



“A STUDY TO ASSESS THE EFFECTIVENESS OF POSTNATAL EXERCISE ON AFTER PAIN AMONG POSTNATAL MOTHERS AT TGMC&H,PURBA MEDINIPUR , WESTBENGAL ”

Sheli Duya

M.Sc Nursing

WBUHS

ABSTRACT

After pains is the spasmodic, intermittent pain felt in the lower abdomen. It is due to vigorous uterine contractions and its occurring in an effort to expel any remaining blood clots. Postpartum uterine contraction tent to be stronger and to persist for a longer period in multipara mothers.

The nurses role Immediately after delivery is to apply massage to the uterus and keep the uterus firm to prevent excessive vaginal bleeding. After pains might be more painful for women who had more than one pregnancies to compensate for the previous stretching of their uterus to return to its pre pregnancy size.

The study was conducted to evaluate the effectiveness of postnatal exercise on reduction of after pains among postnatal mothers in Tamralipto Govt Medical College and Hospital, Tamluk .The study was conducted by adopting pre experimental one group pre test post test design. 60 postnatal mothers who fulfilled the inclusion criteria were selected by non purposive sampling technique. The mothers were explained about the procedure and the assessment tool. To find out the level of pain, numerical rating scale was used and was given score from 0-10 the following score indicates the level of pain. To followed by selected nursing interventions such as performing postnatal exercise after 6 hours of delivery, continued by 3 times at a day for 3 days. Then at the end of the procedure the post intervention level of after pains was assessed by using the same 0-10 Numeric Rating Scale.

The analysis of the study revealed that, the majority of mothers from experimental group experienced less pain after postnatal exercise than the mothers from control group. The study concluded that postnatal exercise on after pain is useful for most of the mothers. It is important to practice and intervention of postnatal exercise among postnatal mothers for reduction of after pains after delivery.

CHAPTER I

INTRODUCTION

Need for the study

The **World Health Organisation** assumed that by the year of 2022, all postnatal women without contraindication should do at least 150 minutes of moderate intensity aerobic physical activity throughout the week.

Incorporate a variety of aerobic and muscle strengthening activities should limit the amount of time spent being sedentary. Replacing sedentary time with physical activity of any intensity (including light intensity) provides health benefits.[1]

The **JAH** has published the knowledge of postnatal mothers regarding postnatal exercises. The postnatal exercises promote weight loss, restore muscle strength, improve mother's mood and relieve stress and postpartum depression etc. Its major reason for the high maternal mortality rate is lack of care at birth and less awareness about the postnatal exercise. So, it is benefited to provide knowledge regarding postnatal exercise.

The report reveals that the mean pre test knowledge score was 7.2 and post test score knowledge score was 9.6. The mean difference between pre test and post test knowledge score was significant, $t = 7, p < 0.05$ level. There was no significant association between the post test knowledge score and selected demographic variables age, education status, number of child. There was significant association between the post test knowledge score and occupation.

In postnatal involution of pelvic structures broad ligament and round ligament recover from the stretching and relaxation pelvic floor and pelvic fascia involves from stretching effect during parturition.

According to studies postnatal mothers suffer from early postnatal complication (backache, leg cramps, deep venous thrombosis, pedal edema, fatigue, constipation and stress) if women are given adequate knowledge about exercise during postnatal period they can practice this exercise in postnatal. And reduce the complication like urinary incontinence, low back pain, postnatal depression, prolapsed uterine prolapse, enhancing positive health and wellbeing for mother and baby. Hence, the investigation felt the need to take up this study. 2021.[2]

Specific stabilisation exercise activity deep local muscles in coordination with global muscle are recommended in the treatment of pregnancy related lumbopelvic pain. Some studies have suggested that recruitment of the deepest abdominal muscle, transversus abdominis, is crucial in the development and improvement of lumbopelvic pain.

This exploratory study aimed to describe the development of pain, disability and transversus abdominis recruitment before, during and after an individually designed intervention including an exercise program for women with persisting lumbo pelvic pain after pain.

Sixteen women with lumbopelvic pain after delivery were included and received tailor exercise therapy, including ultrasound guided activation of deep muscle, strengthening and stretching exercises and advice. Pain, disability and ultrasound recorded activation of transversus abdominis was registered weekly. Treatment and testing was performed in a primary care setting in Trondheim, Norway.

All sixteen included women reported reduced pain and decreased over the intervention period. The magnitude of transversus abdominis activation varied substantially between individual and tests. While there was a statistical significant or relation between change in pain and change in disability, no correlation was observed between change in transversus abdominis activation and change in symptoms.

This is an exploratory study and result cannot be generalised without replication in cont. studies

Pain and disability due to persistent low back pain and pelvic pain after delivery were reduced after specific, individual adopted exercise including deep and superficial lumbopelvic muscle changes in transversus abdominis activation. [3]

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

Most women expect and experience after pains after labour process. Intensity of pain experience varies from one woman to another after pain is managed in various ways according to the following indication such as frequency duration and intensity of uterine contraction the women's emotional behaviour, her response to after pains. Postnatal health problem needs close attention. It is estimated approximately about 58% women experience tiredness, 23% peroneal 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 after pains with multiparity and breastfeeding is well known. However, women may experience after pains regardless of their parity and breastfeeding women themselves have described the pain equal to the severity of moderate labour pains. A survey on child bearing experience showed that 71% of women finding difficulty while feeding the baby. The most common reason they gave was cramping pain during breastfeeding cramping intensity may vary with parity, in which multipara mothers are more prone to get severe after pains than primi mothers.

After pains are abdominal cramps that are caused by postpartum contractions of the uterus as it shrinks back to its pre pregnancy size and location. In short, after pains 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 exercise help to feel better physically and emotionally alternate leg raising. Deep breathing exercises help to feel better physical and emotionally; alternate leg raising exercises, kegal exercises and early ambulation will encourage uterine contractions, helps in restoring the muscle strength and condition the abdominal muscles. Exercise to strengthen abdominal and pelvic muscles and finally hasten the process of involution.

During the investigation is clinical experience, it was found that a number of postnatal mothers experienced after pains, which caused great discomfort making it difficult to adopt to their new maternal role if after pains 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 unexpected tissue which the uterus is trying. [4]

Statement of the problem :

“ A study to assess the effectiveness of postnatal exercise on after pain among postnatal mothers at TGMC&H, Tamluk, Purba Medinipur, West Bengal”.

Objectives of the study :

1. To assess the pre-test and post test score of after pain among postnatal mother in experimental and control group.
2. To determine the effectiveness of postnatal exercise on after pain among postnatal mother in experimental and control group.

3. To find and association between pre-test level of after pain among postnatal mother with their selective demographic variables.

Operational Definition :

Effectiveness: Effectiveness refers to reducing intent results. In this study effectiveness refers to the extent to which postnatal exercise have reduced the after pain among postnatal mother. It is measured by numerical pain rating scale.

Postnatal exercise: A series of physical exercise that are performed by the postnatal mother to bring about optimal functioning of all systems and prevent complications.

After pain : It is the infrequent, spasmodic pain felt in lower abdomen after delivery for the period of 1-3 days due to contraction of uterus as it shrinks back to its pre pregnancy size and location and also helps in expelling the placental bites. It is measured by numerical pain rating scale.

Postnatal mother: In this study it refers to women who had normal vaginal delivery within 1-4 days of their postnatal period.

Assumption :

- Postnatal mother will experience reduce in after pain after practicing thesepostnatal exercises.
- The degree of after pain will vary from mother to mother

Hypothesis :

H0-There will be no significant difference between the main pre-testand post test score of pain among postnatal mother of experimental group.

H1- There will be significant difference between the main pre test and post test score of pain among postnatal mother of experimental group.

H2- There will be significant association between on after pain with selected demographic variables of postnatal mothers.

CHAPTER II**REVIEW OF LITERATURE**

The review of literature is the primary step to be carried out before the researcher finalized the research methodology. The review of literature traditionally considered as a systematic critical review of most important published and unpublished scholarly literature to the present topic.

According to the **Pilot and Hunglar(2002)**-Review of literature is a critical summary of research on a topic of interest generally prepared to put a research problem in context or to identify gaps and weakness in prior so as to justify a new investigation.[5]

The review of literature help the researcher to identify the problem proving conceptual framework of the study, to assess feasibility providing methodology. It also helped in selecting and developing tool research study for data collection and planning for statistical analysis.

V. Mahishale A, Pereira Anatonya Maria Ulorica L, S Patil H (2012)

Conducted an experimental study to identify effect of postnatal exercises on a quality of life in vaginal delivery after obtaining an informed consent. Inclusion criteria are - Women aged between 18 to 35 years, Primi and multi paruswomen. Exclusion criteria are -Women not involved in any exercise regimen during during pregnancy , Obstetric complication like Postpartum Haemorrhage, pre-eclampsia, abruption , placenta previa and marked rectus diastasis etc.[6]

Shukri R, Kilani H ,Clara J, Norhana J, Shakaman L (2016)

Conducted an experimental study to identify effect of postnatal exercise program on the health status of Omani women .The experimental group experienced a physical exercise training program and the control group was left without any intervention. Results showed that were was a significant difference between the experimental and control group in the BasalMetabolicRate (BMR) and the Body Fat Mass.[7]

Alshahrani Adel M, Abdullah Amal M, ElgzarWafaa T, Ibrahim HebaA, Eltohamy Nadia A. Duta

Descriptive statistics as mean and standard deviation were used for reporting normally distributed numerical variables were assessed using the chi-square test on Fisher's exact test (FET). The correlations between continuous numerical variables were assessed using person correlation. Most of the participants (94.3%) were free from chronic diseases. The mean age, gravity, parity, number of children and BMI.[8]

MistriKinjal R. Bhonsle M. Chaudhari C, Chauhan P, Gayakwd S, Parmar K, Patel M, ManibaBhula Nursing College, Bardoli, Gujrat, India

Conducted a pre-experimental study , where structured knowledge questionnaire were used to assess the knowledge. There was no significant association between the post test knowledge score and selected demographic variables age, education status, number of child but there was significant association between the post test knowledge score and occupation.[9]

AnggraeniAyu Dian P. N, Herawati L. WidyawatiNurul M, Leo Kamang I. Arizona T (2019)

Conducted an experimental study to identify the comprehensive searches including from several databases, namely scopes, published between 2000 and 2009. This review cannot provide definite conclusions about the best form of exercise, the suggested duration or the timing needed to improve the quality of life for postpartum women.[10]

Dash M. (2016) Effectiveness of Selected Nursing Intervention on After Pain Among The Postnatal Mothers In The Selected Hospital In Pondicherry. IntJ. Vaccines vaccine 3[2]

Conducted an experimental study for research approach adopted for the study was Quantitative Research approach and the design. There was no significant association found between the post test pain level with the demographic variables.[11]

Nate P, (2019) conducted an experimental study to assess the effectiveness of planned teaching on knowledge and practices of postnatal exercise among postnatal mothers in selected maternity hospital of member : pre experimental on group pre test post test was used for the study. Majority of the mothers had undergone some level of education, out of which maximum mothers were educated up to primary and secondary level.[12]

Sundaramurthy R, Kathiresan S, Venkateshvaran S, Kannan S (2020)

Conducted a descriptive study to identify knowledge, attitude and practice of postnatal exercises among postnatal mothers.. No significant correlation found between socio-demographic characters and knowledge, attitude and practice of postnatal exercise.[13]

Mullins E, Sharma S, McGregor AH. Postnatal exercise intervention : a systematic review of postnatal adherence and effect. BMJ open 2021

Conducted an experimental study to identify patient interventions were commenced and assessed in the postnatal year. The primary outcome was adherence to PA interventions. The secondary outcomes were the effect of the PA intervention on the studies specified primary outcome. We compared effect on primary outcome for supervised and unsupervised exercise interventions.[14]

Mahishale A V, Ulorica L P A M, Pati H S (2014)

Conducted a single group pre-post experimental study design. Aerobic exercises performed for 6 to 8 weeks 4 to 5 times per week would be a key factor in maintaining the normal and maximum function. The current study was carried out to study the effect of immediate postpartum exercises on maternal quality of life. The current study was carried out to study the effect of immediate postpartum exercises on maternal quality of life.[15]

Kakyota. L, et al., (2011) conducted an experimental study on factors associated with depressive symptoms among post partum mothers in young child clinic of a public hospital in Uganda. The samples were selected by using convenient sampling technique. The sample consists of 450 post partum mothers. The data was collected on the third post partum day. Edinburgh depression scale was used to assess the depressive symptoms among postnatal mothers. The result showed that male partners of post partum mothers are major source of factors associated with post partum depressive symptoms in rural areas.[16]

Yelland. J, et al., (2010) conducted a descriptive study to assess the postpartum anxiety and depression among primi para mothers at Australia. The sample were selected by convenient sampling technique. A total sample of 4366 postnatal mothers were included in the study. Self structured questionnaires was used as a tool to collect the data among primi para mothers. The results showed that

among the postnatal mothers 17.4% mothers were affected with anxiety and 18% of mothers were affected with depression.[17]

Bloch. J, et al., (2008) conducted a descriptive study on post partum physical symptoms among primi para mothers and their relationship to functional limitations and emotional well being in Philadelphia, purposive sampling technique were used. The sample consists of 1323 women who received prenatal care were included in the study. Depression scale and self structured check list were used as a tool. The result shows that more than two third (69%) of mothers were had atleast one physical health problem since child birth. Another 45% of mothers reported that they had one moderate to severe health problem and 20% of mothers reported that they had one severe health problem.[18]

Sahytt . E, et al., (2007) conducted a descriptive study to determine the risk factors for poor self health in women at two months and one year after child birth in Sweden. Data were collected by questionnaire in early pregnancy by using convenient sampling technique. Totally 2424 postnatal mothers were included in the study. Self structure questionnaire was used to collect the data. Data were analysed by logistic regression analysis. Results showed that physical problems such as tiredness, musculoskeletal symptoms and abdominal pain, emotional problems and depressive symptoms or increased risk of poor self rated health in both primi and multi para mothers.[19]

Askar. A, et al., (2005) conducted an experimental study to assess the efficacy of carbetocin versus syntometrine in the management of third stage of labour following vaginal delivery at taiba hospital in Kuwait. Prospective double blind randomized controlled study design was adopted for the study, simple random sampling technique were used to collect the data. The sample consists of 240 women with normal vaginal delivery, in that 120 mothers received carbetocin and 120 mothers received syntometrine, results shows that statistically high significant different in the estimated blood loss between the carbetocin and syntometrine groups.[20]

Eroflu. K, et al., (2003) conducted a cohort study to determine the effects of episiotomy on bonding of mothers health at turkey hospital. A Quasi experimental one group pretest post intervention design were adopted for the study. Purposive sampling technique was used to select the samples. Total sample consists of 100 primi para mothers. In that 50 primi para mothers in experimental group and 50 primi para mothers in control group, The result showed that mean duration of the second stage was longer in the experimental group than the control group.[21]

Jackson. K, (2002) conducted a randomized double blinded study on the influence of administration of prophylactic oxytocin on the incidence of postpartum hemorrhage. The total sample consists of 1486 mothers, in that 745 mothers were in the before placenta group and 741 mothers were in the after placenta group. One ampule of injection oxytocin was administered to the mothers. The study was concluded that there is no significant relationship on the influence of prophylactic administration of oxytocin on the incidence of postpartum hemorrhage in before placenta group.[22]

CONCEPTUAL FRAMEWORK

Conceptual Frame work is a complex whole of interrelated concepts or abstract 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 question on phenomena and point out solutions to practical problems as well as serve a spring board for the generation hypothesis to be used.

The conceptual frame work used for this study is based on **General System Approach**. It was developed by Ludwig von Bertalanffy (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 being’s interaction between person and environment changes continuously . The general system theory provides a way to understand many influences on the whole person and the possible input of change of any part of the whole.[23]

Concept:

The main concept of general system theory, or input, throughput and output.

- The input refers to any other form of information, energy or material that enters in to a system through its boundary.
- Through put refers to the process whereby system transforms, creates and organizes.
- Output refers to energy, information or matter that is transfer to the environment as a result of the throughput.

Input:

The input in the present studies refers to the baseline variables for both experimental and control group of post-natal mothers such as age, education status, occupation, income of the family, family support, type of family, variables such as high, weight, reassessment of after pains by numerical pain scale.

Throughput:

Throughput is use to biological, psychological and socio cultural sub system to transform the input. Through put is the process that occurs at some point between input and output process that enables the input

to be transformed in to output such a way that it can readily use by the system. In this study throughput refers to the pretest level of after pains in experimental group among postnatal mothers and the process of administering postnatal exercise and assess the post test level of after pains among post-natal mothers. Routine care was given to both control group and experimental of postnatal mothers.

Output:

Output is the return of matter, energy and information to the environment in the form of both physical and psychological behaviour. In this study it refers to reducing after pains by administering of postnatal exercise in experimental group.

Feedback:

According to the theories, feedback is the information of environmental responses to the system. Output is utilized by the system in adjustment, to the interaction with the effectiveness of postnatal exercise on after pains level is consider as the difference observed and expected.

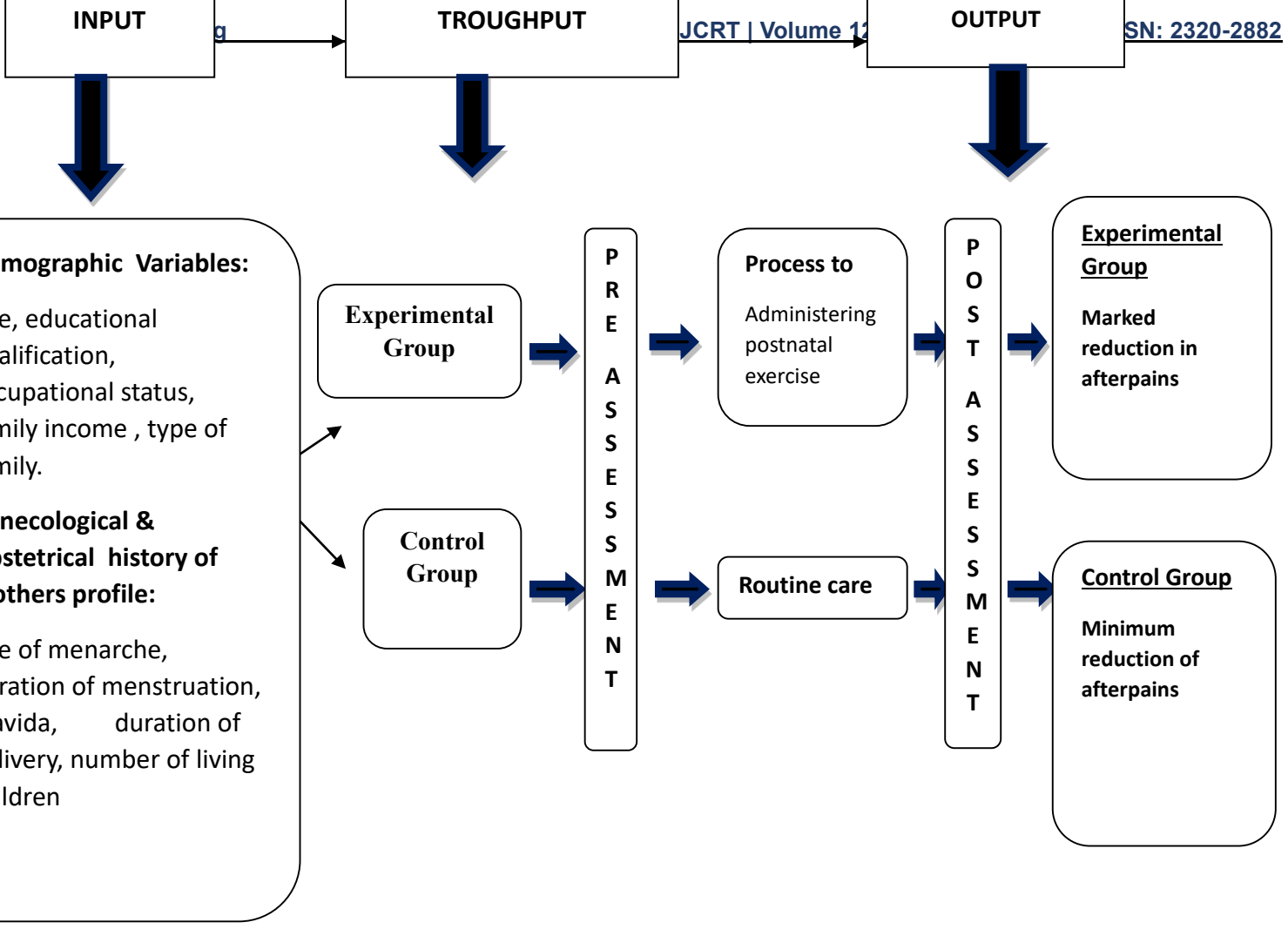


Fig. 1 Conceptual Framework : General Systematic Approach

CHAPTER III

RESEARCH 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. Basavanthappa(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.[24]

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 suggests possible conclusion and helps the researcher in answering specific research questions in the acceptable and efficient way.

Research design

The term 'research design' is the structural framework for study implementation and it is the blueprint for the study (Talbert 1995).

Quasi experimental research design was adopted for this study. We can experiment for this group.

Experimental Group: Q₁, X, Q₂

Control Group: Q₃, Q₄

Q₁: Pre assessment of pain among postnatal mothers in experimental group.

Q₂: Post assessment of pain among postnatal mothers in experimental group.

X: Administration of postnatal exercise among postnatal mothers in experimental group.

Q₃: Pre assessment of pain among postnatal mothers in control group.

Q₄: Post assessment of pain among postnatal mothers in control group.

Manipulation

Process to making the subject to do Post natal exercise for 15 minutes for 3 times a day, 10 repetitions each time for three days among the postnatal mother.

Control group

This group consists of 30 postnatal mothers from day one delivery, and routine care was provided.

Experimental group

This group consist of 30 postnatal mother from day one delivery. There were selected for experimental group and there were made to do Postnatal exercise.

Variables

Independent variables: Postnatal exercise

Dependent Variables : After pains.

Setting of the study

The selection of the setting was done on the basis of the feasibility for conducting the study, availability of the subjects and geographical proximity. Setting for the present study was the postnatal ward at Tamralipto Medical College and Hospital, Tamluk.

Study Population

Postnatal mothers from day one delivery admitted in the postnatal wards at Tamralipto Medical College and Hospital, Tamluk.

Sample

To fulfill the objective of the study, the postnatal mothers admitting in the postnatal ward were selected.

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.

Sampling Technique

Non probability purposive sampling will be used to select the samples.

Criteria for sample selection

Inclusion Criteria for sampling

1. Postnatal mothers with normal vaginal delivery.

2. Postnatal mothers with normal vaginal delivery with episiotomy.

3. Post natal mothers who are willing to participate.

4. Post natal mothers who are able to speak and understand the Bengali.

Exclusion criteria for sampling

1. Postnatal mothers with operative deliveries.

2. High risk factors like postpartum haemorrhage, placenta accreta, shock, pulmonary embolism, uterine rupture, puerperal sepsis and multiple pregnancy.

3. Who are not willing to participate

Development and Description of tool

Tool is developed after extensive review of literature from various text book, journals, internet search and discussion and guidance from the experts in the field of nursing, Department of obstetrics and gynecology.

It has two sections 1 &2 as follows:

Section -1

- Part A – Demographic proforma to collect baseline data.
- Part B – Numerical Pain Rating scale to assess level of afterpains.

Scoring Technique

Pain: To find out the level of pain, numerical rating scale was used and was given score from 0-10 the following score indicates the level of pain

Pain rating Scale Mark -No pain 0 ,0Mild pain 1-3 ,1 Moderate pain 4-6, 2 Severe pain 7-9 ,3 Worst possible pain 10

Ethical Consideration

The study objectives, intervention and data collection procedure were approved by the research and ethical committee of the institution. The research proposal was approved by the experts and permission for the main study was obtained from the Principal, Tamralipto Medical College and Hospital, Tamluk, West Bengal

An informed consent was obtained from each postnatal women before starting the data collection. Assurance was given for confidentiality and privacy.

Validity of the tool

Data collection tool is an instrument that measures the variables of interest of the study accurately precisely and sensitively. In the present study Gynecologists, nursing and medical experts validated the

entire sections of the tool. The experts were requested to check the relevance, sequence and adequacy of the content. Based on their suggestion the tool was reframed.

Reliability of the tool

After the study, reliability of the tool was assessed by using interrater method. pretest, and posttest method. Correlation coefficient values pain (.....).

This correlation coefficient is very high and it is good tool for assessing the effectiveness of postnatal exercise on after pains .

Development of protocol for postnatal exercise

Researcher making the subject to do postnatal exercise for 30 postnatal mothers for 15 minutes for 3 times day, 5 repetitions each time for 2 days. It consist of effectiveness regarding postnatal exercise on reducing the after pains.

Data collection procedure

Formal permission was obtained from the principal ,TamraliptoGovt Medical College and Hospital, Tamluk. The data collection was done for the period of 4weeks. The selected postnatal mothers were assured that the data collected will be kept confidential. Samples were selected by using non probability purposive sampling technique.

In control group-level of afterpains will be assessed every day morning and evening for 2 days through numerical pain rating scale and clinical proforma and also routine care was provided.

In experimental group –Pre intervention pain score will be assessed among postnatal mothers through numerical pain rating scale before giving interventions. Process to making the subjects to do postnatal exercise for 15 minutes for 3 times a day , 5 repetitions each time for two days The post intervention pain score will be assessed by the same tools each day.

Phase-1: Pre assessment

The investigator introduced herself and established rapport by explain the purpose. Informed consent was obtained and confidentiality was maintained. In pre assessment demographic variables, numerical pain rating scale and clinical proforma were used. The researcher spent 90 minutes for each postnatal mother in administering of postnatal exercises. Thirty post natal mothers were initiated to do postnatal exercise for 15 minutes for 3times a day 5repetitions for each time for two days .

Phase- II: Post assessment

The investigator conducted the post assessment of afterpains assessed by numerical pain rating scale and clinical proforma every day evening after third provision of postnatal exercise for 3days.

Process of data analization

1. Demographic variables in categorical/dichotomous were given in frequencies with their percentages.
2. Afterpains score were given in mean and standard deviation.
3. Association between level of afterpains and with demographic variables are calculated using chi square test.

4. Simple bar diagram, Multiple bar diagram, Pie diagram were used to represent the data .

CHAPTER - IV**DATA ANALYSIS AND INTERPRETATION**

This chapter deals with the statistical analysis and interpretation of the data collected. Analysis is a method for rendering quantitative, meaningful and intelligible information. The research problem can be studied and tested including the relationship between the variables.

The data deals with the demographic variables and obstetrical variables, pre and post test assessment of afterpains by numerical pain rating scale.. The data was assembled, analysed, and tested for their significance using appropriate statistical methods and the results are presented below. The analysis used for this study was descriptive and inferential analysis.

Organization of the data

Section A : Description of the demographic and obstetrical variables.

Section B : Pre Assessment of afterpains among experimental and control group of post natal mothers.

Section C : Comparison of pre and post test level of afterpains among experimental and control group of post natal mothers.

Section D : Effectiveness of postnatal exercise

Section E : Association of findings with selected demographic and obstetrical variables with after pain among post natal mothers .

DEMOGRAPHIC VARIABLE OF POSTNATAL MOTHERS

AGE GROUP

n =60

(Experimental group=30, Control group=30)

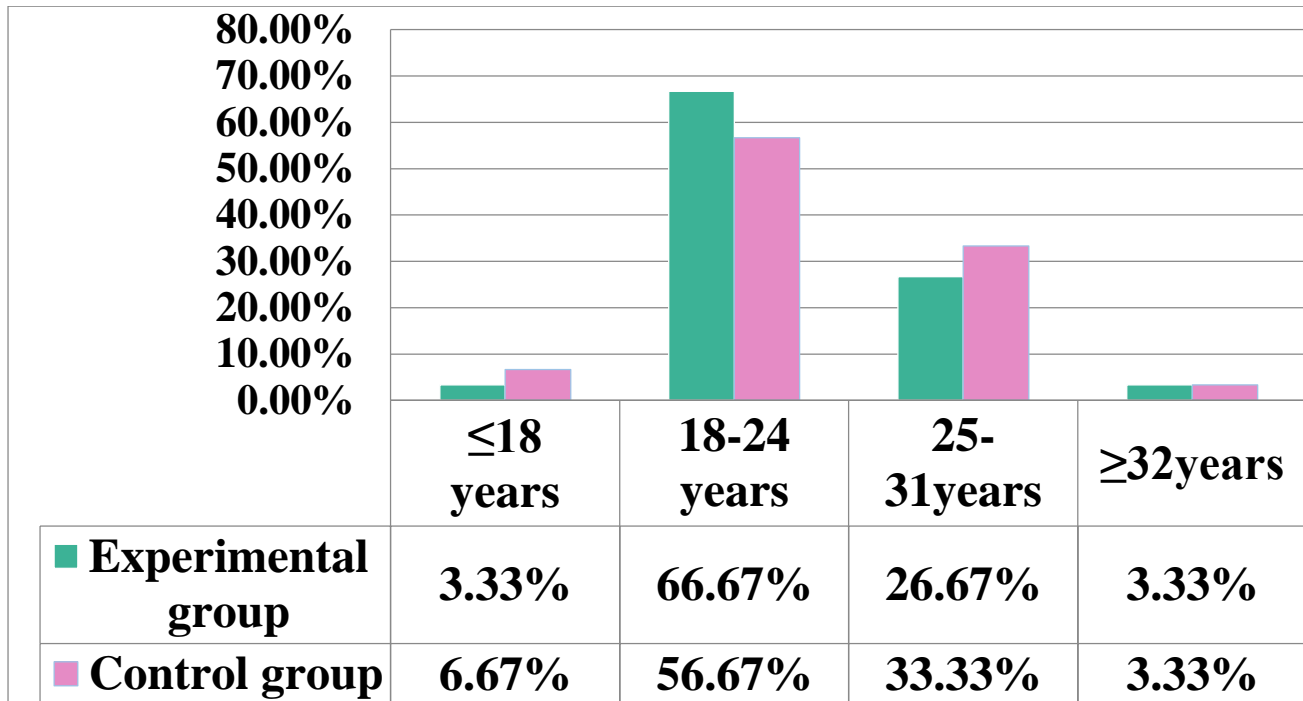


Fig.1 The bar diagram reveals the age group of postnatal mothers.

Demographic variable	Categories	Experimental group		Control group		Table 1. Shows Percentage distribution
		n	%	n	%	
Age group	<18years	1	3.33%	2	6.67%	
	18-24years	20	66.67%	17	56.67%	
	25-31years	8	26.67%	10	33.33%	
	≥32years	1	3.33%	1	3.33%	

of mothers according to their age.

Data presented in Table1 shows that out of 60 mothers 30 mother is from experimental group and 30 mother from control group. 3.33% belonged to the age group below 18 in experimental group and 6.67% from control group. Between age group 18-24 years, 66.67% belonged to experimental group and 56.67% belonged to control group. Between the age group of 25-31 years, 26.67% belonged to experimental group and 33.33% belonged to control group. And above 32 years, 3.33% belonged to experimental group and 3.33% from control group.

RELIGION

n =60

(Experimental group=30, Control group=30)

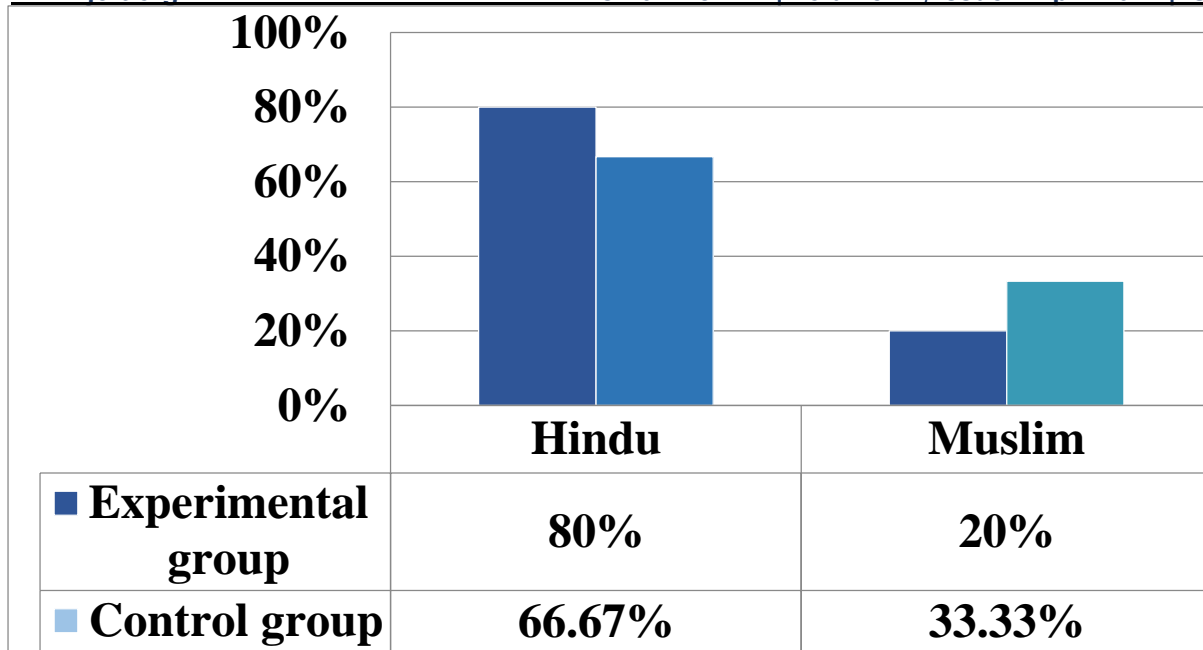


Fig. 2 The bar diagram reveals the religion of the postnatal mothers.

Demographic variable	Categories	Experimental group		Control group	
		n	%	n	%
Religion	Hindu	24	80%	20	66.67%
	Muslim	6	20%	10	33.33%

Table 2. Shows percentage distribution of mothers according to their religion.

rding to their religion.

Data presented in table2 shows that 80% mothers belonged to hindu religion in experimental group and 66.67% mothers from control group. In muslim religion 20 % mothers belonged to experimental group and 33.33% from control group.

EDUCATIONAL STATUS

n=60

(Experimental group=30, Control group=30)

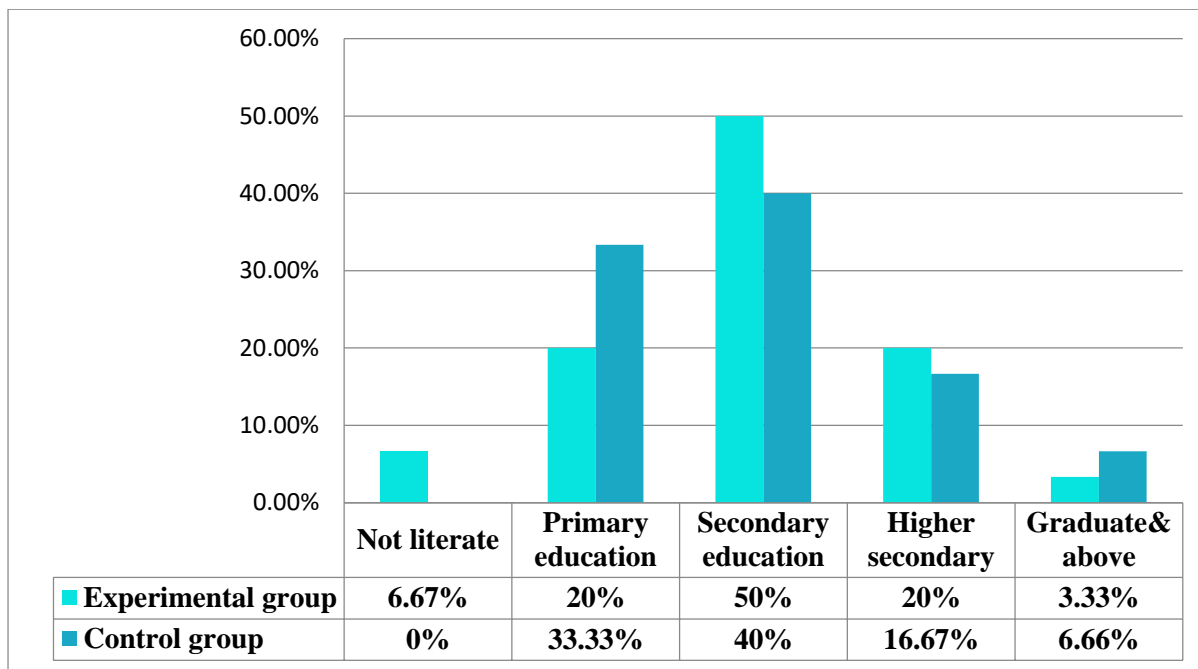


Fig.3 The bar diagram reveals the educational status of the postnatal mothers.

Demographic variable	Categories	Experimental group		Control group	
		n	%	n	%
Educational status of mother	Not literate	2	6.67%	0	0%
	Primary education	6	20%	11	36.67%
	Secondary education	15	50%	12	40%
	Higher secondary	6	20%	5	16.67%
	Graduate & above	1	3.33%	2	6.66%

Table 4.
Shows percentage distribution of mothers according to their educational status

ding to their educational status

6.67% belonged to the not literate in experimental group and in primary education 20% belonged to experimental group. And 36.6% be to control group. In secondary education 50% belonged to the experimental group,40% belonged to the control group. In higher secondary education 20% belonged to the experimental group and 16.7% from control group.

OCCUPATIONAL STATUS

n=60

(Experimental group=30, Control group=30)

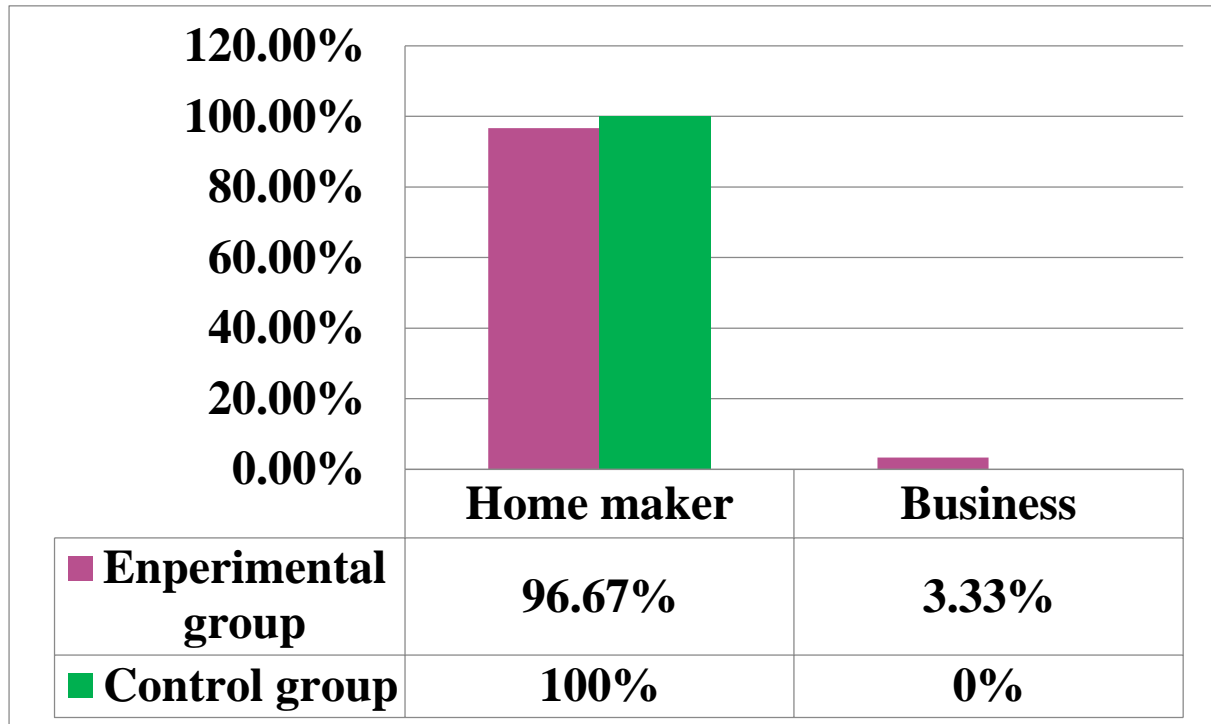


Fig.4 The bar diagram reveals the occupation of the postnatal mothers.

Demographic variable	Categories	Experimental group		Control group		Table5. Shows percent age distribution of mothers according to their occupational satus
		n	%	n	%	
Occupation of mother	Home maker	29	96.67%	30	100%	
	Business	1	3.33%	0	0%	

ional satus

Data presented in the table5 shows that out of 60 mothers in which 30 mothers from experimental group and 30 mothers from control group in which 96.67% is home maker from experimental group and 100% is from control group. And 3.33% is business women in experimental group.

FAMILY INCOME

n=60

(Experimental group=30, Control group=30)

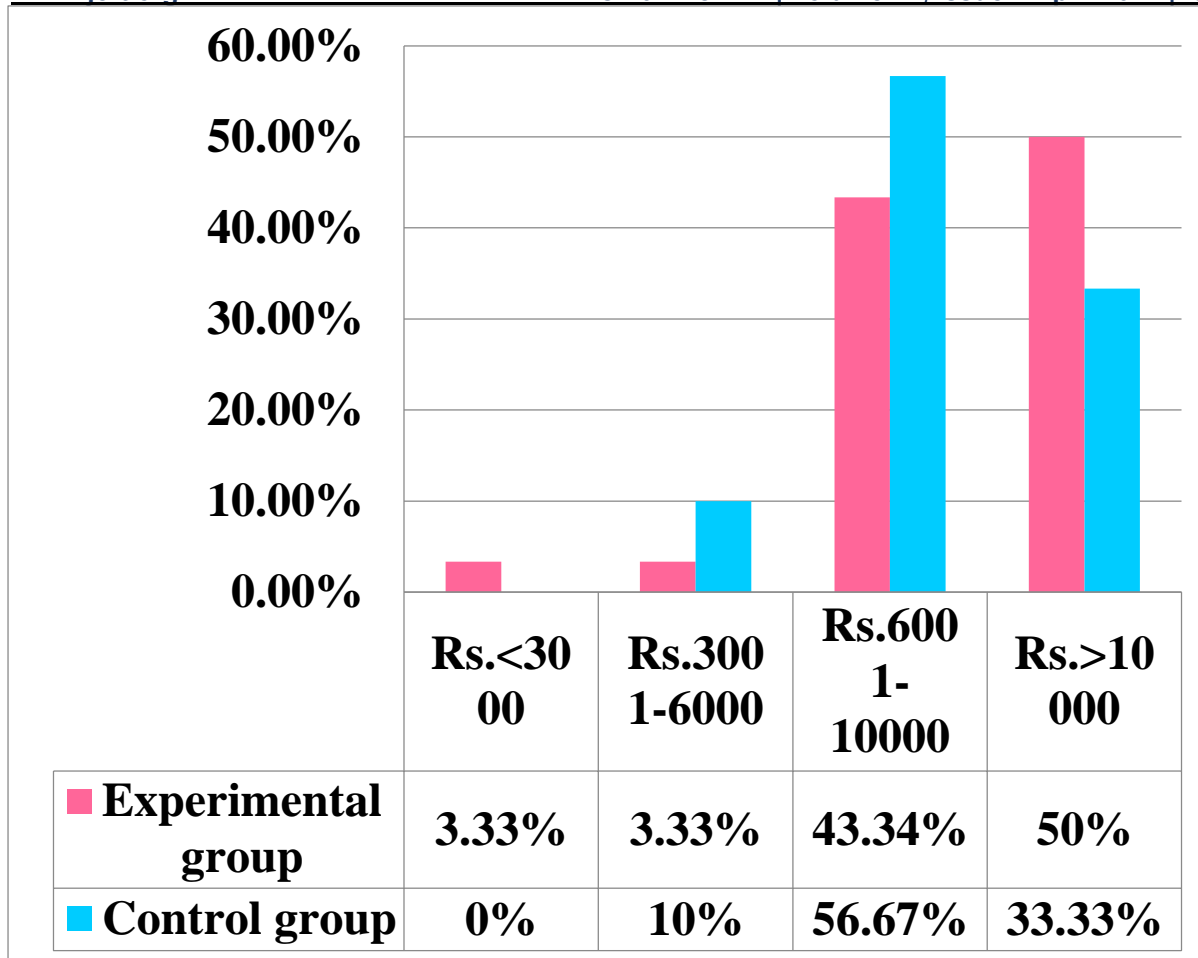


Fig.5 The bar diagram shows the monthly family income of the postnatal mothers.

Demographic variable	Categories	Experimental group		Control group	
		n	%	n	%
Monthly family income	Rs.<3000	1	3.33%	0	0%
	Rs.3001-6000	1	3.33%	3	10%
	Rs.6001-10000	13	43.34%	17	56.67%
	Rs. >10000	15	50%	10	33.33%

Table 6. Shows percentage distribution

ution of mothers according to monthly family income

Data presented in the table6 shows that 3.33% mothers monthly family income was less than 3000 from experimental group,3.33% mothers monthly income of RS.3001-6000 from experimental group and 10% from control group. 43.34% mothers monthly family income of Rs.6001-10000 from experimental group.50% mothers monthly family income of Rs. above 10000 from experimental group and 33.33% control group.

TYPE OF FAMILY

n=60

(Experimental group=30, Control group=30)

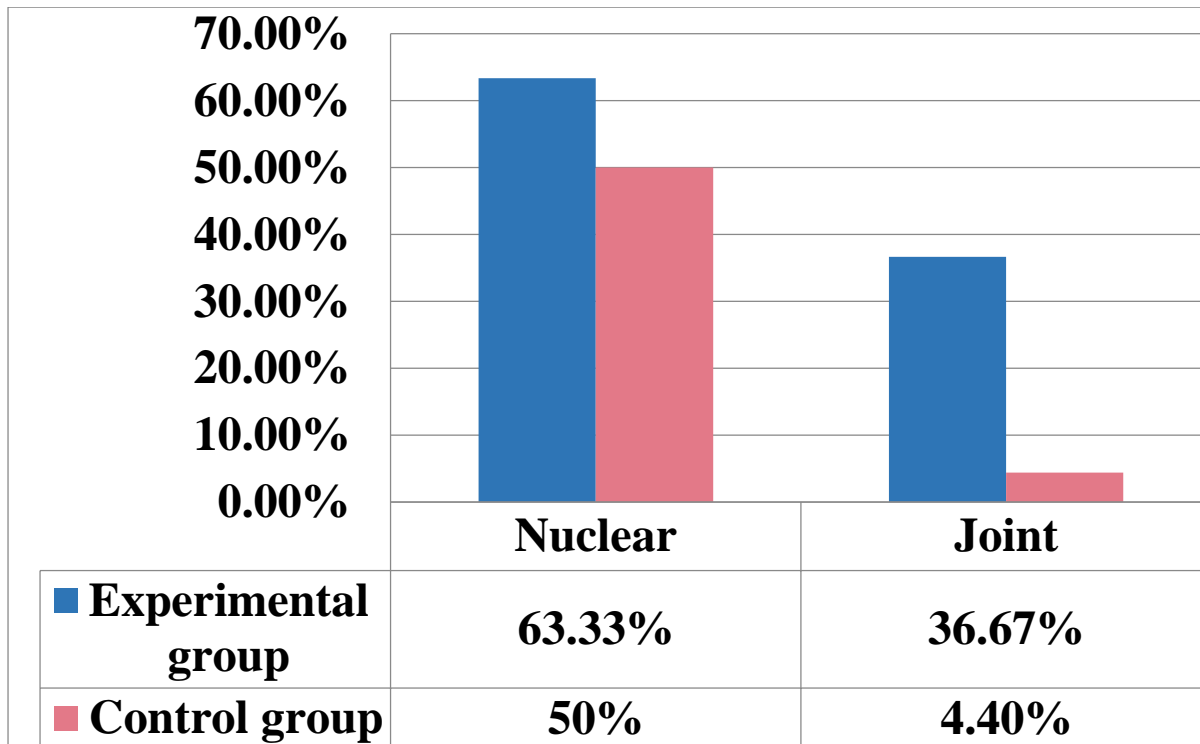


Fig.7The bar diagram reveals type of the family of the postnatal mothers.

Demographic variable	Categories	Experimental group		Control group	
		n	%	n	%
Type of family	Nuclear	19	63.33%	15	50%
	Joint	11	36.67%	15	50%

Table. 6
Shows
percentag
e
distributio
n of the
mothers

according to the type of family

Data presented in table6 shows that 63.33% mothers belong to nuclear family in experimental group and 50% from control group. 36.67% mothers belonged to joint family in experimental group and 50% from control group.

OBSTETRICAL & GYNECOLOGICAL PROFILE OF POSTNATAL MOTHERS

AGE OF MENARCHE

n=60

(Experimental group=30, Control group=30)

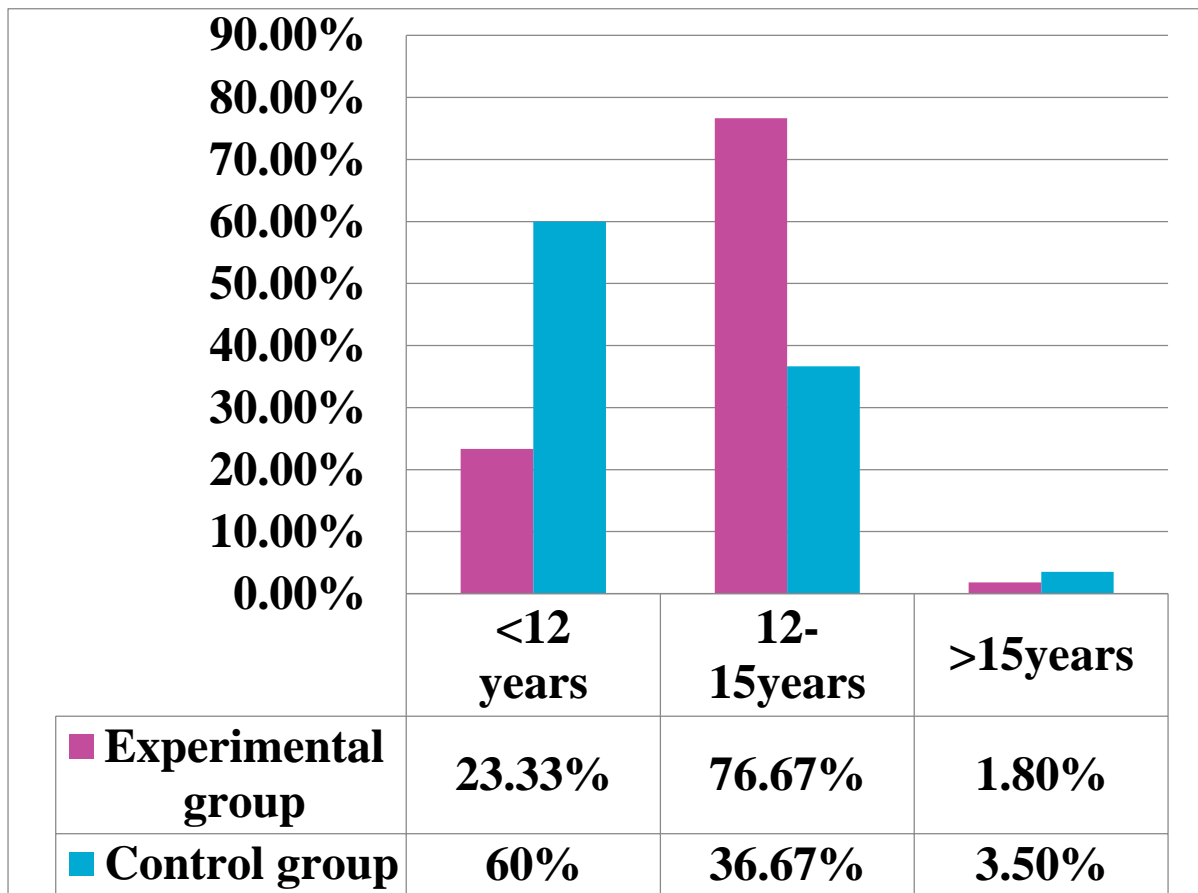


Fig.8 This bar diagram reveals the age of menarche of the postnatal mothers.

Obstetric and gynaecological variable	Categories	Experimental group		Control group		Table. 7 Shows percentage distrib
		n	%	n	%	
Age of menarche	<12 years	7	23.33%	18	60%	
	12-15 years	23	76.67%	11	36.67%	
	15years	0	0	1	3.33%	

ution of the mothers according to the age of menarche

Data presented in table 7 shows <12 years in experimental group and 60% belongs to the <12 year in control group. 76.67% belongs to 12-15 year of age of menarche in experimental group and 36.67% belong to control group. In age of >15 in experimental group are 1.80% and 3.33% belong to control group.

DURATION OF MENSTRUATION

n=60

(Experimental group=30, Control group=30)

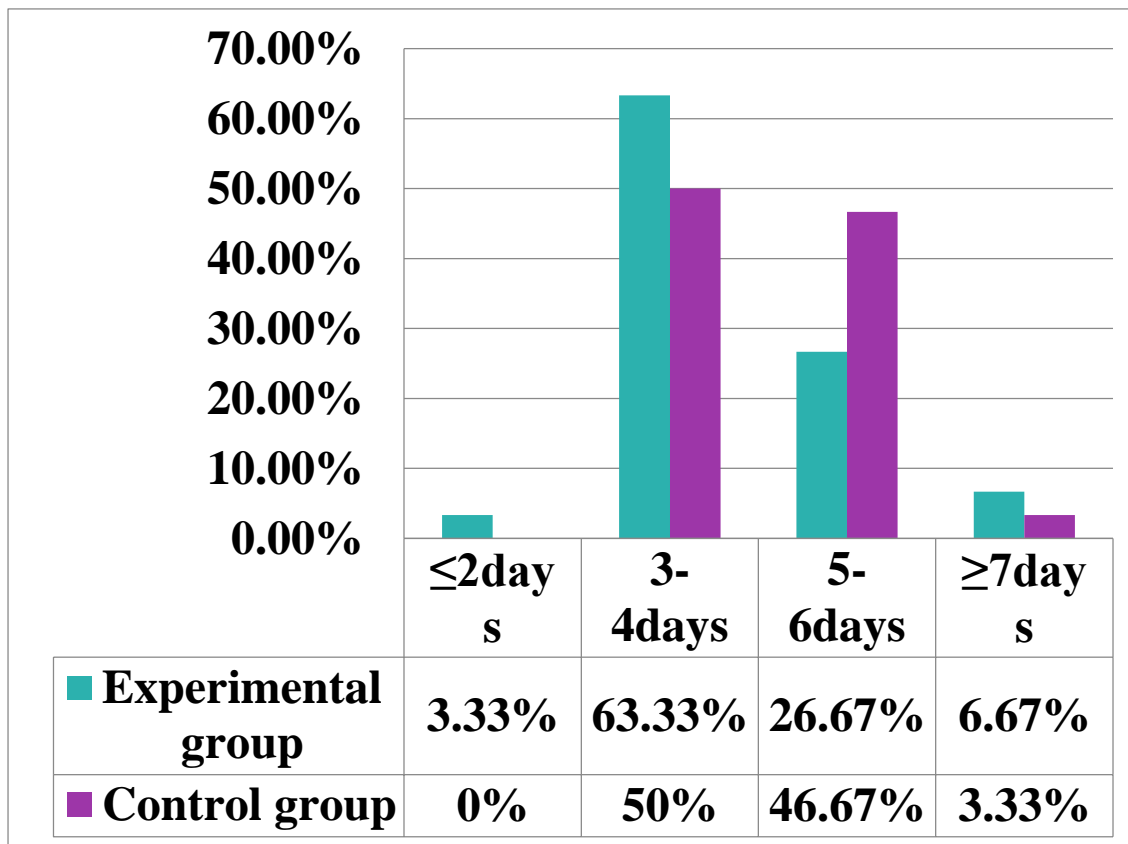


Fig.9 This bar diagram reveals the duration of menstruation of the postnatal mothers.

Obstetric and gynaecological variable	Categories	Experimental group		Control group	
		n	%	n	%
Duration of menstruation	More or less than 2 days	1	3.33%	0	0%
	3-4 days	19	63.33%	15	50%
	5-6 days	8	26.67%	14	46.47%
	More or less than 7 days	2	6.67%	1	3.33%

Table. 8 Shows percentage distribution of the

mothers according to the duration of menstruation

Data present in table8 shows that the duration of menstruation more or less than 2 days are 3.33% belongs to experimental group and 63.33% belong to experimental. And 50%belong to control group. Duration of menstruation 5-6 days 26.67% belong to experimental group,46.67%belong to control group. Duration of menstruation more or less than 7 days 6.67% belongs to the experimental group. And 3.33%belong to control group.

GRAVIDA

n=60

(Experimental group=30, Control group=30)

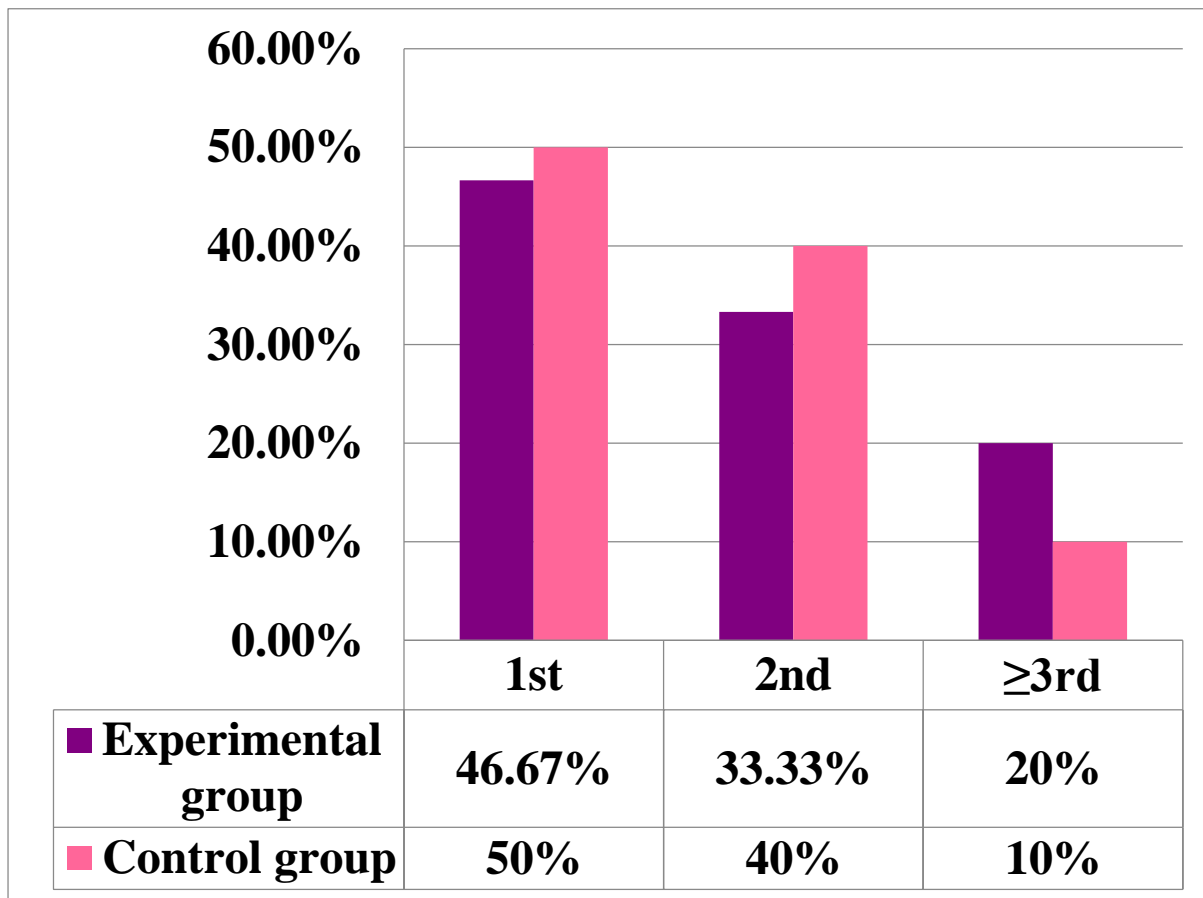


Fig.10 This bar diagram reveals the gravida of the postnatal mothers.

Obstetric and gynaecological variable	Categories	Experimental group		Control group	
		n	%	n	%
Gravida	1st	14	46.67%	15	50%
	2nd	10	33.33%	12	40%
	More or less than 3rd	6	20%	3	10%

Table. 9
Shows per centage distribution of the mothers according to the gravida

Data present shows that the primi mothers 46.67% belongs to the experimental group and 50% belong to the control group. For second gravida 33.33% belong to experimental group and 40% belong to control group. In more or less than 3rd gravida 20% in experimental group and 10% belong to control group.

DURATION OF DELIVERY

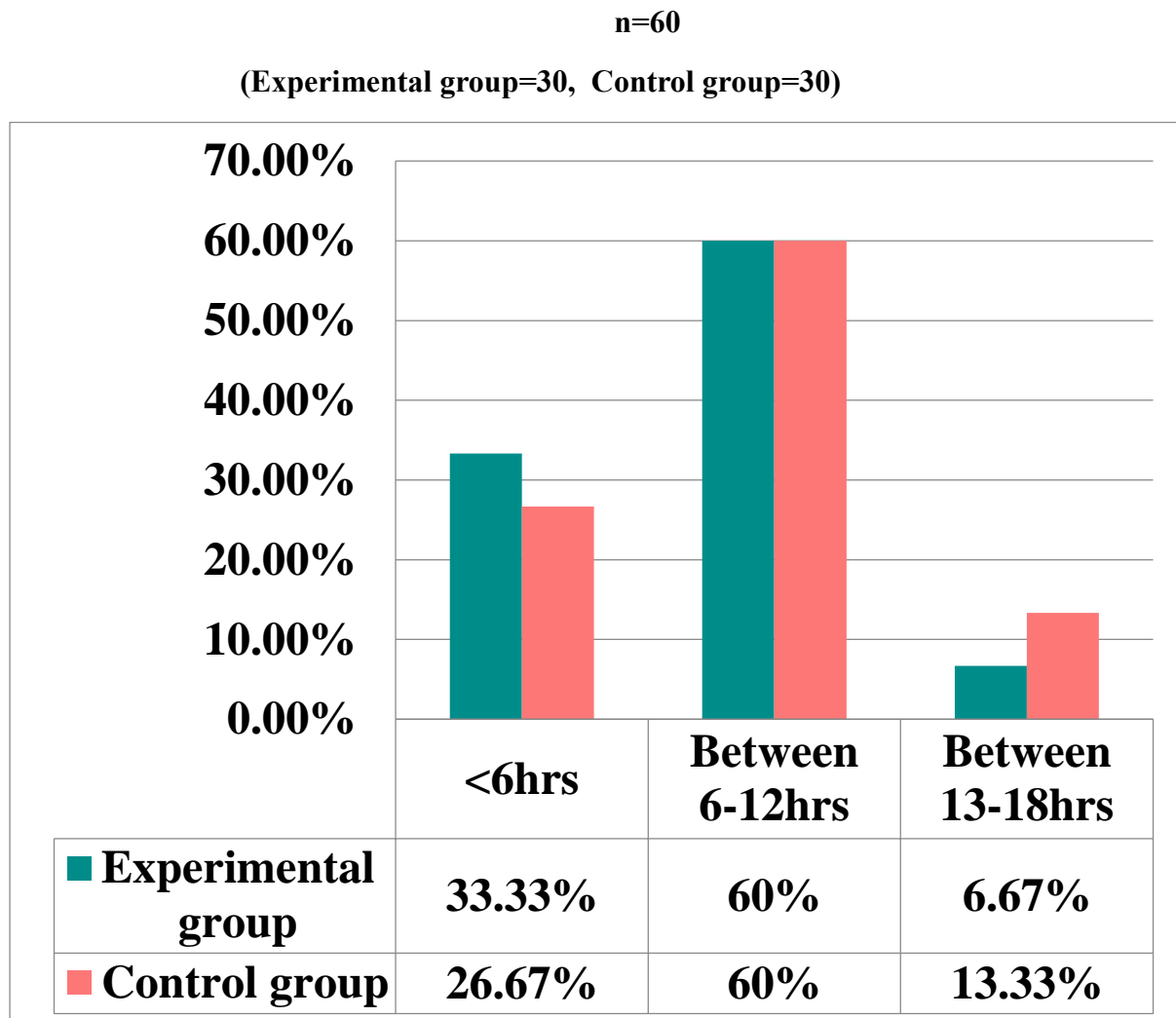


Fig.11 This bar diagram shows the duration of delivery among postnatal mothers

Obstetric and gynaecological variable	Categories	Experimental group		Control group	
		n	%	n	%
Duration of delivery in hours	<6	10	33.33%	8	26.67%
	Between 6&12	18	60%	18	60%

	Between 13 & 18	2	6.67%	4	13.33%
	>18	0	0	0	0%

T
able.

10 Shows percentage distribution of the mothers according to the duration of delivery

Data present shows the duration of delivery more than 6 hours in which 33.33% is from experimental group and 26.67% is from control group. The duration of delivery between 6-12 hours in which 60% is from experimental group and 60% is from control group. The duration of delivery between 13-18 hours in which 6.67% is from experimental group and 13.33% is from control group.

NUMBER OF LIVING CHILD

n=60

(Experimental group=30, Control group=30)

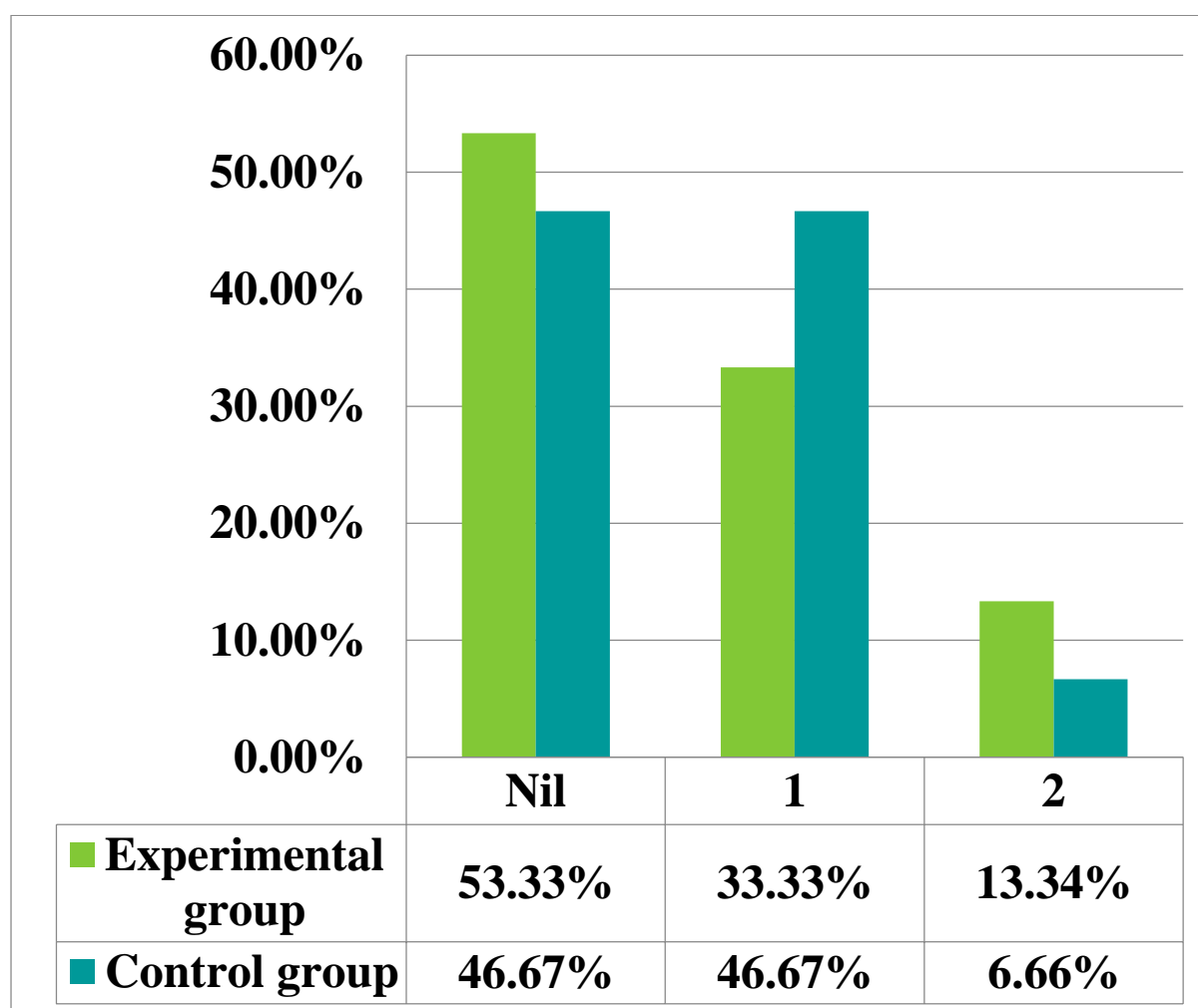


Fig.12 This bar diagram reveals the number of living child of the postnatal mothers

Obstetric and gynaecological variable	Categories	Experimental group		Control group		T
		n	%	n	%	
Number of living children	Nil	16	53.33%	14	46.67%	able. 11 Shows percen tage distrib
	1	10	33.33%	14	46.67%	
	2	4	13.34%	2	6.66%	
	More than 3	0	0%	0	0%	

ution of the mothers according to the number of living children

Data present in table show that the number of no living is 53.33% from experimental group and 46.67 % is from control group. The number of 1 living child is 33.33 % is from experimental group and 46.67% is from control group. The number of 2 living children 13.34% is from experimental group from and 66.66% is from control group.

Table 12: Association between level of pain reduction score & mothers' demographic variables & obstetrical-gynecological profile of Control Group (Pre –Test)n=30

Demographic variable	Categories	Level of pain reduction score				Total	Chi-Square
		Below average(7)		Above average(7)			
		n	%	n	%		
Age	<18 years	1	50%	1	50%	2	$\chi^2 = 1.434$ df= 3
	18-24 years	7	41.18%	10	58.82%	17	
	25-31 years	4	40%	6	60%	10	
Religion	Hindu	9	47.37%	11	52.63%	20	$\chi^2 = 0.06$ df=1
	≥ 32 years	1	100%	0	0%	1	
	Muslim	4	36.36%	6	63.64%	10	
Education	Primary	4	36.36%	7	63.64%	11	$\chi^2 = 0.56$ df=3
	Secondary	6	50%	6	50%	12	
	Higher secondary	2	40%	3	60%	5	
	Graduate & above	1	50%	1	50%	2	
Occupation	Home-maker	13	43.33%	17	56.67%	30	$\chi^2 = 0$ df=1

Family income	Rs.3001-6000	1	39.33%	2	66.67%	3	
	Rs.6001-10000	10	58.82%	7	41.17%	17	$\chi^2 = 3.11$ df=2
	Rs.>10000	2	20%	8	80%	10	

Type of family	Nuclear	3	20%	12	80%	15	$\chi^2 = 6.64$ df=1 *P=0.01
	Joint	10	66.67%	5	33.33%	15	

Obstetrical & gynecological profile	Categories	Level of pain reduction score				Total	Chi Square
		Below average(6)		Above average(6)			
		n	%	n	%		
Age of menarche	<12 years	17	94.44%	1	5.56%	18	$\chi^2 = 18.36$ df=2
	12-15 years	2	18.19%	9	81.81%	11	
	>15 years	1	100%	0	0%	1	
Duration of menstruation	3-4 days	10	66.67%	5	33.33%	15	$\chi^2 = 0.52$ df=2
	5-6 days	9	64.29%	5	35.71%	14	
	≥ 7 days	1	100%	0	0%	1	

Gravida	1 st	10	66.67%	5	33.33%	15	$\chi^2 = 1.87$ df=2 *P=0.50
	2 nd	9	75%	3	25%	12	

	≥ 3	1	33.33%	2	66.67%	3	
Duration of delivery in hours	<6 hours	5	62.5%	3	37.5%	8	$\chi^2 = 2.29$ df=2
	Between 6-12 hours	11	61.11%	7	38.89%	18	
	Between 12-18 hours	4	100%	0	0%	4	

Number of living child	Nil	7	50%	7	50%	14	$\chi^2 = 2.88$ df=2
	1	11	78.57%	3	21.43%	14	
	2	1	50%	1	50%	2	

Pre Assessment of after pains among experimental and control group of post natal mothers.

Age: The data presets that 1 mother between the age group of <18 years, 7 mothers between 18 – 24 years, 4 mothers between 25-31 years and 1 mother is >32 years scored below average 7. And 1 mother between the age group of <18 years, 10 mothers between 18-24 years and 10 mothers 25-31 years scored above average 7. Chi square value computed to determine the association between level of pain reduction score and age of the mothers is 1.434 for df 3 which is not significant at the table value because this is smaller than the table value 2.37 .

Religion :The data shows that 9 Hindu mothers and 4 Muslim mothers scored below average 7. And 11 Hindu mothers and 6 Muslim mothers scored above average 7. Chi square value computed to determine the association between level of pain reduction score and religion of the mother is 0.06 for df 1 which is not significant at the table value because this is smaller than table value 0.46.

Educational qualifications :The data reveals that 4.mothers who had completed primary level 6 mothers who had completed secondary level, 2 mothers had completed higher secondary level, 1 mother had completes her graduation scored below average 7. And 7 mothers who had completed primary level, 6 mother had completed secondary level, 3 mothers had completed higher secondary level, 1 mother had completed hwr graduation scored above average 7. Chi square value computed to determine the association between level of pain reduction score and educational qualifications of mothers was 0.56 for df that is not significant at the table value because this is smaller than the table value 2.37.

Occupation: The data express that 13 mothers who were home maker scored below average 7 and 17 mothers who were home maker scored above average 7. Chi square value computed to determine the association between label of pain reduction score and occupational status of the mothers was for of 1 which is not significant that table value. Because this is smaller than the table value 0.46

Family Income: The data shows that 1 mother whose family income between 3001-6000 per month, 10 mothers whose family income between 6001-10,000 per month and 2 mothers whose family income above 10000 per month scored below average 7. And 2 mothers whose family income between 3001- 6000 per month, 17 mothers whose family income between 6001-10000per month and 8 mother's whose family income above 10000 per month scored above average 7 chi square value computed to determine the association between level of pain reduction score and family income of mothers was 3.11for if 2 which is not significant the table value. Because this is smaller than the table value 4.61.

Type of family: The data presents that 3 mothers had nuclear family and 10 mothers had joint family scored below average 7. And 12 mothers had nuclear family and family and 5 mothers had joint family scored above average 7. chi square value computed to determine the association between of pain reduction score and type of family was 6.64 for df 1 at p =0.01 level of signficance which is equal to table value.

Age of menarche: The data express that 11 mothers between the age of menarche of ≤ 12 years , 1 mother between 12-15 years and one mothers above 15 years scored below average 7 .And 7mothers between the age of menarche ≤ 12 years And 10 mothers between 12-15 years scored above average 7. Chi square value computed to determine the association between association between level of pain reduction score and age of menarche of mothers is 8.883 for df 2 which is not significant the table value. Because this is smaller than the table value 9.21.

Duration of menstruation: The data reveals that 5 mothers had 3-4 days duration of menstruation, 7 mothers had 5-6 days duration and 1 mothers had above 7 days duration scored below average 7. and 10 mothers had 3 to 4 days of duration of menstruation and 7 mothers had 5-6 days duration scored above average 7. Chi square value computed to determine the association between level of pain reduction score and duration of menstruation of mothers is 2.19 for df 2 which is not significant the table value. Because this is smaller than the table value 4.61.

Gravida: The data express that 6 mothers were primigravida ,5 mothers were second gravida and 2 mothers were multi gravida scored below average 7. And 9 mothers were primigravida, 7 mothers were second gravida and 1 mother

was multigravida scored above average 7. Chi square value computed to determine the association between level of pain reduction score and gravida of mothers is 0.828 for df 2 which is not significant the table value. Because this is smaller than the table value 1.39

Duration of delivery: The data shows that 4 mothers duration of delivery is <6 hours and 9 mothers duration of delivery is between 6-12 hours scored below average 7. And 4 mothers duration of delivery is < 6 hours, 9 mothers duration of delivery is between 6-12 hours and 4 mothers is > 12 hours scored above average 7. Chi square value computed to determine the association between level of pain reduction score and duration of delivery in hours is 3.51 for df 2 which is not significant the table value. Because this is smaller than the table value 4.61 .

Number of living child: The data reveals that 6 mothers had no living child at previous and 7 mothers had 1 living child at previous scored below average 7. And 8 mothers had no living child at previous, 7 mothers had 1 living child at previous and 2 mothers had 2 living child at previous scored above average 7 . Chi square value computed to determine the association between level of pain reduction score and number of living child of mothers is 1.79 for df 2 statistically to the table value at the probability > 0.50 level of significant because this value is greater than the table value about 1.39 . (p > 0.50)

Table13: Association between level of pain reduction score & mothers' demographic variables . Control Group (Post –Test). n=30

Demographic variable	Categories	Level of pain reduction score				Total	Chi Square
		Below average(6)		Above average(6)			
		n	%	n	%		
Age	<18 years	1	50%	1	50%	2	$X^2 = 3.09$ df= 3
	18-24 years	11	64.70%	6	35.30%	17	
	25-31 years	8	80%	2	20%	10	
	≥ 32 years	0	0%	1	100%	1	

Religion	Hindu	15	75%	5	25%	20	$X^2 = 1.89$ df=1
	Religion	5	50%	5	50%	10	
Education	Primary	8	72.73%	3	27.27%	11	$X^2 = 4.55$ df=3
	Secondary	8	66.67%	4	33.33%	12	
	Higher secondary	4	80%	1	20%	5	
	Graduate & above	0	0%	2	100%	2	

Occupation	Home maker	20	66.67%	10	33.33%	30	$\chi^2 = 0$
Family income	Rs.3001-6000	2	66.67%	1	33.33%	3	$\chi^2 = 1.27$ df=2
	Rs.6001-10000	10	58.82%	7	41.18%	17	$\chi^2 = 1.27$ df=2
	Rs.>10000	8	80%	2	20%	10	
Type of family	Nuclear	9	60%	6	40%	15	$\chi^2 = 0.6$ df=1
	joint	11	73.33%	4	26.67%	15	

Obstetrical & gynecological profile	Categories	Level of pain reduction score				Total	Chi Square
		Below average(6)		Above average(6)			
		n	%	n	%		
Age of menarche	<12 years	17	94.44%	1	5.56%	18	$\chi^2 = 18.36$ df=2
	12-15 years	2	18.19%	9	81.81%	11	
	>15 years	1	100%	0	0%	1	
Duration of menstruation	3-4 days	10	66.67%	5	33.33%	15	$\chi^2 = 0.52$ df=2
	5-6 days	9	64.29%	5	35.71%	14	
	≥ 7 days	1	100%	0	0%	1	

www.ijcrt.org		1 st	10	66.67%	5	33.33%	15	15 April 2024	ISSN: 2320-2882
Duration of delivery hours	1 st								
	2 nd		9	75%	3	25%	12		χ^2 df=2 *P=0.50
	≥ 3		1	33.33%	2	66.67%	3		
	<6 hours		5	62.5%	3	37.5%	8		χ^2 =2.29 df=2
	Between 6-12 hours		11	61.11%	7	38.89%	18		
Between 12-18 hours		4	100%	0	0%	4			

Number of living child	Nil	7	50%	7	50%	14	χ^2 =2.88 df=2
	1	11	78.57%	3	21.43%	14	
	2	1	50%	1	50%	2	

Age:- The data presents that 12 mothers belong to the age group of 18-24 years, 5 mothers in between 25-31 yr. Scored below average 3 and 1 mother belongs to age group of less than 18 years and 8 mothers in between 18-24 years and 3 mothers in between 25-31 years, 1 mother belongs to above 32 years, scored above average 3. Chi square value computed to determine the association between level of pain reduction score and age of the mother is 2.86 for df -3 which is statistically significant to the table. Value at the probability>0.50 level of significance because this value is greater than the table value about 2.37 .

Religion:- The data in the table also show that 13 Hindu mothers and 4 Muslim mothers scored below average 3 and 11 hindu mothers and 2 muslim mothers scored above average 3. Chi square value computed to determine the association between level of pain reduction score and religion of the mothers was 0.31 for df=1 which statistically not significant. To the table value because this value is less than the table value about 0.46 .

Education:- The data in the table shows that 1 mother is not literate. 3 mothers who has completed their education at primary level, 9 mothers who has completed secondary level, 3 mothers who had completed higher secondary level. 1 mother completed her graduation of education scored below average 3 and 1 mother who is not literate, 3 mothers who had completed primary level, 6 mothers who had completed secondary level, 3 mothers who had completed higher secondary level of education scored above average 3. Chi square value computed to determine the association between level of pain reducing score and education of mother that was 1.074 for df 4 which is statistically not significant to the table value because this value is less than the table value 3.36 .

Occupation:- The data in the table shows that 17 mothers who are home maker scored below average 3 and 12 mothers are home maker, 1 mother is business women. Chi square value computed to determine the association between level of pain reducing score and occupation of mother that was 1.38 for $df=1$ which is statistically not significant to the table value because this value is less than the table value 2.71 .

Family income:- The data in the table shows that 1 mother whose family income between 3001- 6000, 8 mothers whose family income between 6001 – 10000, per month 8 mothers whose family income above 10,000, scored below average 3 and 1 mother whose family income less than/ below 3000, per month 5 mothers whose family income above 10, 000. Scored above average 3. Chi square value computed to determine the association between level of pain reducing score and family income of mother that was 2.39 for $df= 3$ which is statistically significant to the table value at the probability >0.50 level of significance because this value is greater than the table value about 3.36.

Type of family:- The data in the table shows that 12 mothers belong to nuclear family, 5 mothers belong to joint family scored below average 3 and 7 mothers belong to nuclear family and 6 mothers belong to joint family scored above average 3. Chi square value computed to determine the association between level of pain reduction score and type of family of the mother is 0.88 for $df = 1$ which is statistically not significant. To the table value because this value is less than the table value 2.71

Age of menarche:-The data in the table shows that 2 months age of menarche was below 12 years, 15 mothers age of menarche in between 12-15 years, scored below average 3 and 5 mothers age of menarche was below 12 years and 8 mothers age of menarche was in between 12-15 years. Chi square value computed to determine the association between level of pain reduction score and age of menarche that was 2.94 for $df =1$ which is statistically significant to the table value at the probability >0.10 level of significance because this value is greater than the table value about 2.71

Duration of menarche:- The data present that the duration of menstruation of 11 mothers belong to in between 3-4 days, 6 mothers belongs to between 5-6 days, scored below average 3 and duration of menstruation of 1 mothers less than equal to (≤ 2 days), 8 mothers belongs to between 3-4 days, 2 mothers belongs to between 5-6 days and 2 mothers have >7 days duration of menstruation, scored above average 3. Chi square value computed to determine the association between level of pain reduction score and duration of menstruation of the mother is 5.041 for $df= 3$ which is not significant to the table value because this value is less than the table value 6.25 .

Gravida :- The data shows that 9 mothers are primi, 6 mothers are 2nd gravida, 2 mothers belongs to $\geq 3^{\text{rd}}$ gravida scored below average 3 and 4 mothers are primi, 8 mothers are 2nd gravida , 1 mother belongs to above 3rd gravida. Scored above average 3. Chi square value computed to determine the association between level of pain reduction score & gravida of the mother is 1.7 for $df =2$ which is not significant to the table value because this value is less than the table value 4.61.

Duration of delivery in hours:- The data present, 6 mothers whose duration of delivery is <6 hours, 10 mothers whose duration of delivery in between 6-12 hours, 1 mother whose duration of delivery more than 12 hours, scored below average 3 and 4 mothers whose duration of delivery less than 6 hours, 8 mothers whose duration of delivery in between 6-12 hours and 1 mothers more than equal to ($>$) 12 hours. Chi square value computed to determine the association between level of pain reduction score & duration of delivery in hours is 0.9 for $df = 2$ which is not significant to the table value because this value is less than the table value 1.39 .

Number of living child:- The data in the table shows that 10 mothers had no previous child, 5 mothers had 1 previous child and 2 mothers had 2 previous child, scored below average 3 and 6 mothers had no previous child, 5 mothers had 1 previous child and 2 mothers had 2 previous child, scored above average 3. Chi square value computed to determine the association between level of pain reduction score and number of living child of the mother is 0.46 for $df = 2$ which is not significant to the table value because this value is less than the table value 1.39.

Table 14; Association between level of pain reduction score & mothers' demographic variables & obstetrical-gynecological profile of Experimental Group (Pre –Test)

n=30

Demographic variable	Categories	Level of pain reduction score				Total	Chi Square
		Below average(6)		Above average(6)			
		n	%	n	%		
Age	<18 years	0	0%	1	100%	1	χ^2 1.315 df= 3
	18-24 years	7	35%	13	65%	20	
	25-31 years	2	25%	6	75%	8	
	≥ 32 years	0	0%	1	100%	1	

Religion	Hindu	7	29.166%	17	70.83%	24	χ^2 = 0.038 df=1
	Muslim	2	33.333%	4	66.66%	6	
Education	Not literate	0	0%	2	100%	2	χ^2 = 3.759 df=4 *P>0.50
	Primary	2	33.33%	4	66.66%	6	
	Secondary	4	26.66%	11	73.33%	15	
	Higher secondary	3	50%	3	50%	6	
	Graduate & above	0	0%	1	100%	1	

Occupation	Home maker	9	31.034%	20	68.965%	29	$\chi^2 = 4.432$ df=1
	business	0	0%	1	100%	1	
Family income	Rs.<3000	0	0%	1	100%	1	$\chi^2 = 3.917$ df=3
	Rs.3001-6000	1	100%	0	0%	1	
	Rs.6001-10000	5	38.46%	8	61.53%	13	
	Rs.>10000	3	20%	12	80%	15	

Type of family	Nuclear	8	42.10%	11	57.89	19	$\chi^2 = 3.59$ df=1
	Joint	1	9.09%	10	90.90%	11	

gynecological profile		Below average(6)		Above average(6)		Total	Chi-Square
		n	%	n	%		
Age of menarche	<12 years	2	30.43%	5	71.52%	7	$\chi^2 = 0.013$
	12-15 years	7	28.57%	16	69.56%	23	
Duration of menstruation	≥ 2 days	1	100%	0	0%	1	$\chi^2 = 4.779$ df=3
	3-4 days	7	36.842%	12	63.157%	19	
	5-6 days	1	12.5%	7	87.5%	8	
	≥ 7 days	0	0%	2	100%	2	

Gravida	1 st	6	40%	9	60%	15	$\chi^2 = 0.828$ df=2
	2 nd	5	41.67%	7	58.33%	12	
	≥ 3	2	66.67%	1	33.33%	3	
Duration of delivery in hours	<6 hours	4	50%	4	50%	8	$\chi^2 = 3.51$ df= 2
	Between 6-12 hours	9	50%	9	50%	18	
	Between 12-18 hours	0	0%	4	100%	4	

Number of living child	Nil	6	42.85%	8	57.14%	14	$\chi^2 = 1.79$ df=2
*P = 0.50							

1	7	50%	7	50%	14
2	0	0%	2	100%	2

Age :The data present that 7 mothers age group of 18- 24 years, 2mothers belong to the age group of 25-31years ,who scored below average 6.1mother belong to the age group of less than 18 years,13 mothers belong to the age group of 18- 24 years,6 mothers belong to the age group of 25-31 years and 1 mother belong to the age group of greater than or equal to 32 years scored above average 6 .Chi- Square value is computed to determine the association between the level of pain reduction score and age of the post natal mothers is 1.315 for degree of freedom 3 which is not statistically significant to the table value because this value is less than the table value about 2.37 .

Religion:The data presents that 7 mothers and 2 Muslim mothers score below average 6 .17 hindu mothers and 4 muslim mothers scored above average 6.Chi- Square value is computed to determine the association between the level of pain reduction score and religion of the post natal mothers is 0.038 for degree of freedom 1 which is statistically not significant to the table value because this value is less than the table value about 0.46.

Education: The data presents that 2 mothers are educated up to the primary level,4 mothers are educated up to the secondary level ,3 mothers are educated up to the higher secondary level who scored below average 6.2 mothers are not literate ,4 mothers are educated up to the primary level,11 mothers are educated up to the secondary level, 3 mothers are educated up to the higher secondary level and 1 mother is graduate who scored above average 6.Chi- Square value is computed to determine the association between the level of pain reduction score and.....

Family Income :Who scored below average 6. And 1 mother belongs to family whose monthly family income is less than RS -3000, 8 mothers belongs to the family whose family income monthly is Rs – 6001-10000 and 12 mothers belongs to the family whose monthly family income is greater than Rs-10000 who scored below average 6. The Chi-square value is computed to determine the association between the level of pain reduction score and family income of the postnatal mother is 3.917 for degree of freedom 3 which is statistically not significant to the table value because this value is less than the table value 6.25.

Type of Family :The data presents that 8 mothers belongs to the nuclear family and 1 mother belongs to the joint family who scored below average 6.and 11 mothers belongs to the joint family who scored above average 6. The Chi-square value is computed to determine the association between the level of pain reduction score and type of the family is 3.59 for degree of freedom 1 which is statistically not significant to the table value because this value is less than the table value about 3.84.

Duration of delivery :Square value is computed to determine the association between the level of pain reduction of score and duration of delivery is 0.951 for degree of freedom 2 which is statistically not significant to the table value as this volume is less than the table value about 1.39.

No. of living child

The data presents that 2months have no child,6mothers have 1 child,1 mother has 2children who scored below average 6 .14 mothers have no child,4 mothers have 1 children and 3 mother's have 3 or more children who scored above average 6.Chi-squareb volume is computed to determine the association between

the level of pain reduction score and no. of living child is 6.665 for Degree of freedom 2 which is statistically not significant to the table value as this value is less than the table value about 7.82.

Table 14: Association between level of pain reduction score & mothers' demographic variables & obstetrical-gynecological profile of Experimental Group (Post –Test)

Demographic variable	Categories	Level of pain reduction score				Total	Chi Square
		Below average(3)		Above average(3)			
		n	%	n	%		

Age	<18 years	0	0%	1	100%	1	χ^2	n=30
Occupation	Home maker	17	58.62%	12	41.38%	29	$\chi^2 = 2.86^* =$	
	18-24 years business	0	0%	12	60%	12	$\chi^2 = 1.38$	
				8	100%	20	$df=1$	
Family income	Rs.<3000	0	0%	5	62.5%	5	$\chi^2 = 2.39$	
	25-31 years	0	0%	1	100%	1	$df=3$	
				3	37.5%	8	$*P=0.50$	
	Rs.3001-6000	1	100%	0	0%	1	$*P=0.50$	
	6000	0	0%	1	100%	1		
	Rs.6001-10000	8	61.38%	5	38.47%	13		
	Rs.>10000	8	58.33%	7	46.67%	15		
Type of family	Nuclear	12	63.16%	7	36.84%	19	$\chi^2 = 0.88$	
							$df=1$	
	Joint	5	45.45%	6	54.55%	11		

Religion	Hindu	13	54.17%	11	45.83%	24	$\chi^2 = 0.31$
							$df=1$
	Muslim	4	66.67%	2	33.33%	6	$*P=0.50$
Education	Not literate	1	50%	1	50%	2	$\chi^2 = 1.074$
	Primary	3	50%	3	50%	6	$df=4$
	Secondary	9	60%	6	40%	15	
	Higher secondary	3	50%	3	50%	6	
	Graduate & above	1	100%	0	0%	1	

Obstetrical & gynecological profile	Categories	Level of pain reduction score				Total	Chi Square
		Below average(3)		Above average(3)			
		n	%	n	%		

Age of menarche	<12 years	2	28.57%	5	71.43%	7	$\chi^2 = 2.94$ df=1 *P>0.10
	12-15 years	15	65.21%	8	34.79%	23	
Duration of menstruation	≥ 2 days	0	0%	1	100%	1	$\chi^2 = 5.041$ df=3
	3-4 days	11	57.89%	8	42.11%	19	
	5-6 days	6	75%	2	25%	8	
	≥ 7 days	0	0%	2	100%	2	

Gravida	1 st	9	64.23%	5	35.72%	14	$\chi^2 = 1.7$ df=2
	2 nd	6	60%	4	40%	10	
	≥ 3	2	33.33%	4	66.67%	6	
Duration of delivery in hours	<6 hours	6	60%	4	40%	10	$\chi^2 = 0.9$
	Between 6-12 hours	10	55.55%	8	44.45%	18	
	Between 12-18 hours	1	50%	1	50%	2	

Number of living child	Nil	6	42.85%	8	57.14%	14	$\chi^2 = 1.79$ df=2 *P = 0.50
	1	7	50%	7	50%	14	
	2	0	0%	2	100%	2	

Age:- The data presents that 12 mothers belong to the age group of 18-24 years, 5 mothers in between 25-31 yr. Scored below average 3 and 1 mother belongs to age group of less than 18 years and 8 mothers in between 18-24 years and 3 mothers in between 25-31 years, 1 mother belongs to above 32 years, scored above average 3. Chi square value computed to determine the association between level of pain reduction score and age of the mother is 2.86 for df -3 which is statistically significant to the table. Value at the probability >0.50 level of significance because this value is greater than the table value about 2.37 .

Religion:- The data in the table also show that 13 Hindu mothers and 4 Muslim mothers scored below average 3 and 11 hindu mothers and 2 muslim mothers scored above average 3. Chi square value computed to determine the association between level of pain reduction score and religion of the mothers was 0.31 for df=1 which statistically not significant. To the table value because this value is less than the table value about 0.46 .

Education:- The data in the table shows that 1 mother is not literate. 3 mothers who has completed their education at primary level, 9 mothers who has completed secondary level, 3 mothers who had completed higher secondary level. 1 mother completed her graduation of education scored below average 3 and 1 mother who is not literate, 3 mothers who had completed primary level, 6 mothers who had completed

secondary level, 3 mothers who had completed higher secondary level of education scored above average 3. Chi square value computed to determine the association between level of pain reducing score and education of mother that was 1.074 for df 4 which is statistically not significant to the table value because this value is less than the table value 3.36 .

Occupation:- The data in the table shows that 17 mothers who are home maker scored below average 3 and 12 mothers are home maker, 1 mother is business women. Chi square value computed to determine the association between level of pai reducing score and occupation of mother that was 1.38 for df=1 which is statistically not significant to the table value because this value is less than the table value 2.71 .

Family income:- The data in the table shows that 1 mother whose family income between 3001- 6000, 8 mothers whose family income between 6001 – 10000, per month 8 mothers whose family income above 10,000, scored below average 3 and 1 mother whose family income less than/ below 3000, per month 5 mothers whose family income above 10, 000. Scored above average 3. Chi square value computed to determine the association between level of pain reducing score and family income of mother that was 2.39 for df= 3 which is statistically significant to the table value at the probability >0.50 level of significance because this value is greater than the table value about 3.36.

Type of family:- The data in the table shows that 12 mothers belong to nuclear family, 5 mothers belong to joint family scored below average 3 and 7 mothers belong to nuclear family and 6 mothers belong to joint family scored above average 3. Chi square value computed to determine the association between level of pain reduction score and type of family of the mother is 0.88 for df = 1 which is statistically not significant. To the table value because this value is less than the table value 2.71

Age of menarche:The data in the table shows that 2 months age of menarche was below 12 years,15 mothers age of menarche in between 12 to 15 years,second below average 3 mothers age of menarche was below 12 years and 8 mothers age of menarche was in between 12 to 15 years.Chi Square value computed to determine the association between level of pain reduction score and age of menarche that was 2.94 for af=1 which is statistically significant to the table value at the probability>0.10 level of significance because this value is greater than the table value about 2.71.

Duration of menstruation: The data present that the duration of menstruation of 11 mothers belong to in between 3.4 days , 6 mothers belongs to between 5 to 6 days , score below average 3 & duration of menstruation of 1 mother less than equal to (greater than equal to 2 days),8 mothers belong to between 3 to 4 days, 2 mothers belong to between 5 to 6 days and 2 mothers have greater than equal 7 days duration of menstruation. Second above average 3 Chi Squar value computed to determine the association between level of pain, reduction, score and duration of menstruation of the mother is 5.041 for df=3 which is not significant to the table value because this value is less than table value 6.25.

Gravida:The data shows that a mothers are primi,6 mothers are 2nd gravida ,2 mothers belongs to 3rd gravida scored belong average 3 and 4 mothers are primi,8 mothers at 2nd gravida,1 mothers belong to above 3rd gravida.2nd above average 3.Chi Squer value computed to determine rhe association between level of pain

reduction score 8 gravida of the mother is 1.7 for df to which is not significant to the table value because this value is less than the table value 4.61

Duration of delivery in hours: The data present, 6 mother whose duration of delivery is <6 hours, 10 mothers whose duration of in between 6to 12 hours, 1 mother whose duration of delivery more than 12 hours, score below average 3 and 4 mothers whose duration of delivery less than 6 hours, 8 mothers whose duration of delivery in between 6-12 and 1 mother more than equal to 12 hour. Chi square value computed to determine the association between level of pain reduction score and duration of delivery in hours is 0.9 for df =2 which is not significant to the table value because this is smaller than the table value 1.39

Number of living children : The data present in the table shows that 10 mothers had no child, 5 mothers had 1 previous child and 2 mothers had 2 previous child scored above average 3. Chi square value computed to determine the association between level of pain reduction score and number of child of mother is 0.46 for df which is not significant to the table value because this value is less than the table value 1.39

CONTROL GROUP

n =60

(Experimental group=30, Control group=30)

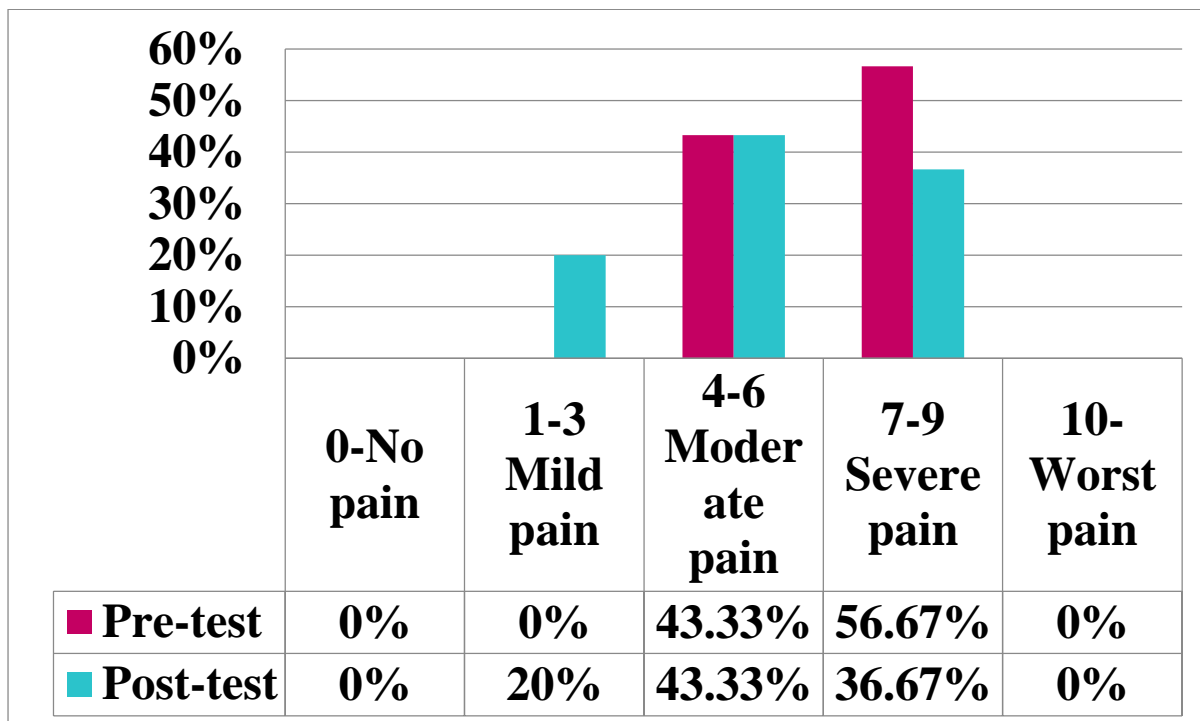


Fig.13 This bar diagram reveals the pre-test & post-test pain score in control group

Description	Control Group			
	Pre test		Post test	
	n	%	n	%
0- No pain	0	0%	0	0%
1-3 Mild pain				
4-6 Moderate pain	0	0%	6	20%
7-9 severe pain	15	43.33%	13	43.33%
10 worst pain	14	56.67%	11	36.67%
	0	0%	0	0%

Table. 15
Shows percentage distribution of the mothers according to presence of pain in control group after post assessment

This bar diagram reveals the pre

test and post test pain score in control group. The highest pre-test pain score of control group is between 7-9 severe pain and 56.67% mother is in this. The lowest pre-test of control group is between 4-6 Moderate pain and 43.33% mother included in this group.

Highest post test pain score of control group is between 4-6 Moderate pain and 43.33% Moderate pain is included in this group. Lowest pain score of control is between 1-3 Mild pain and 20% is included in this group.

EXPERIMENTAL GROUP

n =60.

(Experimental group=30, Control group=30)

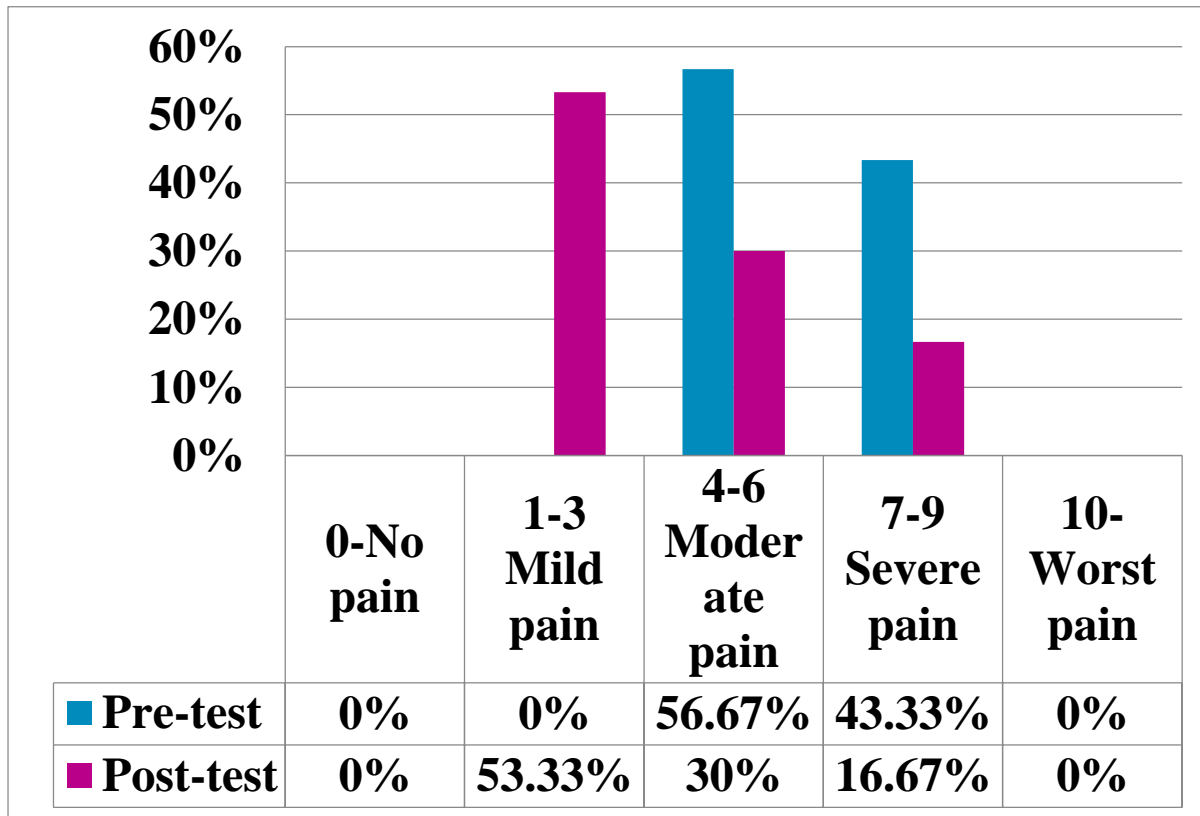


Fig.14 This bar diagram reveals the pre-test & post-test pain score in experimental group.

Description	Experimental Group			
	Pre test		Post test	
	n	%	n	%
0- No pain	0	0%	0	0%
1-3 Mild pain				
4-6 Moderate pain	0	0%	16	53.33 %
7-9 severe pain	17	56.67%	9	30%
10 worst pain	13	43.33 %	5	16.67%
	0	0%	0	0%

Table. 16
Shows percentage distribution of the mothers according to presence of pain in experimental group after post assessment

This bar diagram reveals highest pre test pain score of experimental group is between 4-6 Moderate pain and 56.67% is included in this group. The lowest pre test score in experimental group is between 7-9 severe pain and 43.33% mother is included in this group.

Highest post test pain score of experimental group is between 1-3 Mild pain and 53.33% mother is included in this group. Lowest post test pain score of experimental group is between 4-6 Moderate pain and 30% mother is included in this group.

CHAPTER V

Discussion with other with other study

In this study

The demographical variable of the mothers shows that the most mothers belong to age group of 18-24 years and primi gravida. Postnatal mothers in experimental group showed a significant decrease in level of after pain following nursing interventions ($P < 0.05$) in comparison of the pre assessment level of afterpain

Other study

Dash M stated in the study of “Effectiveness of selected nursing interventions on afterpain among the postnatal mother in the selected hospital. The demography variable of the mother shows that the most of the mothers 21(42%) were in the age group of 21-25 years, 30(60%) belongs to lower class, 25(50%) were primi mothers the pain of the postnatal mothers exhibits that during the pre-test 4(8%) , 46(92%) mothers had intermediate, continuous type of pain none of them (0%) had brief pain whereas in post-test 7(14%), 30(60%), 13(26%) mothers had brief, intermediate, continuous type of pain.

CHAPTER VI

SUMMARY AND CONCLUSION

This chapter gives a brief account of the present study it consist of four sections. in the first two sections, the summary and the implications for nursing 2practice are presented. In the last two sections, the recommendations for further research and conclusion are presented

Summary

Child birth is a significant event in the lives of women and their families. It is a critical time in human development that transforms women into mothers. Child

birth (also called partum, birth or parturition) is the culmination of a human pregnancy or gestation period with birth of one or more newborn infants. There are many minor disorders occurs after the delivery process. The investigator under took the present study to assess the effectiveness of selected nursing interventions on reduction of after pains among postnatal mothers, in TGMC&H PurbaMedinipur. This study was conducted in Tamralipto Govt Medical College& Hospital. 60 postnatal mothers were selected by purposive sampling technique, data was collected by 0-10 Numeric rating scale to assess the level of after pains among multi para mothers.

Major findings

Findings related to demographic variables of. Postnatal mothers in experimental group and control group

- Maximum 37 (61.66%) of the mother belongs to the age group 18-24 years.
- Majority 44(73.33%) of the mothers were Hindu
- Maximum 27(45%) of the mothers completed secondary education.
- Maximum 59(98.33%) mothers were homemaker
- Maximum 30(50%) of the patient had monthly family Income between ₹10000-20000.
- Maximum 34(56.66%) of mothers belong from nuclear family.

Findings related to obstetrical and gynecological variables of postnatal mother in experimental and control group

- Maximum 34(56.66%) mothers' age of menarche was 12-15.
- Maximum 34(56.66%) of the mothers' duration of menstruation was 3-4 days.
- Maximum 29(48.33%) of the mother were primi gravida.
- Maximum 36(60%) of mothers' duration of delivery was between 6-12 hours
- Maximum 30(50%) of mothers' number of living children is nil.

Findings related to the reduction of pain in experimental group and control group

Findings related to the association between level of pain reduction score & mothers' demographic variables & obstetrical-gynecological profile

Chi square value computed to see the association between level of pain reduction score and mother's obstetrical variables profile is found to be statistically significant .

Implication of the Study

The present study emphasized the selected nursing interventions such as postnatal exercises on reduction of after pains among postnatal mothers.

Nursing practice

The midwives could have a vital role in enabling safe and effective measures on reduction of after pains intensity through the use of nursing interventions, and the nurse midwives should learn about accurate assessment of after pains with the use of appropriate pain scales. The nurse should understand the importance of nursing interventions and should know it as a non pharmacological therapy in the field of

obstetrics. Nurses should teach the postnatal mothers about the benefits of nursing interventions on reduction of after pains intensity and promote the postnatal mothers to use nursing interventions in after pain management and it helps in minimize the requirement of analgesics.

Nursing education

The student nurses should be encouraged to know about the importance of nursing interventions to the postnatal mothers. The nurse educator should provide adequate clinical experience to the students, where nursing interventions can be effectively used as a midwifery approach on reduction of after pains and encourage the students to demonstrate the nursing procedure in clinical setting. The nursing library could have available literature regarding after pains management for students reference. The nurse educator should encourage student nurses to bring out innovative and creative ideas pertaining to effective and safe management of after pains, thus the education can encourage the students for the effective utilization of research based practice.

Nursing administration

The role of a nurse administrator is to have a collaboration with medical departments to administer nursing interventions in reduction of after pains in postnatal period. The nurse administrator should arrange for a nurses awareness programs regarding the effectiveness of nursing interventions on reduction of after pains in the concerned department and provide opportunity for midwives to attend training programme on nursing interventions to reduce after pains. She can also initiate measures for introductions of nursing intervention in postnatal ward settings.

Nursing research

Nurse researches can promote more research in after pains. As evident from the review of literature, more research needs to be warranted on this discipline. Disseminate the findings through conferences, seminars, publications in professional, national and international journals.

Recommendation

Similar study can be conducted by increasing the sample size.

- A comparative study between primi para and multi para mothers can bedone.
- A comparative study between the fundal massage and postnatal exercise to see the effectiveness in reduction of after pains.
- A correlation study between breast feeding and level of after pains among postnatal mother can done.

Conclusion

The role of a nurse is to find out a very good way to alleviate the pain and make the postnatal period of the mother indeed the happiest period of her life. From the result of the study, it was concluded that rendering nursing interventions such as exercises to the postatal mothers were effective in reducing the level of after pains. Therefore, the investigator felt that, more importance should be given be assess the post partum after pains and discomfort experienced by the mother and measures should be taken seriously in order to reduce the after pains.

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Appendix A 1

Letter seeking permission from the principal, Tamralipto Government Medical College and Hospital, Purba Medinipur, West Bengal

To
The Principal
T.G.M.C & H, Purba Medinipur

Allowed
Sai
5/9/2023
PRINCIPAL
Tamluk Govt. Medical College & Hospital
Tamluk, Purba Medinipur

Through proper channel

Sub: Application for permission to conduct research projects

Respected Madam,

With due regards, we want to draw your kind attention to the fact that we are supposed to undertake two group research projects and submit to fulfilment of GNM third year internship in GNM course in for the session 2020-2023. The titles of the research projects are 'Assessment of knowledge regarding foot care among diabetes mellitus patients in selected hospital at Purba Medinipur, West Bengal' and 'A study to assess the effectiveness of postnatal exercise on after pain among postnatal mothers at TGMC&H, Purba Medinipur, West Bengal'.

We will bear all expenses of the research project on us own & will have informed consent and permission of all participants and concerned authorities before starting the study. Privacy, safety and confidentiality of all the study participants will be maintained strictly.

We shall be highly obliged if you kindly give the permission to conduct the proposed study.

Thanking you.

Date: 5/09/2023

Yours sincerely

On behalf of
3rd year Intern Students
NTS, TGMC&H
Group-A - Ankita Baro
Jayashree Das.
Group-B - Krishna Nath
Bidisha Manua.

*Forwarded to the principal madam
for necessary action please*
apj
PNB
04.09.23
N.T.S. Tamluk Govt. Medical
College & Hospital
Tamluk, Purba Medinipur

Appendix A 2

To,
The Chairperson
Institutional Ethical Committee
Tamralipto Govt. Medical College and Hospital
Tamluk, PurbaMedinipur

Subject: Prayer for seeking permission from ethical committee for research

Respected Sir/Madam,

This is to inform you that, we GNM Intern student of Nursing Training School, Tamralipto Govt. Medical College and Hospital under WBNC, session 2020-2023, would like to accept our proposal of dissertation on the topic:

1. "A study to assess the effectiveness of postnatal exercise on after pain among postnatal mothers at Tamralipto Govt. Medical College and Hospital, Tamluk, PurbaMedinipur, West Bengal."
2. "Effect of structured teaching program on knowledge regarding foot care among diabetic patient at Tamralipto Govt. Medical College and Hospital, Tamluk, PurbaMedinipur, West Bengal"

We, therefore, request you to kindly do the needful and allow us to conduct that studies and to publish or present the dissertation as a scientific paper.

Here with one attached copies of :

Proposal of related research topic

Consent form

Tool

Thanking you

Date:

NTS, Tamralipto Govt. Medical College and Hospital

Tamluk, PurbaMedinipur

Yours faithfully

GNM Intern students

Appendix B1

To,
The Medical Officer
Tamralipto Govt. Medical College & Hospital
Tamluk, Purba Medinipur

Sub : Prayer for seeking permission for research

Respected Sir,

This is to inform you that, we GNM Intern student of Nursing Training School Tamralipto Govt. Medical College & Hospital, would like to accept our proposal of research on the topic " A study to assess the effectiveness of postnatal exercise on after pain among postnatal mothers at Tamralipto Govt. Medical College & Hospital, Purba Medinipur, West Bengal" for GNM Nursing course session 2020-2023.
I, therefore, request you to kindly do the needful and allow us to conduct the study.

Here with one attached copies of :
Proposal of related research topic
Consent form

Thanking You,

Date : 14-8-23

Tufan Khudw

Yours Faithfully,
GNM Intern Student
NTS, Tamralipto Govt. Medical College & Hospital
Tamluk, Purba Medinipur

To,
The Medical Officer
Tamralipto Govt. Medical College & Hospital
Tamluk, Purba Medinipur

Sub : Prayer for seeking permission for research

Respected Sir,

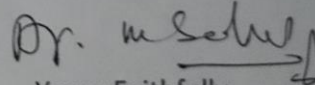
This is to inform you that, we GNM Intern student of Nursing Training School Tamralipto Govt. Medical College & Hospital, would like to accept our proposal of research on the topic " A study to assess the effectiveness of postnatal exercise on after pain among postnatal mothers at Tamralipto Govt. Medical College & Hospital, Purba Medinipur, West Bengal" for GNM Nursing course session 2020-2023.

I, therefore, request you to kindly do the needful and allow us to conduct the study.

Here with one attached copies of :
Proposal of related research topic
Consent form

Thanking You,

Date : 13/6/23


Yours Faithfully,
GNM Intern Student

NTS, Tamralipto Govt. Medical College & Hospital
Tamluk, Purba Medinipur

ডাঃ মধুসূদন সাহু
MBBS, MS (G & O)
Reg. No.- 68718 (WBMC)
তামলুক জেলা হাসপাতাল

Information to participants\legally acceptable representative of participants in case they minor or likely to be mentally incompetent

Information to the participants

Title of the study

We are GNM Intern student of Nursing Training School, Tamralipto Govt. Medical College & Hospital. Conducting a study “A study to assess the effectiveness of postnatal exercise on after pain among postnatal mothers at TGMC&H, PurbaMedinipur, West Bengal. “

Purpose of the study

Purpose of the study is to determine the effectiveness of postnatal exercise on after pain among postnatal mothers in selected hospital, Tamluk.

Why have we been choosen?

You have been selected to participate in this study because you might have fulfilling all the criteria of our research study and you might have some knowledge regarding the effectiveness of postnatal exercise to relief pain among postnatal mother

Do we necessarily have to take part?

Your participation in this study is very much necessary but you have the right to refuse or quiet from the study at any stage or any point of time of the research study without any penalty.

What do we have to do?

You will be demonstrate some postnatal exercise to perform after that we will measuring the level of reduction of pain and asking you some question to answer.

What are the possible benefits of takin part?

You will receive the benefit as a result of takin part in this study is to measuring the reduction of pain level and the result will be used later in education and research purpose.

Are there any possible disadvantages of taken part?

There will be no possible disadvantages of taken part in the study.

Will our takin part in this study be kept confidential?

Yes, all information collected will be used only for purposes of this study and will not disclosed for any other purposes.

What will happen to the results of the study?

The result of the study will about better understanding of the effectiveness of postnatal exercise among postnatal mothers to relief pain.

The result of the research will be given to you if you asked Any other information relevant to participation in the study?

This interview is entirely voluntary, you can refuse to answer in any specific question or decide to terminate the interview in any point of time.

Contact for further information.

GNM Intern student session(2020 – 2023)

Nursing Training School, Tamralipto GovtMedical& Hospital

Tamluk, PurbaMedinipur .

Your kind cooperation is highly solicited. We will be very much grateful to you for extending your cooperation to complete our study.

AppendixC2

Research Consent Form (English)

Participant informed consent form (PICF)

Participant informed consent form (PICF)

Centre code number-----

Participant code number of this study-----

Ihereby state that, the content of the information sheet have been explained in detail to me and I have fully understood the content.

The nature and purpose of the study and its potential risk / benefit and expected duration of the study, and other relevant details of the study have been explained to me in detail. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal right being affected.

I understand that the information collected about me from my participation in this research and section of any of my medical notes may be looked at by responsible individuals from the institute. I give permission for these individuals to have access to my record.

I agree to take part in this study.

(Signature/ Left thumb impression)

Date -----

Place-----

Name of the participant-----

Son / Daughter/ Spouse of -----

Complete postal address -----

This is to certify that the above consent has been obtained in my presence.

Signature of the investigator.....

Place:

Date:.....

1. Witness :

2. Witness :

Signature

Name:

Address:

Date:

Signature

Name:

Address:

Date:

Appendix C3

Appendix B1

TOOL-I(a)

Semi structured interview schedule on demographic variable.

Purpose- The interview schedule is develop to obtain demographic profile of postnatal mothers at TGMC&H, Tamluk, Purba Medinipur, West Bengal.

Background data of the participants:

The investigator will put a tick mark (✓) in the appropriate blank space, provided for each item at the

TOOL-I(b)

Semi structured interview schedule on Gynecological and Obstetrical history of mothers profile.

Purpose - The interview schedule developed to obtain Gynecological and Obstetrical profile of postnatal mothers of TGMC&H, Tamluk, Purba Medinipur, West Bengal.

Background data of the participants :

The investigator will put a tick mark (✓) in the appropriate blank space, provided for each item at the right side ; according to the response of the participants.

Date of interview :

Place of interview :

1. Age of menarche :
 - i. <12 years
 - ii. 12-15 years
 - iii. >15 years
2. Duration of menstruation:
 - i. ≤2 days
 - ii. 3-4 days
 - iii. 5-6 days
 - iv. ≥7 days
3. Gravida:
 - i. 1st
 - ii. 2nd
 - iii. ≥3rd
4. Parity :
 - i. P0+0+0+0
 - ii. P1+0+0+0
 - iii. P1+1+0+0
 - iv. P1+1+1+0
 - v. P1+1+1+1
 - vi. P2+0+0+0 & others
5. Duration of delivery in hours :
 - i. <6
 - ii. Between 6 &12
 - iii. Between 12 & 18
 - iv. >18
6. Number of living child :
 - i. Nil
 - ii. 1
 - iii. 2
 - iv. ≥3
7. Weight of baby:
 - i. <2.5kg
 - ii. 2.6-3 kg
 - iii. 3.1-3.5 kg
 - iv. >3.5 kg

সম্মার

র

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মুমতি

TOOL-II(a)

Semi structured interview schedule to assess after pain level.

Purpose – The questionnaire is prepare to assess the pain level among the postnatal mothers at TGMC&H, Tamluk, Purba Medinipur, West Bengal.

Instructions: Answer the following question which are asked and put and tick (✓) . Mark against the most appropriate column:

1. Do you have any stitch in perineal area?

Yes () No ()

2. Are you feeling pain now?

Yes () No ()

3. Do you have pain in other part except perineal area?

Yes () No ()

4. Do you feel pain while you moving?

Yes() No()

5. Do you feel pain in your abdomen?

Yes() No()

Tool -II(b)

Observation schedule to assess after pain among postnatal mother by using facial pain scale.

Purpose:

The interview schedule is prepared to assess the after pain level among the post Natal mothers add TGMC and eight tamluk purba medinipur West Bengal.

Instruction:

Answer the following question which are asked and put a tick(✓) mark against the most appropriate column.

Questionnaire	Not at all	Often	Continue
How much pain do you feel at the perineal side?			
How much abdominal pain do you feel?			
How much back pain do you feel?			
How much pain do you feel when you move?			
Do you have pain at the stitch side?			

Grading: not at all -0, often-1, continue-2

0- no pain

1-3 -Mild pain

4-6 -Moderate pain

7 -9 – Severe pain

10- Worst pain

Data collection tool in Bengali

টুল – এক(ক)

জনসংখ্যাগত পরিবর্তনশীল অর্থকাঠামোবদ্ধ সাক্ষাৎকারের কর্মসূচী:

উদ্দেশ্য: সাক্ষাৎকারের কর্মসূচী তাম্রলিপ্ত গভর্নমেন্ট মেডিক্যাল কলেজ এবং হাসপিটাল এ প্রসবপরবর্তী মায়াদের জনসংখ্যাগত তথ্য সংগ্রহ করার জন্য তৈরি করা হয়েছে।

অংশগ্রহণকারীদের পর্ষিক তথ্য:

অংশগ্রহণকারীদের প্রতিক্রিয়া অনুযায়ী, তদন্তকারী ডান দিকে প্রতিটি আইটেমের জন্য উপলব্ধ উপযুক্ত ফাঁকা স্থানে, একটি ঠিক (✓) চিহ্ন দেবেন।

সাক্ষাৎকারের তারিখ:

সাক্ষাৎকারের স্থান:

১) বয়স:

২) ধর্ম:

ক) হিন্দু

খ) মুসলিম

গ) খ্রিস্টান

ঘ) অন্যান্য

৩) মায়ের শিক্ষাগত যোগ্যতা:

ক) অশিক্ষিত

খ) প্রাথমিক

গ) মাধ্যমিক

ঘ) উচ্চমাধ্যমিক

ঙ) স্নাতক ও স্নাতকোত্তর

৪) মায়ের পেশা:

ক) গৃহকর্ত্রী

খ) চাকরিবিহীন

গ) দৈনিক মজুরপ

ঘ) ব্যবসা

ঙ) সরকারি কর্মচারী

চ) বেসরকারী কর্মচারী

৫) মাসিক পারিবারিক আয়:

ক) ₹৮২২০ এবং বেশি

খ) ₹৪১১০-₹৮২১৯

গ) ₹২৪৬৫-₹৪১০৯

ঘ) ₹১২৩০-₹২৪৬৪

ঙ) ₹১২৩০- এর কম

৬) পরিবারের ধরন:

ক) ছোট পরিবার

খ) যৌথ পরিবার

গ) বিস্তৃত পরিবার

টুল – এক (খ)

প্রসবপরবর্তী মায়াদের প্রসূতি সংক্রান্ত অর্ধকাঠামোবদ্ধ সাক্ষাৎকারের কর্মসূচি

উদ্দেশ্য:

সাক্ষাৎকারের কর্মসূচী তাম্রলিপ্ত গভর্নমেন্ট মেডিক্যাল কলেজ এবং হাসপিটাল এ প্রসবপরবর্তী মায়াদের প্রসূতি সংক্রান্ত তথ্য সংগ্রহ করার জন্য তৈরি করা হয়েছে।

অংশগ্রহণকারীদের পার্শ্বিক তথ্য

অংশগ্রহণকারীদের প্রতিক্রিয়া অনুযায়ী, তদন্তকারী ডান দিকে প্রতিটি আইটেমের জন্য উপলব্ধ উপযুক্ত ফাঁকা স্থানে, একটি ঠিক (✓) চিহ্ন দেবেন।

১) প্রথম ঋতুস্রাবের সময়:

ক) ১২ বছরের আগে

খ) ১২-১৫ বছরে

গ) ১৫ বছরের বেশি

২) ঋতুস্রাবের সময়কাল:

ক) ২ দিনের কম

খ) ৩-৪ দিন

গ) ৫-৬ দিন

ঘ) ৭ দিনের বেশি

৩) গর্ভধারণের সংখ্যা:

ক) প্রথম

খ) দ্বিতীয়

গ) তৃতীয় অথবা বেশি

৪) বাচ্চার সংখ্যা:

ক) প্রথম বাচ্চা

খ) দ্বিতীয় বাচ্চা

গ) তৃতীয় বাচ্চা অথবা বেশি

(১৫) কঠ - ১৮

৫) প্রসবের সময়কাল:

ক) ৬ঘন্টার কম

খ) ৬-১২ ঘন্টা

গ) ১২-১৮ ঘন্টা

ঘ) ১৮-২৪ ঘন্টা

৬) জীবিত শিশুর সংখ্যা:

ক) ১জন

খ) ২ জন

গ) ৩জন অথবা বেশি

ঘ) নেই

৭) প্রসব পরবর্তী ব্যায়াম কখন শুরু করবেন:

ক) প্রসবের ঠিক পর

খ) প্রসবের প্রথম দিন

গ) প্রসবের দ্বিতীয় দিন

ঘ) প্রসবের তৃতীয় দিন

টুপ - দুই (ক)

ব্যাখার মাত্রা পরিমাপ করার জন্য অর্ধকাঠামোবদ্ধ সাক্ষাৎকারের কর্মসূচি

উদ্দেশ্য:

তাম্রলিঙ্গ গভর্নমেন্ট মেডিক্যাল কলেজ এবং হাসপিটাল এ প্রসব পরবর্তী মায়াদের ব্যাখার মাত্রা নির্ণয় করার জন্য প্রশ্ন গুলি প্রস্তুত করা হয়েছে।

সাক্ষাৎকারের কর্মসূচী তাম্রলিঙ্গ গভর্নমেন্ট মেডিক্যাল কলেজ এবং হাসপিটাল এ প্রসবপরবর্তী মায়াদের প্রসূতি সংক্রান্ত তথ্য সংগ্রহ করার জন্য তৈরি করা হয়েছে।

নিম্নলিখিত প্রশ্নগুলির সঠিক উত্তর দিন যে গুলি আপনাকে জিজ্ঞাসা করা হচ্ছে এবং সঠিক স্তম্ভে টিক (✓) চিহ্ন দিন।

১) আপনার কি যোনিদ্বারে কোনো সেলাই করা হয়েছে?

হ্যাঁ () না ()

যদি হ্যাঁ হয়, তবে সঠিক কারণ বর্ণনা করুন

ক) প্রথম গর্ভবর্তী মা

খ) বড়ো বাচ্চা

গ) ব্যাহত প্রসব

ঘ) দীর্ঘকালীন প্রসব

ঙ) অন্যান্য (বিবৃত কর)।

২) আপনি কি এখন ব্যাথা অনুভব করছেন?

হ্যাঁ () না ()

যদি হ্যাঁ হয়, সঠিক কারণ বর্ণনা করুন

ক) যোনিদ্বারে সেলাই করার জন্য

খ) অঙ্গগুলি পূর্ব গর্ভাবস্থায় ফিরে যাওয়ার জন্য

গ) অন্যান্য (বিবৃত কর)

৩) আপনি কি যোনিদ্বার ছাড়া অন্য কোথাও ব্যাথা অনুভব করছেন?

হ্যাঁ () না ()

যদি হ্যাঁ হয়, সঠিক কারণ বর্ণনা করুন

ক) পেট

খ) কোমর

গ) পা

ঘ) অন্যান্য (বিবৃত কর)

টুল – দুই (খ)

ওয়ং বেকার এর ব্যাথা পরিমাপক স্কেল অনুযায়ী, প্রসব পরবর্তী মেয়েদের ব্যাথার মাত্রা পরিমাপ করার পর্যবেক্ষণ সূচী

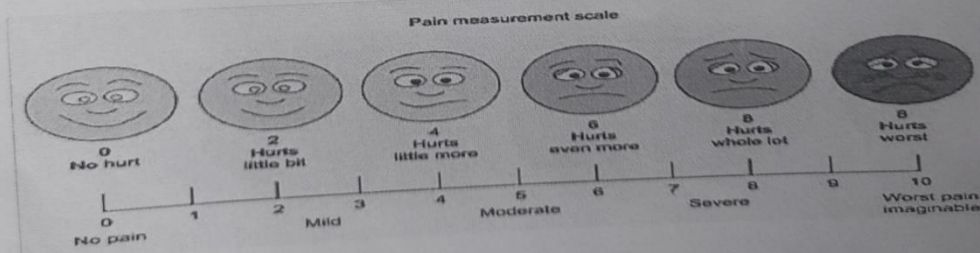
উদ্দেশ্য: সাক্ষাৎকারের কর্মসূচী তামলিপ্ত গভর্নমেন্ট মেডিক্যাল কলেজ এবং হাসপাতাল এ প্রসবপরবর্তী মেয়েদের ব্যাথার মাত্রা সংক্রান্ত তথ্য সংগ্রহ করার জন্য তৈরি করা হয়েছে।

নিম্নলিখিত প্রশ্নগুলির উত্তর দিন যেগুলি জিজ্ঞাসা করা হচ্ছে এবং সঠিক স্তম্ভে টিক(✓)চিহ্ন দিন।

প্রশ্ন	একদমই না	মাঝারি	তীব্র
১। আপনি যোনিদ্বারে কতটা ব্যাথা অনুভব করছেন?			
২। আপনার পেটে কতটা ব্যাথা হচ্ছে?			
৩। আপনার কোমরে কতটা যন্ত্রণা হচ্ছে?			
৪। নাড়াচড়া করলে কতটা ব্যাথা করছে?			
৫। আপনার সেলাই করা জায়গায় কতটা ব্যাথা হচ্ছে?			

ব্যাথার মাত্রা: ওয়ং বেকারের উন্নত ফেসিয়াল স্কেল অনুযায়ী:

গ্রেড: একদমই না -০, মাঝারি -১, তীব্র -২



০- কোনো ব্যাথা নেই

১-৩ – মাঝারি ব্যাথা

৪-৬ – তীব্র ব্যাথা

৭-৯ খুব তীব্র ব্যাথা

1																	
2																	
3																	
4																	
5																	

Item	Sample27	Sample28	Sample29	Sample30	Sample31	Sample32	Sample33	Sample34	Sample35	Sample36	Sample37	Sample38	Sample39	Sample40	Sample41	Sample42
1																
2																
3																
4																
5																
6																