



“Effectiveness Of Postnatal Exercises Programme on Knowledge And Practices Among Postnatal Mothers Admitted In Dr. Vitthalrao Vikhe Patil, Pravara Rural Hospital, Loni (Bk).”

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ABSTRACT:

Background: Motherhood is the most blessed and extreme bonus that god has given to a woman. During this time, mothers experience several physiological and psychological changes. Main changes that occur during postnatal period is involution of the uterus and origin of the fundus. Early exercises in postpartum period are the key to get quick and maximum muscle function and reconstruction of mother's health.

Objectives: 1. To assess the knowledge & practice of postnatal exercises among postnatal mothers in control group. 2. To evaluate the effectiveness of postnatal exercises programme among postnatal mother in experimental group in comparison to control group. 3. To find out association of a knowledge & practices of postnatal exercises with selected demographic & obstetrics variables of postnatal mothers admitted in Dr. Vitthalrao Vikhe Patil, Pravara Rural Hospital, Loni (BK).

Material and Method: Quasi experimental post test research design with experimental group was used and the formal consent was obtained from Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital, Loni Bk and the investigator selected 60 samples using convenience sampling technique and who are fulfilling the inclusive criteria were selected as a samples both in experimental and control group. Knowledge and practice of postnatal exercise was assessed with the help of structured knowledge questionnaire and practice scale.

Results: Descriptive and inferential statistics were used to analyze the data. Analysis of demographic variables was done in terms of frequency and percentage distribution. Comparison of post test level of pain between the experimental and the control group was analysed by 't' test. that mean knowledge score of experimental group was 13.93 with SD

±1.23 and control group was 9.2 with SD ±0.47 respectively. The mean difference score 4.73. The mean practice

score of experimental group was 72.2 with SD ± 6.87 and control group was 53.36 with SD ± 9.93 respectively. The mean difference score 18.84. There was significant in knowledge and practice score in experimental group as compare to control group.

In knowledge score 't' test calculated value was 6.83 which statistically significant at $p > 0.05$ and In practice score 't' test calculated value was 6.62 which statistically significant at $p > 0.05$. It shows that post-natal exercise programme was effective, so accept research hypothesis and reject null hypothesis.

Conclusion: Experimental group have good knowledge and practice than control group. It was also found that there is positive co-relation between the knowledge and practice with demographic and obstetrical variables. The finding revealed that there is no significant association between knowledge and practice score and selected demographic and obstetrical variables like age, education, occupation, type of family, religion, gravida, type of delivery and daily exercises performed by postnatal mothers.

Key word: Postnatal Exercises, Postnatal Mother.

1. Introduction :

Motherhood is the most blessed and extreme bonus that God has given to a woman. During this time, mothers experience several physiological and psychological changes. Main changes that occur during postnatal period is involution of the uterus and origin of the fundus. Early exercises in postpartum period are the key to get quick and maximum muscle function and reconstruction of mother's health.¹ Researchers have evidenced that postnatal exercises can challenge many postnatal problems like urinary and fecal incontinence, postpartum depression, diastases recti, and postpartum backache.²

The postnatal time is a hard period for women to start again or preserve Physical activity. Tiredness from poor sleep and the demands of infant feeding can also participate in lower Physical activity levels.³

Healthcare experts need to know which interferences they can best commended to postpartum women, permitting them to meet suggested levels of Physical activity and improve their health.⁴

1.1 statement of the problem

Effectiveness of postnatal exercises programme on knowledge and practices among postnatal mothers admitted in dr. Vitthalrao Vikhe Patil, Pravara Rural Hospital, Loni (Bk)

1.2 Objectives

- To assess the knowledge & practice of postnatal exercises among postnatal mothers in control group.
- To evaluate the effectiveness of postnatal exercises programme among postnatal mother in experimental group in comparison to control group.
- To find out association of a knowledge & practices of postnatal exercises with selected demographic & obstetrics variables of postnatal mothers admitted in Dr. Vitthalrao Vikhe Patil, Pravara Rural Hospital, Loni (BK).

1.3 Hypothesis

2. Material and Method

II.1- research design and approach

Research design involves the description of the plan to investigate the phenomenon under study in a structured, unstructured or a combination of two methods. The present study used to determine the effect of postnatal exercises programme on knowledge and practices among postnatal mothers. Hence a quantitative approach is used in this study. The research design adopted for this study is quasi-experimental, post-test research design.

II.2- Setting of the study

The setting of the present study was Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital Loni, (Bk).

II.3- Population

The target population was comprised of whole postnatal mothers admitted in the in Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital Loni, (Bk).

II.4- Sample size:

The sample for the study was 60 postnatal mothers admitted in Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital Loni, (Bk).

II.5- Sample techniques:

The investigator has selected the Non probability convenience sampling technique for this study.

II.6- Criteria for selection of sampling: Inclusion criteria:

The postnatal mothers who are-

- Undergone normal delivery.
- Admitted with neonatal health problem
- Can read and write Marathi or English.
- Willing to participate.

Exclusion criteria:

The postnatal mothers who are-

- Not willing to participate.
- Multigravida postnatal mothers.
- Undergone L.S.C.S., delivery mother.
- Critically ill.

II.7- Description of the tool:

Section: A: Demographic Profile

This deals with demographic data of the postnatal mothers. The included items such as age, education, occupation, type of family, religion, gravida and previous performance of daily exercises.

Section: B Structured Knowledge Questionnaire

This deals with knowledge questionnaire on postnatal exercises. In that, above questions were asked. When to start postnatal exercises? How frequently postnatal exercise is needed? What are the types of postnatal exercises do you know? How much time need for postnatal exercise daily? Have you experienced benefits of postnatal exercise? (if perform) Postnatal visits having positive influence on postnatal exercises. I will emphasize postnatal exercises to others. What prevents you to do PNE? How adherence to PNE can be improved? Postnatal exercise affects your physical & mental status.

Section: C Practice Scale

This deals with practice scale of postnatal exercises standard goals. In that, walking exercises, post-partum plank exercises, kegel exercises and diaphragmatic breathing exercises scale is prepare and scoring is given i.e, unable to perform activity is 0, extreme difficulty is 1, quite difficulty is 2, moderate difficulty is 3, a little but difficulty is 4 and no difficulty is 5.

II.8- Method of data collection:

Ethical consideration:

- The study was conducted after the approval of college ethical committee at Smt.S.E.Vithe Patil College of Nursing.
- Formal written permission was obtained from the Medical Superintendent of in Dr.Vitthalrao Vikhe Patil Pravara Rural Hospital Loni, (Bk).
- An informed written consent was obtained individually from postnatal mothers who participate in the study.
- Confidentiality was assured to mothers throughout the study.
- Postnatal mothers were informed that their participation was voluntary.

Procedure for data collection:

The researcher got permission from principal, and research ethical committee of Smt.Sindhutai Eknathrao Vikhe Patil college of nursing. A formal permission was obtain from the administrative officer of in Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital Loni, Bk. The institutional ethics review board approved the protocol.

Data collection period was between 02/01/2023 to 31/01/2023 morning and evening.

60 postnatal mothers who were selected by convenience sampling techniques.

Rapport was established with the postnatal mothers and brief introduction about the study was given consent was obtained from each postnatal mother. Knowledge and practice score was assessed for the both control and experimental group. the knowledge and practice score assessment was done by knowledge questionnaire and practice scale. The data were collected approximately 4-5 study subjects per day

Plan for data analysis

The data were analysed by descriptive and inferential statistics.

➤ Descriptive statistics

Frequency and percentage distribution were used to analyse the demographic data.

➤ Inferential statistics

Unpaired 't' test was used to assessed the effectiveness of postnatal exercises in experimental and control group. Chi-square test was used to find out the association of the demographic and obstetrical variables and knowledge and practice among toddlers.

III. Results**III.1. Frequency percentage distribution according to demographic variables.****Table No.1**

Sr. No.	ITEMS	EXPERIMENTAL GROUP		CONTROL GROUP	
		F	%	F	%
1	Age				
	I. 18 to 22 years	7	23.33	8	26.66
	II. 23 to 27 years	17	56.66	18	60
	III. 28 to 32 years	5	16.66	3	10
	IV. 33 to 37 years	1	3.33	1	3.33
2	Education				
	I. Illiterate	1	3.33	1	3.33
	II. Primary education	6	20	4	13.33
	III. Secondary or higher	14	46.66	16	53.33
	secondary education				
	IV. Graduate or post graduate	9	30	9	30
3	Occupation	13	43.33	14	46.66
	I. House wife	5	16.66	5	16.66
	II. Daily wages work	4	13.33	2	6.66
	III. Government sector	8	26.66	9	30
	IV. Private sector				
4	Type of family	16	53.33	17	56.66
	I. Nuclear family	11	36.66	11	36.66
	II. Joint family	6	20	2	6.66
	III. Extended family				
5	Religion	18	60	16	53.33
	I. Hindu	7	23.33	7	23.33
	II. Muslim	5	16.66	7	23.33
	III. Christian	0	0	0	0
	IV. Other				
6	Gravida	19	63.33	17	56.66
	I. Primi gravida	11	36.66	13	43.33
	II. Multigravida				

7	Type of delivery	15	50	12	40
	I. Normal vaginal delivery	15	50	18	60
	II. Normal vaginal delivery with episiotomy suturing	0	0	0	0
	III. Instrumental delivery				
8	Daily exercises perform	30	100%	4	13.33
	I. Yes	0	0%	26	86.66
	II. No				

The demographic variables distribution of control group postnatal mothers as shown in table no.1 reveal that the majority of postnatal mothers 56.66% vs 60% in the age group of 23-27 years in experimental and control group respectively, followed by 23.33% vs 26.66% from the age group 18-22 years. majority of postnatal mothers 46.66% and 53.33% were in secondary or higher secondary education from experimental and control group respectively, followed by 30% were graduates or postgraduates. majority of postnatal mothers 43.33% and 46.66% were house wife from experimental and control group respectively, followed by 26.66% and 30% were working in private sector. majority of postnatal mothers 53.33% and 56.66% were in nuclear family from experimental and control group respectively, followed by 30.66% were working in private sector. majority of postnatal mothers 60% and 53.33% were hindu from experimental and control group respectively, followed by 23.33% from muslim religion.

The demographic variables distribution of experimental group postnatal mothers as shown in table no.1 reveal that the majority of postnatal mothers 63.33% and 56.66% were primi gravida mother from experimental and control group respectively, followed by 36.66% and 43.33% were multigravida. majority of postnatal mothers 50% and 40% were normal vaginal delivery with episiotomy suturing from experimental and control group respectively, followed by 50% and 60% were normal vaginal delivery. majority of postnatal mothers 100% and 13.33% were perform exercises from experimental and control group respectively, followed by 0% and 86.66% were not perform daily exercises.

III.2. Assessment of knowledge and practice regarding postnatal exercises among postnatal mothers.

Table no.2:

n=60

Sr. No.	Aspect of knowledge	Min-max score	Mean	SD	Mean%
1	Knowledge of postnatal mothers	0-24	9.2	±0.47	38.33%
2	Practice of postnatal mothers	0-90	53.36	±9.93	59.28%

Table no. 2 shows that the knowledge of postnatal mothers about postnatal exercises, mean knowledge score of postnatal mothers was 9.2 ± 0.47 of control group and practice of postnatal mothers about postnatal exercises,

mean practice score of postnatal mothers was 53.36 ± 9.93 of control group.

III.3. To assess the effectiveness of postnatal exercises programme on postnatal exercises.

Table no.3:

n=30

Sr. No.	Variable	Group	Min-Max score	Mean	SD	't' cal	't' value
1	Aspect of Knowledge	Experimental Group	0-24	16.66	± 1.49	6.83	2.08
		Control group	0-24	9.2	± 0.47		

Table no.3. df 59 and 95 % level of significance, t value 2.08, $p < 0.05$

There was significant difference between knowledge score of experimental groups as compare to control group.

In 't' test, t calculated value was 6.83 were as t table value as 2.08 at 59 degrees of freedom.

It shows that post-natal exercise programme was effective, so accept research hypothesis and reject null hypothesis

III.4. Paired 't' test value of experimental and control group practices of postnatal mothers regarding postnatal exercises.

n=30

Sr. No.	Aspect of Practice	Group	Min-Max score	Mean	SD	't' cal	't' value
1	Practice regarding postnatal exercises	Experimental Group	0-90	72.2	6.87	6.62	2.17
		Control group	0-90	53.36	9.93		

Table no.4. df is 59 and 95% of significance, 't' value=2.17, $p < 0.05$.

There was significant difference between practice score of experimental groups as compare to control group. In

't' test, t calculated value was 6.62 were as t table value as 2.17 at 59 degrees of freedom.

It shows that post-natal exercise programme was effective, so accept research hypothesis and reject null hypothesis.

IV. Discussion

IV.1. Frequency percentage distribution according to demographic variables

Quasi experimental study, convenient sampling technique was used for the study to assessment of knowledge and practice score among postnatal mothers admitted in Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital, Loni Bk. The demographic variables were, the majority of postnatal mothers 56.66% vs 60% in the age group of 23-27 years in experimental and control group respectively, followed by 23.33% vs 26.66% from the age group 18-22 years. majority of postnatal mothers 46.66% and 53.33% were in secondary or higher secondary education from experimental and control group respectively, followed by 30% were graduates or postgraduates. majority of postnatal mothers 43.33% and 46.66% were house wife from experimental and control group respectively,

followed by 26.66% and 30% were working in private sector. majority of postnatal mothers 53.33% and 56.66% were in nuclear family from experimental and control group respectively, followed by 30.66% were working in private sector. majority of postnatal mothers 60% and 53.33% were hindu from experimental and control group respectively, followed by 23.33% from muslim religion.

The demographic variables distribution of experimental group postnatal mothers as shown in table no.1 reveal that the majority of postnatal mothers 63.33% and 56.66% were primi gravida mother from experimental and control group respectively, followed by 36.66% and 43.33% were multigravida. majority of postnatal mothers 50% and 40% were normal vaginal delivery with episiotomy suturing from experimental and control group respectively, followed by 50% and 60% were normal vaginal delivery. majority of postnatal mothers 100% and 13.33% were perform exercises from experimental and control group respectively, followed by 0% and 86.66% were not perform daily exercises.

IV.2. Assessment of knowledge and practice regarding postnatal exercises among postnatal mothers.

Knowledge of postnatal mothers about postnatal exercises, mean knowledge score of postnatal mothers was 9.2 ± 0.47 of control group and practice of postnatal mothers about postnatal exercises, mean knowledge score of postnatal mothers was 53.36 ± 9.93 of control group.

IV.3. To assess the effectiveness of postnatal exercises programme on postnatal exercises. There was significant difference between knowledge score of experimental groups as compare to control group. In 't' test t calculated value was 6.83 were as t table value as 2.08 at 59 degrees of freedom.

It shows that post-natal exercise programme was effective, so accept research hypothesis and reject null hypothesis

There was significant difference between knowledge score of experimental groups as compare to control group. In 't' test t calculated value was 6.62 were as t table value as 2.17 at 59 degrees of freedom.

t shows that post-natal exercise programme was effective, so accept research hypothesis and reject null hypothesis.

IV.4. Comparison of Mean, SD and Mean% of experimental and control group

Knowledge score of experimental and control group was (13.93 ± 1.23) and (9.2 ± 0.47) respectively.

The mean difference score 4.73. there was significant in knowledge score in experimental group as compare to control group.

Practice score of experimental and control group was (72.2 ± 6.87) and (53.36 ± 9.93) respectively.

The mean difference score 18.84. there was significant in practice score in experimental group as compare to control group.

IV.5. Association between post test control and experimental group with sociodemographic variables

Association between post test control and experimental group with sociodemographic variables shows that sociodemographic and obstetrics variables of mothers like age, education, occupation, type of family, religion, gravida, type of delivery and daily exercises performance with non-significant association with knowledge of postnatal exercises among postnatal mothers and sociodemographic and obstetrics variables of mothers like age, education, occupation, type of family, religion, gravida, type of delivery and daily exercises performance with

non-significant association with 10 randomization of postnatal exercises among postnatal mothers.

V. Summary and Conclusion

Summary

The present study was a quasi-experimental research study was used for the study to assess effectiveness of postnatal exercises programme on knowledge and practices among postnatal mothers admitted in Dr. Vitthalrao Vikhe Patil, Pravara Rural Hospital, Loni (BK). The objectives of study were

- To assess the knowledge & practice of postnatal exercises among postnatal mothers of control group.
- To evaluate the effectiveness of postnatal exercises programme among postnatal mother in experimental group in comparison to control group.
- To find out association of a knowledge & practices of postnatal exercises with selected demographic & obstetrics variables of postnatal mothers.

The conceptual frame work was adapted based on from general system of model given by Von Ludwig Bertalanffy (1968) to interrelate the concept and study variables. The data was obtained based on different demographic variables such as age, education, occupation, type of family, religion, gravida and previous performance of daily exercises. Sample size was 60 postnatal mothers. The data collected was calculated and analyzed using descriptive and inferential statistics. A perform was used to collect the data which comprised of section A Description of the demographic variables. Section B is Assessment of knowledge and practice regarding postnatal exercises. Section C is Effectiveness of postnatal exercises programme. Section is D Hypothesis testing

Significant findings of the study

The major findings of the study are summarized as follows

Findings related to socio demographic characteristics of postnatal mothers.

- Higher 60% in age group 23-27 years in control group.
- Higher 53.33% postnatal mothers secondary or higher secondary educated in control group.
- Majority 46.66% postnatal mothers are house wife in control group.
- Majority 56.66% postnatal mothers from nuclear family in control group.
- Higher percentage 60% postnatal mothers are Hindu in experimental group.
- Higher percentage 63.33% postnatal mothers are primi gravida mother in experimental group.
- Majority 60% postnatal mothers have normal vaginal delivery with episiotomy suturing.
- Majority 100% postnatal mothers are perform daily exercises in experimental group.

Findings related to assessment of knowledge and practice of postnatal mother in control group.

The highest mean score of knowledge was 16.66 ± 1.49 , which is 69.41% of total score was obtained in relation to assessment during the knowledge, it shows that the postnatal mothers had good knowledge of postnatal exercises.

The highest mean score of practice was 72.2 ± 6.87 which is 80.22% of total score was obtained in relation to assessment during the practice, it shows that the postnatal mothers had good knowledge of postnatal exercises.

Findings related to effectiveness of knowledge and practice of postnatal mothers

The experimental group mean % (69.41) shows that the postnatal mothers had higher knowledge.

The experimental group mean % (72.2) shows that the postnatal mothers had higher practice. **Findings related to association of knowledge with their selected socio-demographic and obstetrics variables**

Study finding revealed that there was Significant difference was found between the knowledge score of postnatal mothers (t value=2.08) $p < 0.05$.

Significant difference was found between the practice score of postnatal mothers (t value=6.62) $p < 0.05$.

Conclusion

Experimental group have good knowledge and practice than control group. It was also found that there is positive co-relation between the knowledge and practice with demographic and obstetrical variables. The finding revealed that there is no significant association between knowledge and practice score and selected demographic and obstetrical variables like age, education, occupation, type of family, religion, gravida, type of delivery and daily exercises performed by postnatal mothers.

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