

Effectiveness of Video Assisted Structured Teaching Programme on Postnatal Exercises in Terms of Knowledge Attitude and Practices among Postnatal Mothers at KIMS Hospital, Amalapuram

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Abstract: The present study conducted by the investigator on “Effectiveness of Video Assisted Structured Teaching Programme on Postnatal exercises in terms of Knowledge Attitude and Practices among postnatal mothers at KIMS Hospital, Amalapuram. **Objectives:** 1) To assess the knowledge, attitude and practices on postnatal exercises among postnatal mothers before and after video assisted structured teaching program. 2) To evaluate the effectiveness of video assisted structured teaching programme regarding postnatal exercises in terms of increase in knowledge, attitude and practice scores in pre test & post test among postnatal mothers. 3) To find out the association between the post test knowledge, attitude and practice scores with demographic variables of postnatal mothers. **Methods:** The research approach selected for the study was quasi - experimental approach and one group pre test and post test only design. 60 postnatal mothers were selected by using purposive sampling technique. **Results:** Among 60 post natal mothers, 61.7% had inadequate knowledge, 26.7% had moderately adequate knowledge and 11.6% had adequate knowledge on postnatal exercises in pre test, 63.3% had low attitude, 30% had moderate attitude and 16.7% had high attitude on postnatal exercises, 86.7% had inadequate practices, 13.3% had moderately adequate on postnatal exercises in pre test. In post test after video assisted structured teaching programme the knowledge, attitude and practices levels of mothers were improved, 81.7% had adequate knowledge and 18.3% had moderate knowledge, 66.7% had high attitude and 23.3% had moderate attitude, 50% had adequate practices and 30% had moderately adequate practices on postnatal exercises. The calculated t values were significant for knowledge (14.23), attitude (28.03) and practices (4.43) at $p < 0.001$ level. This clearly states that there is significant difference between pre test mean knowledge, attitude and practices with their post test means. Hence the video structured teaching programme was effective. There is significant association between level of knowledge of postnatal mothers on postnatal exercises with education and family income of postnatal mothers, there is significant association between level of attitude of postnatal mothers on postnatal exercises with type of family and there is significant association between level of practices of postnatal mothers with education and family income of the postnatal mothers where the chi square values were significant at $p < 0.05$ level. **Conclusion:** The results of the study revealed that the video assisted teaching programme on postnatal exercises was effective in order to improve the knowledge, attitude of postnatal mothers on postnatal exercises.

Keywords: < - Less than, > - Greater than, SD - Standard deviation, X² - chi square, WHO - World Health Organization, % - Percentage, DF- Degree of Freedom

1. Introduction

“Women’s health is universal health”

Regular physical activity and more specifically regular exercise plays an important role to fight against stress. It provide recreation and mental ability, beside keeping the body physically and mentally fit.

During pregnancy, there is progressive anatomical and physiological changes not only confined to the genital organs but also to all systems of the body. Postnatal period is a time of maternal changes that are retrogressive and progressive. Protecting a woman’s health as time changes occur is important for preserving her future childbearing function and for ensuring that she is physically well enough to incorporate her new child into the family.

Regaining physical strength is key concern of mothers and an important goal of nursing care. All healthy post partum women need to learn exercise that promote the resumption of resumption of muscle tone and physical strength, contribute to weight loss and aid in prevention of

constipation. Although vigorous exercises should be delayed until the client feel well recovered. A woman who has had an uncomplicated vaginal delivery can begin moderate exercises soon after the child birth. The physical care, a woman receives during the postpartum period can influence the health for the rest of her life.

Postnatal exercises should be started after birth as soon as possible in order to improve the circulation, strengthen the pelvic floor, abdominal muscles and prevent the transient and long term problems. The mechanisms behind the exercise includes stimulating the blood circulation; strengthen the slow twitch muscle fibers, similarly the deep muscles need to regain as soon as possible to protect the spine and to prevent spinal problems. The abdominal exercises help to improve tone of deep muscles and strengthen the transverse and oblique muscle.

2. Methodology

This chapter dealt with methodology adopted for present study. It includes research approach, research design, variables, setting, population, sample, sampling technique

Volume 12 Issue 11, November 2023

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development and description of tool, pilot study, procedure for data collection and plan for data analysis.

In present study the investigator aims “Effectiveness of Video Assisted Structure Teaching Programme on Postnatal exercises in terms of Knowledge, Attitude and Practices among postnatal mothers at KIMS Hospital, Amalapuram.

Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically e exercises are designed for postpartum women

2.1 Research Approach

The research approach selected for the study was quasi - experimental approach.

2.2 Research Design

The research design selected for the study was one group pre test and post test design.

2.3 Description of Variables

- 1) **Independent variables:** The independent variable in the study was video - assisted teaching programme on postnatal exercises among postnatal mothers.
- 2) **Dependent variables:** The dependent variables was the video - assisted teaching programme on knowledge, attitude and practices on postnatal exercises among postnatal mothers.
- 3) **Demographic variables:** The demographic variables which were influence the knowledge scores of postnatal mothers were age, religion, education, occupation, income of the family, type of family, obstetrical score, dietary pattern, number of postnatal day and source of information on postnatal exercises.

2.4 Setting of Study: For the present study the setting was KIMS Hospital, Amalapuram.

2.5 Population: Population for the present study was postnatal mothers in KIMS Hospital Amalapuram.

2.6 Sample: Sample for the present study were postnatal mothers who were present in KIMS Hospital

2.7 Sample Size Sample size was 60 postnatal mothers in selected Hospital, Guntur.

2.8 Sampling Technique

Simple purposive sampling technique was used for selecting the sample. Simple purposive sampling technique is one of the method of non probability sampling.

2.9 Criteria for sample section

1) Inclusive criteria:

The study will include postnatal mothers, who are admitted in kims hospitals at amalapuram.

- Had normal vaginal delivery within the last one week.
- Are willing to participate in the study.

- Can understand the language in Telugu.
- Are available at the time of data collection.

2) Exclusion criteria:

The study will not include those who

- Are not available during study period.
- Are having perinatal and postnatal complications.

2.10 Sample Characteristics

The sample was described in terms of demographic data, which includes age, religion, education, occupation, income per month, type of family, dietary pattern, obstetrical score, number of postnatal day and source of information.

2.11 Development and Description of tool

A Hospital research of literature was made for the purpose of developing appropriate tools for assessing knowledge, attitude and knowledge on practices on postnatal exercises. An instrument in the form of structured interview schedule was developed with the help of selected literature from various textbooks and journals and internet and discussions with experts in the field of Maternal and Child health Nursing, Psychology, Obstetrics and Gynecology and Community Medicine.

The Hospital, Amalapuram at the time of data collection.

The video - assisted teaching programme was administered for 30 minutes on postnatal exercise in the form of power point presentation by using LCD projector.

- General information on postnatal exercises.
- Indications of postnatal exercises.
- Precautions before stating postnatal exercises.
- Type of postnatal exercises.
- Warning signs of postnatal exercises.

The questionnaire consists of 4 parts

Part A: it was dealt with demographic data of post natal mothers which includes age, religion, education, occupation, income per month, type of family, dietary pattern, obstetrical score, number of post natal day and source of information.

Part B: it was dealt with assessment of knowledge on postnatal exercises. The questionnaire consists of 25 questions. Maximum score was 25. Each question was given with 4 options and participants were asked to select appropriate answers and marked in the bracket given against each answer by the investigator.

Interpretation of scores: each correct answer will be given as 1 and wrong answer will be given as 0. The total score was 25 for 25 questions.

- Between 0 - 12 marks [0 - 49%] – inadequate knowledge.
- Between 13 - 18 marks [50 - 74%] – moderate knowledge
- More than 19 marks [$\geq 75\%$] – adequate knowledge.

Part C: It was dealt with assessment of attitude on postnatal exercises by using Liker scale. It consists of 20 statements.

Maximum score was 100. Each statement was given with 5 options such as strongly agree, agree, undecided, disagree, strongly disagree.

Scoring for attitude:

- Strongly agree - 5
- Agree - 4
- Undecided - 3
- Disagree - 3
- Strongly agree_1

Interpretation of attitude scores:

- High attitude – 61 - 100 score.
- Moderate attitude – 41 - 60 score.
- Low attitude – 1 - 40 score.

Part D: it was dealt with assessment of practices on postnatal exercises by using checklist.

It consists of 10 statements. Maximum score was 10. Each statement was given with 2 options such Yes and No.

Scoring for practices on post natal exercises: out of 10 statements the total score was 10.

Yes=1

No=0

2.12 Reliability of the tool:

The reliability of the measuring instrument is a major criteria for assessing its quality and adquasy. Split - half method was done in order to assess the reliability by dividing the tool into two half to the same sample of 10 subjects in the pilot study. Each subjects first half score was compared with the same subjects second half score with the help of pearsons product movement co - efficient correlation. Obtained r value is 0.91. hence it was statistically determined to be reliable.

2.13 Method of data collection:

In the present study the data has been collected with the help of structured interview schedule.

Techniques for data collection:

The subjects of the study were selected according to the criteria by purposive sampling method. The purpose of the study was explained to the subjects and the pre test was given with the help of interview schedule. The investigator administered video assisted teaching program on postnatal exercise for 30 minutes. Post test was conducted three days after the teaching program to the same sample by interview schedule which was used for the pre test

Plan for data analysis: after collecting data it was analyzed the same by using mean, standard deviation and t - test and chi square for obtained knowledge scores in pre and posttest. The analysis and interpretation of the data presented in 3 parts.

Part - I: frequency and percentage distribution of demographic data of post natal mothers.

Part - II: comparing pretest and posttest knowledge, attitude and knowledge on practices scores on post natal exercises.

Part - III: identify the association between knowledge, attitude and knowledge on practices of postnatal mothers with demographic variables. regain as soon as possible to

protect the spine and to prevent spinal problems. The abdominal exercises help to improve tone of deep muscles and strengthen the transverse and oblique muscles

Epilogue: this chapter dealt with research approach, research design, variables, setting, population, sample, sampling technique, criteria for sample selection, and method of data collection, development and description of tool, validity and reliability, pilot study, technique of data collection & plan of data analysis.

3. Analysis

This deals with analysis interpretation of the data collected for the main study. Data was collected from 60 postnatal mothers. analysis and interpretation was done with the help of descriptive an inferential statistics to meet the objectives of the study. The data was entered in the master sheet for analysis and interpretation. Descriptive and inferential statistics procedures such as frequencies, percentages, mean, standard deviation, paired t - test and chi square tests were used.

Data was presented in following headings.

Part - I: frequency and percentage distribution of postnatal mothers according to demographic variables.

Part - II: frequency and percentage distribution of postnatal mothers according to level of knowledge, attitude and practices on post natal exercises.

Part - III: comparison of pretest and posttest knowledge, attitude and practices on postnatal exercises among postnatal mothers by using paired t test.

Part - IV: association between posttest level of knowledge, attitude and practices of postnatal mothers with selected demographic variables.

Table 1: Frequency and percentage distribution of postnatal mothers according to demographic variables

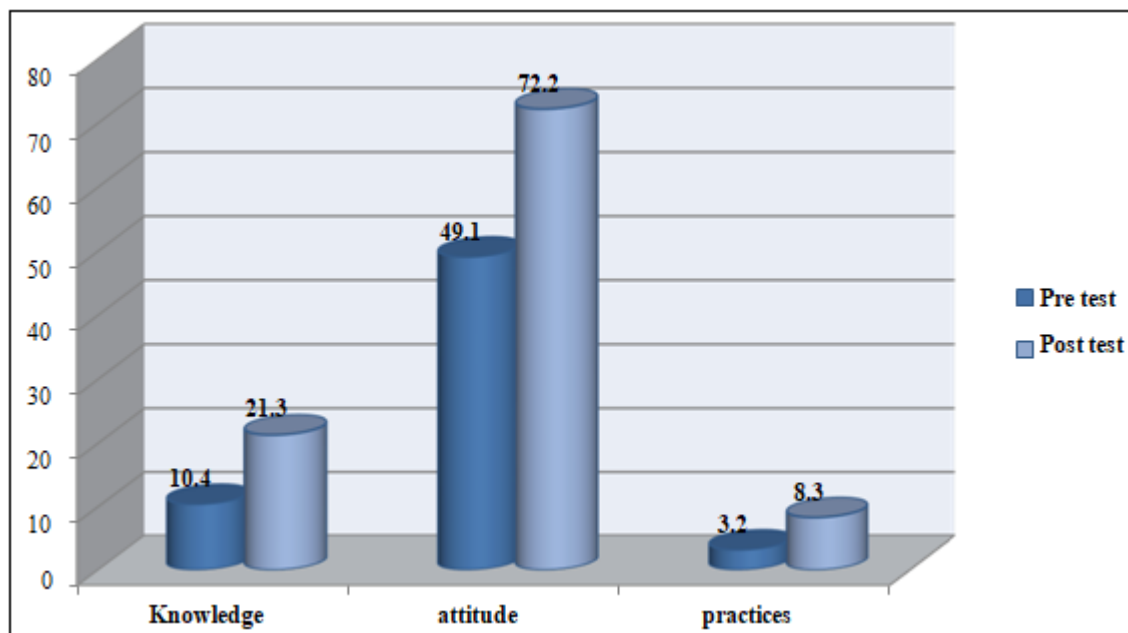
S. no	Variable	Frequency	Percentage
1.	Age in years		
	Below 20	36	60
	21 - 25	16	26.7
	26 - 30	4	6.7
	Above 30	4	6.6
	Total	60	100
2.	Religion of women		
	Hindu	42	70
	Muslim	12	20
	Christian	6	10
	Total	60	100
3.	Education		
	Primary	14	23.3
	Secondary	24	40
	Collegiate	10	16.7
	Illiterate	12	20
	Total	60	100
4.	Occupation		
	House wife	28	46.6
	Employee	6	10
	Business	16	26.7
	Laborer	10	13.7
	Total	60	100
5.	Family income per month		
	≤Rs.3000/-	16	26.7

	Rs.30001 - 6000/-	42	70
	≥Rs.6000/-	2	3.3
	Total	60	100
6.	Type of family		
	Nuclear family	45	75
	Joint family	15	25
	Total	60	100
7.	Dietary pattern		
	Vegetarian	18	30
	Non vegetarian	42	70
	Total	60	100
8.	Obstetrical score		
	Primi para	24	40
	Multi para	36	60
	Total	30	100
9.	Number of postnatal day		
	Less than 1 week	30	50
	2 - 3 weeks	12	20

	4 - 5 weeks	10	16.7
	6 weeks	8	13.3
	Total	60	100
10.	Source of information		
	None	48	80
	Health personnel	12	20
	Famiy	12	20

Table 2: Comparison of pretest and posttest mean knowledge, attitude and practices of postnatal mothers on postnatal exercises

S. No	Variable	Pretest		Posttest		t Value	Sig.
		Mean	SD	Mean	SD		
1.	Knowledge	10.4	3.1	21.3	2.1	14.23	**
2.	Attitude	49.1	2.6	72.2	1.2	28.09	**
3.	Practices	3.2	1.2	8.3	0.9	4.43	**



Graph 1

Above graph shows that Among 60 post natal mothers, 61.7% had inadequate knowledge, 26.7% had moderately adequate knowledge and 11.6% had adequate knowledge on postnatal exercises, 63.3% had low attitude, 30% had moderate attitude and 16.7% had high attitude on postnatal exercises, 86.7% had inadequate practices, 13.3% had moderately adequate on postnatal exercises in pretest.

In post test after video assisted structured teaching programme the knowledge, attitude and practices levels of mothers were improved, 81.7% had adequate knowledge and 18.3% had moderate knowledge, 66.7% had high attitude and 23.3% had moderate attitude, 50% had adequate practices and 30% had moderately adequate practices on postnatal exercises.

4. Results and Discussion

The discussion of the present study is based on findings obtained from descriptive and inferential statistical analysis of collected data. It is presented in view of the objectives of the study. The demographic profile of the postnatal mothers

was, out of 60 subjects, majority were between the age group of below 20 years 60% followed by 21 - 25 years 26.7%, belongs to Hindu 70%, with secondary education 40%, followed by primary education 23.3%, house wives 46.6%, getting Rs.3000 - 6000/- income per month 70%, from nuclear family 75%, non vegetarians 70%, multi para mothers 60% No. of postnatal days, with less than one day 50% and not have information about postnatal exercises 80%.

To evaluate the effectiveness of video assisted structured teaching programme regarding postnatal exercises in terms of increase in knowledge, attitude and practice scores in post test among postnatal mothers.

From table 2 it was observed that the pretest mean knowledge was 10.4 and that of standard deviation was 3.1, pretest mean attitude was 49.1 and that of standard deviation was 2.6, pretest mean practices was 3.2 and that of standard deviation was 1.2. In post test after video assisted structured teaching programme the mean knowledge was improved to 21.3 and that of standard deviation was 2.1, mean attitude was improved to 72.2 and that of standard deviation was 1.2,

mean practices improved to 8.3 and that of standard deviation as 0.9. It also reveals that the calculated t values were significant for knowledge 14.23, attitude 28.03 and practices 4.43 at $p < 0.001$ level. This clearly states that there is significant difference. To find out the association between the post test knowledge, attitude and practice scores with demographic variable of postnatal mothers. The study revealed that there is significant association between level of knowledge of postnatal mothers on postnatal exercises with education and family income of postnatal mothers. From table 7 it was observed that there is significant association between level of attitude of postnatal mothers on postnatal exercises with type of family. From table 8 it was observed that there is significant association between with education and family income of the postnatal mothers where the chi square values were significant at $p < 0.05$ level.

The formulated second hypothesis. "There is a significant association between post test knowledge, attitude and practice related to post natal exercise and selected demographic variables" level of practices of postnatal mothers

5. Conclusions

The present study was undertaken to assess the effectiveness of video structured teaching programme on postnatal exercises in terms of knowledge, attitude and practices among postnatal mothers.

The objectives of the study were:

- To assess the knowledge, attitude and practices on postnatal exercises among postnatal mothers before and after video assisted structured teaching program.
- To evaluate the effectiveness of video assisted structured teaching programme regarding postnatal exercises in terms of increase in knowledge, attitude and practice scores in post test among postnatal mothers.
- To find out the association between the post test knowledge, attitude and practice scores with demographic variables of postnatal mothers.

The investigator felt that the study would help the postnatal mothers to improve their knowledge, attitude and practices on postnatal exercises so that they will be prevented to get the early and late complication of childbirth and they also promote healthy lifestyles and it will the postnatal mothers early regain of pre pregnancy state.

The research approach adopted was quasi experimental approach with one group pre test post test design. The sample consists of 60 postnatal mothers selected by the purposive sampling technique which is non probability sampling technique. The data collection was done with the help of a structured questionnaire for assessing the knowledge, 5 point Likert scale for assessing attitude, check list for assessing practices of postnatal mothers on postnatal exercises prepared by the investigator. The structured questionnaire has two parts. Part - A dealt with the demographic data and Part - B dealt with the assessment of knowledge, attitude, practices regarding postnatal exercises. A questionnaire was given for the content validity to experts in the field of nursing, Obstetrics and Gynecology and

Community Medicine. The questionnaire was tested for reliability by using Carl Pearson's Correlation coefficient formula and was found highly reliable.

The following conclusions were drawn on the basis of the findings of the study:

- 1) Among 60 post natal mothers, 61.7% had inadequate knowledge, 26.7% had moderately adequate knowledge and 11.6% had adequate knowledge on postnatal exercises, 63.3% had low attitude, 30% had moderate attitude and 16.7% had high attitude on postnatal exercises, 86.7% had inadequate practices, 13.3% had moderately adequate on postnatal exercises in pretest.
- 2) In post test after video assisted structured teaching programme the knowledge, attitude and practices levels of mothers were improved, 81.7% had adequate knowledge and 18.3% had moderate knowledge, 66.7% had high attitude and 23.3% had moderate attitude, 50% had adequate practices and 30% had moderately adequate practices on postnatal exercises.
- 3) The calculated t values were significant for knowledge 14.23, attitude 28.03 and practices 4.43 at $p < 0.001$ level. This clearly states that there is significant difference between pre test mean knowledge, attitude and practices with their post test means. Hence the video structured teaching programme was effective.
- 4) There is significant association between level of knowledge of postnatal mothers on postnatal exercises with education and family income of postnatal mothers, there is significant association between level of attitude of postnatal mothers on postnatal exercises with type of family and there is significant association between practices of postnatal mothers with education and family income of postnatal mothers is chi - square were significant at $p < 0.05$.

Acknowledgement

"It is good to give thanks to the lord, and to sing praises to your name, O Most High". Psalms 92/1

The voyage from the ground level, for the search of this dissertation, up to its fulfillment is never solitary. I am so fortunate and thankful for abundant guidance, encouragement and support from many under the wings of the **Lord Almighty**.

Successfully completion of any type of project requires help from a number of persons. I have also taken help from different people for the preparation of this dissertation. Now there is a little effort to show my deep gratitude to those helpful persons.

I express my glorious towards **Lord Almighty** for the blessing wisdom and production which enabled me to complete the project successfully.

I express my heart full gratitude to **Dr. K. V. V. Satyannarayana Raju**, Chairman, **Shri. K. Ravi Varma**, Managing Director, and Chief Administrative Officer of KIMS College of Nursing for providing opportunity to study in this college.

I express my grateful thanks to **Mrs. A. Swapna Kumari**, Principal cum HOD of Obstetrics and Gynaecological Nursing, KIMS College of Nursing, for giving good opportunity and valuable suggestions to complete my education.

I always remain thankful to the post natal mothers those who are cooperated and spending their valuable time for conducting study successfully.

Above all, I am thank full to **ALMIGHTY GOD** for bestowing his bountiful grace for the successful completion of the study.

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