descriptive statistics in terms of frequencies, percentage and inferential statistics like 't' test and chi square test to find the association.

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