

# A Quasi-Experimental Study to Assess the Effectiveness of Kegel Exercise and Prone Position on Involution of Uterus Among Post Natal Mothers Admitted in Selected Hospital, Bhilai (C.G.)

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**Abstract:** Postnatal exercise should be started as soon after delivery as possible in order to improve circulation, strengthen pelvic floor and abdominal muscles and prevent transient and long-term problems. The present study was conducted to assess the effectiveness of the kegel exercise and prone position on involution of uterus among postnatal mothers. The objectives were to assess the pre-test and post-test score of involutions of uterus among postnatal mothers in experimental and control group. To determine the effectiveness of kegel exercise and prone position on involution of uterus among postnatal mothers in experimental group. To compare the effectiveness of kegel exercise and prone position on involution of uterus among postnatal mothers in experimental and control group. To find an association between pre-test score of involutions of uterus among postnatal mothers with their selected demographic and obstetric variables. **Methods:** The study was conducted sample size for the study will comprise of 60 postnatal mothers. Out of which, 30 will be in experimental group and 30 in control group, Quantitative research approach will be adopted for present study, Quasi experimental Research design was adopted in this study with an experimental and control group. **Sampling technique:** Non-probability purposive sampling will be used to select the samples. **Results:** The study result shows that The obtained data from the experimental group total mean 78 and mean percentage is 3.33%, standard deviation is 0.61 whereas in control group total means 46, mean percentage 3.32, standard deviation is 0.725, and “t” test value is 6.29 which is more than table value (2.00) at  $p > 0.05$  level of significance at  $Df=58$ , it was highly significant. which shows that the intervention was very effective. In order to establish the reliability of the tool it was administered to post-natal Mothers reliability and it was calculated by using Karl Pearson, to test the reliability of the tool ( $r=0.85$ ) the reliability of the tool was established the tool was found to be statistically reliable for the study. **Conclusion:** Subinvolution is a major problem remains in mothers after delivery problem in India. since nurses have a key role in preventive, curative, rehabilitative aspects of healthcare. nursing personnel should educate the mothers so that the quality of life will be improved. the intervention was found to be very effective in prevention of pains in mothers and fast involution of uterus.

**Keywords:** Effectiveness, kegel exercise, prone position, postnatal mothers.

## 1. Introduction

Childbirth is the most decisive event in a women's life. It is the most wonderful and joyful journey which a women experiences after childbirth. Even if she was born later in life, a mother feels an experience. It causes significant changes in her everyday life and exposes her to a new position inside herself. Each stage of childbirth has its own set of crucial events, and the mother plays a distinctive role in each of them. The various phases are divided into three categories: prenatal, intranatal, and postnatal periods. The mother and the newborn infant are most susceptible during the second postnatal phase. During this time, many women go through physiological, psychological, and social changes. There are certain postnatal disorders and discomforts that a mother faces after the delivery like pains, irregular vaginal bleeding, leucorrhoea, cervical ectopy (erosion), backache, retroversion of the uterus, anemia, breast issues, and episiotomy.

Postpartum contractions of the uterus as it shrinks back to its pre-pregnancy size and location generate these abdominal pains. The uterus contracts hyper tonically to evacuate the blood clots or fragments of the afterbirth. Due to its contraction-relaxation cycle, the uterus loses muscle tone throughout consecutive pregnancies, causing after pains and severe pain in multiparous women. With a rise in the number of pregnancies, uterine muscle tone declines, which may lead to more severe cramping.

### Objectives:

- To assess the pre-test and post - test score of involutions of uterus among postnatal mothers in experimental and control group.
- To determine the effectiveness of kegel exercise and

prone position on involution of uterus among postnatal mothers in experimental group.

- To compare the effectiveness of kegel exercise and prone position on involution of uterus among postnatal mothers in experimental and control group.
- To find an association between pre-test score of involutions of uterus among postnatal mothers with their selected demographic and obstetric variables.

**Hypothesis:**

H1: There is significant difference between the mean pre- test and post test score of involutions of uterus among postnatal mothers in experimental group.

H2: There is significant effectiveness of educational programme on knowledge regarding kegel exercise and prone position among postnatal mother.

H3: There is significant association between the pre-test on involution of uterus with selected demographic and obstetric variable of postnatal mothers.

**2. Material and Method**

The research approach adopted within the present study was an quantitative research approach and the research design was Quasi experimental Research design was adopted in this study with an experimental and control group. Sampling technique Non-probability purposive sampling will be used to select the samples. Sample size the sample size for the study will comprise of 60 postnatal mothers. Out of which, 30 will be in experimental group and 30 in control group. Variable under study: Independent variable- Kegel exercise and prone position, Dependent variable- Involution of uterus. Description of tools it has 3 sections, Section-a: Self-structured questionnaire demographic and obstetrical variable. Section-b: Observation schedule on measurement of fundalheight postnatal mother on involution of uterus after administer the kegel exercise and prone position assess the level of fundal height in cm. day 1, 2 and 3, Section-c: clinical Performa to assess the lochia Colour of lochia, Odour of discharge, Amount of bleeding., No. of pads.

**3. Result**

Description of the demographic and obstetrical variables by using frequency and percentage. Assessment of level involution of uterus among experimental and control group of post-natal mothers.

- Comparison of level of involution of uterus among experimental group and control group before intervention.
- Comparison of level of involution of uterus among experimental group and control group after intervention.

Comparison of pre and post-test level of involution of uterus among experimental and control group of post-natal mothers.

“t” test to evaluate the effectiveness of kegel exercise and prone position, Section e: Chi- square analysis carried out to find the Association with selected demographic and obstetrical variables with involution of uterus among post- natal mothers.

Table 1  
Comparison of level of involution of uterus among experimental group and control group after intervention

DESCRIPTION	EXPERIMENTAL (n <sub>1</sub> )		CONTROL (n <sub>2</sub> )		CHI SQUARE TEST
	(f)	(%)	(f)	(%)	
Optimal involution	20	66.6	5	16.6	χ <sup>2</sup> = 23.04
Partial involution	8	26.6	6	20	
Sub optimum involution	2	6.6	19	63.3	

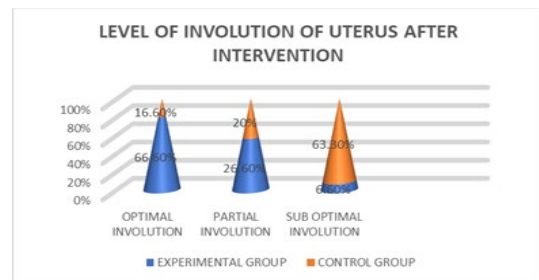


Fig. 1. Level of involution of uterus after intervention

Table 1 and Fig. 1 depict that about 20(66.6%) of mothers are attained optimal involution, 8(26.6%) mothers were partial involution and 2(6.6%) mothers are have sub optimum involution in Experimental group. While in Control group 19(63.3%) mothers are attained sub optimum involution and 6(20%) mothers were partial involution and 5(16.6%) have optimal involution.

There are statically significant differences between Experimental group and control group after intervention.

The “t” test for effectiveness of kegel exercise and prone position on level of involution of uterus.

Represent the effectiveness of the kegel exercise and prone position on level of involution of uterus, administration of post-natal kegel exercise in experimental group and without administration of post- natal kegel exercise in control group.

The Data reveal that the obtained data from the Experimental Group total mean 78 and mean percentage is 3.33%, standard deviation is 0.61.

Whereas in control group total means 46, mean percentage 3.32, standard deviation is 0.725, and “t” test value is 6.29 which is more than table value (2.00) at p>0.05 level of significance at df=58, it was highly significant. Which shows that the intervention was very effective.

**4. Discussion**

The aim of the present study was to evaluate the effectiveness

Table 2

Group	SD	SE	Independent “t” test value	DF	CV >0.05	Inference
Experimental group	0.61	0.17	6.29	58	2.00	Highly significant
Control group	0.725					

(n<sub>1</sub>=30, n<sub>2</sub>=30)

of kegel exercises and prone position on involution of uterus among post-natal mothers in selected hospital Bhilai C.G. The study was conducted by using quasi-experimental study. The post-natal mothers who are admitted in selected hospital post-natal ward.

The “t” test for effectiveness of kegel exercise and prone position on level of involution of uterus. The data reveal that the obtained data from the experimental group total mean 78 and mean percentage is 3.33%, standard deviation is 0.61, whereas in control group total means 46, mean percentage 3.32, standard deviation is 0.725, and “t” test value is 6.29 which is more than table value (2.00) at  $p > 0.05$  level of significance at  $df=58$ , it was highly significant. which shows that the intervention was very effective.

Hence, H2 hypothesis there is significant effectiveness of educational programme on knowledge regarding kegel exercise and prone position among postnatal mother is accepted.

The findings are supported by Seema Sankhla (2014) “a study to assess the effectiveness of kegel exercise and prone position on after pains and involution of uterus among post-natal mothers at in government hospital at tonk district Rajasthan” this study was conducted to assess the effectiveness of the kegel exercise and prone position on after pains and involution of uterus among post-natal mothers. research design chosen for this study was quasi experimental design two group pre -test and post-test design. the obtained data was analyzed by descriptive and inferential statistics using chi-square and student’s independent t test. the study revealed that kegel exercise and prone position have significant reduction of afterpains as t` test value = 15.12 significant at  $p=0.00$  level and improvement of involution of uterus as t` value= 9.54 significant at  $p= 0.001$  level.

### 5. Nursing Implication

According to Tolsma (1995) the selection of research report that focuses on implication usually includes specific suggestion for:

#### *Nursing practice:*

- Advanced nursing practice is one of the evolving trends in nursing practice, in which the hospital has a definite specified role for the nurse, a nurse specialist plays a pivotal role in helping the patient to reduce discomfort and promote the comfort by providing quality care and preventing complications.
- Nurses have vital role in post- natal care and management of sub- involution of uterus.

#### *Nursing education:*

- Before, the nurses can utilize their practice, they need to have a strong foundation and knowledge through education from the inception of nursing as a nurse student till they graduate as professional nurses.
- They have to learn keeping with the changing trends.

#### *Nursing administration:*

- Nursing administrator should conduct in service education program aimed at improve the involution of uterus with non- pharmacological methods.

- Administrators should motivate the health personnel to demonstrate the kegel exercise and prone position through picture or directly demonstrated to the postnatal mothers in order to improving the involution of uterus.

### 6. Conclusion

Subinvolution is a major problem remains in mothers after delivery problem in India. since nurses have a key role in preventive, curative, rehabilitative aspects of healthcare. nursing personnel should educate the mothers so that the quality of life will be improved. the intervention was found to be very effective in prevention of pains in mothers and fast involution of uterus.

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