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## Research Article

# A PRE EXPERIMENTAL STUDY TO EVALUATE THE EFFECTIVENESS OF LECTURE CUM DEMONSTRATION ON KNOWLEDGE AND PRACTICE REGARDING PELVIC FLOOR EXERCISE AMONG POSTNATAL MOTHERS ADMITTED IN SELECTED HOSPITAL OF DELHI

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Lecture cum Demonstration, pelvic floor exercises, post natal mothers, knowledge and practice

### ABSTRACT

Pelvic floor exercise also known as kegel exercise is the best way to strengthen the pelvic muscles which support the urethra, bladder, uterus and rectum. The relaxation and contraction of these pelvic floor muscles, without the involvement of other muscles, forms a repetition of pelvic floor muscle exercise

The objective of the study was to assess the effectiveness of lecture cum demonstration on knowledge and practice regarding pelvic floor exercise among postnatal mothers admitted in selected hospital of Delhi.

Data obtained were analyzed and interpreted in the light of the objectives using both descriptive and inferential statistics in terms of frequency, percentage, mean, standard deviation practice score

Finding showed that the knowledge of post natal mothers in pre test was assessed which revealed 16(53.3%) of them had poor knowledge and 14(46.6%) had average knowledge. The knowledge score of postnatal mothers in post test was assessed which revealed that 20(66.6%) of them had average knowledge and 10(33.3%) had good knowledge. The practice score of postnatal mothers in pretest was assessed which revealed none of them had any practice level. The practice score of postnatal mothers in post test was assessed which reveals that 21(70%) of them had average knowledge, 09(30%) had good knowledge and none of them had poor practice.

Fisher's exact association test value computed between the post test knowledge score and practice score with selected demographic variables and findings show that there was significant association between post test knowledge score with the selected demographic variables sources of information regarding pelvic floor exercises at 0.05 level of significance. It was also found that there was no significant association between the post test practice score with demographic variables.

These findings revealed that the lecture cum demonstration was effective in improving the knowledge and practice of the post natal mothers regarding pelvic floor exercises.

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### INTRODUCTION

#### “Exercise during pregnancy puts you on the perfect path to faster postpartum weight loss and recovery”

Pregnancy is long and very special journey for a woman. It is a dramatic journey of physical, psychological and social change of becoming a mother, of defining family relationship and taking on the long term responsibility of caring and cherishing a new born child. Generations of women have traveled the same route, but each journey is unique. Child bearing is a joyous experience and precious moment in every women life. The post- natal period starts about an hour after the delivery of

placenta and includes the following six weeks. It is a special phase involving special needs. Puerperium is the time of reflection of pregnancy and birth experiences, a time of adjustment to the new role.

Pelvic floor muscle exercise (PFME) or kegel exercise was introduced by Dr Arnold H. Kegel in 1948 in order to build up strength of the pelvic floor muscles and improve their function, to control urinary bladder and bowel motions and increase sexual satisfaction. 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

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that she is physically well enough to incorporate her new child into the family. During pregnancy, there is a progressive anatomical and physiological changes.

### **Need of the study**

Worldwide every minute one women dies of pregnancy related complications. Nearly 600,000 women die each year; of these 99% occur in developing countries. 50-60% occurs during post natal period. According to WHO estimates about 510,000 maternal deaths occur globally during the year 2002. Globally the major causes of maternal death are severe bleeding (25%), infection(15%), eclampsia(12%), obstructed labour(8%) and other problems such as urine retention, incontinence and breast problems such as mastitis and breast abscess.<sup>5</sup>

WHO studies indicate that uterine prolapse affect 3- 25% of women under 45 years of age (WHO-1990). 8The community based studies in different parts of India found a prevalence of prolapse rate of 1 - 27 % (Oommen 2000) In Sao Paulo, Brazil, a gynecological screening found a rate of 40 cases of genital dystopia per 1000 women. The mechanical stress of pregnancy is a predisposing factor.

### **Statement of Problem**

“A pre experimental study to evaluate the effectiveness of lecture cum demonstration on knowledge and practice regarding pelvic floor exercise among postnatal mothers admitted in selected hospital of delhi

### **Objectives**

1. To assess the level of knowledge regarding pelvic floor exercise among postnatal mothers.
2. To assess the level of practice regarding pelvic floor exercise among postnatal mothers.
3. To evaluate the effectiveness of lecture cum demonstration on knowledge and practice regarding pelvic floor exercise among post natal mothers.
4. To determine the association between post test knowledge score and post test practice score of post natal mothers regarding pelvic floor exercise and selected demographic variables.

### **Hypothesis**

- H1.**There is significant difference between pretest and post test knowledge scores regarding pelvic floor exercises as measured by structured knowledge questionnaire at 0.05 level of significance
- H2.**There is significant difference between pretest and post test practice scores regarding pelvic floor exercises as measured by practice checklist at 0.05 level of significance.
- H3.**There is significant association between post test knowledge score with selected demographic variables at 0.05 significant level.
- H4.**There is significant association between post test practice score with selected demographic variables at 0.05 significant level.

## **METHODOLOGY**

**Research approach:** The research approach adopted for this study was quantitative approach.

**Research design:** One group pre-test post -test pre experimental research design was used for the study.

**Setting of the study:** The study was conducted at Hindu Rao Hospital, New Delhi.

**Target Population:** The target population comprised of all post natal mothers admitted in Hindu Rao Hospital.

**Sample and sample size:** Sample comprised of post natal mothers undergone normal vaginal delivery who met the inclusion criteria. The sample size was 30.

**Sampling technique:** The sampling technique used was non-probability purposive sampling technique.

### **Criteria for sample selection**

#### **Inclusion criteria**

##### **Postnatal mothers, who**

1. are admitted in the selected hospital at Delhi
2. are willing to participate in the study
3. are available at the time of data collection
4. had normal vaginal delivery

#### **Exclusion Criteria**

##### **The study will not include those who**

1. are not available during study period.
2. are having perinatal and postnatal complications.
3. are undergone L.S.C.S.

**Description of tool:** The tool for data collection consisted of two sections.

**Part I- Demographic Profile:** it consists of Age, Religion, Number of parity, Type of family, Educational status, Occupational status, Family income, Sources of information regarding pelvic floor exercises.

**Part II- Structured Knowledge Questionnaire:** it consists of 28 multiple choice questions to assess knowledg on pelvic floor exercises and knowledge score was arbitrary classified as poor, average and good.

**Part III- Structured Practice Checklist:** it consists of 30 items of checklist to assess practice on pelvic floor exercises and the practice score was arbitrary classified as poor, average and good.

#### **Ethical consideration**

- Ethical permission from ethical committee of Nightingale Institute of Nursing was taken.
- Informed consent was taken from all subjects before collecting data.
- Anonymity and confidentiality of the participants had been maintained.

#### **Plan for data analysis**

The collected data was organized, tabulated and analyzed by using descriptive and inferential statistics including paired “t-test and fisher exact test.

**RESULTS AND DISCUSSION**

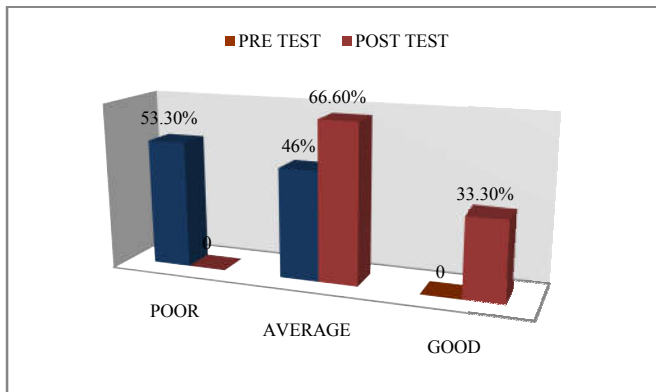
**Section I:** Frequency and percentage distribution of post natal mothers in terms of demographic variables

66.6% of post natal mothers were in the age group of 20-23 years, 56% were Hindu, 66.6% were primipara, 50% were living in nuclear family. 50% were illiterate, 96.6% were house wife, 40% were having monthly income in the range of 15000-20000, rupees 73.3% didn't had any information about pelvic floor exercises

**Section II:** Frequency and percentage distribution of pretest and post test knowledge scores regarding pelvic floor exercises among post natal mothers

Knowledge Level	Pre Test		Post Test	
	Frequency	Percentage	Frequency	Percentage
Poor(0-9)	16	53.3%	0	0
Average (10-18)	14	46.6%	20	66.6%
Good(19-28)	0	0%	10	33.3%

Data presented in the table shows that the knowledge score of postnatal mothers in pretest was assessed which revealed 16(53.3%) of them had poor knowledge, 14(46.6%) had average knowledge, none of them had good knowledge. The knowledge score of postnatal mothers in post test was assessed and table reveals that 20(66.6%) of them had average knowledge, 10(33.3%) had good knowledge and none of them had poor knowledge.



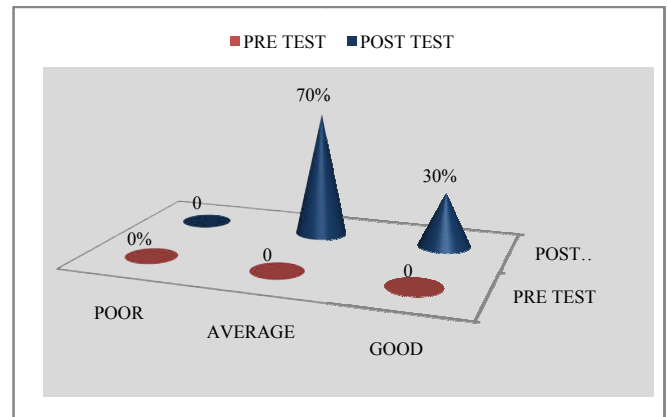
Bar graph depicting the frequency and percentage distribution of pretest and post test knowledge score of post natal mothers regarding pelvic floor exercises.

**Section 3:** Frequency and percentage distribution of pre-test and post –test practice score regarding pelvic floor exercises among post natal mothers.

Practice Score	Pre test		Post test	
	Frequency	Percentage	Frequency	Percentage
Poor(0-10)	0	0%	0	0
Average(11-20)	0	0%	21	70%
Good(21-30)	0	0%	09	30%

N=30

Data presented in the table shows that the practice score of postnatal mothers in pretest was assessed which revealed none of them had any practice level. The practice score of postnatal mothers in post test was assessed and table reveals that 21(70%) of them had average knowledge, 09(30%) had good knowledge and none of them had poor knowledge.



Conical graph depicting the frequency and percentage distribution of pretest and post test practice score of post natal mothers regarding pelvic floor exercises.

**Section 4:** Mean, mean difference, median, standard deviation, t-value of knowledge score regarding pelvic floor exercises among post natal mothers

N=30

Test	Knowledge Score	Mean	Mean Difference	Median	Standard Deviation	"t"-VALUE
Pre-test	310	10.3		12	3.32	
Post-test	472	15.7	5.4	16	3.86	10.56*

\*df(29)=2.05 at 0.05 level of significance

The data represented in table indicates that the mean post test knowledge score of post natal mothers was 15.7 with standard deviation 3.86. the mean pre test knowledge score was 10.3 with standard deviation 3.32. The mean difference was found to be 5.4. The obtained mean difference was found to be statistically significant as evident from the "t" value of 10.56 which is greater than table value(2.05)for df(29) at 0.05 level of significance. Hence the null hypothesis was rejected and research hypothesis was accepted. Thus it was evident that lecture on pelvic floor exercises was effective in improving the knowledge of post natal mothers.

**Section 5:** Mean, mean difference, median, standard deviation, t-value of practice score regarding pelvic floor exercises among post natal mother.

N=30

Test	Practice score	Mean	Mean difference	Median	Standard Deviation	"t"-Value
Pre-test	0	0		0	0	
Post- test	580	19.3	19.3	20	2.39	43.6*

\*df(29)=2.05 at 0.05 level of significance

The data represented in table indicates that the mean post test practice score of post natal mothers was 19.3 with standard deviation 2.39. The mean pre test practice score was 0. The mean difference was found to be 20. The obtained mean difference was found to be statistically significant as evident from the "t" value of 43.6 which is greater than table value (2.05) for df (29) at 0.05 level of significance. Hence the null hypothesis was rejected and research hypothesis was accepted. Thus it was evident that demonstration on pelvic floor exercises was effective in improving the knowledge of post natal mothers.

**Section 6:** Fisher exact test showing association of post test knowledge score of post natal mothers with selected demographic variables

It is evident from the fisher exact test that the demographic variables Age, Religion, Number of parity, Type of family, Educational status, Occupational status, Family income were found to be non significant and there was a significant association between post test knowledge score with demographic variables sources of information regarding pelvic floor exercises as the calculated “p” value is less than 0.05 level of significance. Hence the null hypothesis was rejected and research hypothesis was accepted for the demographic variables.

**Section: 7** Fisher exact test showing the association between the post test practice score with selected demographic variables It is evident that the Fisher’s exact test was obtained to find out the association between the post test practice scores with the demographic variables. It is evident that there was no significant association between post test practice score with demographic variables as the calculated “p” value is more than 0.05 level of significance. Hence the null hypothesis was accepted and research hypothesis was rejected for the demographic variables.

#### Implication of the Study

- **Nursing practice:** Nurse can use there knowledge for their professional enhancement and can give best possible care to the postnatal mother
- **Nursing education:** Nurse educator can prepare the nursing students in order to give importance of teaching programme on pelvic floor exercises by using different educational and teaching aids.
- **Nursing research:** This study will strengthen the research base for the nursing practice of teaching pelvic floor exercises and contribute to the scientific literature about health promotion and disease prevention.
- **Nursing administration:** The nursing administrator should organize educational programs for the nursing students and nursing staffs to update the knowledge related to pelvic floor exercises for improving bladder tone and pelvic floor muscles of post natal mothers.

#### DISCUSSION

The knowledge score of postnatal mothers in post test was assessed which reveals that 20(66.6%) of them had average knowledge, 10(33.3%) had good knowledge and none of them had poor knowledge. The practice score of postnatal mothers in post test was assessed which reveals that 21(70%). There was a significant association between post test knowledge score with demographic variables as the calculated “p” value is less than 0.05 level of significance. had average knowledge, 09(30%) had good knowledge and none of them had poor practice. There was no significant association between post test practice score with demographic variables as the calculated “p” value is more than 0.05 level of significance

#### Limitation

- The study was confined to post natal mothers only.

- Study was limited to 2 weeks.
- Most of the mothers were uneducated

#### Recommendations

On the basis of the findings of the study, the following recommendations are made;

- A similar study can be replicated on a large scale from various other sample categories of hospital, thereby findings can be generalized for a larger population.
- Similar study can be conducted using other strategies to assess and evaluate the knowledge and practice of post natal mothers regarding pelvic floor exercises.
- Similar study can be conducted on antenatal mothers.
- An experimental study can be conducted by analysing the benefits of performing pelvic floor exercises in strengthening pelvic floor muscles.
- A comparative study can be conducted with rural and urban areas.

#### CONCLUSION

The present study aimed to evaluate the effectiveness of lecture cum demonstration on knowledge and practice regarding pelvic floor exercise among postnatal mothers admitted in selected hospital of delhi. The result shows that none of the post natal mothers had a good knowledge and practice as shown in pre test score. After giving intervention 33.3 %of post natal mothers had good knowledge and 30% of post natal mothers had good practice as shown in post test score. There was a significant association post test knowledge score with demographic variables as the calculated “p” value is less than 0.05 level of significance. It is also evident that there was no significant association between post test practice score with demographic variables as the calculated “p” value is more than 0.05 level of significance.

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