



“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”

SEEMA SANKHLA

Ph.D Scholar, JJT University, Jhunjhunu, Rajasthan

sankhla.seema20@gmail.com

ABSTRACT

Childbirth is one of the most important events in a woman's life. The wonder of motherhood is the enjoyable journey that is felt only by the mother after giving birth of rebirth by giving birth to a child. During post natal period, mothers experience numerous physiological and psychological changes. Most of the post natal women had after pains So it was found important to reduce the after pains and hastened the process of involution of uterus. This study was conducted to assess the effectiveness of prone 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 conceptual frame work used for this study is a open system model based on general system model approach developed by Ludwig Von Bertalanffy (1968) and modified by J. W.Kenny. The tool used for the study includes questionnaire to assess the level of after pains pain by numerical pain scale and involution of uterus assessed by measuring the fundal height. In control group-level of afte rpains and involution of uterus will be assessed every day morning and evening for 3days through numerical pain rating scale and clinical proforma and also routine care provided. The obtained data was

analysed 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.

1. INTRODUCTION

Childbirth is one of the most important events in a woman's life. The wonder of motherhood is the enjoyable journey that is felt only by the mother after giving birth of rebirth by giving birth to a child. A mother, even though she is born earlier in this world, perceives an experience. It brings about remarkable changes in her normal life and introduces an exposure to a new role within her. Childbirth includes different stages, and in every stage, the mother plays a unique role in experiencing the important events that occur throughout her journey. The different stages are broadly classified into three main aspects, namely, antenatal period, intranatal period, and postnatal period. postnatal period is the most vulnerable period for the mother and the newborn baby. Many mothers experience physiological, psychological and social changes during this period. There are many types of postnatal ailments experienced by the mother such as afterpains, irregular vaginal bleeding, leucorrhoea, cervical ectopy (erosion), backache, retroversion of the uterus, anaemia, breast problems and episiotomy discomforts. The first 6 weeks after the birth of the baby is known as postpartum period or puerperium. During this time, mothers experience numerous physiological and psychological changes. Main changes occur for uterus is involution of the uterus and descent of the fundus. Involution begins immediately after the delivery of the placenta. During involution uterine muscles contracts firmly around the maternal blood vessels at the area where the placenta is attached. This contraction controls bleeding from the area when the placenta is separated. There are many reasons for the sub involution of the uterus. Sometimes it can be associated with certain factors such as inadequate breast feeding, lack of maternal care during pregnancy and puerperium. Other complications of puerperium include early postpartum haemorrhage, hypovolemic shock, thromboembolism, puerperal infections. Certain complications may be fatal and would be recognized early and dealt with prompt care. Maternal mortality and morbidity rates measures the risk of women dying from puerperal causes.

Eventually, after the birth of the baby placenta separates from the wall of uterus and expelled. Immediately the uterus contracts tightly to seal off open blood vessels on uterine wall at placental site. These uterine contractions called after pains. Afterpains refers to the

infrequent, spasmodic pain felt in the lower abdomen after delivery for a variable period of 2-4 days. These abdominal cramps are caused by postpartum contractions of the uterus as it shrinks back to its pre-pregnancy size and location. Presence of blood clots or bits of the afterbirth leads to hypertonic contractions of the uterus in an attempt to expel them. The uterus loses muscle tone during subsequent pregnancies due to its contraction-relaxation cycle and causes afterpains, and is vigorous pain in multiparous woman. Uterine muscle tone decreases with increase in number of pregnancies and this may leads to more severe cramping. Breast feeding the baby stimulates the production of the hormone oxytocin by the pituitary gland. Oxytocin triggers the let-down reflex that releases milk from the breasts and also causes the uterus to contract even more. This effect creates additional abdominal discomfort. After pains will be relieved if the womb remains firmly contracted. When the bladder is full it is unable for the uterus to contract and it tends to relax, thus prohibiting relief from after pains. Labour is one of the major life-events, a woman will experience. Its memory will remain with her. Any negative impressions may give rise to psychological disturbance with her and the whole family. There are varieties of non pharmacological methods for pain relief which are important for postnatal period. They are massage, counter pressure, hydrotherapy, breathing patterns, heat and cold packs, position changes, relaxation techniques, music, aromatherapy, birth doulas and acupressure points. Among non pharmacological methods, position change, abdominal muscle exercise and uterine massage are more effective.

2. NEED FOR THE STUDY

The postnatal period is a time of maternal changes that are both retrogressive (involution of uterus and vagina) and progressive (production of milk for lactation, restoration of the normal menstrual cycle, and beginning of a parenting role). Protecting a women's health as these changes occur is important for preserving her future childbearing function and for ensuring that she is physically fit to incorporate her new child into her family. The physical care a woman receives during the postnatal period can influence her health for rest of her life. Most women experience some degree of discomfort during the postnatal period. Common causes of discomfort include pain from uterine contractions (afterpains), perineal lacerations, episiotomy, haemorrhoids, sore nipples, and breast engorgement.

Most women expect and experience afterpains after the labour process. Intensity of pain experienced, varies from one woman to another. Afterpains is managed in various ways according to the following indicators such as frequency, duration and intensity of uterine contractions, the women's emotional behaviour, her response to afterpains. Postnatal health problem needs close attention. It is estimated that approximately about 58% women experience tiredness, 23% perineal problems, 42% backache, 24% haemorrhoids, 13%

bowel problems, 23% sexual problems, 20% vaginal bleeding, 46% urinary incontinence, and 43.5% women experience after pains.

Association of afterpains with multiparity and breastfeeding is well known. However, women may experience afterpains regardless of their parity and breast feeding. Women themselves have described the pain equal to the severity of moderate labour pains. A survey on childbearing experiences showed that 71% of women finding difficulty while feeding the baby. The most common reason they gave was cramping pain during breast feeding. Cramping intensity may vary with parity, in which multipara mothers are more prone to get severe afterpains than primi mothers. Afterpains are the abdominal cramps that are caused by postpartum contractions of the uterus as it shrinks back to its pre-pregnancy size and location. In short, afterpains signals the process of involution. Immediately after delivery, the uterus begins the process of involution or reduction in size. A woman can best help her abdominal wall to return to good tone by using proper body mechanics and posture, getting adequate rest and by performing exercises. Deep breathing exercises help to feel better physically and emotionally; alternate leg raising exercises, Kegel exercise and early ambulation will encourage uterine contractions, helps in restoring the muscle strength and conditions the abdominal muscles. Exercises to strengthen abdominal and pelvic muscles and finally hastens the process of involution. During the investigator's clinical experience, it was found that a number of postnatal mothers experienced afterpains, which caused great discomfort, making it difficult to adapt to their new maternal role. If afterpains are extremely painful or they persist for over a week, it may be a good idea to nurse to explore possible complications which might be causing contractions, such as unexpelled tissue which the uterus is trying to get rid off, So the role of a nurse is to find out an effective way to alleviate pain and make the postnatal period of the mother indeed the happiest period of her

3. OBJECTIVE

1. To assess the pre-test and post-test scores of after pains and involution of uterus among postnatal mothers in experimental and control group.
2. To determine the effectiveness of Kegel exercise and prone position on afterpains and involution of uterus among postnatal mothers in experimental group
3. To compare the effectiveness of Kegel exercise and prone position on after pains and involution of uterus among postnatal mothers in experimental and control group.
4. To find an association between pre-test level of after pains and involution of uterus among postnatal mothers with their selected demographic variables

4. ASSUMPTIONS

- Post natal Mothers will experience reduces in after-pains after practicing this Kegel exercise and adopts prone position
- The degree of after pains will vary from mother to mother

5. HYPOTHESIS

H1: There will be significant difference between the mean pre-test and post-test scores of after pains and involution of uterus among postnatal mothers in experimental group.

H2: There will be significant association between the pre-test level of after pains and involution of uterus with selected demographic variables of postnatal mothers.

6. REVIEW OF LITERATURE

Massimo F, Antonella C.(2009) A randomized control trial was conducted to compare the effectiveness of postnatal exercises with conventional therapy in the reduction of pain during puerperium. The study participants were 60 women with either an episiotomy or a perineal laceration after vaginal delivery were assigned randomly to receive the postnatal exercises(n=30) with conventional therapy(n=30). Women who received postnatal exercises had lower pain scores than those with conventional therapy(1.7 +2.4 v/s 3.9+2.4;p=0.0002).

Bernandes NO, Santos AM, Oliveira MR (2008) A study was conducted to describe the profile of postpartum women who attended physical therapy in a public maternity house in Betin to relieve postpartum pain. A total of 215, multiparous women participated in the study .Women (43%)had complaints of breast discomforts,(62.3%) presented normal diaphragm kinetics, (85.1%) tympanic sound at abdominal percussion normal uterine involution with moderate degree pain(VAS-6 to 7 at different intervals); (87.9%) presented pelvic floor muscle contraction and 30.3% lower limb oedema; abdominal muscle diastameters measured supra and infra umbilical 2+1 and 1+1 fingers respectively. The women were treated with diaphragm respiratory exercises, abdominal isometric exercises, pelvic floor muscle contractions, lower limb circulatory exercises, flatus elimination maneuvers, ambulation, and guiding.

Karpagavalli G, Judie A (2008) An evaluative study was conducted to find the effectiveness of nursing interventions in reducing after-pains among postnatal mothers in Chennai. Among the 60 postnatal mothers, 30 were in the experimental group and 30 in the control group. Data was collected using Visual Analogue Scale and Categorical Pain Scale. Nursing interventions such as lying flat on abdomen, emptying the bladder, and oil massage were given to reduce the after-pains. Postnatal mothers showed a highly significant decrease in the level of after pain following nursing interventions ($P < 0.001$), in comparison to the pre-assessment level of after-pains. The mean and standard deviation of level of after pain after implementation of nursing interventions in the experimental group was 4.59 and 1.01

Declercq ER, Sakala C(2005) A descriptive study was conducted to determine women's experience of afterpains in United States. The sample of 300 postnatal women were selected by stratified sampling method. The study results revealed that afterbirth pain is one of the most common obstetrical problems in most of the women. Among them young adult women ages from 17 to 24 years are most likely to report less pain. Between 50% and 80% of the women reported some level of discomfort associated with afterpains and 10% to 18% reported severe pain. The study concluded that most multipara women experience severe afterbirth pain.

Wyman JF,Choi SC,Harkins sw, et al (2005)A correlational study was conducted to assess incidence of women reporting after birth pains after childbirth at London. Non-probability purposive sampling technique was used to select 100 primigravida postnatal women. The data was collected using questionnaire, demographic and obstetric data from hospital notes. The major findings of the study revealed that 27.5% postnatal women reported afterbirth pains; back pain was complained by 25.2%, and headache by 5.7%

Holdcroft A, Snidvongs S. (2003) conducted a correlation study to assess the pain and uterine contractions during breastfeeding in the immediate postpartum period in London. A structured questionnaire that included McGill Pain Questionnaire (TPI) and Visual Analogue Scale (VAS) was used to evaluate the characteristics of pain. The study sample was 50 women and sample were selected by non-probability purposive sampling. The result showed that 96% woman reported deep pain primarily at three sites: lower abdomen, low back and breast with associated tenderness in 62% of the subjects. The intensity of these pains increased significantly with parity ($P \leq 0.001$) along with increase in the number of pain sites ($P = 0.03$), mainly in lower abdomen and back. Similarly both the mean duration and number of uterine contractions increased significantly with parity ($P < 0.001$). The mean duration of uterine contractions correlated significantly with the pain scores ($P = 0.03$ -VAS and $P = 0.006$ -TPI)

Thompson JF, Roberts CL, Currie M, Ellwood DA (2002) A prospective cohort study was conducted to estimate incidence of afterpains and associated symptoms in women. The study sample was 1066 women and samples were collected by simple random sampling. The study finding revealed that among the sample, the incidence of severe afterpains was 52.1% in that 53.8% of women are multiparas and 46.2% are primipara mothers. The study concluded that the most frequent symptoms associated with afterpains were nervousness, stress, depression, irritability and sleeplessness.

Babu M. A (1998) A descriptive study was conducted among 100 postnatal women and their babies in an urban community of Delhi to identify the health problems in postnatal mothers and newborns during puerperium. Data was collected using a semi-structured interview schedule. The study results revealed that 68% of postnatal mothers experienced after-pains during the first two weeks of puerperium, 16% experienced perineal pain, 14% experienced breast engorgement, and 11% had lack of sleep during the first two weeks of puerperium. To relieve these health problems, 66% of postnatal mothers used simple home remedies like homemade cereal mixture, khoya, sugar, dry fruits, and milk mixture which was taken from one week after delivery till four to six weeks

Avidson AB, Chintu K, Erikson B (1997) An exploratory study was conducted to discover the maternal and infant health problems after normal childbirth on 408 postnatal mothers at Zambia. The postnatal mothers were randomly assigned to 2 groups, Group A and Group B. Group A consisted of 208 dyads who were visited by a midwife in their homes at 3, 7, 28 and 42 days after delivery; Group B consisted of 200 dyads who were visited only at Day 42. Data was collected using an interview schedule. The results showed that the total number of symptoms reported by mothers in Group B was higher ($P < 0.01$). At the end of puerperium in Group A, 1% of the mothers had complaints of abdominal pain, 6.2% had body pain, and 5.6% had cough. In Group B, 20% mothers had complaints of abdominal pain, 11.5% complained of body pain, and 6.9% had fever

Studies related to effectiveness of kegel exercises and prone position on pain reduction and involution of uterus among postnatal mothers.

Hisu RC(2010) A study was conducted to assess the effectiveness of postpartum exercise on reducing the chronic disease risk factor among 60 postnatal mothers in Ontario, London. Random sampling technique was used. The result of the study showed that women were randomly assigned to a nutrition and low intensity postpartum exercise were 30% and moderate intensity exercise were 70% and control group of 20 sedentary postpartum women were included and were not given any intervention. The low and moderate intensity groups lost more body mass (-4.2 ± 4.0 kg and -5.0 ± 2.9 kg respectively) compared with the control group (-0.1 ± 3.3 kg, $P < 0.01$). Thus the study concludes that the post partum exercise program

helps to maintain healthy body weight and thereby reduces chronic disease risk factors.

7- CONCEPTUAL FRAME WORK

Conceptual frame work is a complex whole of interrelated concepts or abstracts that are assembled together in some rational scheme by virtue of their relevance to a common theme. A conceptual model provides for logical thinking for systematic observation and interpretation of observed data. The model also gives direction for relevant questions on phenomena and points out solutions to practical problems as well as serve as a spring board for the generation of hypothesis to be used.

The conceptual framework used for this study is based on **General System Approach**. It was developed by Ludwig Von Bertalanfy (1968) and modified by J.w. Kenny and is called open system model. The system consists of a set of interacting components with a boundary that filters the type and rate of exchange with the environment whole person. The system is defined as “set of components or units interacting with each other within a boundary that filters both the kind and rate of flow of inputs and outputs from the system.” The general system theory is concerned with changes due to interaction between the various factors (variables) in a situation. In human beings interaction between person and environment changes continuously. The general system theory provides a way to understand the many influences on the whole person and the possible input of change of any part of the whole.

8. METHODOLOGY

Research methodology is a way to solve the problems systematically. It indicates the general pattern of organizing the procedures for gathering reliable data for the purpose of investigation (**Denise F.Polit, 2004**)

In this section, the following topics are discussed in relation to the methodology adopted by the investigator. It includes research design, setting of the study, variables, population, sample size, sampling technique, and sample selection criteria, description of the tool, content validity, reliability, pilot study, and method of data collection and plan for data analysis. According to B. T. Basavanhappa(2007) research methodology involves the systematic procedures by which the researcher starts from initial identification of the problem to its final conclusions. The role of methodology consists of procedures and techniques the study. This chapter deals methodological approach adopted to evaluate the effectiveness of kegel exercise and prone position on afterpains and involution of uterus among postnatal mothers. It includes description of research approach, among research design, variables, setting up of the study of population, sample size, sampling techniques, development and description of the tool, validity, reliability, pilot study, data collection procedure and plan for data analysis.

RESEARCH APPROACH

In order to achieve the objectives of the study, an evaluative approach was found to be appropriate and selected for the study. The research approach tells the researcher from where the data to be collected, what to be collected, how to be collected and how to analyse them. It also

RESEARCH DESIGN

The term 'Research Design' is the structural frame work for study implementation and it is blue print for the study (Talbolt 1995) Quasi experimental research design was adopted in this study with an experimental and control group.

Experimental group:

Q₁ X Q₂

Control group:

Q₃ Q₄

Q₁: Pre assessment of the after pains and involution of uterus among post natal mothers in experimental group.

Q₂ : Post assessment of the after pains and involution of uterus among postnatal mothers in experimental group.

X: Administration of Kegel exercise and prone position among post natal mothers in experimental group.

Q₃: Pre assessment of the after pains and involution of uterus among post natal mothers in control group.

Q₄ : Post assessment of the after pains and involution of uterus among post natal mothers in control group.

8. ANALYSIS AND INTERPRETESION

Description of the demographic and obstetrical variables

Table 1. DEMOGRAPHIC PROFILE

Demographic variables	Categories	Group			
		Experiment		Control	
		n	%	N	%
Age	> 20 years	11	36.7%	10	33.3%
	21 - 25 years	8	26.7%	10	33.3%
	26 - 30 years	9	30.0%	8	26.7%
	31 - 35 years	2	6.7%	2	6.7%
Religion	Hindu	19	63.3%	16	53.3%
	Christian	9	30.0%	12	40.0%
	Muslim	2	6.7%	2	6.7%
Educational Status	Non formal	3	10.0%	3	10.0%
	Primary	12	40.0%	13	43.3%
	Secondary	10	33.3%	6	20.0%
	Graduate	5	16.7%	8	26.7%
	Housewife	21	70.0%	21	70.0%

Occupation	Cooly	3	10.0%	1	3.3%
	Private company	4	13.3%	5	16.7%
	Others	2	6.7%	3	10.0%
Income	< Rs.2000	10	33.3%	12	40.0%
	Rs.2000 -3000	18	60.0%	14	46.7%
	Rs.3000-4000	2	6.7%	4	13.3%
Type of family	Joint family	13	43.3%	11	36.7%
	Nuclear family	12	40.0%	15	50.0%
	Extended family	5	16.7%	4	13.3%
Place of living	Rural	5	16.7%	9	30.0%
	Urban	18	60.0%	14	46.7%
	Suburban	7	23.3%	7	23.3%
Type of Marriage	Relative	18	60.0%	13	43.3%
	Non relative	12	40.0%	17	56.7%
Height	140 -145cm	4	13.3%	3	10.0%
	146 -150cm	13	43.3%	15	50.0%
	151 -155cm	8	26.7%	9	30.0%
	>155cm	5	16.7%	3	10.0%
Weight	50 -55 kg	13	43.3%	16	53.3%
	56 -65 kg	6	20.0%	7	23.3%
	65 -70 kg	7	23.3%	5	16.7%
	>70 kg	4	13.3%	2	6.7%
Food habits	Vegetarian	4	13.3%	3	10.0%
	Non vegetarian	26	86.7%	27	90.0%
Age menarche at	< 12 yrs	5	16.7%	3	10.0%
	12 -15 yrs	22	73.3%	22	73.3%
	16 -19 yrs	3	10.0%	5	16.7%

Table 1 reveals about the demographic profile of the post natal mothers

The above table shows the demographic information of post natal mothers. Age of post natal mothers in experimental group 11(36.7%) belonged to < 20 years age group while in control group 10 (33.3%) and also 10 (33.3%) in 21 – 25 years age in control group. With record to Religion majority belonged to Hindu 19 (63.3%) in experimental group and 16 (53.3%) Mostly post natal mothers are educated at the level of primary school in both the experimental 12 (40.0%) and 13 (43.3 %) in control group. Most of women's are house wife in experimental group 21 (70%) and also same 21 (70%) in control group. Monthly income of the majority of post natal mothers ranges from RS 2000 to 3000 experimental group 18(60.0%) and control group 14 (46.7%). Majority of the women come from joined family. In experimental 13 (43.3%) and control group 15 (50.0). Most of the women came from urban experimental group 18 (60.0%) and control group 14 (46.7%). Majority of the women close relative marriage in experimental group 18 (60.0%). In control group 17 (56.7%) Most of the women are non relative marriage. Most of the women height 146 to 150 cm in both the experimental group 13 (43.3%) and control group 15 (50.0%) . Most of the women weight 50 to 55 kg in both groups. In experimental group 13 (43.3%) And control group 16 (53.3%). Their diet pattern mostly was non vegetarian, in experimental group 26(86.7%) and control group 27 (90.0%). Most of the women age at the menarche 12 to 15

years, in experimental group 22(73.3%) and control group 22 (73.3%).

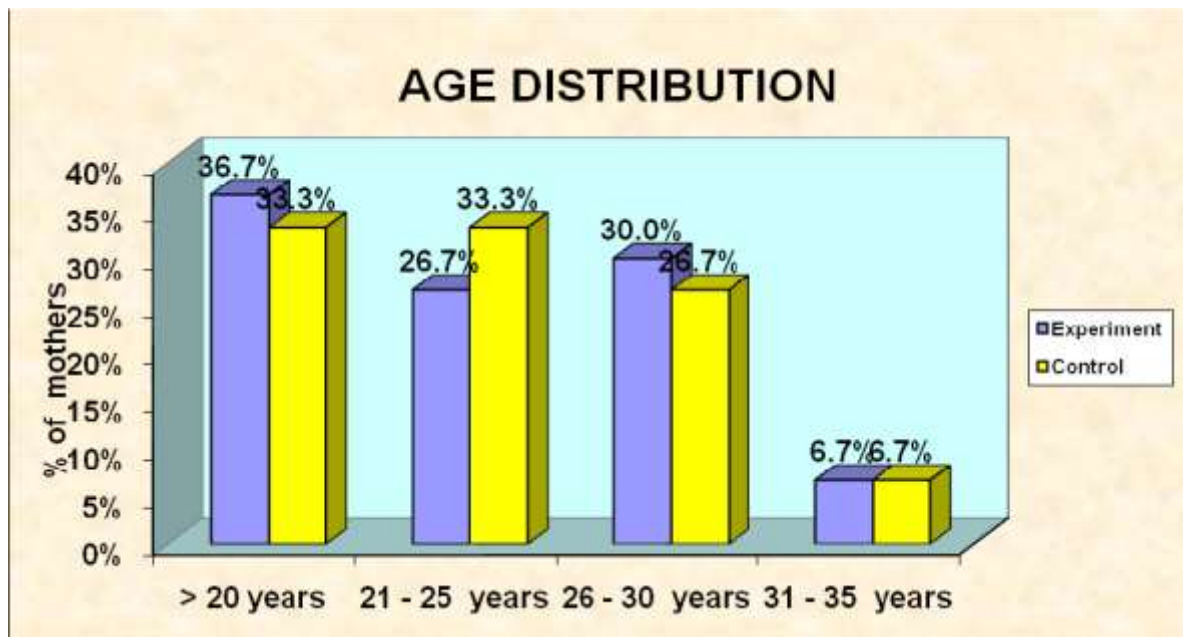


Figure 3. shows the age distribution of post natal mothers ,majority of the participants from Experimental and control group are >20 years of age

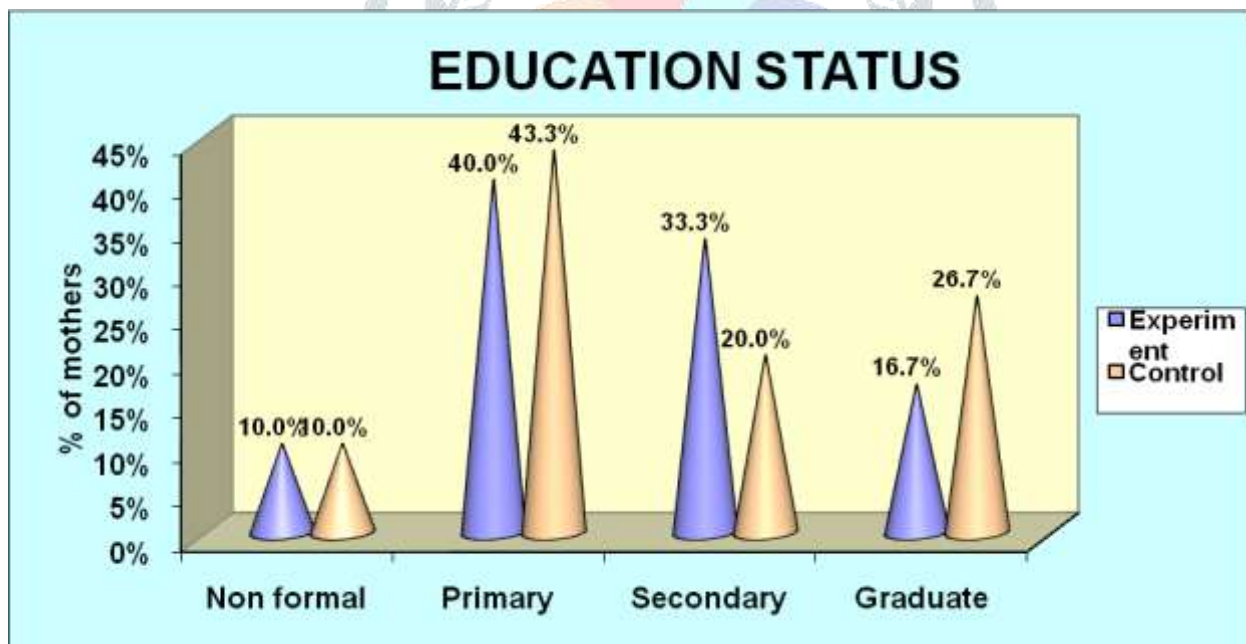


Figure 4. shows the educational status of post natal mothers ,majority of the participants from Experimental and control group had primary education

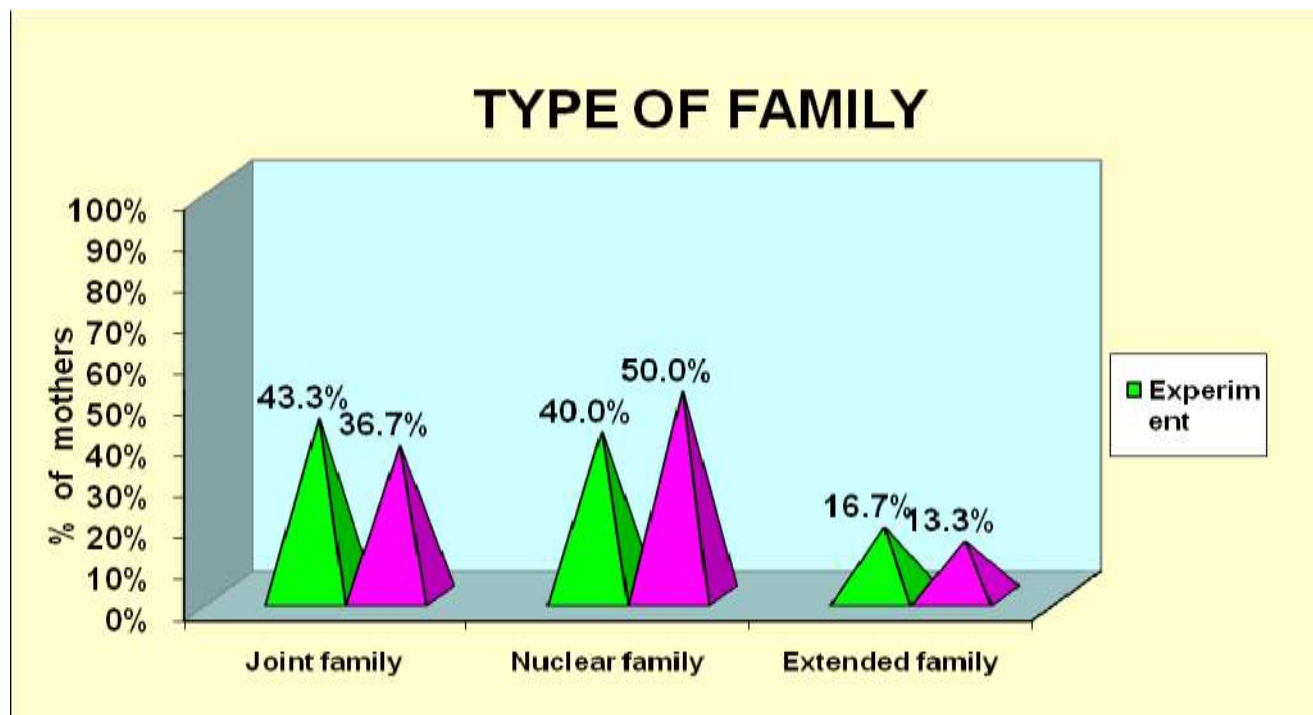


Figure 5 shows about the type of family, majority of them are belongs to nuclear family

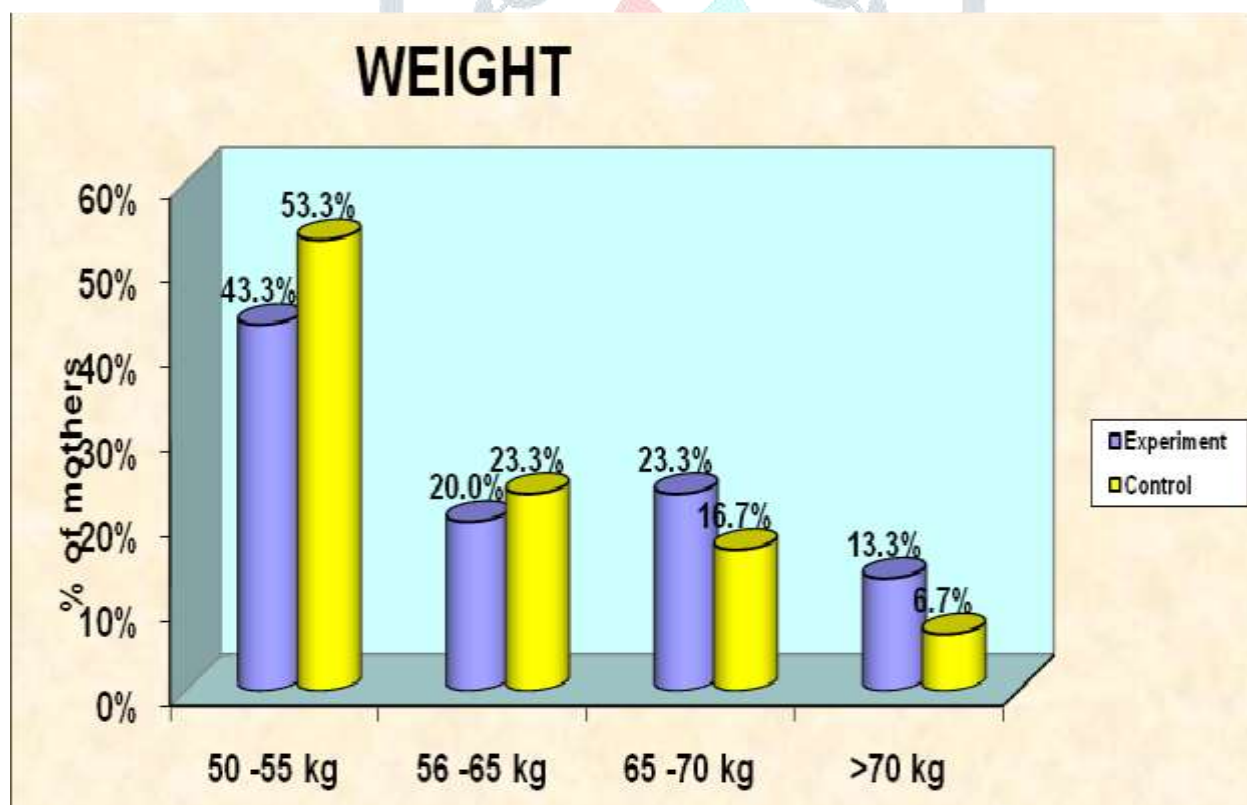


Figure 6 shows about the distribution of the weight of the mother

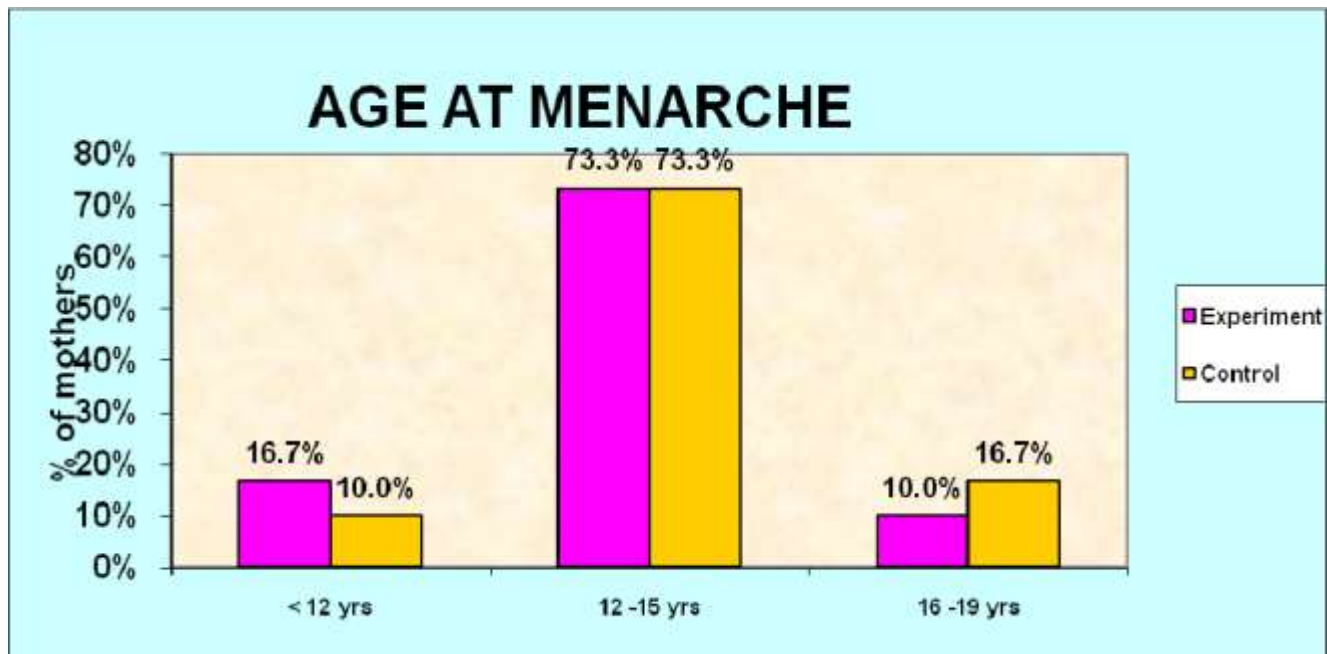


Figure 7 reveals about the menarche age of the study participants



Obstetrical information		Group			
		Experiment		Control	
		n	%	N	%
Time of 1st stage of delivery	6 -12 hrs	15	50.0%	10	33.3%
	13 -14 hrs	10	33.3%	11	36.7%
	24 hrs	5	16.7%	9	30.0%
Episiotomy	Yes	15	50.0%	21	70.0%
	No	15	50.0%	9	30.0%
Time of 3rd stage of labour	10 -15 mins	14	46.7%	13	43.3%
	16 -30 mins	10	33.3%	11	36.7%
	30 -45 mins	6	20.0%	6	20.0%
When the postnatal exercise has to be started	Immediately after delivery	20	66.7%	15	50.0%
	First day of delivery	8	26.7%	12	40.0%
	Third day of delivery	2	6.7%	3	10.0%
How long the postnatal exercise can be done	1- 2 months	11	36.7%	9	30.0%
	2- 3 months	10	33.3%	8	26.7%
	6 months	9	30.0%	13	43.3%
Uses of postnatal exercise	To increase sleep	5	16.7%	7	23.3%
	To provide comfort	14	46.7%	11	36.7%
	Strengthening of the abdominal	11	36.7%	12	40.0%
Colour of bleeding in first three days after delivery	Red	30	100.0%	30	100.0%
How often you will change pad in a day	Four	20	66.7%	16	53.3%
	Five	10	33.3%	14	46.7%
Gravida	First baby	11	36.7%	14	46.7%
	Second baby	19	63.3%	16	53.3%
Para	First baby	24	80.0%	24	80.0%
	Second baby	6	20.0%	6	20.0%
Number of live children	One	24	80.0%	24	80.0%
	Two	6	20.0%	6	20.0%

Table 2. OBSTETRICAL VARIABLES

Table 2 shows the obstetrical information about the study participants among them majority of the participants are second gravid(63.3%)in experimental group,and (53.3%) in control group.

- Above table shows the distribution of obstetrical information of post natal mothers with after pains and involution of uterus.
- Regarding time of first stage of delivery in majority of the women 6-12 hours in experimental group 15 (50.0%) and 13-14 hours in control group 11 (36.7%). With episiotomy 15 (50%) and without episiotomy in experimental group 15 (50%) In control group with episiotomy 21 (70.0%), without episiotomy 9 (30.0%)
- Majority of time of third stage of labour 10-15 minutes in both groups. In experimental group 14 (46.7%) and in control group 13 (43.3%). Most the women thought post natal exercise can start immediately after delivery. In experimental group 20 (66.7%) and control group 15 (50.0%).
- Regarding the duration of post natal exercise in experimental group 1-2 months , 11(36.7%) I control group 6 months, 13(43.3%).
- Considering the uses of post natal exercise to provide comfort in experimental group 14(46.75). Strengthening of the abdominal muscle in control group 12 (40%).
- With regard to colour of lochia in first three days in after delivery in both group red in colour. In experimental group 30(100%) and also in control group 30 (100%). Most of the mothers changed four pad each day in experimental group 20 (66.7%) and in control group 16 (53.3%).
- Majority of the mothers belongs to second gravid in experimental group 19 (63.3%) and in control group 16(53.3%).
- Most of the mothers belongs to first baby In experimental group 24(80.0%) and in control group also 24(80.0%).
- Considering parity of women in both group had one child. In experimental group 24(80.0%) and in control group 24(80.0%).

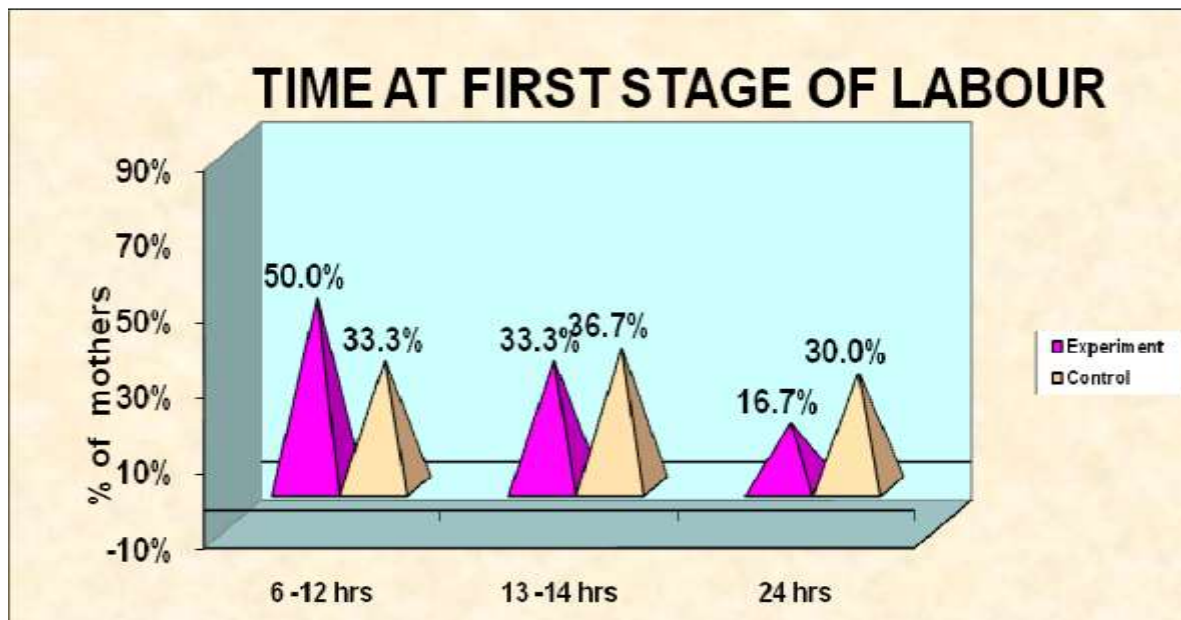


Figure 8 shows the distribution of post natal mothers according to the time of their first stage of labour in experimental and control group

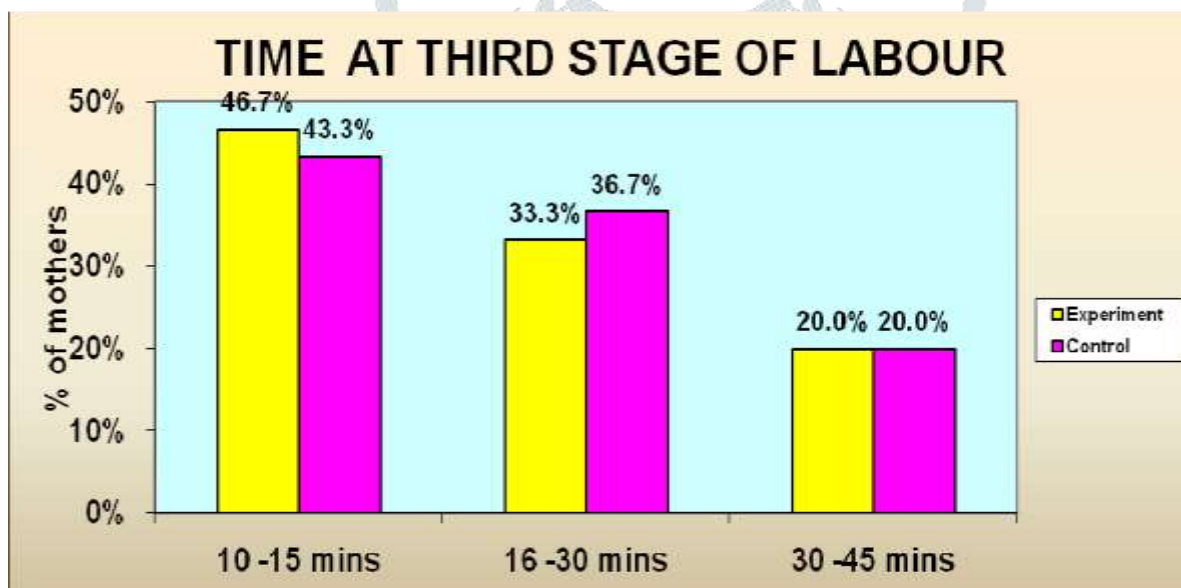


Figure 9. shows the distribution of post natal mothers according to the time of their third stage of labour in experimental and control group

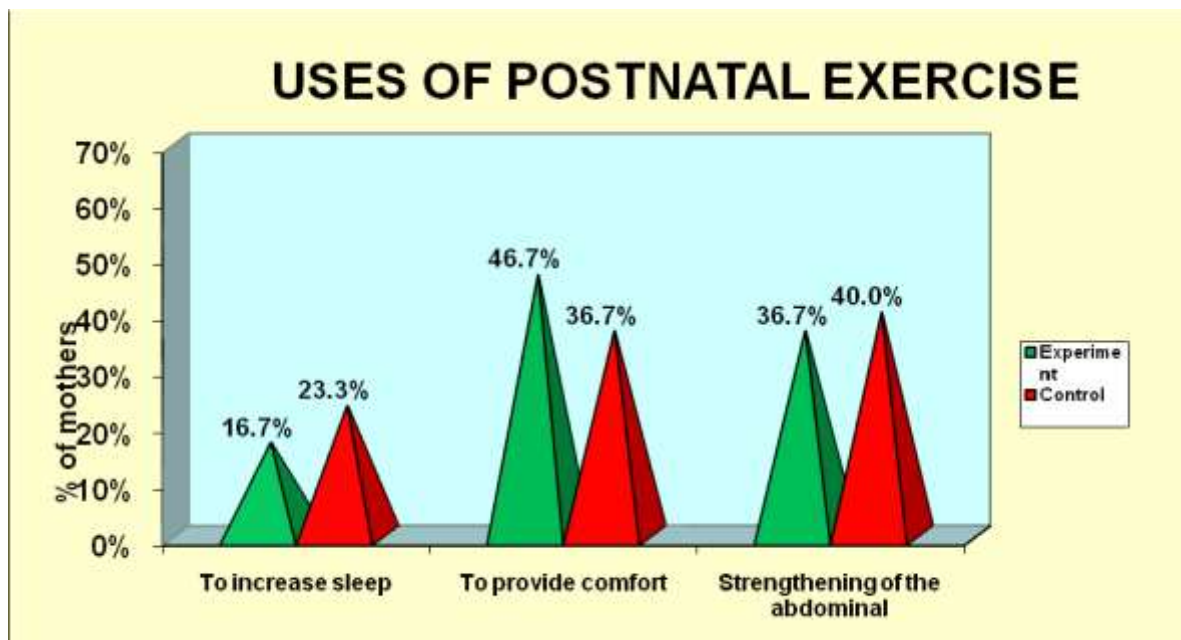


Figure 10 shows the distribution of post natal mothers according to the uses of post natal exercises in experimental control group

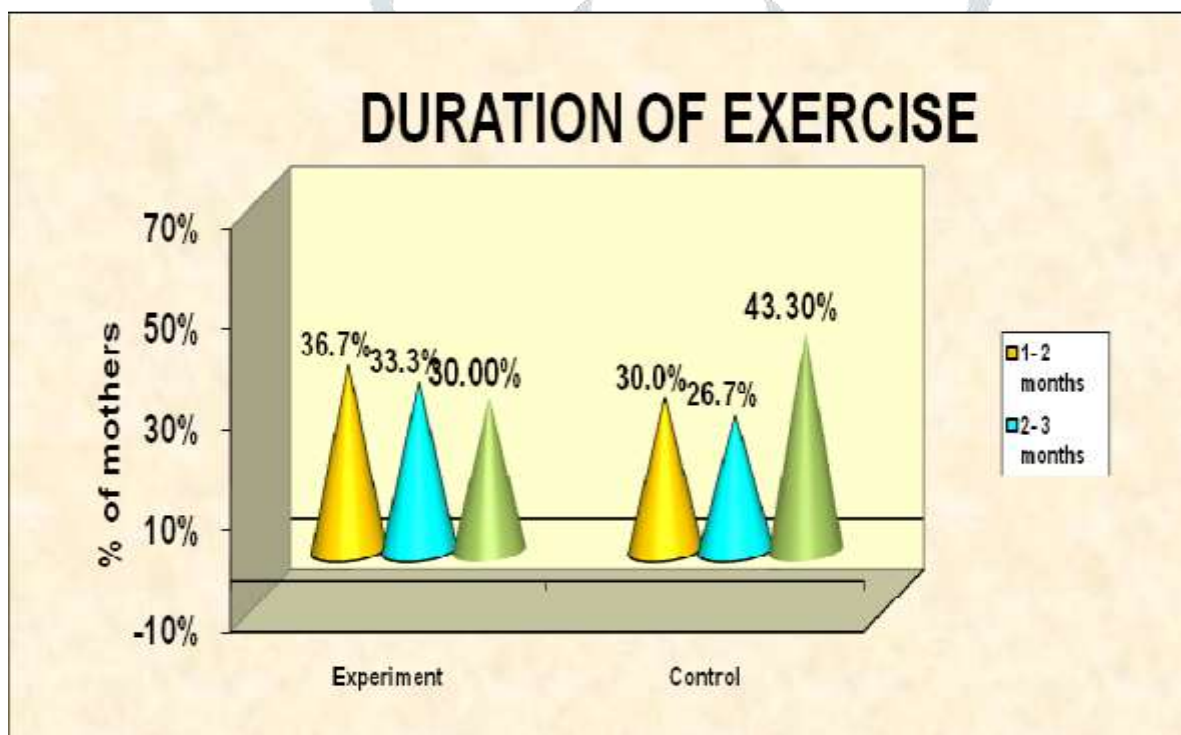


Figure 11 shows the distribution of post natal mothers according to the duration of exercises in experimental control group

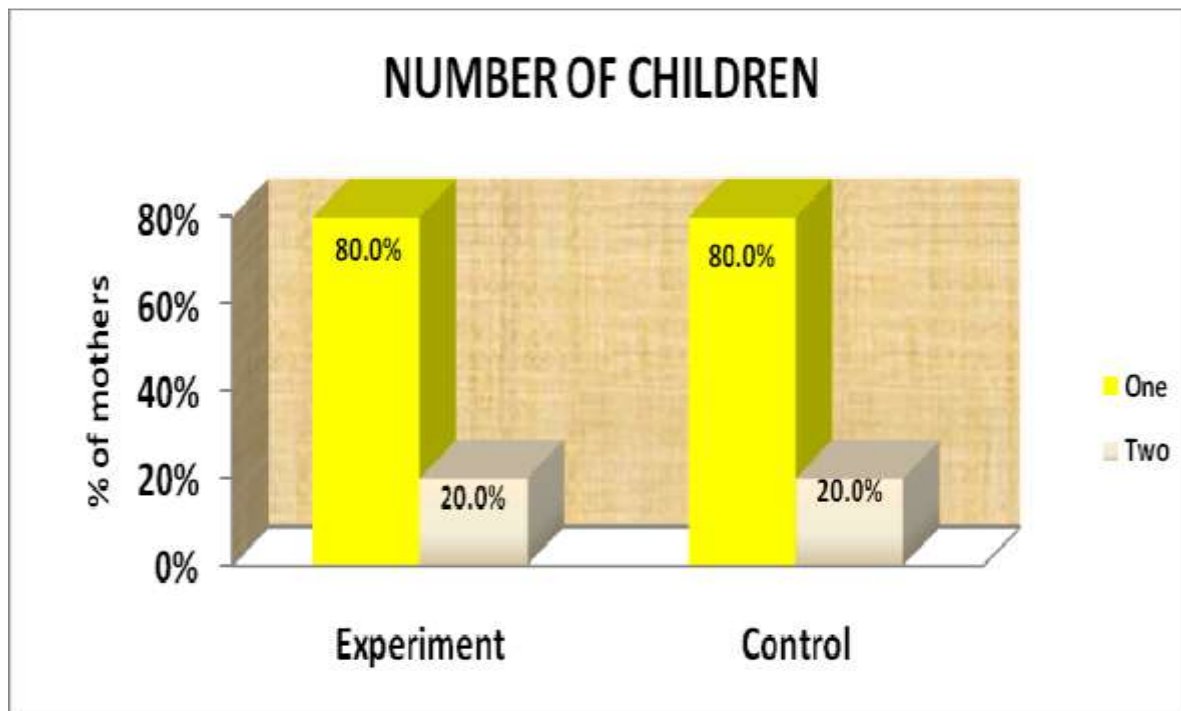


Figure 12. shows the distribution of post natal mothers according to their parity

9 - MAJOR FINDINGS OF THE STUDY

The study shows that among the study participants of post natal mothers according to their the Age of post natal mothers in experimental group 11 (36.7%) belonged to < 20 years age group while in control group 10 (33.3%) and also 10 (33.3%) in 21 – 25 years age in control group. With record to Religion majority belonged to Hindu 19 (63.3%) in experimental group and 16 (53.3%) Mostly post natal mothers are educated at the level of primary school in both the experimental 12 (40.0%) and 13 (43.3 %) in control group. Most of women's are house wife in experimental group 21 (70%) and also same 21 (70%) in control group. Monthly income of the majority of post natal mothers ranges from RS 2000 to 3000 experimental group 18 (60.0%) and control group 14 (46.7%). Majority of the women come from joined family. In experimental 13 (43.3%) and control group 15 (50.0).

Most of the women came from urban experimental group 18 (60.0%) and control group 14 (46.7%). Majority of the women close relative marriage in experimental group 18 (60.0%). In control group 17 (56.7%) Most of the women are non relative marriage. Most of the women height 146 to 150 cm in both the experimental group 13 (43.3%) and control group 15 (50.0%) . Most of the women weight 50 to 55 kg in both groups. In experimental group 13 (43.3%) And control group 16 (53.3%). Their diet pattern mostly was non vegetarian, in experimental group 26 (86.7%) and control group 27 (90.0%). Most of the women age at the menarche 12 to 15 years, in experimental group 22 (73.3%) and control group 22 (73.3%). When analyzing the association between level of pain reduction

score and mother's demographic variables in experimental group. There is a statistical significance between age of the mother and reduction of fundal height ($\chi^2=9.72$ $p=0.01^{**}$) specifically in mothers between 26-30 years and also there is a marked reduction of fundal height among educated mothers ($\chi^2=8.33$ $p=0.04^*$) who are graduates.

10. CONCLUSION

After pains 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..

11- IMPLICATIONS:

According to Tolsma (1995) the selection of research report that focuses on implication usually includes specific suggestion for nursing practice , education, administration and research.

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 play 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 afterpains and involution of uterus. Nurse need to act as a source of knowledge and educate the post natal mothers on afterpains , involution of uterus and its management in post natal period. Nurses should have up to date knowledge on recent trends in diagnostic procedure and management of afterpains and involution of uterus in post natal period. The present study helps the nurse to enable the post natal mothers to do the kegel exercise and prone position which helps to reduce the afterpains and improve the 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 The purpose and steps of kegel exercise and prone position should be taught directly demonstrated at the bed side in clinical area and postnatal ward in all the nursing students.

They should be given opportunities by assigning patients along with the supervision of senior ward nurses for providing nursing interventional care. The nurse should have up to date knowledge regarding the treatment modalities for the symptoms in afterpains and involution of uterus in post natal period. Nursing faculty members should impart the knowledge regarding about afterpains and involution of uterus in post natal period and its management to the student nurse.

NURSING ADMINISTRATION

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

- 1) Administrators should motivate the health personnel to demonstrate the kegel exercise and prone position through video or directly demonstrated to the postnatal mothers in order to reduce the afterpains and improving the involution of uterus.
- 2) Nursing administrators should arrange for periodic joint discussion about afterpains and involution of uterus in post natal period and its management among nurses and doctors.
- 3) Nursing administrators should provide the time, place and material for the nurse to educate the post natal mothers on self care of after pains and involution of uterus.

NURSING RESEARCH

- 1) More research studies in India are needed to identify the afterpains and involution of uterus to further complications among postnatal mothers.
- 2) The finding of the present study helps to prepare the study in different gravid group of post natal mothers
- 3) The present stimulates recommend recognize, support, research on physical, medical, genetic, psychological and cultural aspects of afterpains ,involution of uterus and its transition in to practice.

12 - RECOMMENDATIONS

The study recommends the following for further research

- A similar experimental design can be done with more samples and also a larger period of time.
- A study can be conducted to find out the knowledge of kegel exercise and prone position in reducing the after pains.
- A comparative study can be done to compare the intervention of exercise with other home remedies.

13. REFERENCES:

BOOKS

1. Avidson AB, Chintu K, Erikson B. Maternal and infant health problems after normal childbirth – a randomised controlled study in Zambia. *Journal of Epidemiology and Community Health* 1998;52:385-91.
2. Babu M. A study of the postnatal and neonatal health problems and home remedies used during puerperium in an urban community of New Delhi. *The Indian Journal of Nursing and Midwifery* 1998;1(3):49-52.
3. Benett RV, Brown LK. *Myles textbook for midwives*. 14th ed. Edinburgh: Churchill Livingstone; 2003.
4. Dutta DC. *Textbook of obstetrics*. 6th ed. Calcutta: New Central Book Agency (P) Ltd.; 2004.
5. Gamble J, Creedy D. *Midwifery preparation for practice*. Marrickville: Churchill Livingstone; 2006.
6. Gonzales H. *How to ease after-pains after giving birth*. Philadelphia: Lippincott Williams and Wilkins; 2008.
7. Holdcroft A, Snidvongs S. Pain and uterine contractions during breastfeeding. *Pain* 2003 Aug;104(3):589-96.
8. Jacob A. *A comprehensive textbook of midwifery*. 2nd ed. New Delhi: Jaypee Brothers Publications; 2005.
9. Karpagavalli G, Judie A. Study reveals effectiveness of nursing interventions in reduction of after pain among postnatal mothers. *Indian Journal of Holistic Nursing* 2008 Dec;4(3):30-3
10. Piliterry A. *Maternal and child health nursing care of the child bearing and child rearing family*. 4th ed. Philadelphia: J. B. Lippincott Company; 2003.

JOURNALS

- 1) Aeikan O.N and Tomilson. Appraisal of patient training for child birth .*American Journal of Obstetrics and gynecology*. Vol: 102, 953: PP: 66-100
- 2) Allen, R.E. Pelvic floor damage and child birth. *Obstetrics and gynecology* Vol: 97: 200:42.
- 3) Berg. LB. P&post natal discomfort during postpartum period. *Journals of OBG*. Lincoping. 1998; Jan: 7(1): 71.5.

- 4) Beaty, Ib ache drupes, acute homodynamic effects of lumbar support. Journal of OBG. Oklama city . U.S.A. 2004; Dec: 449120: 1007-11.
- 5) Beckman, C.R., Beckman, C.A. Effects of a structured postpartum exercise programe on postnatal mothers in Obstetrics and Gynecology . 1990; VOL 35(7): 704-709.
- 6) Clap, J. The course labour after endurance exercise during pregnancy and post partum period.
- 7) Collintong . Management of abdominal cramps after labour process. Journal of OBG. Thailand . 1997; May : 33(6): 43: 9.
- 8) Douglas W. L agube., Michael T. Menruli, Pelvic floor exercise. Obstetrics and Gynecology. 2007; VOL: 109: 390-394.

- 9) Ealaine, Welling. Pysical activities during post partum period, Journal of physio. New Zealand. 1998; June: 45(8) : 78-81.
- 10) Fast. A. Post partum discomfort . Journal of Physio medicine & Rehabilitation. St. Vincent. 1990; Jan; 15(1) : 28-30.

