DISSERTATION ON

"A STUDY TO ASSESS THE EFFECTIVENESS OF EFFLEURAGE MASSAGE IN REDUCTION OF LABOUR PAIN DURING FIRST STAGE OF LABOUR AMONG PRIMIGRAVIDA MOTHERS IN INSTITUTE OF OBSTETRICS AND GYNAECOLOGY HOSPITAL FOR WOMEN AND CHILDREN, EGMORE, CHENNAI-08"

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Approved by the Dissertation committee on _____

RESEARCH GUIDE
Prof.Dr.R.LAKSHMI,M.Sc(N), Ph.D, MBA., _____
Principal,College of Nursing,
Madras Medical College,Chennai-03

CLINICAL SPECIALITY EXPERT
Mrs.V.JAYANTHI, M.Sc(N), _____
Lecturer,College of Nursing,
Madras Medical College,Chennai-03

MEDICAL EXPERT
Dr.V.VANITHA, M.D, D.G.O _____
|Assistant Professor in Obstetrics and Gynecology
Institute of Obstetrics and Gynecology,
Egmore, Chennai-08

STATISTICAL GUIDE
Dr.A.VENGATESAN,M.Sc,M.Phil,PGDCA. Ph.D., _____
Deputy Director of Medical Education (Statistics),
Directorate of Medical Education, Chennai-10.

A dissertation submitted to

THE TAMILNADU DR.M.G.R. MEDICAL UNIVERSITY CHENNAI – 600 032.

In partial fulfillment of requirements for the degree of

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CERTIFICATE

This is to certify that this dissertation titled **"A STUDY TO ASSESS THE EFFECTIVENESS OF EFFLEURAGE MASSAGE IN REDUCTION OF LABOUR PAIN DURING FIRST STAGE OF LABOUR AMONG PRIMI GRAVIDA MOTHERS IN INSTITUTE OF OBSTETRICS AND GYNAECOLOGY HOSPITAL FOR WOMEN AND CHILDREN - EGMORE, CHENNAI-08"** is a bonafide work done by Mrs. L.MANJULA, College of Nursing, Madras Medical College, Chennai – 600003 submitted to THE TAMILNADU DR.M.G.R. MEDICAL UNVERSITY, CHENNAI in Partial fulfillment of the requirements for the award of Degree of Master of Science in Nursing, Branch III, Obstetric and gynecological Nursing, under our guidance and supervision during the academic period from 2013 – 2015.

Mrs.J.S.ELIZABETH KALAVATHY, M.Sc (N).,
Principal, i/c
College of Nursing,
Madras Medical College,
Chennai-03.

Dr.R.VIMALA, MD.,
Dean,
Madras Medical College,
Chennai-03.

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CHAPTER-I
INTRODUCTION

"To touch is humane; but the feelings are Divine".

The most ambitious dream of a woman in her life is giving birth. The best part of pregnancy is the thought that there is a little person developing within her .child birth is a thrilling exciting, revealing and life changing experience.

A women having pain during child birth is unique sweet rememberable event in their life. Labour is a much painful and stressful situation mostly felt higher in primigravida mothers than multiparous

Labour is a physiologic process during which the products of conception [fetus, membranes and placenta] are expelled outside of the uterus. Labour is achieved with changes in the Biochemical connective tissue and with gradual effacement and dilatation of the uterine cervix as result of rhythmic uterine contraction of sufficient frequency intensity and duration.

Labour process consists of three stages such as first stage, second stage, third stage. First stage of labour is defined as the dilatation of the cervix. It's begun with regular rhythmic contraction and is complete when the cervix is fully dilated. Its average duration is 12 hours in primigravida and 6 hours in multiparas.

In the first stage of labour there are three phases, which includes latent phase, active phase, transitional phases.Latent phase is prior to active first stage of labour and may last 6-8 hours with 0 to 3-4cm cervical dilatation occurs more rapidly, increasing from 4-7cm.Transitional phase is the stage of labour when cervix is around 8cm dilated until it is fully dilated with increased uterine contraction.

Pain in labour is nearly universal experience for child bearing women. Pain and its relief for women in labour has been a subject of interest since the dawn of mankind. Child birth has been associated with pain and throughout history measures had been introduced to help relieve it. Pain can vary during different times in the same labour and during different birth by the same woman. Massage has the potential benefits such as decreasing the intensity of pain, relieving the muscle spasm, increasing physical activity, promoting general relaxation and reducing anxiety.

In midwifery, pain would be defined as ‘a complex, personal, subjective, multifactorial phenomenon which is influenced by psychological, biological, socio-cultural, and economical factors’. (Fraser and Cooper, 2005)

A variety of factors affect the intensity and amount of pain experienced by women in labour. These include: perception of pain, tolerance of pain, coping mechanisms, individual meaning of pain, expression of pain, communication of pain, cultural characteristics and environment of pain. The biological, psychological, social, spiritual, cultural and educational dimensions of each woman have an impact on how they express themselves and indeed how they perceive pain during labour. The challenge of midwifery is to provide adequate and adapted care for each childbearing woman. The essence of midwifery is to be ‘with woman’, providing comfort in labour. Historically, the maintenance of health has been the role of women. (Kitzinger 2000).

Much midwifery and medical research has indicated that the one-to-one support by a midwife in labour reduces the need of analgesia and improves the birth experience of the mother. It also shortens the length of the labour. Pain control during labour is a woman centered concept.

There is much evidence to state that women are not always more satisfied by a birth experience, that is pain free. (Fairlie, et al 1999

The pain itself and its severity, plus the side-effects of medication, make it difficult for the woman to maintain control during labour. Women then require care, support, attention and advice at this time. Midwives are therefore required to give control of the pain to women rather than eradicating it and a clear differentiation must be made between the traditional goal of pain relief and the control of pain in labour.

There are many types of non-pharmacological methods of pain control; among those, homeopathy, hydrotherapy, music therapy, TENS, acupressure technique, application of heat & cold, and massage are the most common and widely applied techniques. Among these methods, massage has the potential benefits such as decreasing the intensity of pain, relieving muscle spasm, increasing physical activity, distracting from pain, promoting general relaxation and decreasing anxiety.

The labour pain is increasing in labour as it proceeds. There are various modalities to help to relieve pain during labour, in which massage gives better effectiveness. Massage stimulates the body to release endorphins which are natural pain killing and mood lifting hormones. This hormone has the potential benefits such as decreasing the intensity of pain, relieving the muscle spasm promoting general relaxation and reducing anxiety.

Massage is an ancient practice that has been widely employed during labour. It comprises of deep stroking and superficial stroking. It is thought to work either by blocking pain impulses to the brain by increased A β fiber transmission or by stimulating the local release of endorphins due to more relaxation of soft tissue.

Effleurage massage is one of the massage techniques for labour, which is used during the first stage. This massage is good for women experiencing back pain during their labour. Efflurage massage is a specifically designed technique in which upward and downward circular strokes are given on either sides of spine in the sacral region with controlled breathing, which helps to reduce the intensity of the labour pain. Comparing to all the non-pharmacological methods of pain relief during lab our, circular hip massage has important benefits such as, it will not give any harmful effect to the mother as well as to the fetus and it can reduce the need for pharmacological agents for pain relief.

1.1 NEED FOR THE STUDY

The creation of new life and the birthing process is thought to be the highest spirituals experience. Women may achieve it and men can only wonder .everything in nature moves in ephemeral cycles of birth, life and death when a midwife thinks ahead to being with a woman in labor. she is likely to dwell on the challenges of supporting her through the pain.

The pain itself is known as the challenge of labor. A variety of child birth reparation methods can help the women cope with the discomfort of labour. The pharmacological and non pharmacological intervention to relieve the discomfort .which include the non pharmacological method like massage, hypnosis, yoga etc.

Child birth is a natural biological process and therefore the pain associated with it is also perceived as normal and natural. The nature of the pain experienced during labour depends on the physical and emotional status of the women. Labour pain is an excruciating intolerable pain, which results in changes in blood pressure, pulse, respiration, skin colour, pallor and diaphoresis. The mother with labour pain may have bouts of nausea and vomiting and she may have certain

affective expressions which include increasing anxiety, crying, groaning, gesturing (hand clenching and wringing) and excessive muscular excitability throughout the body.

Severe labour pain may also cause several problems to the fetus such as abnormal heart rate patterns, lack of oxygen, position changes and may end up in a cesarean delivery. If the fetus is already stressed greater amounts of the medication are "trapped" in the fetal circulation, it may lead to more pronounced newborn effects.

Melzack, et al (1981) expressed that primigravida mother do not know which is the intense pain and how to manage with that because they do not have any past experience for the primigravida mothers this is the first delivery, the mother experience much pain when compared with the multiparous.

Massage has been a vital part of prenatal and postnatal care in much culture for countries. In India women have recently only begin to experience the pleasures and benefits of massage . During pregnancy many of the pain stress that body undergoes as a result of can be alleviated at the hands of professional massage therapist who is specially trained in working in pregnant woman.

Massage helps to sooth and relaxes nervous tension which helps the mother sleep more easily and more deeply. Massage can be used during the child birth to make it easier and Comfortable for the mother before and after the child birth .It also helps to regain her Strength quickly and cases postpartum stress (Seymour,1997).

Non-pharmacological therapies are gaining popularity and finding a more substantial place in health care. (Williams J. and Mitchell M. 2007; Ernst and White, 2000)

Nowadays many number of non-pharmacological (complementary and alternative medicine) therapies like massage, therapeutic touch, hydrotherapy, music, heat application and cold application are being used to reduce pain or distress. Non–pharmacological techniques have been inadequately studied and there appears to be little interest from funders to finance research on these seemingly simple, safe and innocuous measures. More research attention is required to these promising techniques.

However, in the absence of clear scientific confirmation of their effectiveness, acceptability must be based on other criteria: absence of harm and preferences of each individual woman. This can be facilitated with comfort measures that provide sufficient pain relief and enhance the women sense of control and her satisfaction with her birth experience. For these reasons the investigator felt it is important to study the effect of effleurage massage on reduction of labour pain.

1.2 STATEMENT OF THE PROBLEM

A study to assess the effectiveness of effleurage massage in reduction of labour pain during first stage of labour among primigravida mothers at Institute of Obstetrics and Gynaecology, Egmore, Chennai-8.

1.3 OBJECTIVES

1) To assess the level of the labour pain before effleurage massage among Primigravida mothers in experimental and control groups.

2) To assess the level of the labour pain after effleurage massage among primigravida mothers in experimental groups.

3) To determine the association between level of pain reduction in selected demographic variables .

1.4 OPERATIONAL DEFINITIONS

1) ***First Stage of Labour:*** In the study, first stage of labour refers to the active phase of labour, which begins from 3cm, dilatation and ends with 9cm. dilatation of the cervix.

2) ***Labour Pain:*** Labour pain is referred as painful uterine contractions at regular intervals with increasing intensity and duration during first stage of labour. It is measured by numerical pain scale during relaxation time.

3) ***Primigravida Mothers:*** Primigravida mothers are those who are pregnant for the first time. The study referred to the mothers who are admitted in IOG Hospital for the safe confinement, who fulfilled the inclusion criteria.

4) ***Effleurage Massage:*** It massages kneading and rubbing parts of the body to increases circulation and promotes relaxation. A method that prepare a mother for natural child birth. A type of massage technique in which upward and downward circular strokes are giving on either sides of spine in the sacral region with controlled breathing, which was thought to minimize the labour pain. The massage is done for 15 minutes with the interval of 30 minutes for 4 times.

5) ***Effectiveness:*** Effectiveness means result, outcome or change produced by an action. In the study effectiveness refers to the reduction in the labour pain with regard to effleurage massage on primigravida mothers in first stage of labour. It was measured by the mean difference.

6) ***Selected Variables:*** Refers to those issues, elements, variables which were thought to influence the labour pain such as age, education status,family income,dwelling place,type of

family,occupation,weeks of gestation,activity of the mother,pain tolerance,cervical dilatation,membranes.

1.5 ASSUMPTIONS

1) Effleurage massage promotes relaxation, thereby increasing the compliance of primigravida mothers during labour.

2) Pain perception by primi mothers in labour is their first experience and not influenced by previous experience.

1.6 HYPOTHESIS

H1 There will be a significant difference in the mean post intervention pain score among primigravida mothers in the experimental and control group.

H2 There will be a significant association between mean difference in labor pain score and selected variables among primigravida mothers in the experimental group.

1.7 DELIMITATIONS

1) The study will be delimited to the subjects who were hospitalized for labour in IOG Hospital.

2) The samples were selected by purposive sampling method

CHAPTER-II
REVIEW OF LITERATURE

Review of literature is an essential component of a worthwhile study in any field of knowledge. It helps the investigator to gain information on what has been done previously and to gain deeper insight into the research problem. It also helps to plan and conduct the study in a systemic and scientific manner.

Review of literature of the present study was arranged in the following heading;

1) Studies related to labour.

2) Studies related to labour pain perception

3) Studies related to massage on pain in general

4) Studies related to labour pain and massage

5) Studies related to effects of effleurage on reduction pain during first stage of labour.

SECTION I: LITERATURE RELATED TO LABOUR

Mikolajczyk, Sundaram, Beaver Fraser (2010) conducted a study aimed to examine labour patterns in a Large population and to explore an alternative approach for diagnosing abnormal labour progression The study were selected total of 26838 parturients ,who had a singleton term gestation spontaneous onset of labour , vertex presentation and a normal prenatal outcome in Maryland an interval censored regression method was used. The result revealed that nulliparaous women had longest and most gradual labour curve and start the active phase after 5cm of cervical dilation and may not necessarily have a clear active phase and multiparous women of different parities had very similar curve researcher concluded that active phase of labour may not start until 5cm

cervical dilation in multiparous and ever later in nulliparous and after 6cm dilatation only the progress in all pregnancy during labour.

Hui,Hahn,jamieson,palerme (2010) conducted the retrospective study to dertermine lengths of the first and second stage of labour the study were selected total no of 119 Canadian adolescents in the age group of 19 years old under at the time of delivery had spontaneous labour and a term singleton cephalic vaginal delivery in Kingston general hospital, Kingston , Canada. He measured that primary outcome was length in the first and second stage of labour the result revealed that duration of the first stage was 6.8 and 3.2 hours for nulliparous and multiparous teens respectively and second stage comparatively for the general population were 92 minutes and 20 minutes for nulliparous and multiparaous women respectively. He concluded that adolescents do have shorter both first and second stage when compared to a general group.

Hall, Hauck,carty, Fenuick, Stoll (2009) conducted the cross sectional study aimed to explore women levels of child birth fear ,sleep deprivation anxiety, and fatigue and their relationships during the third trimester of pregnancy with 650 nulliparaous and multipararous women with (17-46) years of age and between (35-39) weeks gestation ,with uncomplicated pregnancies in Canada. He used wijma Delivery expectancy/experience Questionnaire spielberger state anxiety inventory mindell's sleep the study findings revealed that child birth fear fatigue, sleep deprivation, and anxiety were positively correlated. He concluded that the study suggested forth of the women reported high child birth fear and fear of child birth appears to be part of a complex picture of women emotional experience.

Duignan, Stud,Hughes (2002) conducted the prospective study aimed to assessed the characteristics of normal labour in different racial

groups the characteristics of normal labour in 1306 write , Asian and Black parturient and 3217 consecutive labour.

SECTION-II: REVIEW RELATED TO LABOUR PAIN PERCEPTION

Lena Martensson, et. al (2011) done a study on effect of treatment for labour pain, verbal report versus visual analogue scale scores. A prospective randomized study to compare women's verbally reported effect of treatment for labour pain with changes in visual analogue scale scores. This comparative Prospective study was carrying out on a ward. Pain was assessed on visual analogue scale before as well as30, 60, 90, 120, 150and 180 minutes after treatment. This study conform that verbal report and changes in visual analogue scores are reliable indicators of treatment effects for labour pain.It might be valuable to combine visual analogue scale score with verbal reports for a more extensive assessment of treatment effects.

Olayemi, et .al (2009) checked the effect of ethnicity on the perception of pain by parturient undergoing labour in a hospital the outcome measure of pain perception was assessed by the box numerical scale the Yoruba ethnic group had scores lower than the mean scores for the other ethnicgroup(+=_0.636)the presence of a doula reduced the means Bns scores significantly during labour (t=-0.533) increasing parity also reduced pain (t=-0.182)as well as increasing educational attainment Increased pain scores in labour (t=0.189)it is concluded that the ethnicity of the parturient relative to that of the predominant ethnicity in the place of birth has a significant effect on the perception of labour by the parturient.

Pirdel.M .et al (2009) concluded a study to assess perceived environmental stressors and pain perception during labour in tabric alzabra hospital, iran, samples were 300primiparaous and 300

multiparaous women who were admitted for normal vaginal delivary sample were selected through purposive sampling technique the intensity of the pain was assessed by visual analogue scale. The study finding reveals that primiparaous women believed that a crowed delivary room 70% and restriction of movement and mobility 67% contributed to the environmental stress. Multiparaous women believed that restriction of fluid intake (75%) and noise in the labour ward (84%) increased their stresses. The study result concluded that performance of routine diagnostic tests in hospitalized pregnant women provision of invasive medical care during labour process and a noisy and the crowded environment in the labour ward influence the mother's labour experience and perception of pain.

Tzeng Y.L. et al (2008) concluded a quantitative study among Taiwan women about low back pain to describe the following characteristics of low backpain during labour. A co relational designed with repeated measures was used to conduct this investigation. Ninety three low risk parturient were selected from a medical center. Low back pain was repeatedly measures during the latent phase cervix dilated 2-4cm, early active phase cervix dilated 5-7cm and late active phase cervix dilated 8-10cm of labour . The study findings revealed that in latent phase, early active phase and late active phase the pain perception of parturients were 40%, 50% and 75% respectively.

Onah, H.E. et al (2007) conducted a study on pain perception among parturients the evaluated the pain perception on a scale of 0 to 10, with 0 representing no pain and 10 representing maximal pain, antenatal care place of resident, ethnicity, religion, marital status, occupational level receiving intrapartum analgesia, type of analgesia received, having a companion. During labour or receiving lectures on labour pain during the antenatal period, had no significant impact on pain perception by the respondent ($p>0.05$) for each of these variables,

There was no significant correlation between pain score and the respondent ages and gestational age at delivery ($p>0.05$) parturient whose labour were either induced (or) augmented had a significantly higher perceived mean pain score than those who had spontaneous labour (8.9+/-2.5 versus 7.1 +/- 2.8 $p = 0.001$). It was concluded that parturient in perceive labour as a very painful process.

Wijma, et al (2001), did a comparative study on the labour pain among 35 primipara and 39 multipara women during first stage of labour and it is found that the primigravida mothers experience more intense pain during labour as compared to multigravida mothers ($t = 0.735$, $p = 0.01$).

Cambell and Kurtz (2000) conducted a descriptive study to evaluate the intensity of labour pain at the two stages of cervical dilatation, (cervical dilatation of 2 – 5 cm and 6 – 10 cm). The study identified that when the cervical dilatation increased, there was a significant increase in self-reported pain and observed pain on all the cited measures ($t = 15.72$, $p = 0.01$).

Melzack, et al (1981) expressed that primigravida mother do not know which is the intense pain and how to manage with that because they do not have any past experience for the primigravida mothers this is the first delivery, the mother experience much pain when compared with the multiparous.

SECTION-III: STUDIES RELATED TO MASSAGE ON PAIN IN GENERAL

Massage has been a vital part of prenatal and postnatal care in much culture for countries. In India women have recently only begin to experience the pleasures and benefits of massage. During pregnancy many of the pain stress that body undergoes as a result of can be alleviated at the hands of professional massage therapist who is specially trained in working in pregnant woman.

Massage helps to sooth and relaxes nervous tension which helps the mother sleep more easily and more deeply. Massage can be used during the child birth to make it easier and Comfortable for the mother before and after the child birth .It also helps to regain her Strength quickly and eases postpartum stress (Seymour, 1997).

According to WHO report (2007) around world 26% of population using massage therapy during pregnancy. A study to evaluate the effectiveness of various massages (whole back massage Upper back massage) in U.K. the samples were 30 nulliparous woman 30 were multiparous women followed proper massage techniques the tool used for the study was numerical pain intensity scale there was 100% spontaneous vaginal delivery in the multiparaous women where as 81.4%in nullipararous the result shows that the massage had a positive effect on labour pain and promotes a positive feeling during labour (kimber,L.2006)

Kutner j. S., et al (2008) reported a randomized trial study on efficacy on massage for decreasing pain and symptom distress among 82 adult with advanced cancer in palliative care center and catholic hospice,Florida. The tools used were brief pain

Inventory and memorial symptom assessment scale.among 82 patients, 32 patients

Were in the massage group, whereas 45 in the control group. Both group demonstrated immediate improvement in pain (massage:-1.87 point and control:-0.97) and mood (massage: 1.58 point and control: 0.97 point). Massage was superior for both immediate pain and mood (mean difference: 0.90 and 0.61 point respectively<0.001).massage may have immediately beneficial effect on pain and among patients with advanced cancer.

Morales M.A, et al (2008) reported a prospective randomized clinical trial study on the effect of massage on neuromuscular recruitment, mood state and mechanical nociceptive threshold after high –intensity exercise among 62 healthy active students (age:18-26) at a university based sports medicine clinic. Dependent variables were surface electro myopathy of quadriceps, profile of mood state and mechanical nociceptive threshold of trapezius and masseter muscles. These data were assessed at baseline after exercise and recovery periods. Significant difference were found in effects of treatment on electromyography of vastus medialis(vm)(=0.02)and vigor subscale (p=0.04).After the recovery period, there was asignificant decrease in electromyography actively of VM(p=0.02)in the myofascial –release group versus a non significant increases in the placebo group (p=0.32), and a decrease in vigor (p<0.01)in the massage group versus no change in the placebo group(p=0.86).

Mok, et al (2004) conducted an experimental study on the effect of slow strokes back massage on shoulder pain in hospitalized elderly patients with stroke. 102 patients were selected randomly for the study.10min.slow stroke back massage was given for seven consecutive evenings. The data was collected by psycho physiological parameters in three days questionnaire. Inferential statistics was used to analyze the data. The result of the study shows that SSBM was an effective nursing intervention for reducing shoulder pain among elderly patients with stroke' (p=0.01).

Quinn C.,et al (2002) measured the effect of massage therapy on chronic non-migraine headache among 10 adults who have chronic tension headache. The intensity of headache assessed visual by analogue scale compared with baseline values; headache frequency was significantly reduced within the massage protocol. The reduction of headache frequency continued for the reminder of the study

(p=0.009).The duration of headache tended to decrease during the massage treatment period (p=0.058).Headache intensity was unaffected by massage (p=0.19).The muscle –specific massage therapy used in this study was potentials, to be a functional, non pharmacological intervention for reducing the of chronic tension headache.

SECTION-IV: STUDIES RELATED TO LABOUR PAIN AND MASSAGE

Kavitha.N.K.(2010), conducted a study to compare the effectiveness of sacral massage versus music therapy on low back pain during first stage labour among primi gravida women at a selected hospital, Bangalure. The sample were 60 primi gravod women were selected thorugh conveience sampling technique . the data was collected through structured interview schedule and numaical pain intensity scale was used,The result demonstrated 75.3% of participants suffered of low back pain during labour. One group received massage therapy and other group received music therapy. The result reveals that the mean pain scores 65.6%of the mothers were comfort with massage therapy. The t'value reveals that t=4.34. Which is significant at p<0.05 level. It was concluded that massage was very effective reducing the level of labour pain.

Chandra.T., (2010) conduted a quasi experimental study to evaluate the effectiveness of olive oilback massage on labour pain during first stage of labour among primi gravid women at selected hospital,salem.Convenience sampling technique was used to 60 primigravida women, 30 were assigned to experimental group and 30 were assigned to control group.The tool used for the study was numerical pain intensity scale the data was analyzed by using descriptive and inferential statistics. In experimental group,mean valve pain score is 4.533,which is lesser than the control group mean value is 8.5667 at seventh observation. The t' value is 8.880 which is significant

at p<0.05 level. This finding shows that olive oil back massage was very effective in pain relief during labour.

Davim R.M.B., et al (2007) reported a descriptive study on non pharmacological strategies(NFS) such as respiratory exercise, muscular relaxation, lumbo- sacral massage, shower washing, deambulation and pelvic swing on pain during labour. In order to evaluate the NFS,the analogue visual scale was used on 30 parturient attended at the humanized labour unit of a school- maternity hospital in north –east of brasil, of the 6 NFS,2 were excluded post test (deambulation and pelvic swing)for not being accepted by the parturient mothers. The remaining NFS (respiratory exercise, muscular relaxation, lumbo-sacral massage and shower bathing) obtained acceptance percentage above 80 being therefore selected for the application of Mann whitney's U test,with a ststistical significance of (p<0.05)for the verificationof the effectiveness in parturient pain relief during the active stage labour

Padmavathi R.(2007) measured the effectiveness of back massage on pain relief during first stage of labour among 60 expectant mothers during first stage of labour in selected hospitals of Raichur by a quasi experimental design with the nonequivalent control group. The tool used were structured interview schedule, visual analogue scale zung self rating anxiety scale . fatigue severity scale,using descriptive and inferential statistics, the pre test mean score of pain in experimental group was almost same(x=4.53,SD=0.82)as the control group d(x=4.63,SD=0.81)and obtained t' value was 0.45;where as in the post – test mean pain scores in experimental group (x=5.69,SD=1.3) was lower as compared to control group (x=8.75,SD=2.6)and calculated t' value 4.25 indicated significant difference between the pain level of experimental and control group. The continuous back massage hourly from the beginning till to the end of the first stage of labour had significantly reduced pain, anxiety and fatigue levels in the experimental

group where as in control group, the pain, anxiety and fatigue had increased at the end of the first stage of labour.

MalathiM .(2006) observed the effectiveness of simple massage, French oil massage and normal labour care on labour pain of 60 primi para mothers selected by c convenient sampling method in government hospital,Erode.The study was a non equivalent factorial repeated measure design, with interview schedule for background variables and visual analague numerical pain scale for the pain score as tool. There were three group simple massage (n=20), French oil massage group (n=20). There was a significant reductions in labour pain score in the group who received the franch oil massage than the simple massage group and control group;F=117.04($p<0.05$),F=150.9(<0.05)and F=39.8($p<0.05$) respectively.

SECTION-V: LITERATURE RELATED TO EFFECTS OF EFFLEURAGE ON REDUCTION PAIN DURING FIRST STAGE OF LABOUR.

Field, Figueiredo, Hernandez- Reif, Diego, Deeds, Ascencio (2008) conducted randomized control study to determine the massage therapy reduces pain in pregnant women and allivates prenatal depression with 47 depressed women in USA.Samples were randomly assigned to experimental group that received massage twice weekly from their partner from 20 weeks gestation until the end of pregnancy and control group did not. Questionnaire method was used. The study finding revealed that experimental group had depressed mood, anxiety and anger across the course of the massage therapy period than control group. Researcher concluded that massage therapy reduces depressed mood, pain during pregnancy and labuor.

Kimbera, Menabb, Courto, Hainesa,Brocklehurstd (2008) conducted the comparative study to assess the effectiveness of massage for pain relief in labour in Horton Maternity unit with selected control group and experimental

group in four small trils. For the intervention group different massage techniques at different frequencies and duration and relaxation technique were included in three trials. The study included three arms intervention, experimental group, and placebo and control group. Pain measured by visual analogue scale as 90mts following birth.the study findings suggest that regular massage with relaxation technique from late pregnancy to birth is an acceptable coping strategy that maits large trial with sufficient power to detect differences in reported pain as a primary out come measures. He concluded that regular massage therapy reduces pain during labour and increase comfort.

Amanesh safarzadeh, Naheidk khodakarami, Naheid Fathizaden, Faranan safdari Dehcheshmeh(2008) conducted the clinical trial study to assess the effects of massage therapy on the severity of labour in primi paraous women. These studies were selected 60 primi paraous women who were hospitalized in mahdieh and Hedayat hospital in Tehran. They were selected using simple random sampling and randomly divided in to two group of control (n=30) and case (n=30) the severity of pain before intervention was measured in both group by VAS. Data in the two groups were compared using independent and chi-sqaure test. The result indicated that there was no significant difference between two groups. Mean of severity of pain at the beginning of traditional phase it was ($p<0.05$) and at the end of the first stage was respectively ($p<0.05$).He concludsion that the effect of massage therapy in both decreasing of labour pain and in the acceleration of delivary. Education and there using of methods in labour centers would result in decreasing of proposed of caaaesarean section.

Esther Mok (2004) conducted an experimental qualitative design to explore the effect of slow stroke back massage on anxiety and shoulder pain in hospitalized elderly patients with stroke and comparing the scores for self reported pain, anxiety, blood pressure heart rate, and pain of two groups of patients before and immediately after, and three

days after the intervention. The intervention consisted of 10 mts of slow stroke back massage for seven consecutive evenings. One hundred and two patients participated in the entire study and were randomly assigned to a massage group or a control group. The result revealed that effleurage massage intervention significant reduced the patients' levels of pain perception and anxiety.

2.2 CONCEPTUAL FRAME WORK

Nursing profession gives a greater importance to nursing theories, general nursing art is comprised of not only rational of reactionary actions but also deliberate action. The frame work provide the perspective from which the investigator views the problem.

The present study is aimed to helping the parturient mother in reducing their labour pain perception by administration of effleurage over lumbo sacral region on reduction of pain perception during first stage of labour among primi gravid mothers who undergone had normal vaginal delivery. The investigator adopted the modified wiedenbach's helping art of clinical nursing theory as a base for developing conceptual frame work.

Ernestine wiedenbach's enrolled in john hospital school of nursing and wrote family –centered maternity nursing .She developed the helping art of clinical nursing – prescriptive theory in 1964.

Ernestine wiedenbach's helping art of nursing theory for nursing which describe a derived situation and way to attain it.

This therapy has 3 factors

- ❖ Central purpose
- ❖ Prescription
- ❖ Realities

Central purpose

It refers to what the nurse to accomplish in the stusy, the investigator identified the central purpose is the effective management of pain perception during first stage of labour.

Prescription

It's refers to plan of care for a mothers it will specify the nature of action that will fulfil the nurse central purpose. In this study the investigator adopted effleurage over lumbo sacral region as a intervention on management of labour

Realities

It refers to the physical, physiological,emotional, spiritual factors that come in to play in situation involuing nursing action. The five realities identified by wiednbach's are agent, recipient goal, means of nursing intervention and frame work.

Agent

Who is the practicing nurse or investigator delegate characterized by personal attributes ,problem, capacities,commitment and competence in nursing in this research the agent was investigator.

Recipient

Is the patients is characterized by the personal attributes, problems, capacities aspiration and ability to cope with the concern or problem being experienced. In this study primi gravida mothers with normal vaginal delivery in first stage of labour.

Goal

Is defined outcome, the nurse wishes to achieve. In this study effective management by reduction of pain perception.

Means

Comprise the activities and devices through which the practitioners attain the goal. The mean include skills, techniques,procedure and devices that the may be used to facilitate nursing practice in this research it is the selected nursing intervention such as effleurage over lumbo sacral region.

Frame Work

Consist of the human, environmental, professional, organizational facilities that not only make up the context which nursing practice but also constitutes the currently existing limits, In this study facility was labour unit.

The conceptualization of nursing according to this theory consist of 3 steps as follows

Step-1 Identifying the need for help.

Step -2 Ministering the needed help.

Step-3 Validating that the need for help was met.

Step-1: Identifying the need for help

This step involves determining the need for help. The primigravida mothers are identified based on the inclusive and exclusive criteria. Simple random sampling techniques was used to assign the primigravida mothers in experimental and control group.The assessment levels of pain perception was assessed in both groups by using an numerical categorical scale.

Step-2 : Ministering the needed help

After the assessment of pre test levels of pain perception during first stage of labour among experimental and control group of primi

gravid mothers given selected intervention of effleurage to the experimental group and no intervention for control group.

Step-3 : Validating that the need for help was met

Its accomplish by mean of pre and post assessment level of pain perception among experimental and control group. It followed by analysis of the findings.

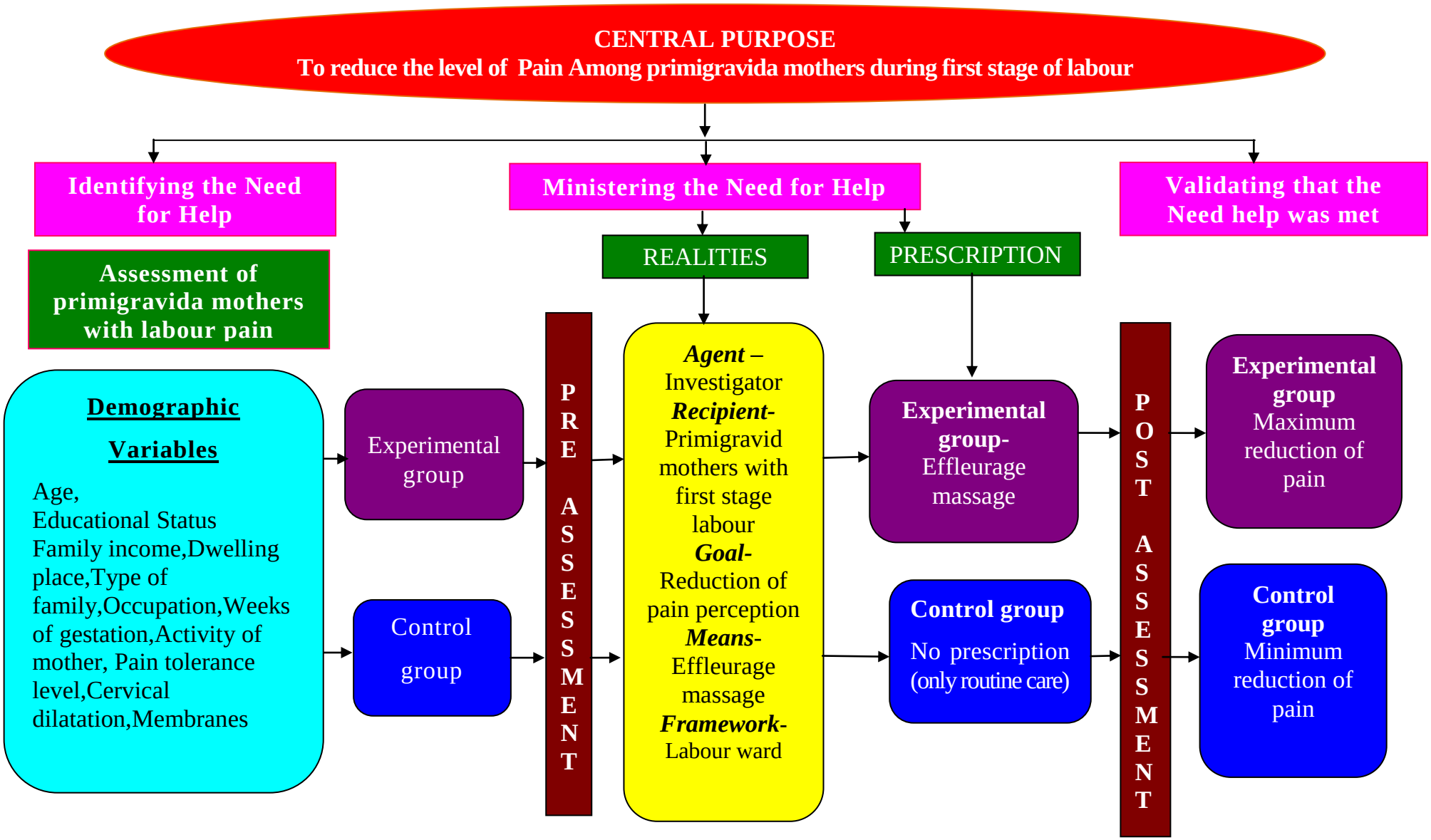


Fig-2.1: Modified Wiedenbach's Helping Art Of Clinical Nursing Theory

CHAPTER-III
RESEARCH METHODOLOGY

Methodology is a significant part of any study which enables the researcher to project the research undertaken. Research methodology is a way to systematically solve the research problem

3.1: RESEARCH APPROACH:

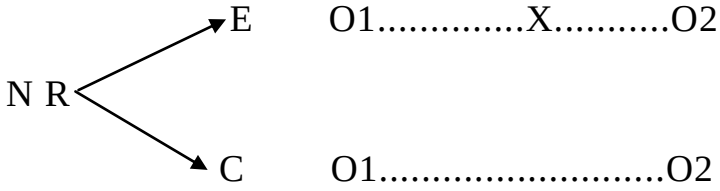
In order to achieve the objective of the study, a quantitative-evaluative approach was found to be appropriate and selected for the study. The research approach tells the researcher from where the data to be collected, what to be collected, how to be collected and how to analyze them. It also suggests possible conclusion and helps the researcher in answering specific research questions in the acceptable and efficient way.

The selection of research is a basic procedure for conducting the study. In view of the problem and objective to be accomplished, evaluative research was considered as an appropriate research approach for the present study.

3.2 RESEARCH DESIGN

In the study the investigator could not ensure random selection or random allocation. To be precise the research design selected for the present study is quasi experimental, non equivalent control group design. In this design, subject are selected by purposive sampling technique to the experimental group and control group.Labour pain was measured before and after the effleurage massage in the experimental group. Control group received the regular intervention and care.

Quasi experimental-Non randomized control group design was adopted in this study with an experimental and control group.



N R Non Randomized

E Experimental group

C Control group.

O1 Labour pain in pretest of experimental and control group.

O2 Post test labour pain experimental and control group.

X Intervention (effleurage massage) with the gap of half an hour.

3.3 VARIABLES

The three categories of variables discussed in the present study are;

In dependent variables : Effleurage massage

Dependent variables : labour pain score

Associate variables: Age,education status,family income,dwelling place,type of family,occupation,weeks of gestation,activity of the mother,pain tolerance,cervical dilatation,membranes.

3.4 SETTING OF THE STUDY

The study was conducted at labour ward Institute of Obstetrics and Gynaecology, Govt. Hospital for women and Children, Egmore, Chennai.

3.5 POPULATION

Population include the primigravida mothers with first stage of labour pain in labour ward.

3.6 SAMPLE

The study samples are primi gravida mothers who fulfilled the inclusion criteria

3.7 SAMPLE SIZE

The sample consist of 60 primi gravida mothers (30 control group and 30 experimental group).

3.8 SAMPLIING TECHNIQUE

In this study non probability purposive sampling technique was used to select subjects according to the sample selection criteria.

3.9 INCLUSION CRITERIA FOR SAMPLE SELECTION:

Inclusion criteria for sampling

- ❖ Primi gravida mothers aged less than 35 years mothers
- ❖ Mothers who have no high risk condition
- ❖ Mother who can understand Tamil and English
- ❖ Cooperative primi gravida mothers

Exclusion criteria for sampling

- ❖ Age below 20 years and above 35 years
- ❖ High risk mothers
- ❖ Mothers planned for any surgical procedure
- ❖ Uncooperative mothers
- ❖ Mother having specific musculo skeletal problem

3.10 DEVELOPMENT AND DESCRIPTION OF THE TOOL

The tool is a written device that a researcher uses to collect the data. After a careful review of literature, the investigator used the numerical pain rating scale to assess pain. However, the demographic variables and variables identified by the interview schedule.

DESCRIPTION OF THE TOOL

The study tool consist of three section

Section 1: Demographic variables:

Section 2: Numerical pain rating scale:

Section 3: Opinionaire on effleurage massage**:**

INTERPRETATION OF THE TOOL

Section-1: Demographic variables

It consists of 11items related to personal and health variables. Verbal responses were obtained from the primigravida mothers regarding age, Educational status ,family income, Type of family, Dwelling place, Occupation of the mother, Weeks of gestation, Activity of mother, Pain tolerance, Cervical dilatation, Membrane status.

Section-2: Numerical pain rating scale

It consists of a scale ranging from 0'-No pain,1-3 mild pain,4-6 moderate pain,7 to 10'-Severe pain. Provision was made to record the cervical dilatation, fetal heart rate and time of intervention administered.

Section-3: Opinionaire on Effleurage Massage

This section comprised of on Opinionaire to determine primimothers opinion on effleurage massage. The Opinionaire assessed using a five point scale which consisted of 8 items they were evaluated in terms of strongly agree, agree, uncertain, strongly disagree, disagree.

Effleurage massage

Massage is a superficial and deep stroking over the soft tissue. The investigator prepared a effleurage massage, After extensive search of books, journals, research and non research publications and websites on the internet. The steps of massage consisted of a preparatory phase, procedure and after massage. This procedure took about 15 minutes for four times. Post test was carried out after half an hour, after the 4th massage.

3.11. ETHICAL CONSIDERATION

The objectives of the study, intervention and data collection procedure were approved by the research and ethics committee of the institution. Informed consent was obtained from the primigravida mothers in written form. The primigravida mothers had the freedom to leave the study at her will without assigning any reason. Due permission from college authorities, hospital authorities were obtained. Explanation regarding the purpose of massage was given to the primigravida mothers involved in the study. Thus the ethical issues were ensured in the study.

3.12 TESTING OF THE TOOL

3.12 (1) Validity of the tool

Validity of the tool was assessed using content validity. Content validity was determined by experts form Nursing and Medical field. They suggested certain modifications in tool. After the modifications, they agreed this tool for assess the effectiveness of effleurage massage in reduction of labour pain during first stage of labour among primigravida mothers at Institute of Obstetrics and Gynaecology, Egmore, Chennai-8.

3.12 (2) Pilot study

The pilot study was conducted in Institute of obstetrics and gynaecology hospital, Egmore. after obtaining the permission from the authorities. From among those who fulfilled the sampling criteria, the researcher selected 10 primi gravid mothers with labour pain as study sample by non probability purposive sampling. On those 10mothers, 5were in experimental group and 5 in control group. After getting the consent from each participant, pretest was done. Then intervention for 15 minutes (Effleurage massage) was given to experimental group. This was repeated in every half an hour for 4 times. Post test was assessed after half an hour, after the 4^{th} massage by blinding method and the tool was checked for completion. The study was found to be feasible with regard to time, the availability of the subject and co operation of the samples. It also provided information regarding, feasibility, and practicability of the designed methodology. The phenomena were observable and the questions in interview schedule had clarity and simplicity to the samples.

3.12 (3) Relieability of the tool

After pilot study reliability of the tool was assessed by using inter rater method and its correlation coefficient r –value is 0.87. This correlation coefficient is very high and it is good tool for assess the effectiveness of effleurage massage in reduction of labour pain during first stage of labour among primigravida mothers at Institute of Obstetrics and Gynaecology, Egmore, Chennai-8

3.13 DATA COLLECTION PROCEDURE

The study was conducted for 4 weeks in the month of July, 2014. Based on the sampling criteria, a total of sixty primi gravida mothers with a labour pain were recruited in the study. Thirty mothers in the experimental group and thirty mothers in the control group were included in the study using non probability_purposive_sampling method. The objective and purpose of the study were explained and confidentiality was ensured. Informed consent was obtained in the written form. The information regarding the demographic data and other variables were collected from the mother by interview and from the health records.

Pretest was done to observe the level of labour pain. Each observation was made for 5 minutes. The primi gravid mothers in the experimental group were given effleurage massage for 15 minutes, for 4 times in an group after half an hour, after the 4^{th} massage. The primigravida mothers in the control group were given only routine labour care. Post observation was done in the control group after the 3 hours of pretest.

3.14. DATA ANALYSIS

For the present study the researcher collected the data from the primigravida mothers were edited and analyzed by using both descriptive and inferential statistical methods

The data analysis was to

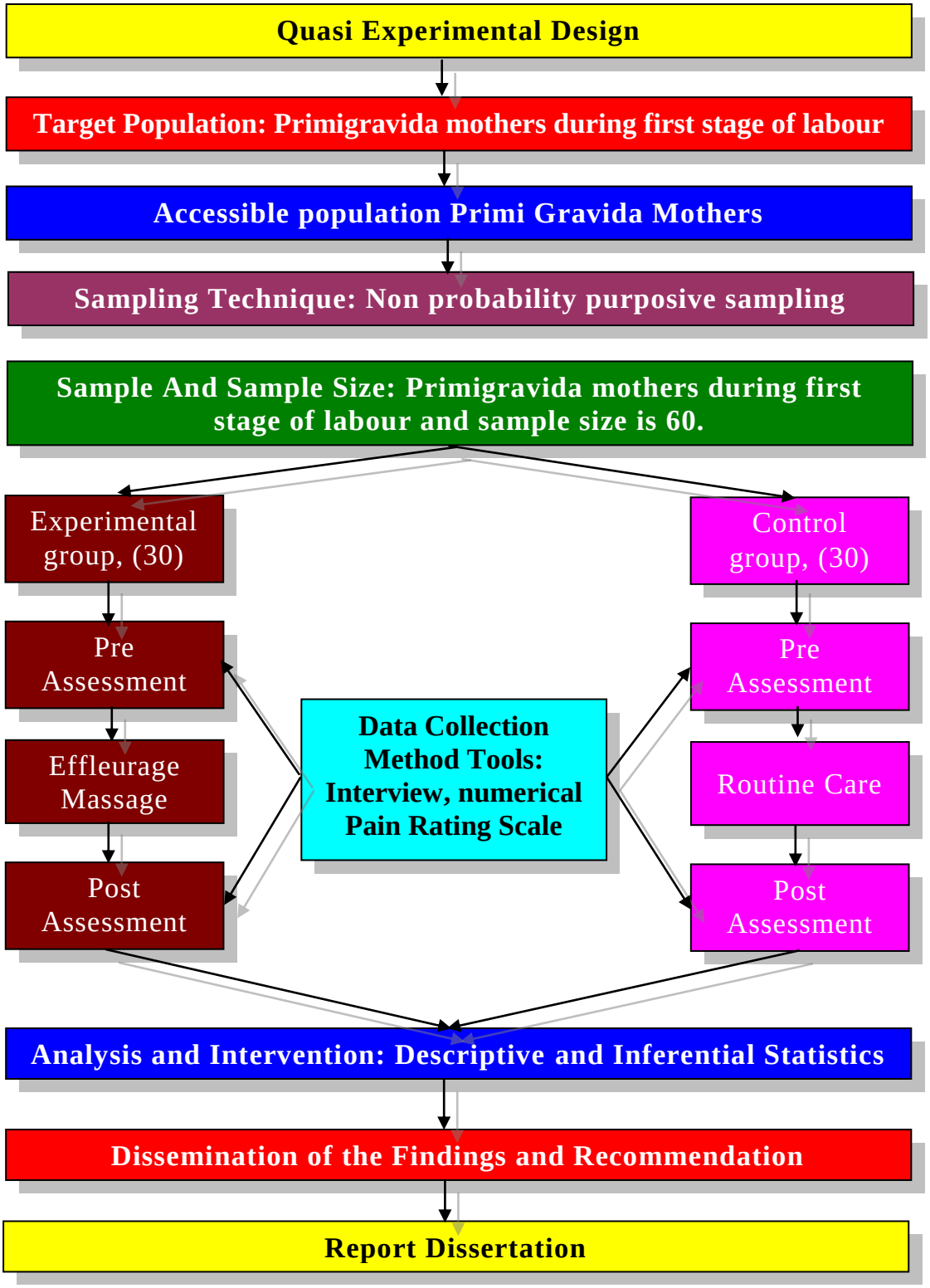
1) Organize data in master sheet.

2) Describe background variables of the primigravida mothers in the experimental group and the control group by frequency and percentage distribution.

3) Test effectiveness of effleurage massage among experimental group by mean scores, standard deviation and t'test.

4) Find the association between the mean differences in labour pain on selected variables among experimental group by linear regression.

FIGURE 3.1 SCHEMATIC REPRESENTATION OF STUDY METHODOLOGY



CHAPTER-IV
DATA ANALYSIS AND INTERPRETATION

The analysis and interpretation data of this study were based on the data collected through interview schedule among primigravida mothers. The data were entered into excel sheet and result were computed by using inferential and descriptive analysis based on the objective. The data collected were edited, tabulated and analyzed using SPSS version 10 probability value of less than 0.05 was considered to be significant.

Findings were presented in the forms of tables, and diagrams under the following sections.

The data analyzed were presented as follows

Section-I	Data on demographic variables of primigravida mothers in experimental and control group.
Section-II	Data on pretest level of labour pain score among primigravida mothers in experimental and control group.
Section- III	Data on post test level of labour pain score among primigravida mothers in experimental and control group.
Section-IV	Comparison of labour pain between experimental and control group
Section-V	Data on effectiveness of effleurage massage .
Section-VI	Association between level of pain reduction and demographic variables (Experiment)

Section-VII Association between level of pain reduction and demographic variables (Control)

Section-VIII Opinionaire on Effleurage massage

STATISTICAL ANALYSIS

Demographic variables in categorical/dichotomous were given in frequencies with their percentages.

labour variables in categorical were given in frequencies with their percentages.

Pain score was given in mean and standard deviation.

Difference between experiment and control was analysed using student independent t-test

Pretest and posttest difference was analysed using paired t-test

Association between level of pain and demographic variables were analysed using pearson chisquare test.

Effectiveness of study was analysed using mean pain difference with 95% CI and propotion with 95% CI

Multiple bar diagram, simple bar diagram were used to represent the data

$P<0.05$ was considered statistically significant.

SECTION- I: DATA ON DEMOGRAPHIC VARIABLES OF PRIMIGRAVIDA MOTHERS IN EXPERIMENTAL AND CONTROL GROUP

Table-1: Demographic Profile

Demographic variables		Group			
		Experiment		Control	
		N	%	N	%
Age	< 20 yrs	7	23.3%	4	13.3%
	21yrs-25yrs	13	43.3%	18	60.0%
	26yrs-30yrs	10	33.4%	8	26.7%
Education status	Illiterate	7	23.3%	5	16.7%
	School level	15	50.0%	18	60.0%
	Graduate	8	26.7%	7	23.3%
Family Income	< Rs.1000	15	50.0%	19	63.3%
	Rs.1001 – 2999	11	36.6%	6	20.0%
	Rs. 3000 – 4999	2	6.7%	3	10.0%
	> Rs. 5000	2	6.7%	2	6.7%
Dwelling place	Rural	12	40.0%	9	30.0%
	Urban	18	60.0%	21	70.0%
Type of family	Nuclear family	17	56.7%	14	46.7%
	Joint family	13	43.3%	16	53.3%
Occupation of the mother	Home maker	19	63.3%	21	70.0%
	Moderate worker	9	30.0%	6	20.0%
	Heavy worker	2	6.7%	3	10.0%
Weeks of gestation	37 - 39 weeks	15	50.0%	16	53.3%
	40 - 42 weeks	15	50.0%	14	46.7%

Demographic variables		Group			
		Experiment		Control	
		N	%	N	%
Activity of mother during first stage	Walking	4	13.3%	5	16.7%
	Bed rest	14	46.7%	17	56.7%
	Others	12	40.0%	8	26.7%
General pain tolerance level	Good	7	23.3%	6	20.0%
	Better	12	40.0%	11	36.7%
	Bad	11	36.7%	13	43.3%

Table 1 shows the demographic information of primigravida mothers those who are participated for the following study on “A study to assess the effectiveness of effleurage massage in reduction of labour pain during first stage of labour among primigravida mothers at Institute of Obstetrics and Gynaecology, Egmore, Chennai-8.”

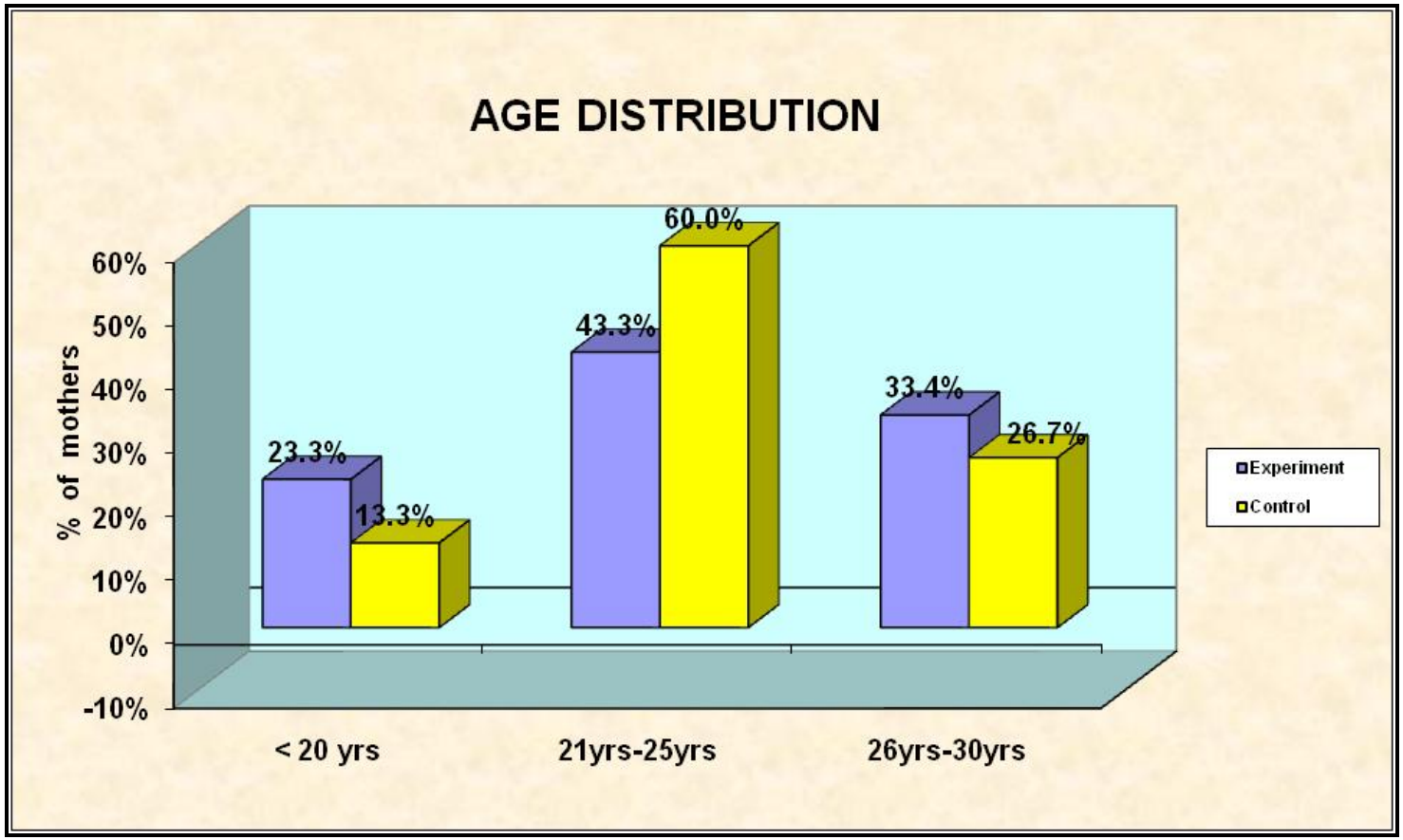


Figure 4.1: Age distribution of experimental and control group

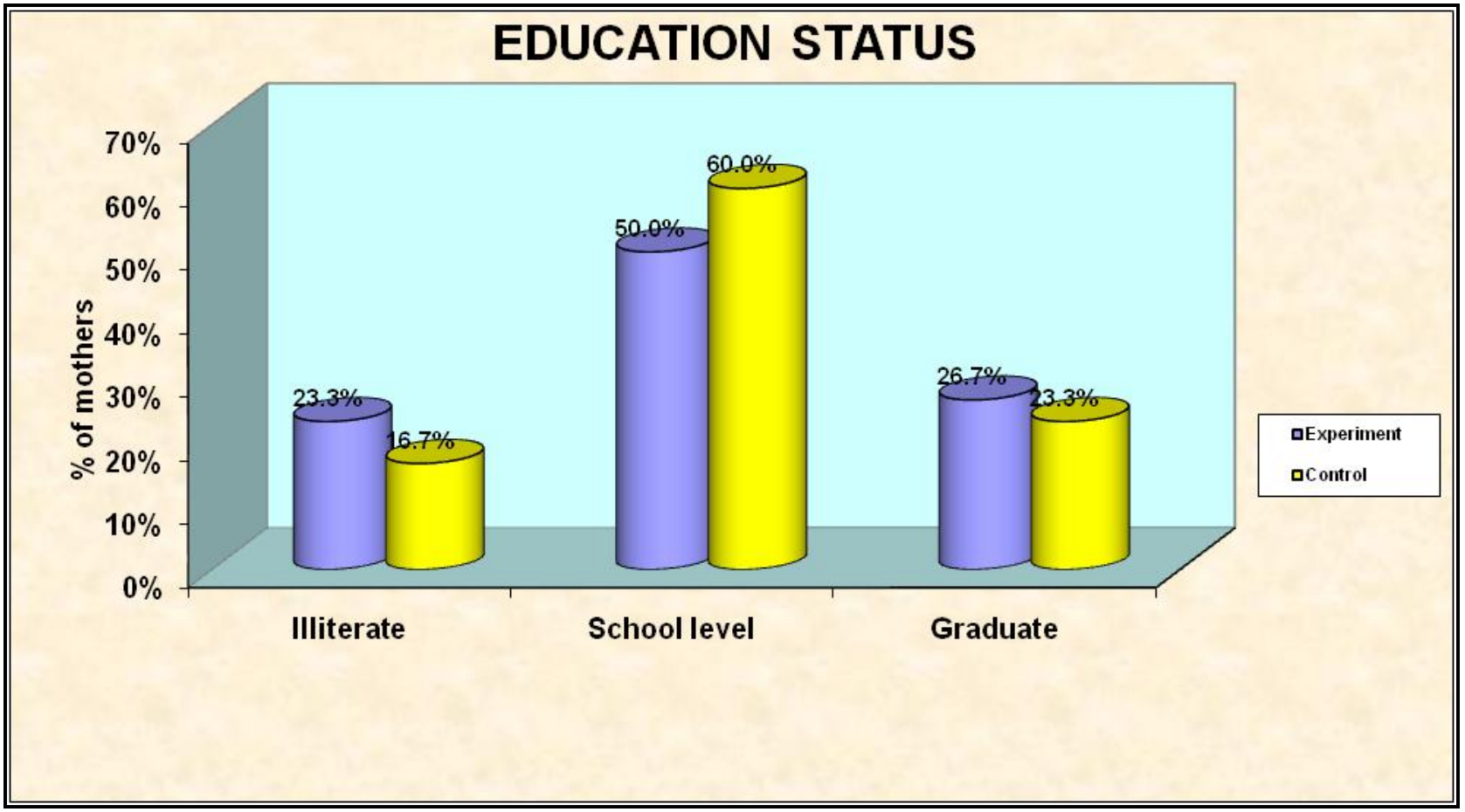


Figure 4 (2) : Education status of experimental and control group

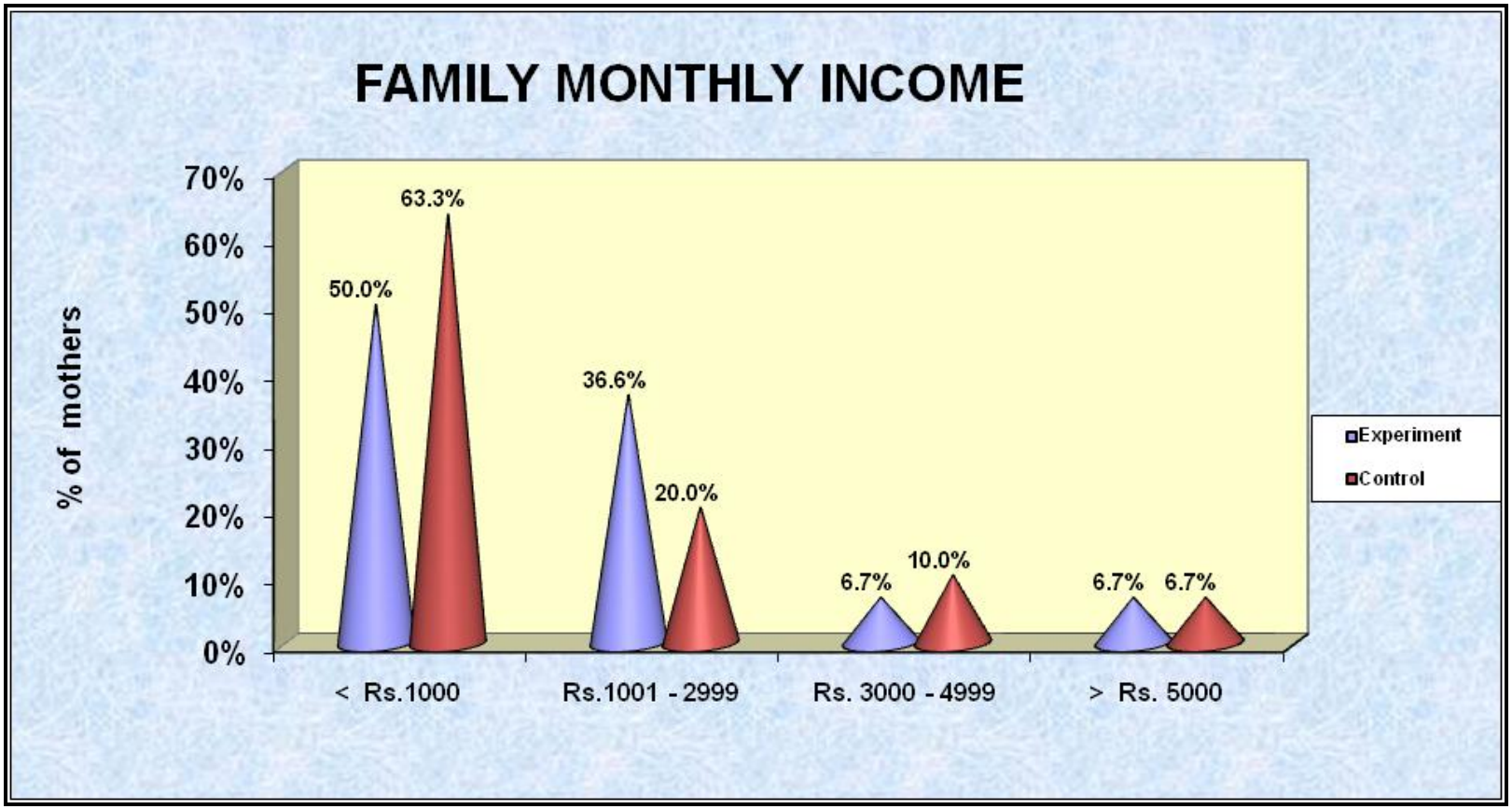


Figure 4 (3) : family monthly income of experimental and control group

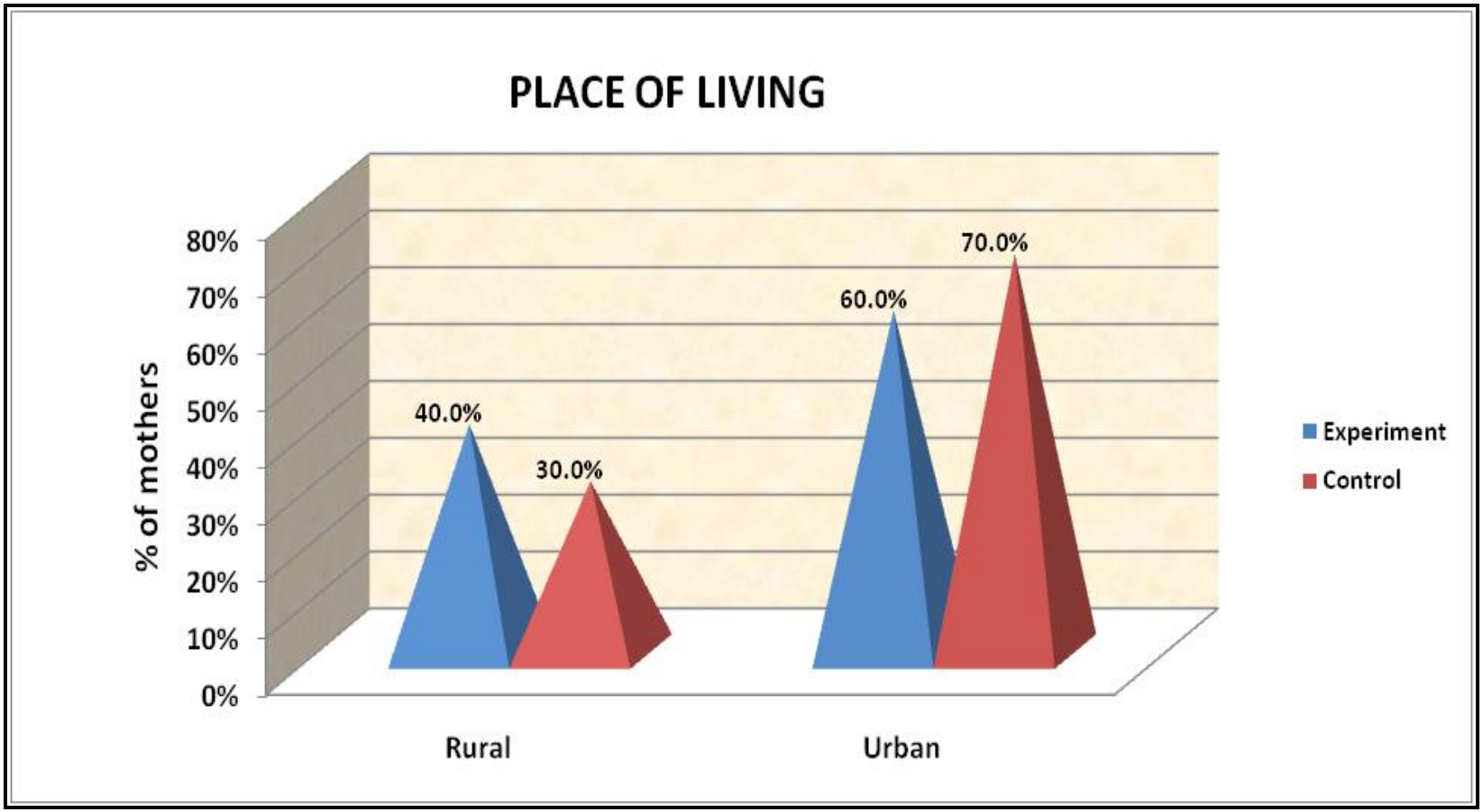


Figure 4 (4) : Place of living in experimental and control group

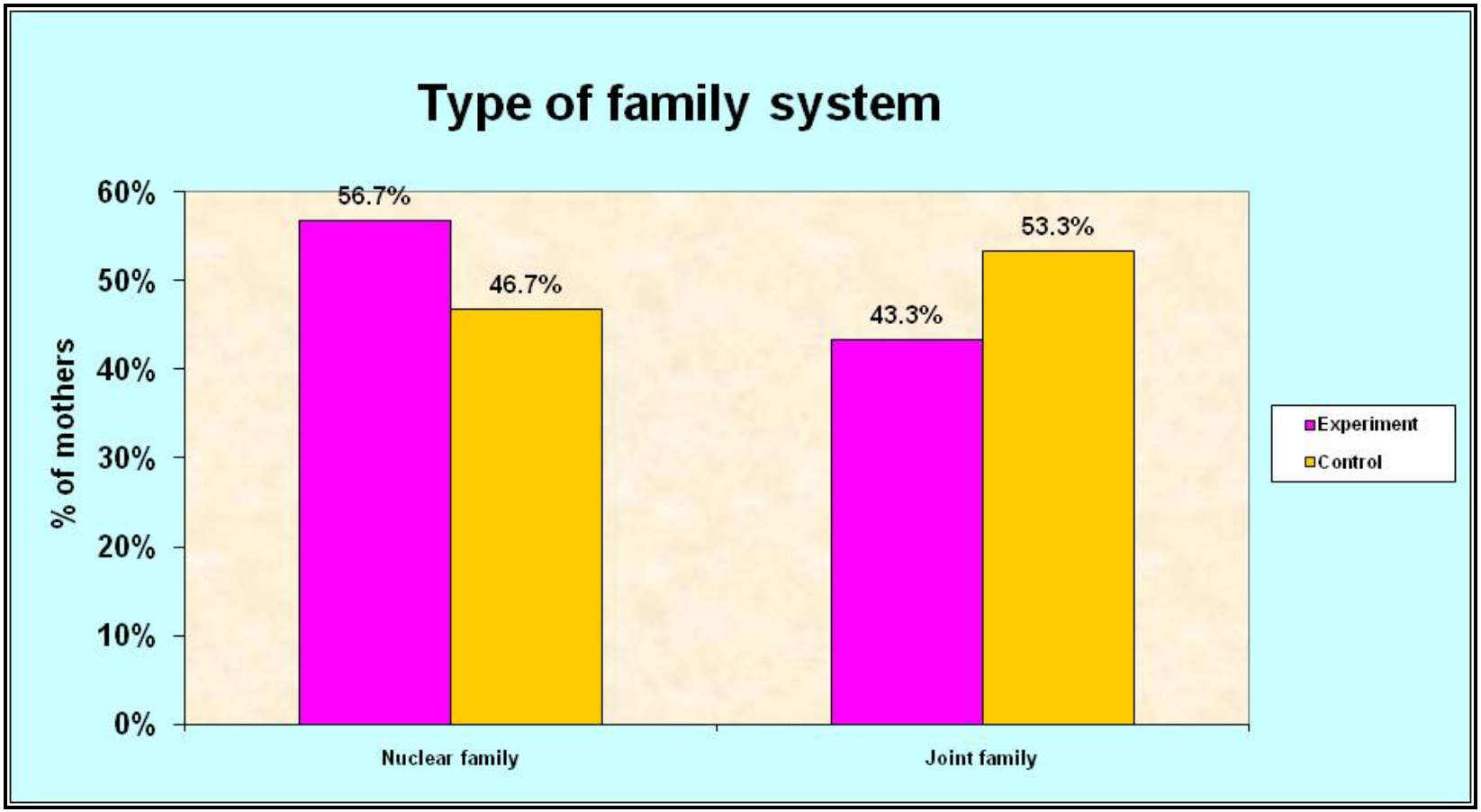


Figure 4 (5) : Type of family in experimental and control group

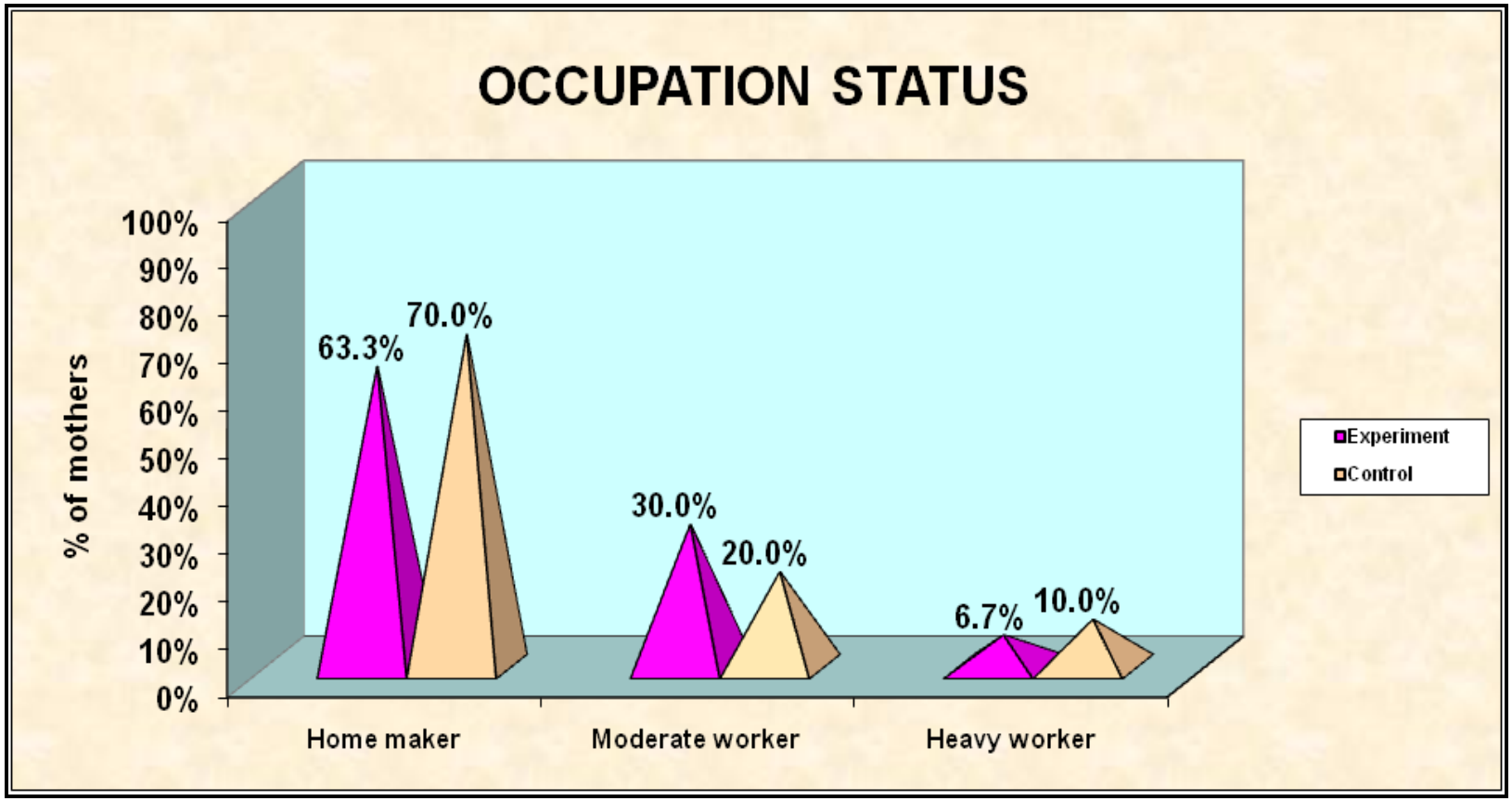


Figure 4 (6):occupation status of the experimental and control group

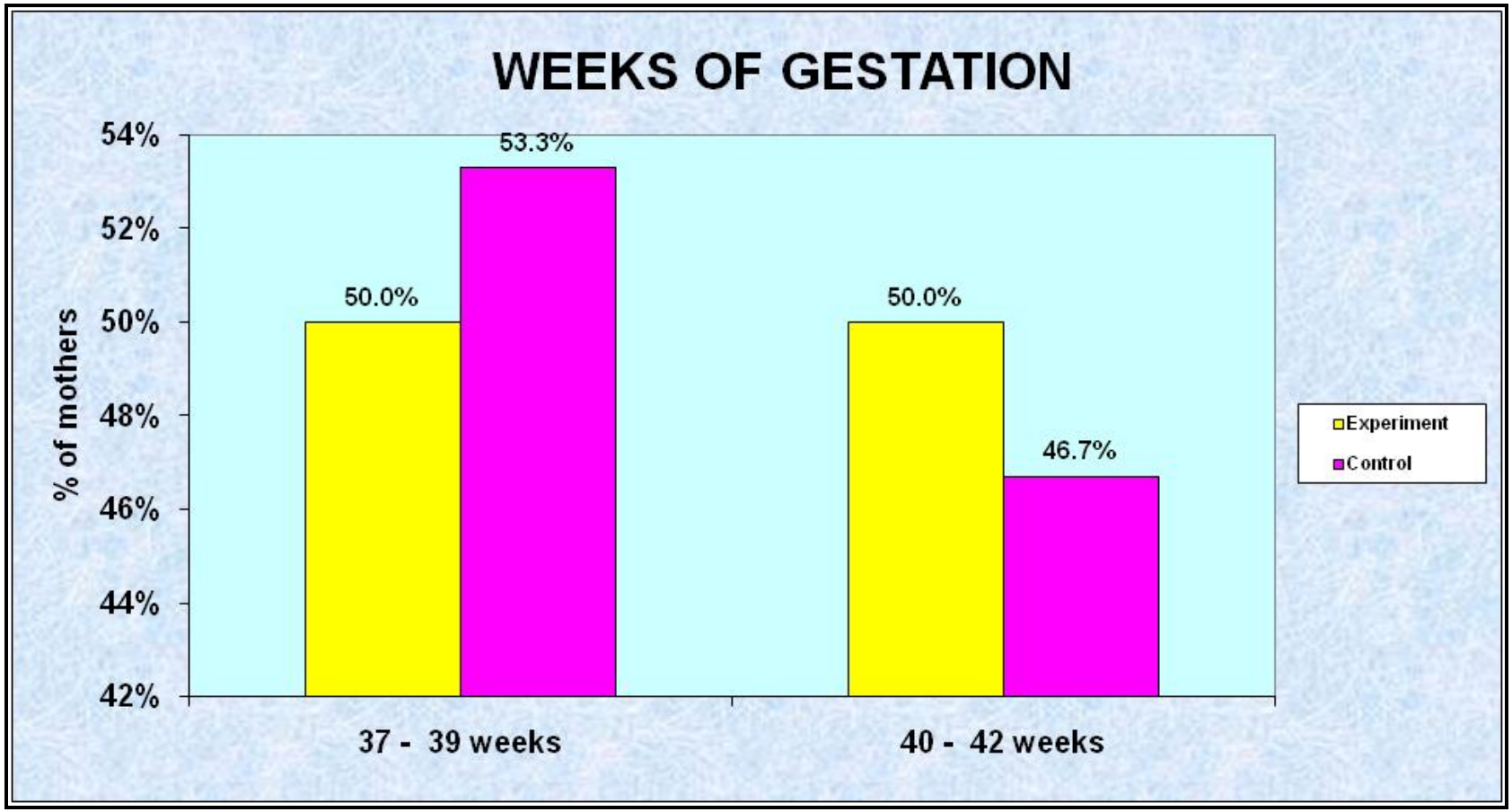


Figure 4(7) :Weeks of gestation in experimental and control group

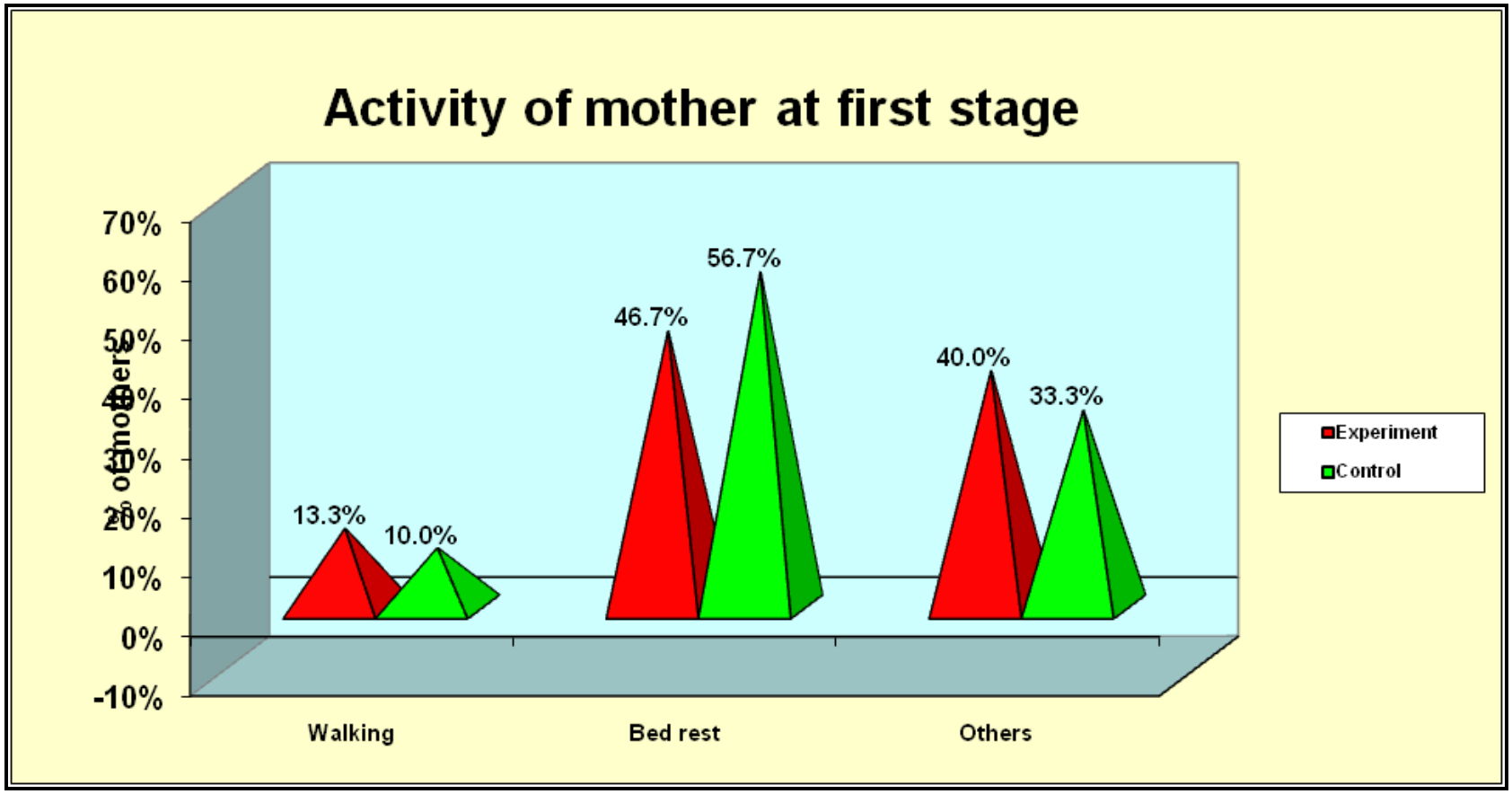


Figure 4(8) : shows activity of the mother in experimental and control group

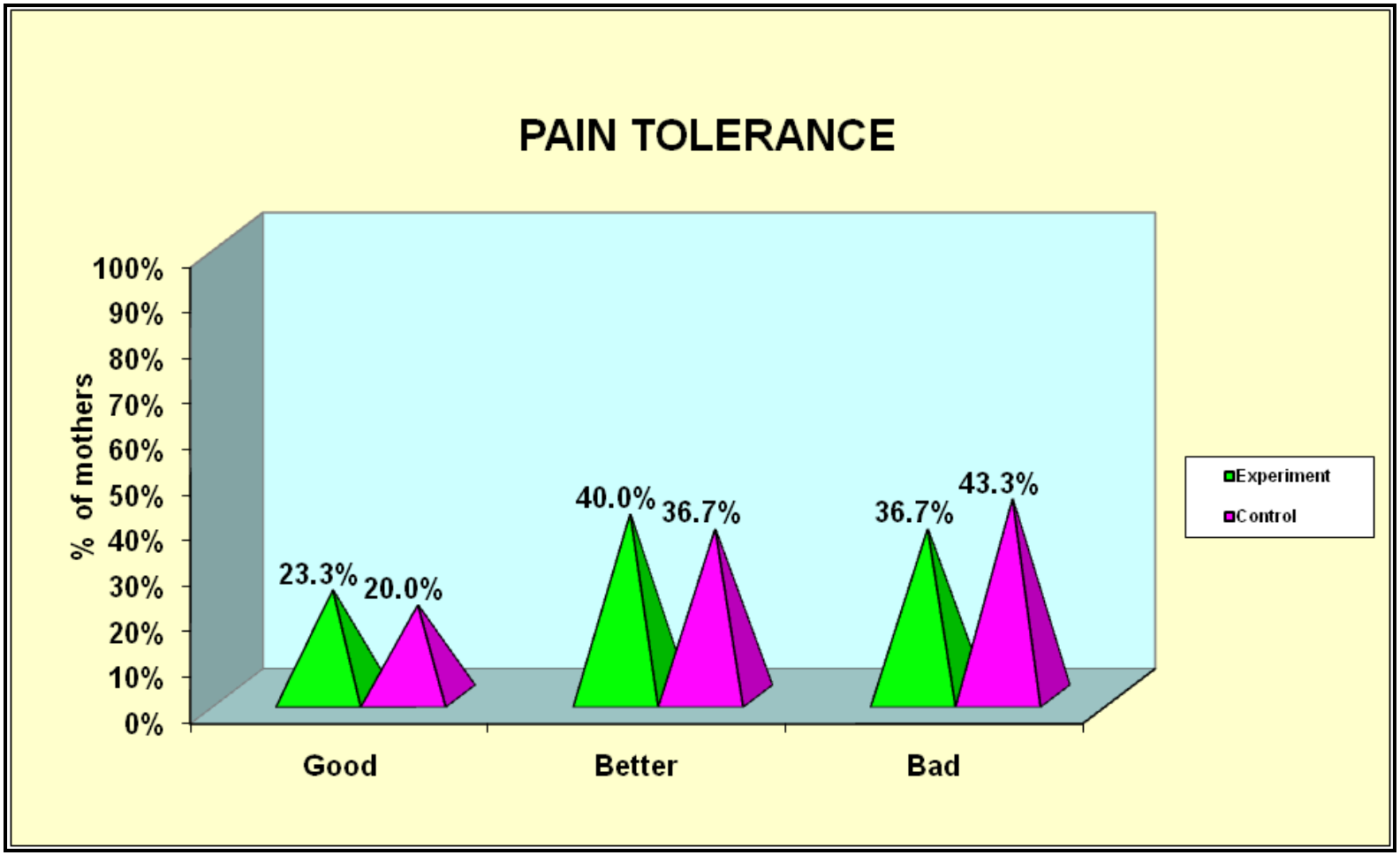


Figure 4 (9) : pain tolerance level of experimental and control group

Table- 2 Information obtained from case sheet

		Group			
		Experiment		Control	
		n	%	n	%
Cervical Dilatation	2cm - 4cm	18	60.0%	17	56.7%
	5cm - 7cm	12	40.0%	13	43.3%
Membranes	Intact	27	90.0%	24	80.0%
	Ruptured	3	10.0%	6	20.0%

Table 2 shows the Information obtained from case sheet of primigravida mothers those who are participated in this study

Regarding cervical dilatation, majority of the primigravida mothers in experimental group (60.0%) and control group (56.7%) have 2cm-4cm.

Majority of he primigravida mothers (90.0%) in experimental group had intact membranes and (80.0%) from control group also were with intact membrane.

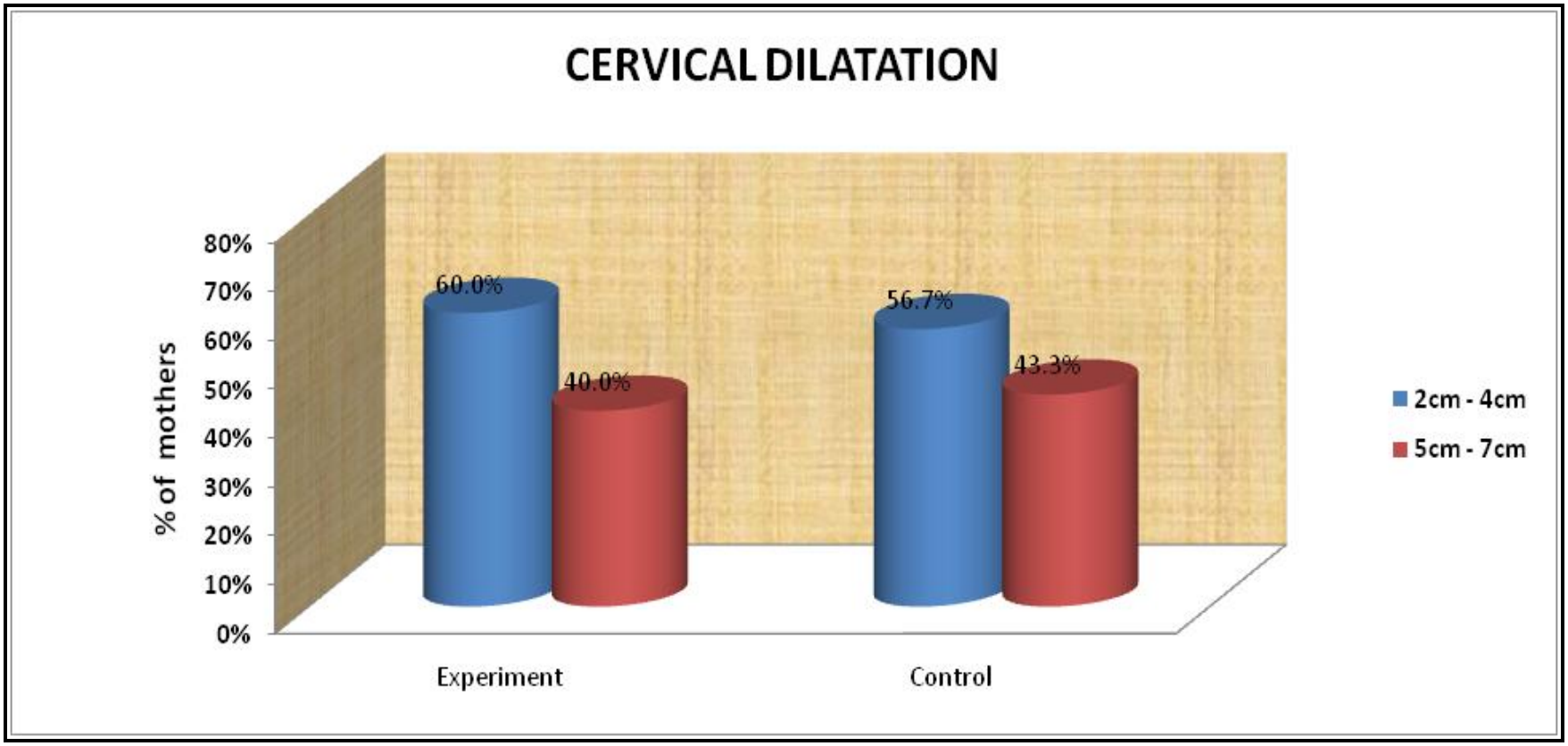


Figure 4 (10) : cervical dilatation of the mother in experimental and control group.

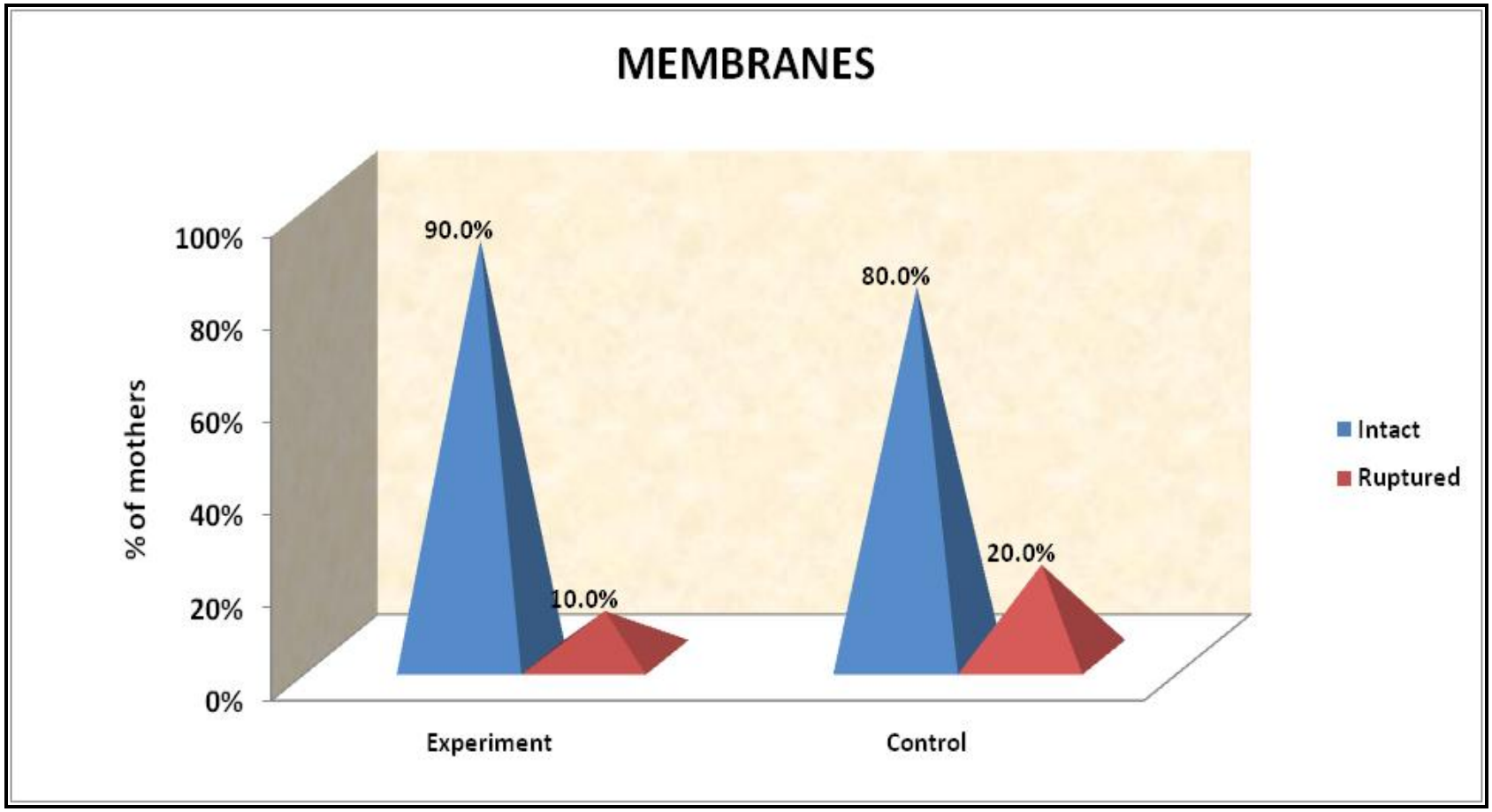


Figure 4 (11) : Membrane of experimental and control group

SECTION-II: DATA ON PRETEST LEVEL OF LABOUR PAIN SCORE AMONG PRIMIGRAVIDA MOTHERS IN EXPERIMENTAL AND CONTROL GROUP.

Table- 3: Experiment and Control Pretest Level of Pain

	Experiment		Control		Chisquare test
	No. of mothers	%	No. of mothers	%	
No pain	0	0.0%	0	0.0%	$\chi 2=0.29$ P=0.86 Not Significant
Mild	7	23.3%	7	23.3%	
Moderate	16	53.4%	18	60.0%	
Severe	7	23.3%	5	16.7%	
Total	30	100.0%	30	100.0%%	

Table 3: Among the experiment group, in the pretest, 23.3% of the mothers are having mild pain, 53.4% of them are having moderate pain and 23.3% of them are having severe pain.

Among the control group, in the pretest, 23.3% of the mothers are having mild pain, 60.0% of them are having moderate pain and 16.7% of them are having severe pain.

There was no statistically significant difference between experimetnal and control group as per the result obtainted from chi square test.

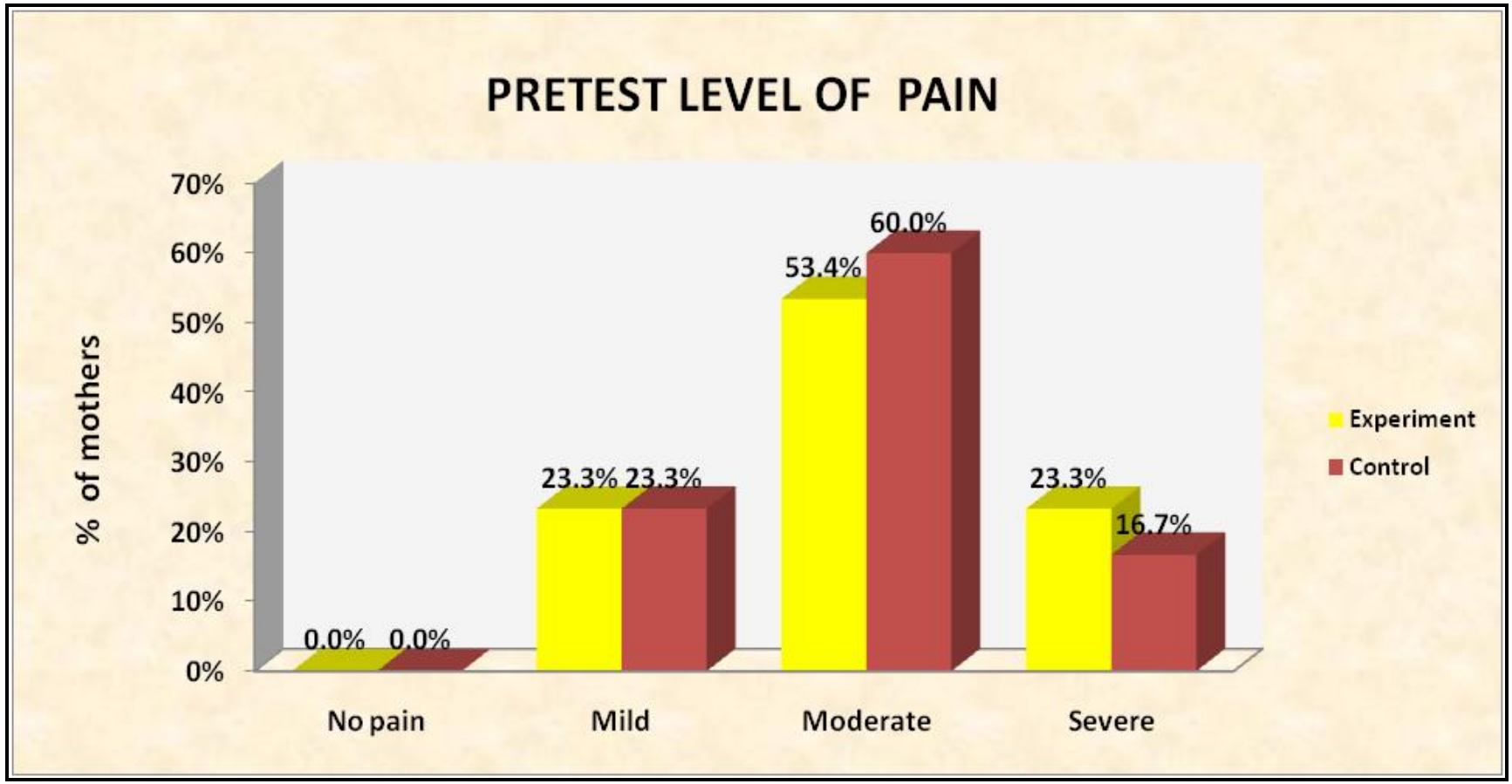


Figure 4(12) : pre test level of pain of experimental and control group

SECTION – III : DATA ON POST TEST LEVEL OF LABOUR PAIN SCORE AMONG PRIMIGRAVIDA MOTHERS IN EXPERIMENTAL AND CONTROL GROUP

Table 4: Experiment And Control Posttest Level Of Pain

	Experiment		Control		Chisquare test
	No. of mothers	%	No. of mothers	%	
No pain	0	0.0%	0	0.0%	$\chi 2=8.25$ P=0.01** Significant
Mild	19	63.3%	8	26.7%	
Moderate	9	30.0%	17	56.7%	
Severe	2	6.7%	5	16.6%	
Total	30	100.0%	30	100.0%%	

Table 4:Among the experimental group, in the post test, 63.3% of the mothers are having mild pain, 30.0% of them are having moderate pain and 6.7% of them are having severe pain.

Among the control group, in the posttest, 26.7% of the mothers are having mild pain, 56.7% of them are having moderate pain and 16.6% of them are having severe pain.

There was a statistically significant difference between experimental and control grper the result obtained from chi square test.

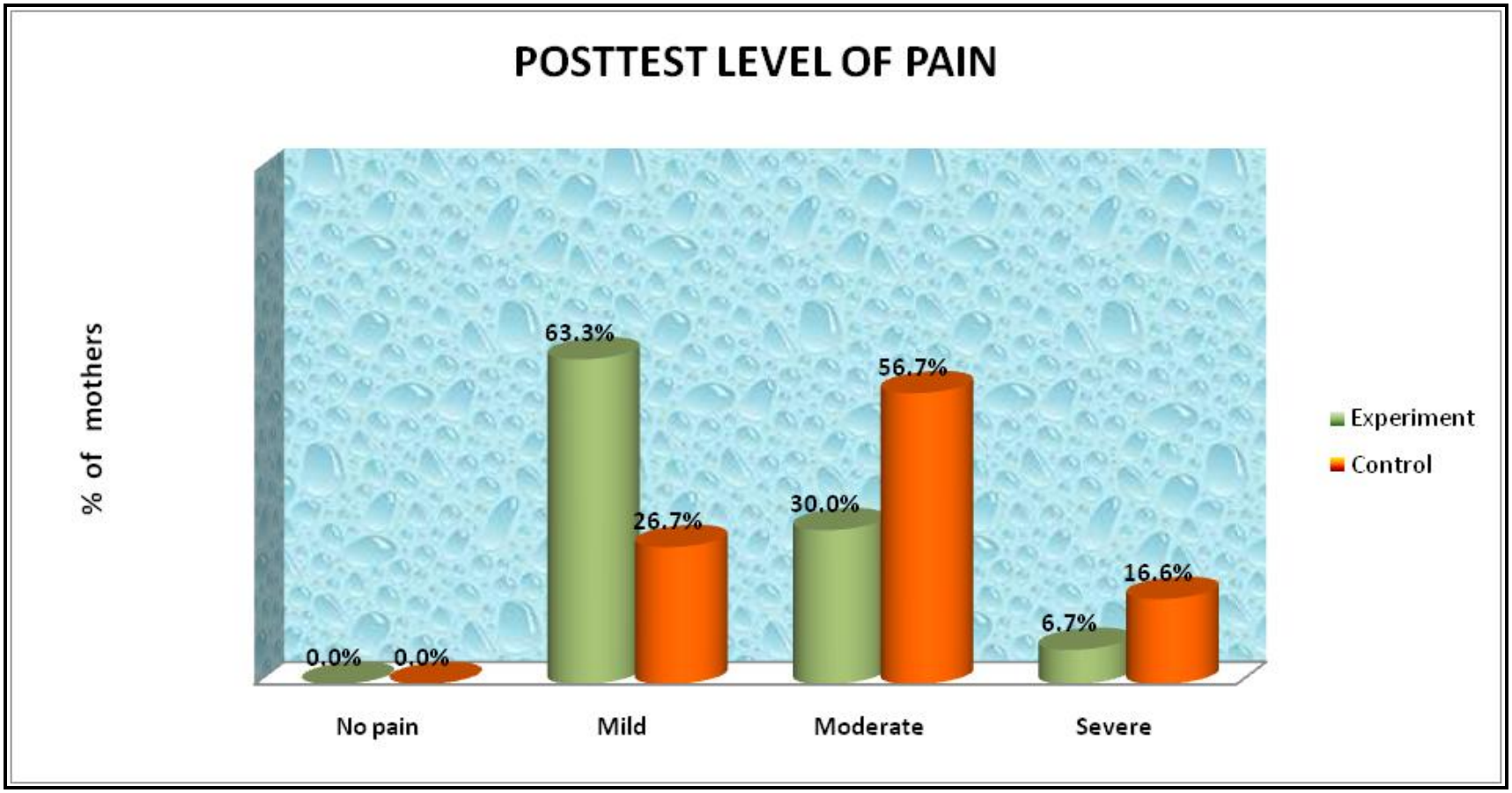


Figure 4(13) : post test level of pain in experimental and control group

SECTION- IV: COMPARISON OF LABOUR PAIN BETWEEN EXPERIMENTAL AND CONTROL GROUP

Table 5: Comparison of Experiment & Control Group

	No. of mothers	Experiment	Control	Mean difference	Student's independent t-test
		Mean ± SD	Mean ± SD		
Pretest	30	6.50±2.27	6.13±1.75	0.37	t=0.70 P=0.48 Not significant
Posttest	30	3.60±1.94	5.53±2.34	1.93	t=3.48 P=0.001 ** Significant

Table 5 shows the comparison of experiment and control group pain score.

When considering pain , In pretest, there is no statistically significant difference between experimental and control group.

In posttest, there is a statistically significant difference between experiment and control.

Differences between experiment and control score was analysed using independent t-test.

COMPARISON OF PRETEST AND POST TEST PAIN SCORES BETWEEN EXPERIMENTAL AND CONTROL GROUP

Table 6: Comparison of Pretest & Posttest

	No. of mothers	Pretest	Posttest	Mean difference	Student's paired t-test
		Mean ± SD	Mean ± SD		
Experiment	30	6.50±2.27	3.60±1.94	↓2.90	t=6.51 P=0.001*** significant
Control	30	6.13±1.75	5.53±2.34	↓0.60	t=1.26 P=0.21 Not significant

Table 6 shows the comparison of experimental and control group pain score.

Among experimental, in pre test they are having 6.50 pain score , in post test they are having 3.60 score, so the mean difference is ↓2.90 . This difference is large and statistically significant .

Among control, in pretest they are having 6.13 pain score , in posttest they are having 5.53 score, so the mean difference is ↓ 0.60 . This difference is small and it is not statistically significant .

Differences between pretest and posttest score was analysed using paired t-test.

SECTION- V : DATA ON EFFECTIVENESS OF EFFLEURAGE MASSAGE

Table 7: Effectiveness of Effleurage Massage

		Max score	**Mean score**	**Mean Difference with 95% Confidence interval**	**Percentage Difference with 95% Confidence interval**
Experiment	Pretest	10	6.50	2.90 (1.99– 3.81)	↓29.0% (19.9% – 38.1%)
	Posttest	10	3.60		
Control	Pretest	10	6.13	0.60 (0.36 – 1.57)	↓6.0% (3.6% –15.7%)
	Posttest	10	5.53		

Table 7 shows the effectiveness of the effleurage massage 29.0% reduction of pain than the pretest.

Control group had only 6.0% reduction of pain than the pretest

Differences between pretest and post test score was analysed using proportion with 95% CI and mean difference with 95% CI. It shows the effectiveness of effleurage massage

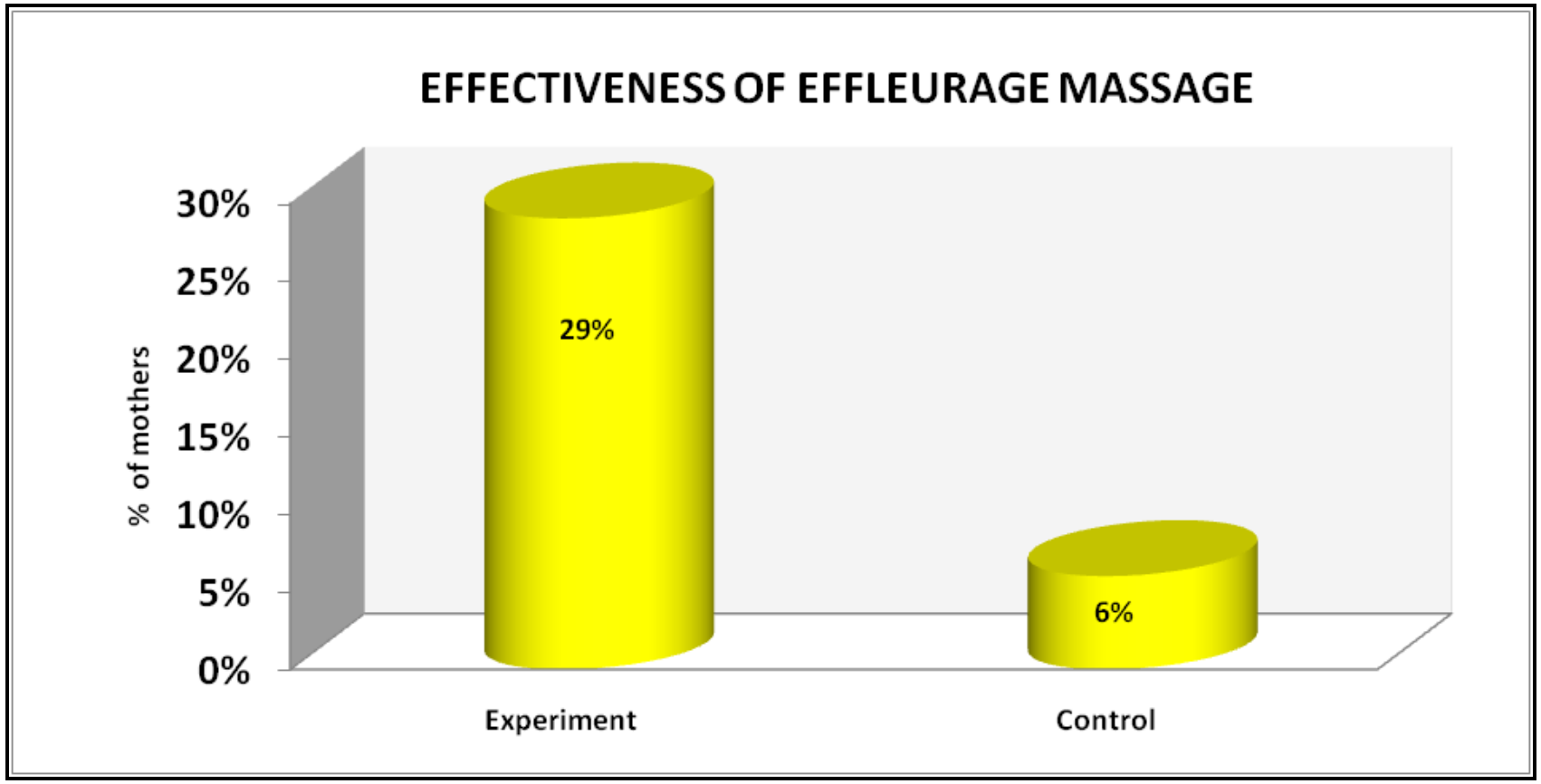


Figure 4(14): shows effectiveness of effleurage massage in experimental and control group.

SECTION VI : ASSOCIATION BETWEEN LEVEL OF PAIN REDUCTION AND DEMOGRAPHIC VARIABLES(EXPERIMENT)

Table-8: Association Between Level of Pain Reduction and Demographic Variables(Experiment)

Demographic variables		Level of pain reduction				Total	Chi square test
		Below average(≤2.90)		Above average(>2.90)			
		N	%	n	%		
Age	< 20 yrs	6	85.7%	1	14.3%	7	$\chi 2$=7.74 p=0.02**
	21yrs-25yrs	3	23.1%	10	76.9%	13	
	26yrs-30yrs	6	60.0%	4	40.0%	10	
Education status	Illiterate	6	85.7%	1	14.3%	7	$\chi 2$=6.12 p=0.05*
	School level	7	46.7%	8	53.3%	15	
	Graduate	2	25.0%	6	75.0%	8	
Family Income	< Rs.1000	10	66.7%	5	33.3%	15	$\chi 2$=3.93 p=0.26
	Rs.1001 - 2999	3	27.3%	8	72.7%	11	
	Rs. 3000 - 4999	1	50.0%	1	50.0%	2	
	> Rs. 5000	1	50.0%	1	50.0%	2	
Dwelling place	Rural	4	33.3%	8	66.7%	12	$\chi 2$=2.22 p=0.13
	Urban	11	61.1%	7	38.9%	18	
Type of family	Nuclear family	9	52.9%	8	47.1%	17	$\chi 2$=0.13 p=0.71
	Joint family	6	46.2%	7	53.8%	13	

Demographic variables		Level of pain reduction				Total	Chi square test
		Below average(≤2.90)		Above average(>2.90)			
		N	%	n	%		
Occupation of the mother	Home maker	11	57.9%	8	42.1%	19	$\chi 2=2.58$ p=0.27
	Moderate worker	4	44.4%	5	55.6%	9	
	Heavy worker			2	100.0%	2	
Weeks of gestation	37 - 39 weeks	8	53.3%	7	46.7%	15	$\chi 2=0.13$ p=0.71
	40 - 42 weeks	7	46.7%	8	53.3%	15	
Activity of mother during first stage	Walking	0	0.0%	4	100.0%	4	$\chi 2=7.14$ p=0.03*
	Bed rest	9	64.3%	5	35.7%	14	
	Others	6	50.0%	6	50.0%	12	
General pain tolerance level	Good	2	28.5%	5	71.5%	7	$\chi 2=7.07$ p=0.03*
	Better	4	33.3%	8	66.7%	12	
	Bad	9	81.8%	2	18.2%	11	
Cervical Dilatation	2cm - 4cm	7	38.9%	11	61.1%	18	$\chi 2=2.22$ p=0.13
	5cm - 7cm	8	66.7%	4	33.3%	12	
Membranes	Intact	14	51.9%	13	48.1%	27	$\chi 2=0.37$ p=0.54
	Ruptured	1	33.3%	2	66.7%	3	

Table 8 shows the association between level of pain reduction and mothers demographic variable in experimental group Elders, more educated, walking , good pain tolerance mothers are reduced more pain Other than variables. There was statistical significance difference in experimental group as per result obtainted from chi square test.

SECTION -VII: ASSOCIATION BETWEEN LEVEL OF PAIN REDUCTION AND DEMOGRAPHIC VARIABLES (CONTROL) TABLE: 9

Demographic variables		Level of pain reduction				Total	Chi square test
		Below average(≤0.60)		Above average(>0.60)			
		N	%	n	%		
Age	< 20 yrs	2	50.0%	2	50.0%	4	χ^2=2.33 p=0.05
	21yrs-25yrs	9	50.0%	9	50.0%	18	
	26yrs-30yrs	4	50.0%	4	50.0%	8	
Education status	Illiterate	3	60.0%	2	40.0%	5	χ^2=5.77 p=0.06
	School level	6	33.3%	12	66.7%	18	
	Graduate	6	85.7%	1	14.3%	7	
Family Income	<Rs.1000	11	57.9%	8	42.1%	19	χ^2=6.14 p=0.10
	Rs.1001 – 2999	4	66.7%	2	33.3%	6	
	Rs. 3000 – 4999			3	100.0%	3	
	>Rs.5000			2	100.0%	2	
Dwelling place	Rural	6	66.7%	3	33.3%	9	χ^2=1.42 p=0.23
	Urban	9	42.9%	12	57.1%	21	
Type of family	Nuclear family	6	42.9%	8	57.1%	14	χ^2=0.53 p=0.46
	Joint family	9	56.3%	7	43.8%	16	
Occupation of the mother	Home maker	11	52.4%	10	47.6%	21	χ^2=1.04 p=0.59
	Moderate worker	2	33.3%	4	66.7%	6	
	Heavy worker	2	66.7%	1	33.3%	3	

Demographic variables		Level of pain reduction				Total	Chi square test
		Below average(≤0.60)		Above average(>0.60)			
		N	%	n	%		
Weeks of gestation	37 - 39 weeks	8	50.0%	8	50.0%	16	$\chi 2=0.00$ p=1.00
	40 - 42 weeks	7	50.0%	7	50.0%	14	
Activity of mother during first stage	Walking	1	20.0%	4	80.0%	5	$\chi 2=2.35$ p=0.30
	Bed rest	9	52.9%	8	47.1%	17	
	Others	5	62.5%	3	37.5%	8	
General pain tolerance level	Good	4	66.7%	2	33.3%	6	$\chi 2=0.83$ p=0.65
	Better	5	45.5%	6	54.5%	11	
	Bad	6	46.2%	7	53.8%	13	
Cervical Dilatation	2cm - 4cm	9	52.9%	8	47.1%	17	$\chi 2=0.13$ p=0.71
	5cm - 7cm	6	46.2%	7	53.8%	13	
Membranes	Intact	11	45.8%	13	54.2%	24	$\chi 2=0.83$ p=0.36
	Ruptured	4	66.7%	2	33.3%	6	

Table 9 shows the association between level of pain reduction and mothers demographic variables. None of the variables are significant. Statistical significance was calculated using chi square test.

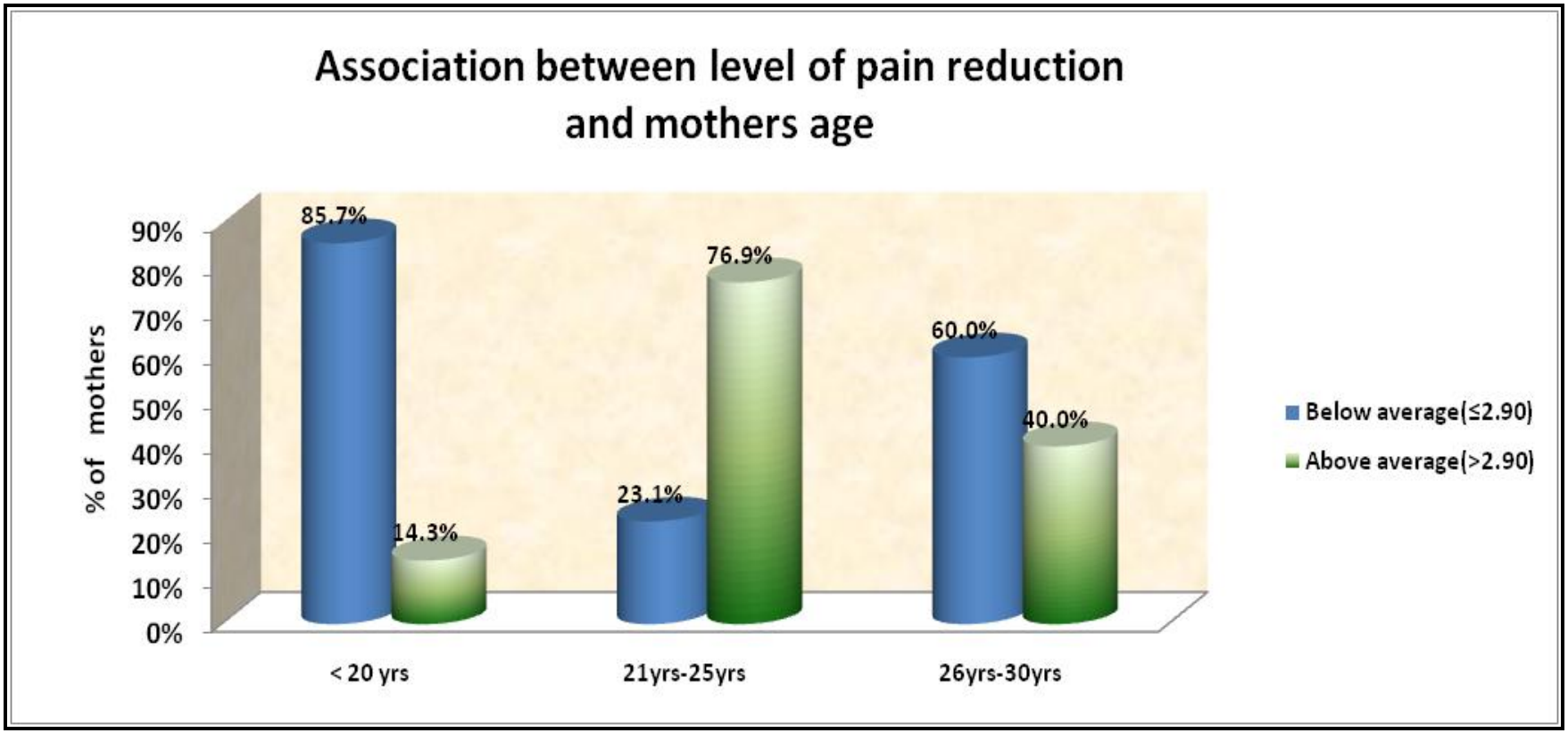


Figure 4(15) : Association between level of pain reduction and mothers age in experimental and control group

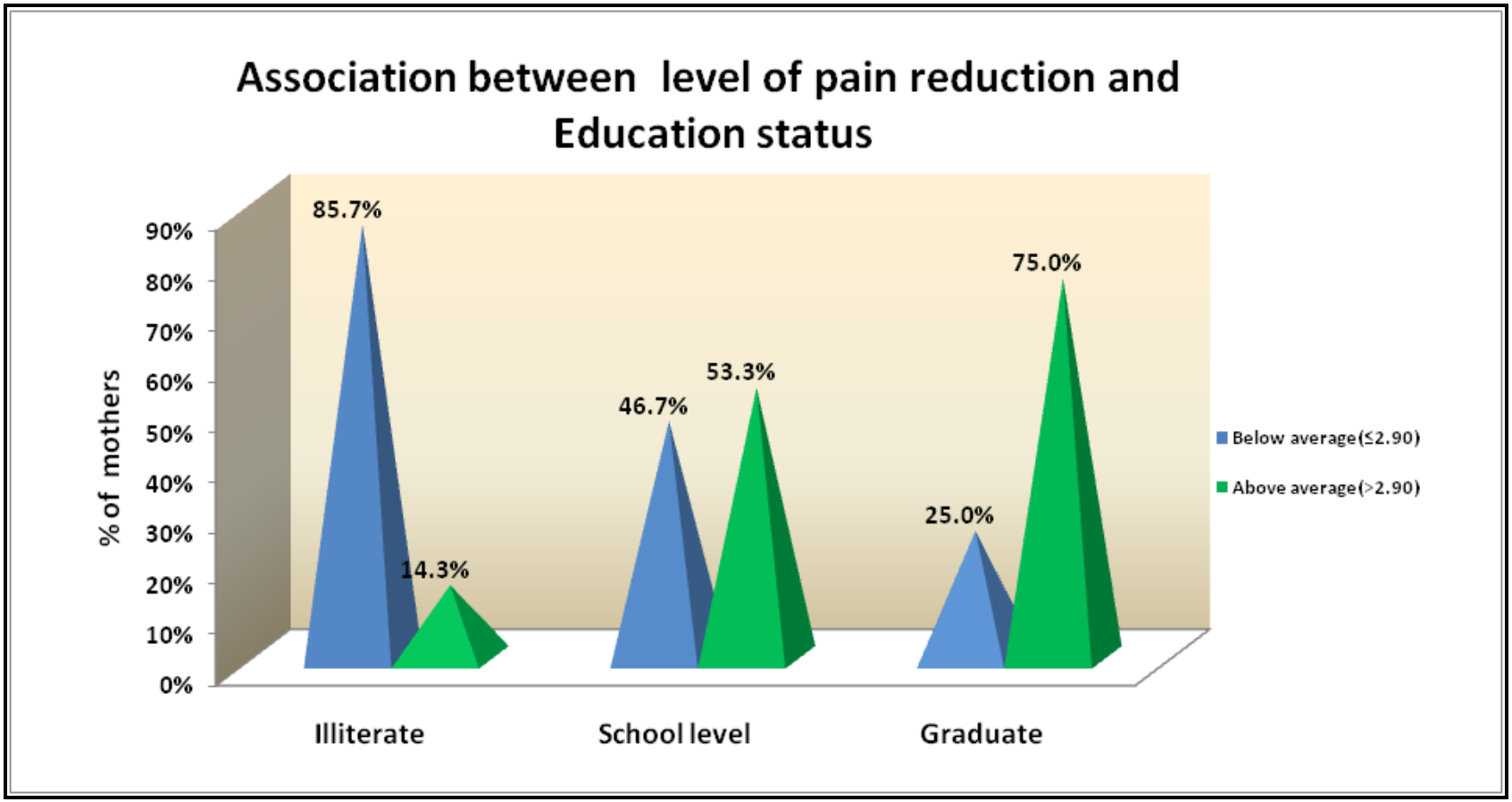


Figure 4(16) : Association between level of pain reduction and education status

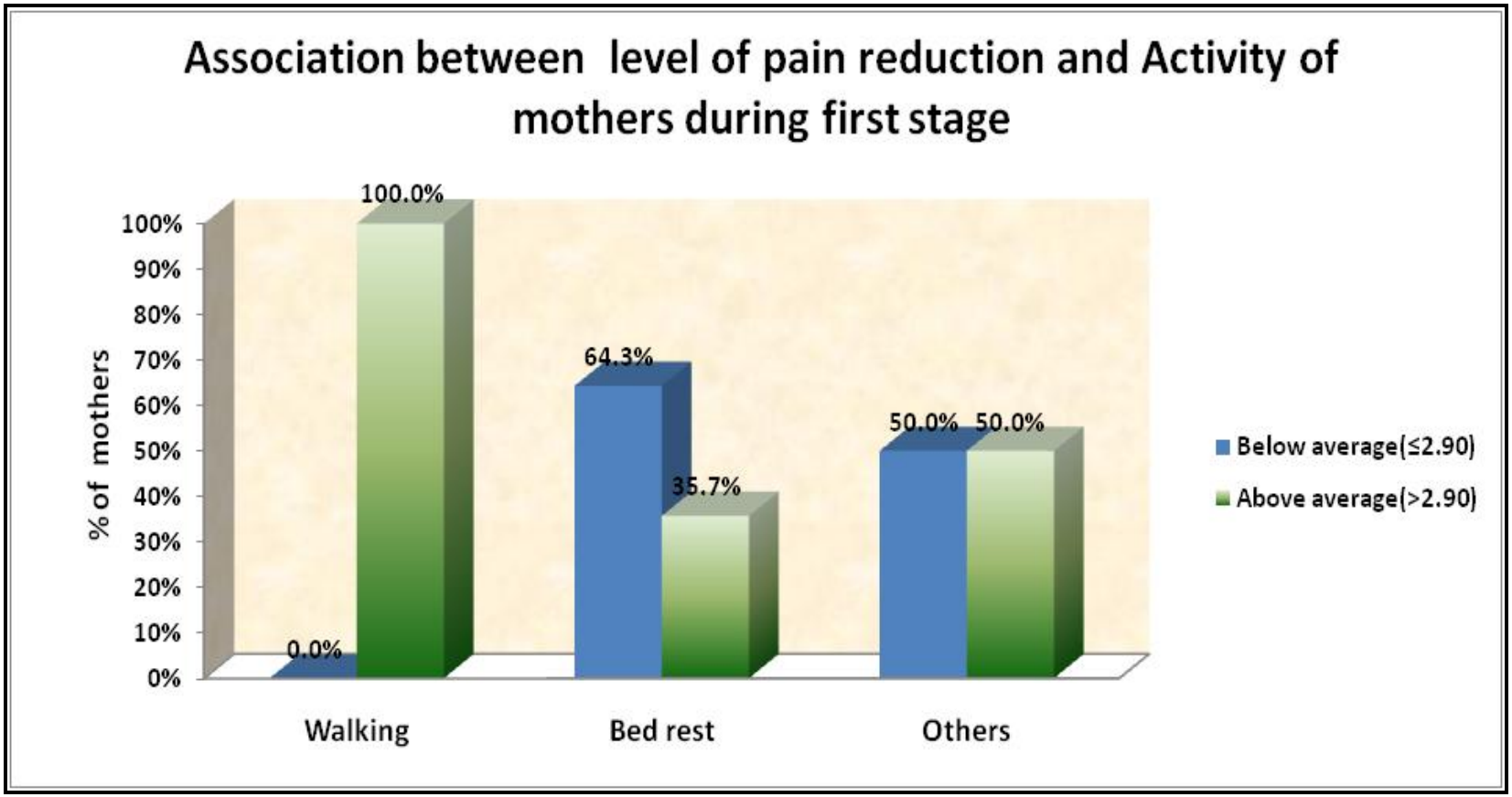


Figure 4(17) : Association between level of pain reduction and activity of mothers during first stage

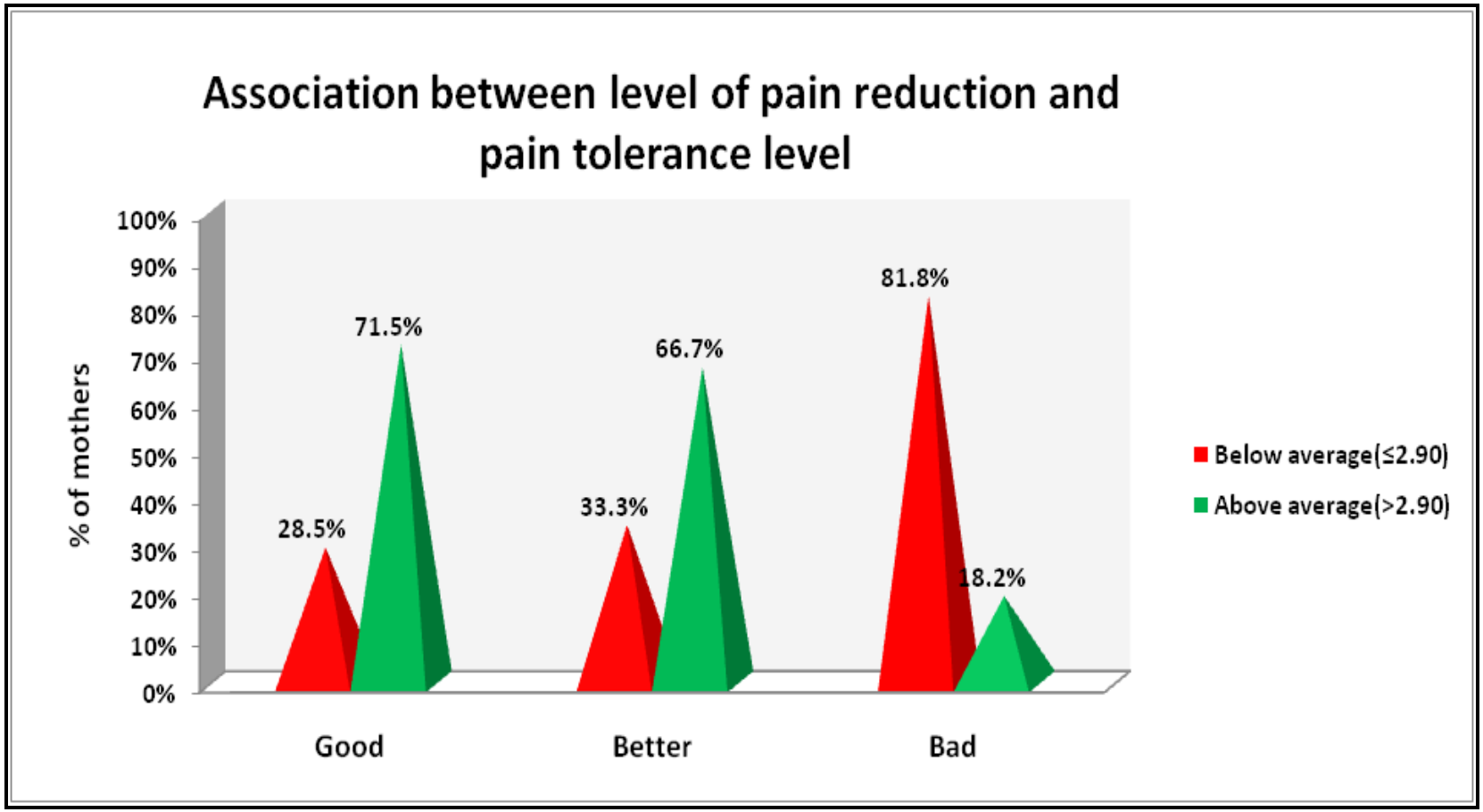


Figure 4 (18): Association between level of pain reduction and pain tolerance level

SECTION -VIII : OPINIONAIRRE ON EFFLEURAGE MASSAGE

Table 10: Opinionairre On Effleurage Massage

	SA		A		U		D		SD	
	n	**%**	**n**	**%**	**N**	**%**	**n**	**%**	**n**	**%**
Pain perception is reduced after therapy	2	6.7%	24	80.0%	4	13.3%	0	0.0%	0	0.0%
I feel a little more relaxed after therapy	0	0.0%	24	80.0%	6	20.0%	0	0.0%	0	0.0%
I am able to recognize and respond appropriately to physical symptoms	0	0.0%	13	43.3%	17	56.7%	0	0.0%	0	0.0%
The therapy does not take away the labour pain	0	0.0%	15	50.0%	15	50.0%	0	0.0%	0	0.0%
The pain during delivery was bearable	0	0.0%	17	56.7%	13	43.3%	0	0.0%	0	0.0%
The massage therapy reduced the stress of child birth	4	13.3%	21	70.0%	5	16.7%	0	0.0%	0	0.0%
I feel comfortable with the massage therapy	5	16.7%	25	83.3%	0	0.0%	0	0.0%	0	0.0%
The instructions given about the massage was clear	2	6.7%	28	93.3%	0	0.0%	0	0.0%	0	0.0%
Total	2	6.7%	21	70.0%	7	23.3%	0	0.0%	0	0.0%

Table 10 : 6.7% of the primigravida mothers are having strongly agree opinion, 70% of the mothers are having agree and 23.3% of them are having uncertain opinion on effleurage massage in reduction of labour pain during first stage of labour among primigravida mothers.

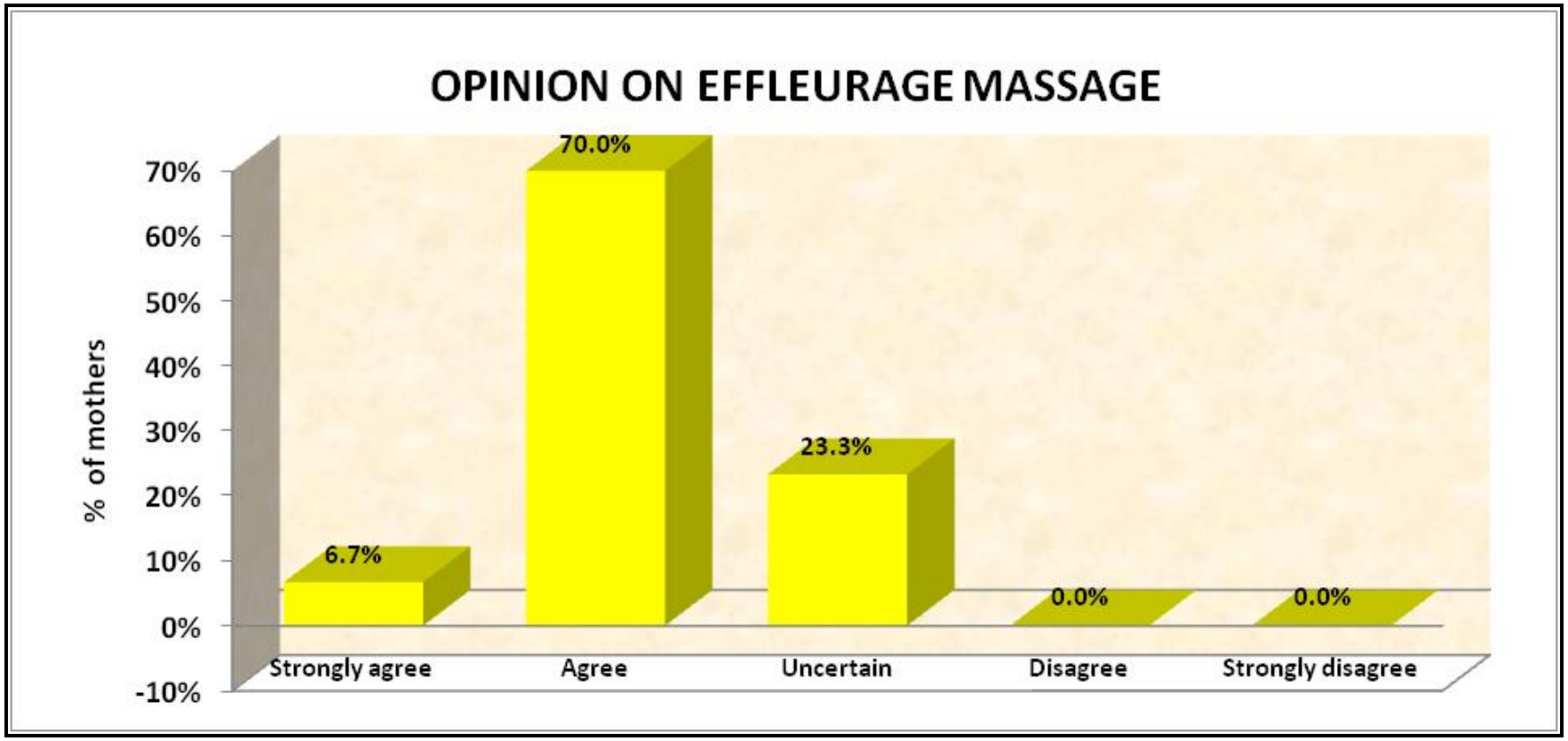


Figure 4(19) : opinion on effleurage massage

CHAPTER-V
DISCUSSION

This chapter deals with the discussion of the data analyzed based on the hypotheses of the study. The purpose of the study is to assess "Effectiveness of effleurage massage in reduction of labour pain during first stage of labour among primigravida mothers. The findings of the study are discussed with reference to the objective, hypothesis and with the findings of the study.

The first objective of the study is to assess the level of the labour pain before effleurage massage among Primigravida mothers in experimental and control groups.

Olayemi,et.al.(2009) checked the effect of ethnicity on the perception of pain by parturient undergoing labour in a hospital the outcome measure of pain perception was assessed by the box numerical scale the Yoruba ethnic group had scores lower than the mean scores for the other ethnic group (+=_0.636)the presence of a doula reduced the means Bns scores significantly during labour (t=-0.533) increasing parity also reduced pain (t=-0.182)as well as increasing educational attainment Increased pain scores in labour (t=0.189) it is concluded that the ethnicity of the parturient relative to that of the predominant ethnicity in the place of birth has a significant effect on the perception of labour by the parturient.

Lena Martensson, et. al (2011) done a study on effect of treatment for labour pain, verbal report versus visual analogue scale scores. A prospective randomized study to compare women's verbally reported effect of treatment for labour pain with changes in visual analogue scale scores. This comparative Prospective study was carrying out on a ward. Pain was assessed on visual analogue scale before as well as30, 60, 90, 120, 150 and 180 minutes after treatment. This study

conform that verbal report and changes in visual analogue scores are reliable indicators of treatment effects for labour pain.It might be valuable to combine visual analogue scale score with verbal reports for a more extensive assessment of treatment effects.

In the present study the pretest level of labour pain in the experimental and control groups,among the experiment group, in the pretest, 23.3% of the mothers are having mild pain, 53.4% of them are having moderate pain and 23.3% of them are having severe pain.Among the experimental group, in the pretest, 23.3% of the mothers are having mild pain, 60.0% of them are having moderate pain and 16.7% of them are having severe pain.

There was no statistically significant difference between experimental and control group as per the result obtainted from chi square test.

The second objective of the study was to assess the level of the labour pain after effleurage massage among primigravida mothers in experimental and control groups.

Kavitha.N.K.(2010), conducted a study to compare the effectiveness of sacral massage versus music therapy on low back pain during first stage labour among primi gravida women at a selected hospital, Bangalure. The sample were 60 primigravod women were selected thorugh conveience sampling technique .The data was collected through structured interview schedule and numaical pain intensity scale was used,The result demonstrated 75.3% of participants suffered of low back pain during labour. One group received massage therapy and other group received music therapy. The result reveals that the mean pain scores 65.6%of the mothers were comfort with massage therapy. The t'value reveals that t=4.34. Which is significant at $p<0.05$ level. It was concluded that massage was very effective reducing the level of labour pain.

Morales M.A.,et al(2008) reported a prospective randomized clinical trial study on the effect of massage on neuromuscular recruitment, mood state and mechanical nociceptive threshold after high –intensity exercise among 62 healthy active students (age:18-26) at a university based sports medicine clinic. Dependent variables were surface electro myopathy of quadriceps, profile of mood state and mechanical nociceptive threshold of trapezius and masseter muscles. These data were assessed at baseline after exercise and recovery periods. Significant difference were found in effects of treatment on electromyography of vastus medialis(vm)(=0.02)and vigor subscale (p=0.04).

After the recovery period, there was a significant decrease in electromyography actively of VM(p=0.02)in the myofascial –release group versus a non significant increases in the placebo group (p=0.32), and a decrease in vigor (p<0.01)in the massage group versus no change in the placebo group(p=0.86).Massage reduces EMG amplitude and vigor when applied as a passive recovery technique after a high intensity exercise protocol. Massage may induce a transient loss of muscle strength or a change in the muscle fibre tension- length relationship, influenced by alterations of muscle function and a psychological state of relaxation

In the present study the post test level of pain among the experimental group, in the post test, 63.3% of the mothers are having mild pain, 30.0% of them are having moderate pain and 6.7% of them are having severe pain.

Among the control group, in the post test, 26.7% of the mothers are having mild pain, 56.7% of them are having moderate pain and 16.6% of them are having severe pain.

There was a statistically significant difference between experimental and control. It was calculated using chi square test.H1: There will be a significant difference in the mean post intervention pain score among primigravida mothers in the experimental and control group hence the hypothesis H1 was accepted.

The third objective of the study was to determine the association between level pain reduction in selected demographic variables.

Amanesh safarzadeh, Naheidk khodakarami, Naheid Fathizaden,Faranan safdari Dehcheshmeh(2008) conducted the clinical trial study to assess the effects of massage therapy on the severity of labour in primi paraous women. These studies were selected 60 primi paraous women who were hospitalized in mahdieh and Hedayat hospital in Tehran. They were selected using simple random sampling and randomly divided in to two group of control (n=30) and case (n=30) the severity of pain before intervention was measured in both group by VAS. Data in the two groups were compared using independent and chi-sqaure test. The result indicated that there was no significant difference between two groups. Mean of severity of pain at the beginning of traditional phase it was ($p<0.05$) and at the end of the first stage was respectively ($p<0.05$).He conclusion that the effect of massage therapy in both decreasing of labour pain and in the acceleration of delivery. Education and there using of methods in labour centers would result in decreasing of proposed of caesarean section.

The present study shows the association between level of pain reduction and mothers demographic variable in experimental group Elders, more educated, walking , good pain tolerance mothers are reduced more pain Other than variables. There was statistical significance difference in experimental group as per result obtainted from chi square test. hence the hypo thesis H2 was proved.

CHAPTER-VI
SUMMARY , CONCLUSION, RECOMMENDATION, AND IMPLICATION

6.1 SUMMARY

Pain in labour is nearly universal experience for child bearing women. Pain and its relief for women in labour have been a subject of interest since the dawn of mankind. Child birth has been associated with pain and throughout history measures had been introduced to help relieve it. Pain can vary during different times in the same labour and during different birth by the same woman. Massage has the potential benefits such as decreasing the intensity of pain, relieving the muscle spasm, increasing physical activity, promoting general relaxation and reducing anxiety.

The main aim of the study was to find the effectiveness of effleurage massage on the reduction of pain perception among primigravida mothers during first stage of labour at institute of obstetrics and gynaecology,Egmore,Chennai.

6.2 MAJOR FINDINGS OF THE STUDY

Frequency and percentage distribution of demographic variables of primigravida mothers in experimental and control group were as follows:

Regarding age , majority of primigravida mothers in experimental group (43.3%) and control group (60%) are between the age group of 21-25 years.

While comparing educational status, majority of primigravida mothers in experimental group (50.0%) and control group (60.0%) have completed their school education.

By observing family income, majority of primigravida mothers in experimental group (50.0%) and control group (63.3%) have income less than 1000 rupees.

By identifying dwelling place, majority of primigravida mothers in experimental group (60.0%) and control group (70.0%) reside in urban area.

Considering the type of family, majority of primigravida mothers in experimental group (56.7%) belong to nuclear family and control group (53.3%) belong to joint family.

Regarding the occupation of the mothers majority of primigravida mothers in experimental group (63.3%) and control group (70.0%) are homemakers.

By assessing the weeks of gestation, majority of primigravida mothers in experimental group (50.0%) and control group (53.3%) are 37-39 weeks.

Regarding the activity of the mothers, majority of primigravida mothers in experimental group (46.7%) and control group (56.7%) were bed rest.

While analyzing general pain tolerance of the mothers, majority of primigravida mothers in (40.0%) better in experimental group and (43.3%) bad control group.

Regarding cervical dilatation, majority of the primigravida mothers in experimental group (60.0%) and control group (56.7%) have 2cm-4cm.

Majority of primigravida mothers (90.0%) had intact membranes and (80%) from control group also were with intact membrane .

In pretest among the experimental group, none of them are having no pain, 23.3% of the mothers are having mild pain, 53.4% of them are having moderate pain and 23.3% of them are having severe pain. among the control group, none of them are having no pain,23.3% of the mothers are having mild pain, 60.0% of them are having moderate pain and 16.7% of them are having severe pain.

In post test among the experimental group,none of them are having no pain, 63.3% of the mothers are having mild pain, 30.0% of them are having moderate pain and 6.7% of them are having severe pain. among the control group, none of them are having no pain, 26.7% of the mothers are having mild pain, 56.7% of them are having moderate pain and 16.6% of them are having severe pain.

Comparison of the preassessment and post assessment showed the result of statistically significant of intervention.

On an average experiment group are reduced pain 29.0% of less than pretest. Control group are reduced pain 6.0% of less than pretest. It shows the effectiveness of effleurage massage

In experimental group the association between level of pain reduction and mothers demographic variables. Elders, more educated, walking , good pain tolerance mothers are reduced more pain..

Regarding the opinionairre on effleurage massage 6.7% of the primigravida mothers are having strongly agree opinion, 70% of the mothers are having agree and 23.3% of them are having uncertain opinion on effleurage massage in reduction of labour pain during first stage of labour among primigravida mothers.

6.3 CONCLUSION

The main conclusion drawn from this present study was that majority of the primi women in first and second stage had moderate level of pain perception and progress of labour.After the administration of effleurage massage, their was a significant reduction in pain perception and progress of labour was normal . The calculated mean difference was 2.9 and the obtained "t 'value 6.51 shows the difference which is large and statically significant . The subject become familiar and found themselves comfort and express satisfaction in pain perception and progress of labour. This ensured that Primigravida mothers had a reduction in the labour pain as evidenced by the results shown in numerical pain scale. Hence effleurage was found to be a cost effective procedure in reducing labour pain among primigravida mother in early labour.

6.4 IMPLICATIONS OF THE STUDY

The findings of the study have the following implication in nursing.

Implications for Nursing practice

1) Effleurage massage is a cost effective measure to block the pain path. Effleurage massage helps in reducing the need and frequency of administration of analgesics

2) Effleurage massage help to conserve the energy of the mother during the first stage of her labour, which helps to put her own effort during the second stage.

3) Midwives can plan the goal of nursing management and enhance the nurse patient relationship and a sense of wellbeing to the mother through the development of mutually agreed goals.

4) Effleurage massage therapy should be an integral part of pain relief in the nursing management of labour pain.

Implication for Nursing Education

Nurse educators should encourage nursing students to utilize effleurage as a measure for the labour pain reduction

Implication for Nursing administration

1) Midwifery department should have a policy decision to use the effleurage massage therapy as an essential nursing activity to reduce the labour pain.

2) Administration must provide adequate training facilities for effective nursing care to the mothers in labour

Implications for Nursing Research

2) The study will be a valuable reference material for future researcher.

3) The findings of the study would help to expand the scientific body of professional knowledge upon which further researchers can be conducted.

4) Effleurage massage therapy may be studied more scientifically and used as a specific nursing intervention.

6.5 RECOMMENDATIONS

- Similar study can replicate on a larger scale.
- A similar study can be conducted in another way as, massage by Doulas who are closer and always with the mother in labour.
- A similar study can be conducted in other ways like massage with increased the frequency and the duration of effleurage massage more 15minutes.

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செவிலியர் கல்லூரி, சென்னை மருத்துவக் கல்லூரி, சமுதாய நேர்காணல் படிவம்

பகுதி–அ

பின்வருவனவற்றை மிகவும் கவனமாக படித்து பொருத்தமானவற்றை சரியான இடத்தில் (✓) குறிப்பிடவும்.

1) வயது (ஆண்டுகளில்)

அ) < 20 வயது ☐

ஆ) 21-25 வயதுக்குள் ☐

இ) 26-30 வயதுக்குள் ☐

ஈ) 31-35 வயதுக்குள் ☐

2) கல்வித் தகுதி

அ) படிக்காதவர் ☐

ஆ) பள்ளிப்படிப்பு

(ஆரம்ப பள்ளி முதல் உயர்நிலை பள்ளி வரை) ☐

இ) பட்டதாரி ☐

ஈ) பட்டதாரி மற்றும் இதர தொழில் ☐

3) குடும்ப மாத வருமானம்

அ) ரூ.1000 குறைவாக ☐

ஆ) ரூ.1001 முதல் 2999 வரை ☐

இ) ரூ.3000 முதல் 4999 வரை ☐

ஈ) ரூ.5000க்கு மேல் ☐

4) வசிக்கும் இடம்

அ) கிராமம் ☐

ஆ) நகரம் ☐

5) குடும்பம்

அ) தனிக்குடும்பம் ☐

ஆ) கூட்டுக்குடும்பம் ☐

6) தாயின் தொழில்

அ) வீட்டில் இருப்பவர் ☐

ஆ) மிதமான வேலை ☐

இ) கடினமான வேலை ☐

7) பேறுகால விவரம்

அ) 37-39வது வாரம் ☐

ஆ) 40-42வது வாரம் ☐

8) பேறுகாலத்தின்போது தாயின் வேலைகள்

அ) நடத்தல் ☐

ஆ) படுத்திருப்பது ☐

இ) மற்றவை ☐

9) பொதுவாக வலிதாங்கி கொள்ளும் நிலை

அ) நன்று ☐

ஆ) ஓரளவுக்கு ☐

இ) தாங்கமுடியாது ☐

10) கர்ப்பபை வாய் திறத்தலின் அளவு

அ) 2 செ.மீ -4 செ.மீ ☐

ஆ) 5 செ.மீ -7 செ.மீ ☐

11) பனிக்குட நீர்பை

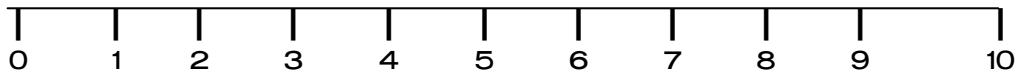
அ) உடைந்த நிலை ☐

ஆ) உடையாத நிலை ☐

பகுதி–ஆ

வலியின் அளவை குறிக்கும் அளவுகோல்

குறிப்பு: தங்களின் வலியின் அளவினை 0 முதல் 10 வரையிலான அளவுகோலின் சரியான இடத்தில் குறியிடவும்.



வலி இல்லை

மிகவும் கடுமையான வலி

மதிப்பீட்டு அளவுகோல்

மதிப்பீடு	வலியின் அளவு
0	வலியில்லை
1-3	குறைவான வலி
4-6	மிதமான வலி
7-10	கடுமையான வலி

பகுதி–இ

எப்ளுரேஜ் முறையின் பயன்பாடு பற்றிய கருத்தாய்வு

எண்	கருத்தாயவு
1	முழுதாக ஒப்புக்கொள்கிறேன்
2	ஒத்துக்கொள்கிறேன்
3	நடுநிலையாக இருக்கிறேன்
4	மறுக்கிறேன்
5	வலுவாக மறுக்கிறேன்

1) இந்த முறையை பயன்படுத்தி பின்னால் பிரசவ வலி பற்றிய உணர்வு குறைந்துள்ளது ( )

2) இந்த பயிற்சிக்கு பின்னர் சிறிது புத்துணர்வாய் உணர்கிறேன் ( )

3) எனது உடலில் ஏற்படும் மாற்றங்களை உணர்ந்து அதன்படி நடந்துகொள்ள முடிகிறது ( )

4) இந்த முறையை பயன்படுத்துவதால் பிரசவ வலி முற்றிலும் நீங்காது ( )

5) பிரசவ வலி தாங்கிக்கொள்ள முடிந்தது ( )

6) இந்த பயிற்சிகள் குழந்தை பிறப்பு பற்றிய கவலையை குறைந்த்தது ( )

7) எனக்கு இந்த பயிற்சிகள் செய்ய சௌகரியமாக இருந்தது ( )

8) இந்த பயிற்சியைப் பற்றி கொடுக்கப்பட்ட தகவல்கள் தெளிவாக இருந்தது ( )

TOOLS - INTERVIEW/ OBSERVATION SCHEDULE

SECTION - I SAMPLE NO :

A. DEMOGRAPHIC VARIABLES

1. Age ;
   a. Less than 20 yrs [ ]
   b. 21yrs-25yrs [ ]
   c. 26yrs-30yrs [ ]
   d. 31yrs-35yrs [ ]

2. Educational status;
   a. Illiterate (non formal education) [ ]
   b. School level (primary till higher secondary) [ ]
   c. Graduate (Diploma /Degree) [ ]

3. Family income:
   a. Below Rs.1000 [ ]
   b. Rs.1001 - 2999 [ ]
   c. Rs. 3000 – 4999 [ ]
   d. Above Rs. 5000 [ ]

4. Dwelling place:
   a. Rural [ ]
   b. Urban [ ]

5. Type of family :

   a. Nuclear family [ ]
   b. Joint family [ ]

6. Occupation of the mother:
   a. Home maker [ ]
   b. Moderate worker(officer, teacher, Govt and non-Govt.staff) [ ]
   c. Heavy worker (cooly, daily wages, construction work) [ ]

7. Weeks of gestation:
   a. 37 - 39 weeks [ ]
   b. 40 – 42 weeks [ ]

8. Activity of mother during first stage :
    a. Walking [ ]
    b. Bed rest [ ]
    c. Others [ ]

9. General Pain tolerance level (as reported by the client)
    a. Good [ ]
    b. Better [ ]
    c. Bad [ ]

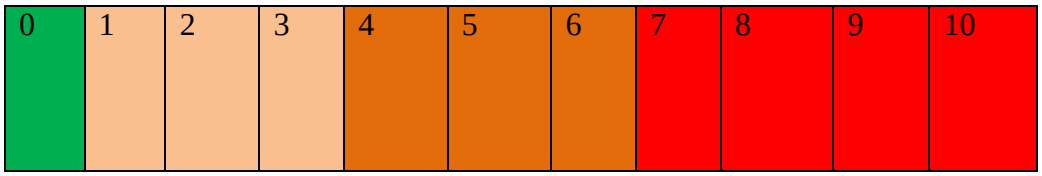
B. Information obtained from case sheet

1. Cervical dilatation:
    a. 2cm – 4cm [ ]
    b. 5cm- 7cm [ ]

2. Membrane status;
    a. Intact [ ]
    b. Ruptured [ ]

SECTION II:

NUMERICAL PAIN RATING SCALE



Interpretation :

0 score – no pain

1-3 score – mild pain

4-6 score – moderate pain

7-10 score – severe pain

SECTION III:

OPINIONAIRRE ON EFFLURAGE MASSAGE

S.NO	STATEMENT
1.	Strongly agree
2.	Agree
3.	Uncertain
4.	Disagree
5.	Strongly disagree

a) Pain perception is reduced after therapy ☐

b) I feel a little more relaxed after therapy ☐

c) I am able to recognize and respond appropriately to physical symptoms ☐

d) The therapy does not take away the labour pain ☐

e) The pain during delivery was bearable ☐

f) The effleurage massage reduced the stress of child birth ☐

g) I feel comfortable with the effleurage massage ☐

h) The instructions given about the massage was clear ☐

<u>ஆராய்ச்சி தகவல் தாள்</u>

ஆராய்ச்சி தலைப்பு : பிரசவ பெண்களுக்கு முதல் கட்ட பிரசவ நேரத்தில் எப்லுரேஜ் மசாஜ் மூலமாக பிரசவ வலியை குறைக்கும் திறனாய்வு

ஆய்வாளர் பெயர் : திருமதி.ல.மஞ்சுளா

பங்கேற்பாளர் பெயர் :

தேதி : வயது :

ஆராய்ச்சி சேர்க்கை எண்:

- நான் அரசு தாய் சேய் நல மருத்துவமனையில் மகளிர் நோய்கள் பற்றிய ஆய்வுத்துறையில் பிரசவ பெண்களுக்கு முதல் கட்ட பிரசவ நேரத்தில் எப்லுரேஜ் மசாஜ் மூலமாக பிரசவ வலியை குறைக்கும் திறனாய்வு இங்கு நடைபெறுகிறது.
- கர்ப்பிணி தாய்மார்களுக்கு தலையணை வைத்து இடதுபுறமாக படுக்க வைக்கவேண்டும்.
- இடது காலை நேராகவும், வலது காலை சிறிது மடித்து முழங்காலில் வைக்கவும்.
- ஆய்வாளர் உள்ளங்கை மெதுவாக தேய்க்கவும்
- மசாஜ் செய்ய ஏதுவான முறையில் இருக்கவேண்டும்.
- ஆய்வாளர் இரு கைகளையும் முதுகு தண்டு புறத்தில் இருபுறமும் சேக்ரம் பகுதியில் வைக்கவும். இருகைகளையும் மேல்நோக்கி வைக்கவும்.
- மூச்சு உள்ளிழுக்கும்போது ஆய்வாளர் கைகளை மேல்நோக்கி மசாஜ் செய்யவும்.
- மூச்சு வெளியிடும்போது கைகளை மெதுவாக இடுப்பெழும்பை நோக்கி நகர்த்தவும். தொடர்ந்து 15 முறை மசாஜ் செய்யவும்.
- இந்த மசாஜ் தொடர்ந்து 15 நிமிடங்கள், 30 நிமிட இடைவெளியில் நான்கு முறை செய்யவும்.
- நோயாளிகள் தங்கள் சொந்த விருப்பத்தின்பேரில் ஆராய்ச்சியில் இணைக்கப்படுவர். விருப்பமில்லையென்றால் எந்நேரமும் விலகிக் கொள்ளலாம். இதனால் ஆராய்ச்சிக்கு எந்தவித பாதிப்பும் ஏற்படாது.
- முடிவுகளை அல்லது கருத்துக்களை வெளியிடும்போது தங்களின் பெயரையோ அல்லது அடையாளங்களையோ வெளியிடமாட்டோம் என்பதை தெரிவித்துக் கொள்கிறோம்.
- இந்த சிகிச்சையின் மூலம் நோயின் வலியை தீவிரம் குறைய வாய்ப்பு உள்ளதே தவிர, அதிகரிக்க வாய்ப்பு சிறிதும் இல்லை. இதனை நோயாளிகள் நன்றாக பயன்படுத்திக் கொள்ளலாம்.

ஆராய்ச்சியாளர் கையொப்பம் **பங்கேற்பாளர் கையொப்பம்**

தேதி : தேதி :

<u>ஆராய்ச்சி ஒப்புதல் படிவும்</u>

ஆராய்ச்சி தலைப்பு : பிரசவ பெண்களுக்கு முதல் கட்ட பிரசவ நேரத்தில் எப்லுரேஜ் மசாஜ் மூலமாக பிரசவ வலியை குறைக்கும் திறனாய்வு

பெயர் : தேதி:
வயது : உள்நோயாளி எண்.:
ஆராய்ச்சி சேர்க்கை எண்:

இந்த ஆராய்ச்சியின் விவரங்களும் அதன் நோக்ககங்களும் முழுமையாக எனக்கு தெளிவாக விளக்கப்பட்டது.

எனக்கு விளக்கப்பட்ட விஷயங்களை நான் புரிந்துக் கொண்டு நான் எனது சம்மதத்தை தெரிவிக்கிறேன்.

இந்த ஆராய்ச்சியின் பிறரின் நிர்பந்தனையின்றி சொந்த விருப்பத்தின்பேரில் தான் பங்கு பெறுகிறேன் மற்றும் நான் இந்த ஆராய்ச்சியிலிருந்து எந்நேரமும் பின்வாங்கலாம் என்பதையும், அதனால் எந்த பாதிப்பும் ஏற்படாது என்பதையும் நான் புரிந்துக் கொண்டேன்.

நான் என் சுயநினைவுடனும் மற்றும் முழு சுதந்திரத்திடனும் இந்த மருத்துவ ஆராய்ச்சியில் என்னை சேர்த்துக் கொள்ள சம்மதிக்கிறேன்.

நான் இந்த ஆராய்ச்சிக்கு என்னுடைய முழு ஒப்புதலை அளிக்கிறேன்.

கையொப்பம்.

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Certificate of Massage Therapy

This is to certify that **Ms. L. MANJULA, M.Sc(N) II Year,** College of Nursing, Madras Medical College, Chennai -03, underwent a training programme in **Effleurage massage in reduction of labour pain** for a period of one month from **15/05/2014 to 14/06/2014** . She has gained knowledge and skill to practice Massage therapy.

Yuva Healthcare India Pvt Ltd
Chennai

For Yuva Healthcare India Pvt Ltd

Authorised Signatory

Signature with seal

From,

L.Manjula,
M.Sc Nursing, I Year,
College of Nursing,
Madras Medical College,
Chennai-600003.

To,

The Director / Superintendent,
Institute of Obstetrics and Gynaecology,
Women and Children Hospital,
Egmore, Chennai-600008.

Through the proper channel

Respected Sir/Madam,

Sub; Requesting permission to conduct a study- regarding

I, L.Manjula, M.Sc Nursing I Year, College of Nursing, Madras Medical College, request you to kindly grant me permission to conduct study **"A study to assess the effectiveness of effleurage massage in reduction of labour pain during first stage of labour among primigravida mothers at hospital for women and children, Chennai-8."** to fulfil the requirement of data collection.

I assure you that it will not interfere with the routine activities of the study settings.

Thanking you,

Yours Obediently

L.Manjula
M.Sc (N), I Year, MMC

Date: 4.3.13

Place: Chennai-3.

INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE, CHENNAI – 3.

EC Reg No.ECR/270/Inst.TN/2013
Telephone No : 044 25305301
Fax : 044 25363970

CERTIFICATE OF APPROVAL

To
Ms. L.Manjula
M.Sc Nursing I Year
College of Nursing
Madras Medical College, Chennai – 3

Dear Ms. L.Manjula,

The institutional Ethics committee of Madras Medical College reviewed and discussed your application for approval of the proposal entitled **"A study to assess the effectiveness of effleurage massage in reduction of labour pain during first stage of labour among primigravida mothers at hospital for women and children, Chennai-8."** No.12022014.

The following members of Ethics Committee were present in the meeting held on 24.02.2014 conducted at Madras Medical College, Chennai – 3.

1.	Dr.G.Sivakumar, MS FICS FAIS	--	Chairperson
2.	Dr.Kalai Selvi, MD Prof. of Pharmacology, MMC, Ch-3	--	Member Secretary
3.	Thiru. S. Govindasamy, BABL	--	Lawyer
4.	Tmt. Arnold Saulina, MA MSW	--	Social Scientist
5.	Prof. V. Padmavathi, MD I/C Director of Pathology, MMC, Ch-3	--	Member
6.	S. Ramesh	--	Lay Person

We approve the proposal to be conducted in its presented form

Sd/. Chairman & Other Members

The Institutional Ethics Committee expects to be informed about the progress of the study, any SAE occurring in the course of the study, any changes in the protocol and patient information / informed consent and asks to be provided a copy of the final report.

27/2/14

Member Secretary, Ethics Committee

VICE PRINCIPAL
MADRAS MEDICAL COLLEGE
CHENNAI-3.

26/2/14

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool constructed by Ms.L.Manjula, M.Sc Nursing II year, College of Nursing, Madras Medical College which is to be used in her study titled **"A study to Assess the effectiveness of effleurage massage in reduction of labour pain during first stage of labour among primigravida mothers at Institute of Obstetrics & Gynaecology, Egmore, Chennai"** has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.

T. G. M.

SIGNATURE WITH SEAL

Assistant Surgeon
I.O.G. & Government Hospital
For Women and Children
Egmore, Chennai-8

NAME : DR. T. GUNATHAI

DESIGNATION : ASST. PROF OF OBSTETRICS & GYNAECOLOGY

COLLEGE : MADRAS MEDICAL COLLEGE.

PLACE : Chennai-8

DATE : 24.06.14.

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool constructed by Ms.L.Manjula, M.Sc Nursing II year, College of Nursing, Madras Medical College which is to be used in her study titled **"A study to Assess the effectiveness of effleurage massage in reduction of labour pain during first stage of labour among primigravida mothers at Institute of Obstetrics & Gynaecology, Egmore, Chennai"** has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.

SIGNATURE WITH SEAL

NAME : KANAGAVALLI.P

DESIGNATION : READER, DEPT OF OBG NURSING

COLLEGE : MADHA COLLEGE OF NURSING
CHENNAI-69.

PLACE :

DATE : JUN 2014

MADHA COLLEGE OF NURSING
CHENNAI - 600 069

CERTIFICATE

This is to certify that the dissertation work **"A STUDY TO ASSESS THE EFFECTIVESS OF EFFLUERAGE MASSAGE IN REDUCTION OF LABOUR PAIN DURING FIRST STAGE OF LABOUR AMONG PRIMIGRAVIDA MOTHERS IN INSTITUTE OF OBSTETRICS AND GYNAECOLOGY AND HOSPITAL FOR WOMEN AND CHILDREN, EGMORE, CHENNAI-08",** done by **Ms.L.Manjula**, M.Sc (N) II year, College of Nursing, Madras Medical College, Chennai – 03 is edited for English language appropriateness.

Place: CHENNAI

Date: 3/2/2015

Signature

Designation

Mrs.S.USHA NANDHINI,M.A.,
HOD, Dept. of English,
SRI SANTHOSHI GROUP OF INSTITUTIONS,
Paiyambadi,Madurantakam Taluk,
Kanchipuram District - 603309.

EFFLEURAGE MASSAGE GUIDE

Effleurage Massage:

A type of massage technique in which upward and downward circular strokes are giving on either sides of spine in the sacral region during contraction, which helps to minimize the labour pain.

Timing of this procedure:

1. At 4 - 9c.m. cervical dilatation of the pre-test massage
2. Massage for 15 minutes need to be given
3. Massage is repeated in every 30 minutes.

Preparatory Phase:

- Check the cervical dilatation between 4-9cm
- Explain the procedure and the effect of labour massage to the mother.
- Give assurance to the mother in such a way that the procedure will not harm the fetus and it will not interfere with the uterine contraction.
- Healthy mother to assume comfortable position (left lying position).
- Expose the treatment area – on either sides of the spine in sacral region.

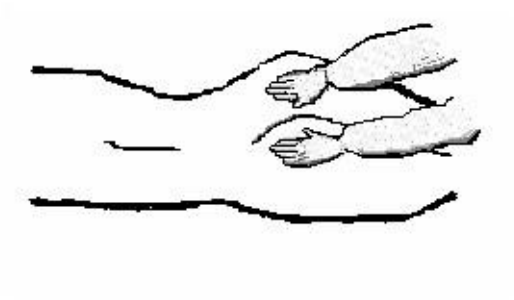
Procedure

Steps:- The masseur should:

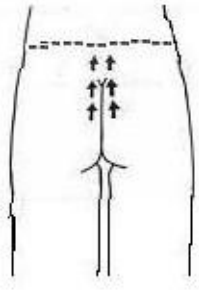
1. Make the mother to lie in the left lateral position with pillow under the head, keeping the left leg straight and right leg slightly flexed at the knee.
2. Rub the palm of the hands gently to warm up.

3. Take a comfortable position to do the massage (standing).

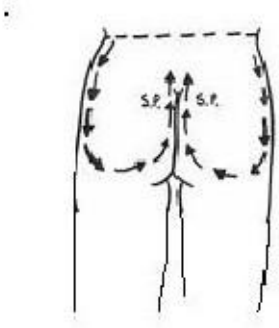
4. Place both the hands on either sides of the spine in the sacral region with the hands pointing in an upward direction.



5. During inspiration, the masseur's hands go up to the waist level.



6. During expiration, move hands smoothly down the sides of the hip until they arrive at the starting position (each minute 15 strokes).



7. The massage is done for 15 min with the interval of 30 min. for 4 times.

After massage

- Instruct the mother to lie down in a left lateral position for 30min.
- Wash the hands and record the procedure.