A STUDY TO ASSESS THE EFFECTIVENESS OF ROSE OIL MASSAGE ON LABOUR PAIN DURING THE FIRST STAGE AMONG PRIMI GRAVIDA MOTHERS AT RAILWAY HOSPITAL, PERAMBUR.

BY

30083622

A DISSERTATION SUBMITTED TO THE TAMILNADU Dr.M.G.R. MEDICAL UNIVERSITY, CHENNAI, IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN NURSING

MARCH – 2010

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INTRODUCTION

"Touch is a language spoken through the hands and understood by the heart"

BACKGROUND OF THE STUDY

Labour, the culmination of pregnancy, is an event with great psychological, social and emotional meaning for the mother and her family. In addition, many women experience stress and physical pain.

Pain in labor is a universal experience for childbearing women. The severity and duration of labor pain is more, in primi gravida women and may lead to undesirable psychological effects, lowered self-confidence and anxiety.

The pain women experience during labor and birth is subjective, individualized, and caused by a number of interrelating factors. Physical, affective, psychological, and environmental components all shape the pain experience. The physical sensation of pain in first stage labor comes from the mechanical distention of the lower uterine segment, stretching of cervical tissue during dilatation, and pressure on adjacent structures and nerves. The pain from uterine contractions is referred to the abdominal wall, lumbosacral region, iliac crests, gluteal area, thighs, and lower back (Lowe, 2002).

Affective or emotional influences on the pain experience relate to fear and anxiety about the childbearing process or the ability to cope with it. Although some anxiety is considered normal for women during labor, excessive anxiety produces increased

catecholamine secretion that may actually increase pain perception in the brain and decrease uterine contractions by blocking the release of oxytocin from the posterior pituitary. Fear and stress can affect the physiologic aspects of labor.

The environment can influence pain perception in several ways. The appearance of the birthing facility, the amount of noise and light, the temperature of the room contribute to the degree of strangeness of the environment. Other aspect of the environment is the philosophy of care and practice policies of the providers a positive approach can help to decrease pain perception.

Pain is noted to be the most frequent complaint during labour. Pain is defined as subjective feeling that cannot be observed or even measured directly. A doula, or professional labor support person, uses nurturing touch and massage on a frequent basis during labor. Several studies have shown that this constant support and hands-on attention leads to better obstetric outcomes for mother and baby as well as a more efficient laboring process in general. The need for risky and expensive medical interventions is also decreased. Even an untrained birth support person can provide many of these benefits through the use of constant, loving touch during a woman's labor.

In ancient Greece and Rome massage was one of the primary methods to treat pain. Women who have experienced skillful massage during labour say that the massage was helpful and pain relieving. Although no controlled trails have been conducted to determine the exact neurophysiologic mechanism by which massage moderates pain, rubbing very often makes it better.

Massage in general has many benefits for anyone, and what better time to apply these benefits than during the stressful and exhausting process of childbirth. Natural endorphins are released during massage which provides a laboring mother with natural pain-relieving agents

from within her own body. Circulation is enhanced by massage which means less muscle fatigue for the mother and better blood flow to the baby. Stress hormone levels are also decreased during massage which can help a mother relax and lessen her overall pain levels as well.

Essential oils can be a welcomed addition to the birthing process: They can help relax, reduce pain, reduce anxiety, ease both the mind and body and create a pleasant aroma for both the mother and the baby. Many essential oils also have antibacterial properties and will help to disinfect the air in the room while adding a pleasant aroma.

Rosa Otto may relieve mood swings from hormonal fluctuations during pregnancy and is one of the most helpful oils to use during labor and delivery. Rose oil eases labor pains and relieves postpartum depression. True Rose is good for the genito-urinary system and is known to have a balancing and regulating effect on the female hormones and the menstrual cycle. It cleanses the uterus and may be helpful for relieving premenstrual tension (PMS), as well as menopausal symptoms. This is a favorite way of mine for using aromatic oils. Use the aromatic mist as a facial toner to soothe your fevered brow during labor or as an all over body freshener, or as an air freshener for your birthing room.

Zaharra(2009) quoted the study of Burns saying that used aromatherapy to promote maternal comfort during labor were offered aromatherapy to relieve pain, anxiety, nausea, vomiting, and also to strengthen contractions . More than 50% of the women said that the aromatherapy was helpful and only 14% stated that it was unhelpful. The study also stated that, overall; the use of aromatherapy appeared to have reduced the need for additional pharmacological pain relief in the women. Of the women, 61% used the oils to relieve feelings of anxiety and fear, 7% of the women used it as pain relief, 6% used the oils to improve contractions and 14% used it to reduce feelings of nausea and vomiting. An interesting part of this study was the less than 14% of the women who were given the essential oil of rose for

anxiety had a regional anesthetic block or an epidural, and 67% had a spontaneous vaginal delivery. The study also found that overall, the women who had used aromatherapy to reduce fear and anxiety had less chances of using an epidural for pain relief and had a higher chance of having a spontaneous vaginal delivery than the women in the control group who did not use aromatherapy

NEED FOR THE STUDY

Labor is a wondrous act of nature, and unique to every childbearing woman. It varies from community to community and generally normal labor and operative labor is 85% and 15% respectively. Incidence of hospital and domiciliary delivery in India : 65:35.

Majority of the people are aware of just two forms of child birth, namely Normal Delivery and Caesarean. But now there is a new form that's emerging and it's called underwater birthing. Once again the latest trend is something known as Cord Banking and Preservation.

In under water birthing, the mother is completely immersed in a special Pooler a tub where she gives birth to her baby. The temperature of the water is adjusted to match the temperature of the mother's body. The warm water is relaxing and eases labour by reducing the excretion of adrenaline caused by pain and fear. The water also stimulates the release of endorphins and the elasticity of the perineum is increased. These all help to result in an easier birth with fewer lacerations and tears. In most cases, water births are shorter and less painful and few women need analgesics. The buoyancy also causes a hormonal change in the mother's body, giving her more oxytocin making her labour more efficient.

Labour pain is ‘an unpleasant sensory and emotional experience associated with actual or potential tissue damage’. Acute pain such as labor pain has two dimensions: a sensory or physical dimension, with the transmission of information, the pain stimuli, to the brain, and an affective dimension due to interpretation of these stimuli through the interaction of a wide variety of emotional, social, cultural and cognitive variables unique to the individual.

A study comparing different pain syndromes found that average labor pain scores were higher in both nulliparous (first delivery) and multiparous women than the average scores previously recorded for out-patients with sciatic pain, toothache and fracture pain. However, whereas the average score is higher, its exact value differs greatly from one woman to another. Bonica found that labor pain was mild in 15% of cases, moderate in 35%, severe in 30% and extreme in 20%.

Some factors are associated with increased pain: first delivery, history of dysmenorrhea, fear of pain, a religious practice. Some factors diminish pain: childbirth preparation classes, complications during pregnancy, wish to breast feed, high socio-economic status, older age.

For the management of pain, conventional medicine focuses more on the physical side, while alternative methods deal mainly with emotional considerations. There are several reasons for both mothers and medical professionals to want to avoid the use of medication during childbirth. Some of negative effects may include:

- Extending labour
- Making pushing more difficult
- Increasing the need for the use of additional medication, forceps or other intervention.

Possibilities for childbirth without medication include positioning during labour (Birthing ball and moving), alternative medicine practices (massage, Acupuncture and Aromatherapy), and changes in the birthing environment. (Hydrotherapy and family support).

The therapeutic touch in labor is to communicate caring and reassurance. Painful contractions of the uterus can be treated by the application of pressure with the hands to the woman's back, abdomen, hips, thighs, sacrum or perineum. Whether touch is perceived as positive or not is dependent on who is touching the patient: in one study, touching was perceived positively by 94% of patients when they were touched by a relative or friend, 86% by their husbands, 73% by a nurse and 21% by a physician. Anxiety is reported to be reduced in patients who receive reassuring touch. In a retrospective study of 30 patients, 77% experienced 'less pain' when they were touched during labor, and 40% reported less need for pain medication

Maddocks J and Wilkinson, (2004), Aromatherapy is the therapeutic use of plant-derived essential oils to promote physical and psychological well being. Essential oils are lipid-soluble and are rapidly absorbed when applied externally or are inhaled. They are excreted through the kidneys or expired through the lungs. The use of essential oils in low doses for massage or as an environmental fragrance is increasing in healthcare settings.

Relaxation and massage have been shown be factors in promoting labor progress, decreasing pain perception, and increasing the woman's ability to cope with for (Chang et al., 2002). Using massage with Aromatherapy oil or lotion enhances relaxation both during and between contractions. Massage can be done on hands, arms, legs, feet, or back, can be easily taught to family members. A back massage is always comforting, particularly if the woman is experiencing back pain. Massage can decrease pain by stimulating the release of endorphins, stimulating large- diameter nerve fibres to close a gate on pain, stimulating mechanoreceptors,

stimulating circulation with resultant increased oxygenation to tissues, and facilitating the excretion of toxins through the lymphatic system.

Essential oils are a natural and effective way to help manage stress, boost mood, fight off infection, and deal with pain. Rose is a uterine relaxant. It will help the uterus to work efficiently, and to return to homeostasis between contractions. It is also said to have a relaxant effect for the pelvic floor, help to open the pelvis, much like an opening rose bud. The emotional effects of rose are very supportive during labor. It stimulates the production of dopamine, the 'happy hormone', and strengthens the parasympathetic nervous system, instilling a relaxed feeling of well-being. In this way, rose oil is beneficial for treating anxiety and depression.

The Alternative Health Information Bureau in conjunction with the Nursing Times instigated the largest survey of Nurses in respect to alternative and complementary medicine ever undertaken. A total of 393 nurses responded to the survey of which over 40% were staff nurses, the remainder being a variety of other nursing professionals. The survey found that:-

- 58% of the respondents stated that they used complementary therapies in their work and 89% stated that they used complementary therapies at home. The therapies most commonly employed at work were massage (used by 40% of the nurses) and aromatherapy (used by 34%) with the next most popular being reflexology (used by 10.5%) and Therapeutic Touch (8%).
- The therapies were used to help treat a variety of conditions from arthritis to cancer, but the most common conditions treated were stress, relaxation and anxiety, pain relief, insomnia, pregnancy and palliative care.
- 88.5% of the nurses who has used complementary therapies stated that they had seen a definite improvement in the patient's condition as a result of the therapy employed with only 2 (less than 1%) saying they had not seen any improvement..

- 88% stated that they recommend complementary therapies to patients (often - 30%), (occasionally - 58%). And 81% of those recommendations were based upon first-hand experience.

The survey clearly indicates that alternative and complementary therapies are being used extensively (especially massage, aromatherapy and therapeutic touch) by nurses in their work.

Marial, (2009) conducted a quasi experimental study on effectiveness of back massage on pain during first stage of labour. Thirty women who were randomly assigned to experimental group and control group (15). A't' test demonstrated that the experimental group has significantly lower pain and reactions. The mean pain score was 8.6 and at 7cm cervical dilatation the mean score was 9.5. The findings of the present study show that back massage was effective in labour pain and it promotes comfort to great extent .

Kimber.L etal (2008) conducted a study on massage therapy for maternal pain and anxiety in labour. The level of pain was measured by a visual analogue scale (VAS). These findings suggest that regular massage with relaxation techniques from late pregnancy to birth is an acceptable coping stratergy that merits a large trial with sufficient power to detect differences in reported pain as primary outcome measure

Field.T(2008) reported on complementary and alternative therapies used during pregnancy and labor, including massage therapy, acupuncture, relaxation, yoga and exercise. The labor research generally shows that alternative therapies reduce pain

Simkin PP,and O'hara M (2002), observed the Non-pharmacological relief of pain during labor. These 5 methods included continuous labor support, baths, touch and massage, maternal movement and positioning and intradermal water blocks for back pain relief. Critical

evaluation of controlled studies of these 5 methods suggests that all 5 may be effective in reducing labor pain and improving other obstetric outcome

Ethel.E,etal (2000) conducted a study to assess the effectiveness of aromatherapy in reducing pain and suffering during labour. A total of 8058 women received aromatherapy during labour. Rose oil rated helpful by most (71%) followed by lavender (50%). One large uncontrolled study reported that majority of users found it helpful in reducing pain and anxiety

The Railway hospital, Perambur has separate antenatal, natal and postnatal units. Labour room has seven beds capacity, which is attached with first stage room, where the mother in labour will be admitted during first stage of labour. There were 5 deliveries every day. Severe pain causes many adverse effects on the mother and the fetus especially in the primi gravida mothers. So this present study need for administering non- pharmacological pain therapy for the primi gravida mothers to reduce the labor pain.

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of Rose Oil massage on labour pain during the first stage among primi gravida mothers at Railway hospital, Perambur.

OBJECTIVES

1. To compare the labour pain before and after rose Oil massage among primi gravida mothers in experimental group.
2. To compare the mean difference in labour pain among primi gravida mothers in experimental and control group.
3. To find out the association between selected variables and the mean difference labour pain among primi gravida mothers in experimental group

HYPOTHESES

H_1 : There will be a significant difference in the labour pain before and after rose oil massage among primi gravida mothers in experimental group.

H_2 : There will be a significant difference in the mean difference of labour pain among primi gravida mothers between the experimental group and control group.

H_3 : There will be a significant association between the mean difference in labour pain and selected variables among primi gravida mothers in experimental group such as age, education, occupation, family income, human support, ante natal check-up, Rest status in pregnancy, ante natal practice, previous hospitalization, activities during first stage of labour and pain tolerance.

OPERATIONAL DEFINITIONS

1. First stage of labour : It is the initial stage of labour. It starts from the onset of true labour pain and ends with full dilatation of the cervix (10 cm). Duration of primi gravida is 12 hrs. primi mothers with 4 -6cm dilatation were included in the study.

2. Labour pain : Labour pain refers to the subjective, felt, experienced unpleasant discomfort associated with contractions of the uterus during labour. Labour pain was measured in terms of mean labour pain score

3. Primi gravida mothers : Refers to a woman who is pregnant for the first time

4. Rose oil massage (Rosa Otto) :It is a massage given by using Rose oil (a volatile fragrant oil obtained from fresh roses) as an adjunct therapy to enrich the process of relaxation, which helps to reduce the labour pain more effectively.

5. Effectiveness : It was measured in terms of mean difference in the labor pain during first stage of labor between the experimental and control group in relation to rose oil massage.

6. Selected variables : Refers to factors that may influence the effect of rose oil massage such as age, education, occupation, family income, human support, ante natal check-up, Rest status in pregnancy, ante natal practice, previous hospitalization, activities during first stage of labour and pain tolerance.

ASSUMPTIONS

1. Meeting the comfort needs of the parturient mothers is an important function of a nurse.
2. Labour Pain reduction promote relaxation in parturient women.
3. promotion of relaxation will increase the likelihood of compliance during labour.
4. Labour pain will be progressive in nature.
5. Pain perception by primi gravida mothers in labour is their first experience and not influenced by previous experience.
6. All massages have the effect of reducing emotional tension, which is very essential in primi gravida mothers.
7. Response of primi gravida mothers to visual analogue pain scale will be the true measure of this pain.

DELIMITATIONS

1. The study will be delimited to the subjects who are hospitalized for labour in Railway hospital, Perambur.
2. The pain will be measured by visual analogue pain scale
3. Samples selected by purposive sampling method

CONCEPTUAL FRAMEWORK

Conceptual framework is the conceptual underpinning of the study. It is a group of concepts and a set of proportions that spells out the relationship between them.

The study was aimed to assess the effectiveness of Rose oil massage on labour pain among primi gravida mothers in Railway hospital, Perambur. The conceptual framework for this study was derived from Gate control theory of pain.

Gate control theory of pain: Wall and Malzack's gate control theory (1965) was the first to suggest that in addition to the physical sensation, pain has obligatory emotions and cognitive components. They further suggest that pain impulses can be regulated or even blocked by gating mechanisms located along the central nervous system. The theory suggests that pain impulses pass through when a gate is open and that impulses are blocked when gate is closed. Closing the gate is the basis for pain- relief interventions. Gating mechanisms can be found in substantia gelatinosa cells within the dorsal horn of the spinal cord, thalamus, and limbic system. By understanding what can influence these gates, nurses can gain a useful conceptual framework for pain management.

Primi gravida mothers: Refers to is a woman who is pregnant for the first time

Labour pain: Labour pain refers to the subjective, felt, experienced unpleasant discomfort associated with contractions of the uterus during labour. Labour pain was measured in terms of mean labour pain score

Stimulation of pain receptors: Contraction of the uterus stimulates pain receptors in lower abdomen and lumbar area of the back. In the control group more stimulation of pain receptors in these areas due to the close contact between the contracting uterus and the abdominal and lower back structures. In case of experimental group less stimulation of free nerve endings in the lower abdomen and lumbar area of the back compared to the control group due to the relaxation caused by Rose oil massage in the lower lumbar areas. Here massages are not interfering in the uterine contraction only causing relaxation in the muscle groups.

Traveling of pain impulses: In control group pain impulses will be conducted straight away by A δ and C fibres, which reach the gate of pain and open the gate. In experimental group where the mothers receive Rose oil massage, impulses will be conducted by fast conducting A β large fibres which reaches the gate of pain very quickly.

Gating mechanism: Pain impulses during the first stage of labour are transmitted through the spinal nerve segment of 11-12 and accessory lower thoracic and upper lumbar sympathetic nerves, which are traveled through (A δ and C) small diameter and slow conducting amyelinated fibres and reach the pain gate and open the gate thus mother perceives pain in the lower abdomen and lower back. Impulses from massage traveled through fast conducting myelinated A β fibres which supper impose small fibres and closes the pain gate, and also β endorphin which is released from interneurons at spinal cord level which also closes the gate of pain thus mother perceives less pain in lower lumbar and lower abdominal region.

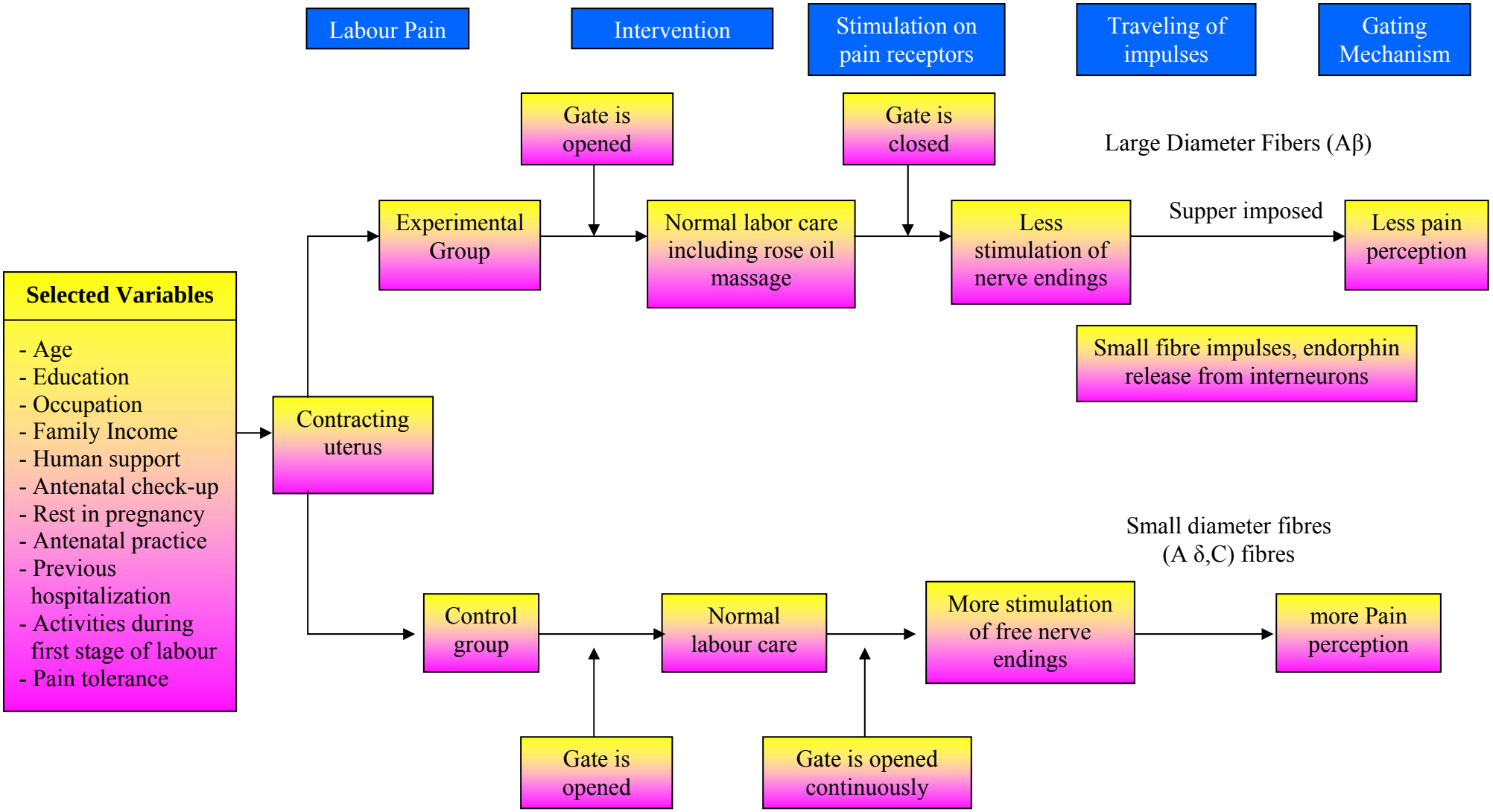


Fig. 1: CONCEPTUAL FRAME WORK (WALL AND MALZACK'S GATE CONTROL THEORY)

CHAPTER – II

REVIEW OF LITERATURE

Review of literature is defined on a broad, comprehensive, in-depth, systematic and crucial review of scholarly publication, unpublished scholarly publications, unpublished scholarly print material and audio visual material and personal communications.

I. Studies related to perception of labour pain

II. Studies related to massage during labour pain

III. Studies related to oil massage during labour pain

I. STUDIES RELATED TO PERCEPTION OF PAIN

Pirdel.M and Pirdel.L (2009) reported a descriptive comparative study on Perceived Environmental Stressors and Pain Perception during Labor among 300 primiparous and 300 multiparous women who were candidates for vaginal delivery, were randomly selected in Tabriz Alzahra Hospital. Tension and stress resulting from pregnancy crisis and labor increase when the mother is hospitalized, which is concomitant with stressful situations and factors that affect pain perception during labor. The data were collected by a questionnaire and the intensity of pain was determined by Visual Analogue Scale (VAS). Significant positive correlations were found between pain and tension from environmental factors in primiparous ($r=0.16$, $p<0.01$) and in multiparous ($r=0.22$, $p<0.05$) women. Furthermore, primiparous women believed that a crowded delivery room (70%) and restriction of movement and mobility (67%) contributed to their environmental stresses. Multiparas women believed that noise in the delivery ward (84%) and restrict of fluid intake (78%) increased their stresses. Performance of routine diagnostic tests in hospitalized pregnant woman, provision of invasive medical care during labor process and a noisy and crowded environment all influence the mothere s experience and perception of pain.

Rajakumari. A.G (2008), measured the music therapy on pain perception among 60 primi gravida mothers in southern railway hospital, Chennai. Non probability purposive sampling technique was used, 30 mothers were equally distributed in the experimental and control group. Assessment of pain was obtained using a modified combined numerical categorical pain intensity scale. The obtained value in session I t=21.53 and in section II, t= 21.05 which were significant at p<0.001 level. It reveals that the primi gravida mothers pain level was reduced after music therapy

Olayemi, et al., (2007) measured the ethnicity on pain perception in labor among parturients at the university college hospital Ibadan. Pain perception assessed by the Box Numerical Scale (BNS).The data was analyzed by t-test, χ^2 test and multiple linear regression method. The lowest adjusted mean BNS score was found in the Yoruba ethnic group: they had scores lower than the mean scores for the other ethnic groups (t = −0.636 [95% confidence interval (CI) −0.959, −0.313]). The presence of a doula also reduced the mean BNS scores significantly (t = −0.533 [95% CI −0.844, −0.222]. Increasing parity also reduced pain scores (t = −0.182 [95% CI −0.342, −0.022]). Increasing educational attainment increased pain scores in labor (t = 0.189 [95% CI 0.017, 0.361]). The influence of increasing age was not statistically significant in this model.

Ohel.I et al., (2007) observed the pain threshold before, during and after labor among 40 pregnant women in Soroka university medical center, Israel. Pain threshold in 18 specific pressure points was evaluated using a colorimeter. Woman underwent pain threshold assessment at term before labor, during the active phase of labor and postpartum. Subjective pain intensity was assessed by the parturient using the Verbal Rating Scale (VRS). Pain threshold was significantly higher during active phase of labor. There was a significant decline in pain threshold after labor as compared to pain threshold during labor (2.507 ± 0.947 and 2.608 ± 1.023, respectively, $p = 0.01$). Pain intensity using the VRS score was higher during labor than before labor (4.8 ± 2.7 and 2.4 ± 2.6 $p < 0.001$). We found a significant rise in pain threshold during labor in term pregnancies.

Jayabharathi.B (2006) measured the Effectiveness of selected nursing interventions on perception of pain during first stage of labor. Among 60 primi mothers were selected from different hospitals, Pattukkotai, Tanjore district. The tool used for the study was numerical and categorical scale. The data was analyzed by descriptive and inferential statistics, the post-test mean value was 3.33 and SD 1.86 of experimental group and mean value of 5.64 and SD 2.59 of control group projected the 't' value of 4.384. P<0.001 on the basis of the findings of the study, the investigator found that rendering selected nursing interventions like massage, breathing exercise and positions enhance the reduction of labour pain perception.

Nabh MT,et al (2006) observed regular massage from late pregnancy to birth decrease maternal pain perception during labour and birth among 25 Nulli parous and 10 multiparous women were selected in st.George's hospital, London. Assessment of pain was done by visual analogue scale. To detect any effect of massage during labour, on maternal cortisol and catecholamines, cord venous blood was taken to measure plasma concentrations following birth. Cortisol values were similar to published studies following labour without massage but pain scores at 90 minutes following birth were significantly lower than scores recorded 2 days postpartum. The mean score was 6.6.

McCrea B.H. and Wright M.E (2004) measured the satisfaction in childbirth and perceptions of personal control in pain relief during labour. 50 primi gravidae and 50 multi gravidae were taken for the study. A questionnaire was developed included visual analogue scale to measure the labour pain. Levels of satisfaction were measured using a likert scale. The women were asked to complete the questionnaire within 48 hours of birth. The study findings revealed that the demographic profile revealed the mean age of primi gravidae was 25.6 years and multigravidae was 29.5 years. Most of women were satisfied with pain relief. Her study concluded that many factors influence the individual's feelings of personnel control and pain relief.

Aya AG, et al., (2004) observed the Chronobiology of labour pain perception among 222 consecutive nulliparous women with uncomplicated pregnancy, spontaneous labour, cervical dilatation (3-5 cm), ruptured membranes and normal fetal heart rate tracings were studied in University hospital Nimes, France. Visual analogue pain scores (VAPS) were analyzed and divided into four periods: night (1:01 a.m. to 7:00 a.m.), morning (7:01 a.m. to 1:00 p.m.), afternoon (1:01 p.m. to 7:00 p.m.) and evening (7:01 p.m. to 1:00 a.m.). VAPS were also compared between daytime (morning+afternoon) and nocturnal (evening+night) periods. Daytime mean VAPS were lower than nocturnal scores [75.6 (15.1) vs. 85.7 (14.1), P<0.0001]. VAPS were lower in the morning than in the afternoon, evening and night periods (ANOVA, P<0.0001). Labour pain perception appears to be chronobiological, and this might be taken into account when enrolling parturients in studies designed to assess and treat the labour pain.

Wijam et al., (2001) observed a comparative study on labour pain among primi gravida and multi para women during 1st stage of labour. The sample consists of 35 primiparous and 39 multiparous women were selected by using random selection method. Verbal rating scale was used to collect the data. The data were analyzed employing descriptive and inferential statistics. The result of the study shows that primi parous women reported higher level of pain than the multiparous women (t= 0.735: p: 0.01)

Cambell and Kurtz (2000) measured the intensity of labour pain at East Cardina University, school of nursing, Greeille. Among 78 women in labour were selected through convenient sampling technique. Using 3 self-reported measures such as visual analogue scale, present pain intensity scale and Mc Gill pain questionnaire carried the pain assessment. The data were analyzed by descriptive and inferential statistics. The result of the study shows that when the cervical dilatation increased, there was significant increase in self report pain and observed pain on all the cited measures (t= 15.72, p: 0.01). Pain was characterized us discomforting during early dilatation and distressing, horrible and excruciating as dilatation progressed.

II. STUDIES RELATED TO MASSAGE DURING LABOUR PAIN

Marial, (2009) conducted a quasi experimental study on effectiveness of back massage on pain during first stage of labour. Thirty women who were randomly assigned to experimental group and control group (15). A't' test demonstrated that the experimental group has significantly lower pain and reactions. The mean pain score of the experimental group at 3cm cervical dilatation it was 2.2, on 5cm cervical dilatation it was 5.5 and at 7cm cervical dilatation it was 7. in the control group the mean pain score at 3cm cervical dilatation was 4.4 at 5cm cervical dilatation. The mean pain score was 8.6 and at 7cm cervical dilatation the mean score was 9.5. The findings of the present study show that back massage was effective in labour pain and it promotes comfort to great extent.

Tzeng YL& Su TJ (2008), observed a correlational study on low back pain during labor and related factors among 93 low risk women in labor were recruited from a medical centre in central Taiwan. Low back pain was repeatedly measured during the latent phase (cervix dilated 2-4 cm), early active phase (cervix dilated 5-7 cm), and late active phase (cervix dilated 8-10 cm) of labor. Data were analyzed using descriptive statistics, repeated measurement ANOVA and logistic regression. The results showed as many as 75.3% of the participants suffered episodes of low back pain during labor. The mean pain score were 36.66-76.20 in the various stage of labor. Massage was chosen as the most effective intervention to alleviate low back by 65.3% of women. The women in labor who suffered from low back pain during pregnancy(r=3.23; p<.01) and had greater body weight when hospitalized(r=1.13; p=.02) were most likely to be in the low back pain group.

Karami.N, et al.,(2007) studied effect of Massage Therapy on Severity of Pain and Outcome of Labor in Primipara, was all the women admitted in Mahdieh and Hedayat hospitals, Tehran, for delivery. They were divided into massage therapy and control groups, randomly. Severity of pain was measured in visual analogue scale (VAS) and the questionnaires were

filled at the cervical dilatation of 4, 8 and 10 centimeters. Massage therapy was done using effleurage method as a type of Swedish massage technique. The data was analyzed using descriptive (frequency distribution, mean and standard deviation) and analytical (independent t-test and chi square) statistical methods by SPSS software. The results demonstrated that the mean of pain severity at the first stage of labor was significantly different between the experiment group and the control group, at the start of active phase (p= 0.009), end of transitional phase (p= 0.014) and end of the first stage (p=0.01). Also, the duration of the first stage of the labor was different in experiment and control group.

Davim RM, et al., (2007), measured the effectiveness of Non- pharmacological strategies (NFS) on pain relief of parturient. To evaluate the NFS, the analogues visual scale (AVS) was used on 30 parturient attended at the humanized labor unit of a school maternity hospital in Natal,RN Brazil. Of the six NFS (respiratory exercises, muscular relaxation, lumbossacral massage, shower washing, deambulation and pelvic swing), two were excluded post test (deambulation and pelvic swing) for not being accepted by the parturient. The remaining NFS (respiratory exercises, muscular relaxation, lumbossacral massage, shower washing) which reached satisfactory acceptation and applicability rates, were found to be effective in relieving pain of these parturients, and thus deemed adequate for use in the doctoral dissertation data collection process.

Padmavathi.R (2007), reported the effectiveness of back massage on pain relief during first stage of labor among 60 expectant mothers selected by convenient sampling method in Sanjeevani maternity hospital, Raichur. The techniques and methods used were structured interview schedule for the line data, VAS,Zung self rating anxiety scale and fatigue severity scale. The collected data were analyzed and interpreted using descriptive and inferential statistics. The findings of the study, the pretest mean score of pain in experimental group was almost same(X=4.53, S.D=0.82) as the control group (X=4.53, S.D=0.81) and obtained‘t’ value was 0.45. In the post test mean pain scores in experimental group (X=5.69,

S.D=1.3) was lower compared to control group (X=8.75, S.D=2.6) and the calculated't' value was 4.25 indicated that there was significant difference the pain levels of experimental and control group

Waters BL and Raisler J (2003) observed a study on ice massage for the reduction of labor pain. A one-group, pretest, posttest design was chosen, which used 100mm VAS and the Mc Gill pain questionnaire (MPQ) ranked numerically verbally to measure pain levels. Participants noted a pain reduction mean on the VAS of 28.22mm on the left hand and 11.93mm on the right hand. The study results suggest that ice massage is a safe, noninvasive, Non-pharmacological method of reducing labor pain

Chang M.Y.,et.al (2002), measured the effects of massage on pain and anxiety during labour. Sixty primi parous women were selected randomly at regional hospital in Taiwan. Data was collected using present behavioral intensity and visual analog scale. The statistical calculation done was frequency percentage, mean, SD, mean difference and't' test. The result of the study shows that massage is a cost effective nursing intervention that can decrease pain during labour. Mean pain score in the massage group in three observations=0.73, 1.73 and 2.17 and in control group=1.30, 2.10 and 2.87.

Labrecque M, et al., (1999) observed the effectiveness of 3 non pharmacologic approaches for relief of low back pain during labour. Among 34 women suffering from low back pain during labor were randomly assigned to receive 1 of 3 treatments: (1) intracutaneous sterile water injections (ISW); (2) transcutaneous electrical nerve stimulation (TENS); and (3) standard care, including back massage, whirlpool bath, and liberal mobilization. Women self evaluated both intensity and affective dimensions of pain using visual analog scales. Their evaluations of control and satisfaction were assessed using adapted versions of the labour Agentry scale and the labour and delivery satisfaction index. Women in the ISW (sterile water injections group rated the intensity and unpleasantness of pain during the experimental period

significantly lower than women in the standard care group or the TENS group, (p= .001 & p=.003).similar results were observed for intensity (p=.01) and unpleasantness (p=.03) of pain assessed just before delivery or request for an epidural. Mean pain intensity at 15 and 60 minutes after randomization was significantly reduced in the ISW group compared with the 2 other groups.

III. STUDIES RELATED TO OIL MASSAGE DURING LABOUR PAIN

Jeyalakshmi.S (2008) measured the effectiveness of olive oil massage therapy upon the low back pain of parturient mothers in the first stage of labour at Andhra mahila sabha, Chennai. The sample size was 60 selected by systematic random sampling technique. The researcher used demographic variable Performa, obstetric variable preformed, and numeric pain rating scale, simplified partogram, and rating scale on satisfaction of olive oil massage therapy, structured interview schedule for data collection. The collected data was tabulated and analyzed using descriptive and inferential statistics. The mean and standard deviation of uterine contraction frequency interval was high in before therapy (m= 4.27, S.D= 0.705) compared to after therapy (m=3.82, S.D= 0.684). The after therapy level of pain was significantly reduced among the mothers who received the massage therapy.

Burns E,et al., (2007) observed the use of aromatherapy during labour.251 women randomized to aromatherapy and 262 controls. There were no significant differences for the following outcomes: CS (RR: 0.99, 95%, CI: 0.70-1.41) ventouse (RR: 1.5, 95%, CI: 0.31-7.62), kristeller manoeuvre (RR: 0.97, 95%, CI: 0.64-1.48). Spontaneous vaginal delivery (RR 0.99, 95%, CI: 0.75-1.3) and first stage augmentation (RR 1.01, CI: 0.83-1.4), pain perception was reduced in aromatherapy group for nulliparae

Malathi (2006) measured the effectiveness of simple massage, franch oil massage and normal labour care on labour pain among 60 primi gravida mothers selected by convenient sampling method in Government hospital, Erode. There were 3 groups, the experimental group 1received of simple massage, the experimental group 2 received of franch oil massage and the control group 3 received normal labour care. The level of pain was assessed by using visual analogue and numerical rating. The data was analyzed using inferential statistics. The finding of the study, there was a significant difference between the mean labour pain scores among the primi gravida mothers in simple massage group, franch oil massage group and the control group in all four post observation, F=122.4 (p=0.01), F=152.4 (p=0.01), F=150.1(p=0.01), F=63.9(p=0.01). And there was significant reduction in the labour pain in the experimental group 2 with the franch oil massge than the experimental group1 and the control group ijn all the four post test. F=117.04 ($p<0.05$), F=150.9 ($p=<0.05$), F=102.1($P<0.05$) and F=39.8 ($p<0.05$).

Smith.C.A.,et al.,(2006) reported an experimental study using complimentary and alternative therapies for pain management in labour, at department of obstetrics and gynecology, 366 women were selected by using convenient sampling method and they were grouped into different therapies like acupuncture (n=22), involving audio analgesia (n=55), oil massage (n=100), hypnosis (n=120), music (n=69). VAS was used to measure the pain rate before and after the treatment. The statistical calculation done was frequency, percentage, SD, chi-square,'t' test and 'F' ratio. The study concluded that5 there was significant reduction in pain due to oil massage and hypnosis (F=132.5, p=0.01)

Hur Mh et al., (2005) reported on effect of delivery nursing care using essential oils on labor stress response, labor anxiety and postpartum status anxiety for primipara. 24 primipara were in the experimental group and control group each. Data was analyzed by t-test, repeated measures ANOVA, Mann-Whitney U test, and Wilcoxon signed ranks test. Plasma epinephrine, nor epinephrine were significantly low in the experimental group (p=0.001, p=0.033). These

findings indicate that delivery nursing care using essential oils could be effective in decreasing plasma epinephrine, norepinephrine.

Burns.E.et al., (1999) evaluated the effect of oil massage on anxiety, pain, nausea and vomiting and strength of the uterine contractions among the mothers in labour. 8058 mothers were selected by Random sampling method. Data from the unit audit were used to provide a comparison group of mothers not given oil massage (n=15,799) from the study centre. Outcome measures were assessed by ratings scale. Oil massage was given to all the mothers and the pain, anxiety, strength of the uterine contraction were measure after massage and compared with pretest value. The data was analyzes by inferential statistics. The result concluded that there was significant reduction of labour pain and anxiety, t=20.2 (p=0.01) and quicken the progress of the labour

CHAPTER – III

METHODOLOGY

Methodology is a significant part of any study, which enables the researcher to logically project the research undertaken. Research methodology is the systematic way to carry out an academic study and research in flawless manner. The methodology enables the researcher to project a blue print of the details, data, approach, analysis and finding of research undertaken

This chapter includes research design, variables, setting population, sample size, sampling technique, development of tool, content validity, pilot study, data collection procedure, plan for data analysis and ethical consideration.

RESEARCH DESIGN

Research design helps the researcher in the selection of the subjects, identification of variables, their manipulation and control, observations to be made and types of statistical analysis to interpret the data

Selection of the design is based on the purpose of the study. The present study was conducted to assess the effectiveness of rose oil massage on pain during first stage of labour among primi gravida mothers using a quasi- experimental design, repeated measure time series design. Quasi experimental design involves the manipulation of an independent variable that is the institution of an experimental design but lack at least one of the other two properties that characterize true experiments, randomization or a control group. In this study random allocation of the sample to the experimental and control group was not done

There were two groups, experimental and control group. The experimental group had 20 mothers and the control group consisted of 20 mothers. They were selected by purposive sampling method. Rose Oil massage was the intervention carried out on pain during first stage of labour among primi gravida mothers in experimental group. Effectiveness of Rose Oil massage before and after the intervention was measured at regular time intervals.

RESEARCH DESIGN NOTATION

Group	Treatment/Intervention
E	$O_1X\ O_2\ X\ O_3X\ O_4X\ O_5$
C	O_6 - O_7- O_8 – O_9 –O_{10}

E	-	Experimental Group
C	-	Control Group
O_1, O_6	-	Pre test pain score in experimental and control groups respectively
O_2, O_3, O_4, O_5	-	Post test pain score in experimental group
O_7, O_8, O_9, O_{10}	-	Post test pain score in control group
X	-	Intervention (Rose oil massage)

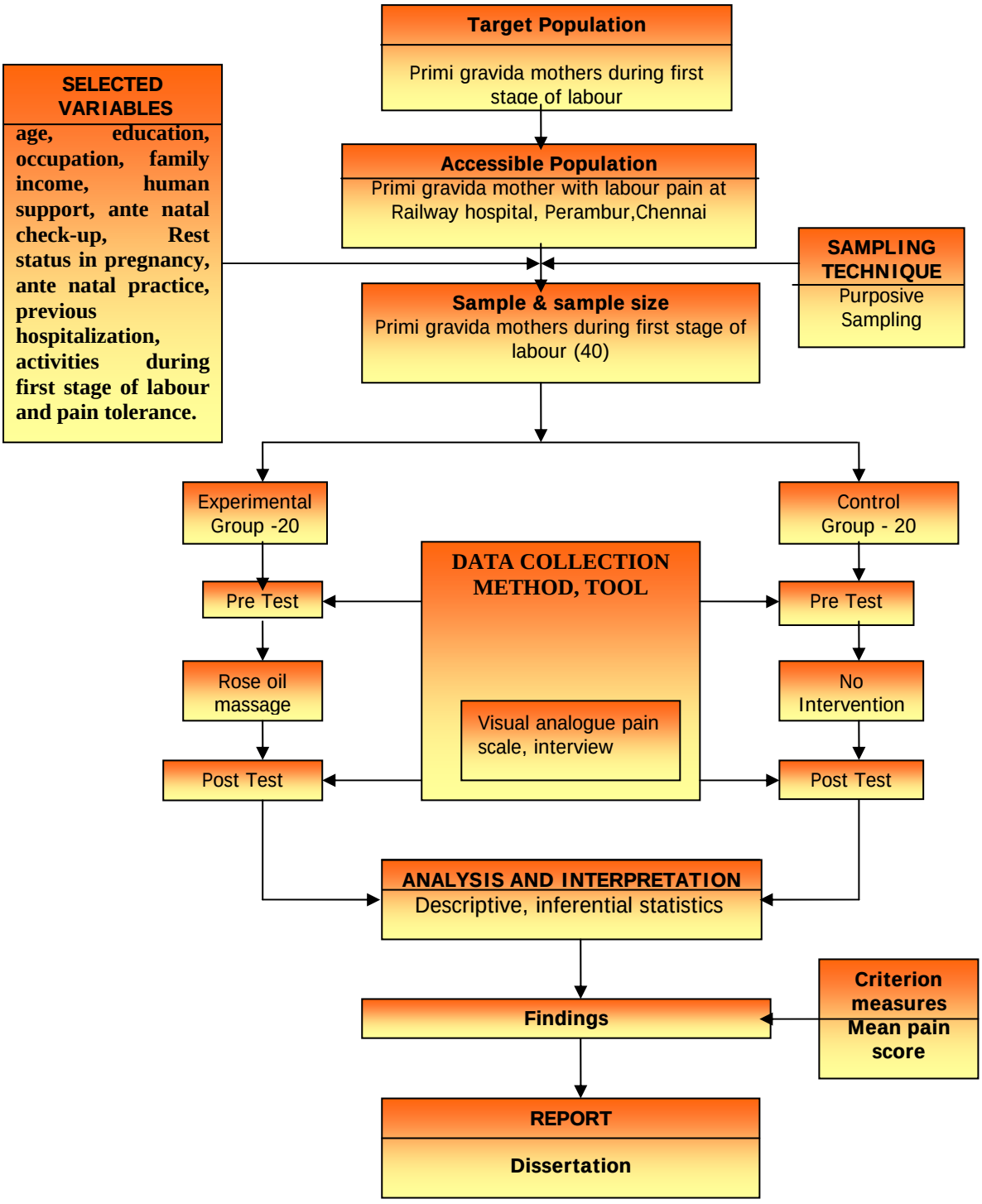


Fig-2: SCHEMATIC REPRESENTATION OF RESEARCH DESIGN

VARIABLES

A variable is a characteristic which can be taken on different values. The three categories of variables discussed in the present study were,

Dependent variable	:	Labour pain
Independent variable	:	Rose Oil massage
Selected variable	:	Age, Education, Occupation, Family income, Human support, Ante natal check-up, Rest status in pregnancy, Ante natal practice, Previous hospitalization, Activities during first stage of labour, and pain tolerance.

SETTINGS

The selection of setting was done on the basis of feasibility of conducting the study, availability of the subjects and permission from authorities. The study was conducted in the labour room at Railway hospital, perambur.

POPULATION

Population is the entire set of individuals or subjects having common characteristics, sometimes referred to as universe. Population may be of two types, accessible population and target population.

Target population -It refers to the population under study and the population to which the researcher wants to generalize the research findings. In this research the target populations were primi gravida mothers in first stage of labour

Accessible population -It refers to the part of the population that is available to the research. In this study the accessible populations were the primi gravida mothers who were admitted in Railway Hospital, Perambur, available during the period of data collection.

SAMPLE

A sample is a portion of the population of interest. It then consists of a subset of the units that is composed of the population. To fulfill the objective of the study the primi gravida mothers got admitted in labour ward in Railway Hospital, Perambur.

SAMPLE SIZE

The sample size for this study was arbitrarily decided to be 40. Twenty in experimental group and twenty in control group

SAMPLING TECHNIQUE

It is the process of selecting representatives units of subset of a population of the study in a research. In this study purposive sampling method was used to select subjects among those who fulfilled the inclusive criteria.

SAMPLING CRITERIA

In sampling criteria the researcher specifies the characters are the population under the study by detailing the inclusive and exclusive criteria

Inclusive criteria, specified the primi gravida mothers

- who were with 4-6cm cervical dilatation during the first stage of labour
- Undergoing vaginal delivery without any complications
- who can understand and speak Tamil
- Who had regular ante natal check-up
- Who were willing to participate in the study

Exclusive criteria, specified the primi gravida mothers

- High risk condition
- Gross fetal anomalies
- Mothers who are chronically ill.
- Mothers who are administered analgesia

DEVELOPMENT OF THE TOOL

An interview/ observation schedule on labour related data and visual analogue pain scale for pain assessment was developed and used in this present study

DESCRIPTION OF THE TOOL

The study tool consist of two sections

Section I: selected variables

Section II: labour observation record

Section I - The Selected variables consisted of 11 items related to personal and health issues of the mother. Verbal response was obtained from the primi Gravida mothers regarding age, education, occupation, family income, human support, ante natal check-up, rest status in pregnancy, ante natal practice, previous hospitalization, activities during first stage of labour and pain tolerance.

Section II - The labour observation record was used to register the level of cervical dilation, fetal heart rate, intervention administered and the pain scores. The pain was measured by visual analogue pain scale in a 10 point scale ranging from '0'- no pain to '10'- severe pain

VALIDITY OF THE TOOL

Polit (1999) says that validity refers to the degree to which an instrument measures what it is supposed to be measuring. The entire tool was validated by 5 experts, including 2 gynecologists, 1 physiotherapist and 2 nursing experts. Experts were requested to judge the tool for its clarity, relatedness, sequence, meaningfulness and content. Few modifications were made as per suggestions given by the experts. The tool which was developed in English was translated into Tamil. Retranslation was done and language validity was established

RELIABILITY

The stability of an instrument refers to the instruments reliability to produce the same result with repeated testing. In the present study the reliability of the observation scale (visual analogue pain scale) was established by inter rater reliability. Two persons who were equally exposed to the caring of the patients and researcher administered the tool simultaneously. The reliability coefficient value r=0.92, was high. The tool was found to be highly reliable

ROSE OIL MASSAGE

It is a massage given by using Rose oil (a volatile fragrant oil obtained from fresh roses) as an adjunct therapy to enrich the process of relaxation, which helps to reduce the labour pain more effectively. The massage was done following the steps in "Rose oil lower back massage guide". (Appendix- VIII)

- preparatory phase
- Active phase
    - Stroking the back
    - Circular strokes
    - Relaxing the pelvis
    - Stroking the lower back
- Post labour massage phase

VALIDITY OF ROSE OIL MASSAGE

The steps of rose oil massage were carried out as listed in the “Rose oil lower back massage guide” was demonstrated by the investigator before 2 physiotherapy experts. Due corrections were incorporated. Thus the validity of the intervention was established

PILOT STUDY

It is a small version or trail run of the major study. Railway hospital, perambur was selected for pilot study. After obtaining administrative approval from the authorities concerned, the investigator selected 10 primi gravida mothers as study sample by purposive sampling, who were not included in the main study later. Intervention using rose oil, massage was given to experimental group and this was repeated every one hour. Pain level was assessed after half an hour of intervention and the tool was checked for completion. It also provided information regarding reliability, feasibility and practicability of the designed methodology. The phenomena were observable and the questions in interview schedule had clarity and simplicity to the level samples.

DATA COLLECTION PROCEDURE

It refers data collection as gathering of information from the sampling units. The study was done for the specified 4 weeks in the month of October, 2009. Prior permission from the authorities was sought and obtained from the Railway Hospital, Perambur. A total of 40 primi gravida mothers in labour pain (20 in experimental group and 20 in control group) were recruited in the study by purposive sampling method. The objectives of the study were explained to all primi mothers and informed consent was obtained. Pretest was done to observe the level of labour pain and other related parameters. Each observation was made for five minutes. The experimental group was given rose oil massage for 15 minutes for 4 times with an interval of 1 hour. 4 post observations were done after half an hour of each intervention. The primi gravida mothers in control group were given only normal labour care. The data were collected by interview and observation method. The data were entered in the tool.

PLAN FOR DATA ANALYSIS

The data collected from subjects were edited, complied and analyzed by using both descriptive and inferential statistics on the basis of objectives and hypothesis of the study. The analysis was done by using the statistical package SPSS version 10.The data were analyzed as follows:

1. Data on selected variables of the primi gravida mothers in experimental group and control group were analyzed using frequency and percentage distribution
2. Data on mean difference in labour pain among primi gravida mothers in experimental and control group were analyzed using mean, SD and “t” value
3. Data on association between the mean differences in labour pain and selected variables among experimental group were analyzed using linear regression.

ETHICAL CONSIDERATION

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

CHAPTER – IV

DATA ANALYSIS AND INTERPRETATION

The analysis and interpretation of data of this study is based on the data collected from the primi gravida mothers. 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 form of tables and diagrams.

The objectives of the study were,

1. To compare the labor pain before and after rose oil massage among primi gravida mothers in experimental group.
2. To compare the mean difference in labour pain among primi gravida mothers in experimental and control group
3. To find out the association between selected variables and the mean difference in labor pain among primi gravida mothers in experimental group

The data analyzed were presented as follows:

Section – I	:	Data on selected variables of primi gravida mothers among control and experimental group.
Section – II	:	Data on labour pain among primi gravida mothers before and after rose oil massage in experimental group.
Section – III	:	Data on mean difference in labour pain among primi gravida mothers in experimental and control group
Section – IV	:	Data on association between the mean difference in labour pain and selected variables among experimental group.

SECTION – I: DATA ON SELECTED VARIABLES OF PRIMI GRAVIDA MOTHERS AMONG CONTROL AND EXPERIMENTAL GROUP.

TABLE – I

Frequency and percentage distribution of primi gravida mothers in experimental and control group regarding their selected variables.

Selected variables	Experimental group n=20		Control group n=20		Chi square (p)
	No	*%*	*No*	*%*	
Education					
a) Illitrerate	-	-	-	-	-
b) Literate	20	100	20	100	
Antenatal checkup					
c) Regular	20	100	20	100	-
d) Irregular	-	-	-	-	
Rest status in pregnancy					
a) Intermittent rest	5	25	9	45	7.01
b) Complete rest	14	70	6	30	(p=0.03)
c) No rest	1	5	5	25	S
Antenatal practice					
a) Breathing exercises	1	5	-	-	1.71
b) Antenatal exercises	-	-	-	-	(P=0.42)
c) Regular walking	7	35	10	50	NS
d) Any other(Household activities)	12	60	10	50	
Previous hospitalization					0.00
a) Yes	6	30	6	30	(P=1.00)
b) No	14	70	14	70	NS

Selected variables	Experimental group n=20		Control group n=20		Chi square (p)
	No	*%*	*No*	*%*	
Activities during first stage of labour					2.13
a) Lying down	13	65	17	85	(P=0.14)
b) walking	7	35	3	15	NS
c) Any other	-	-	-	-	
Pain tolerance					
a) Very good	-	-	1	5	4.79
b) Good	15	75	17	85	(P=0.18)
c) Poor	5	25	1	5	NS
d) Very poor	-	-	1	5	

S= Significant NS=Not significant

Table 1 reveals the frequency and percentage distribution of primi gravida mothers in the experimental and control group regarding their selected variables.

All the primi gravida mothers in experimental and control group were 100% educated.

All the primi gravida mothers in experimental and control group 100% reported regulgr ante natal check up

Regarding rest during last month of pregnant the majority of mothers 14 (70%) had complete rest and least 1(5%) had no rest. In control group majority of the primi gravida mothers 9(45%) had intermittent rest. The obtained chi-square is 7.01 (p=0.03) was significant.

Regarding antenatal practice, the majority of mothers 12 (60%) had other practice and least 1 (5%) were did breathing exercises. In control group, majority of the primi grvida

mothers 10 (50%) had regular walking and other practices. The obtained chi-square 1.71 (p=0.42) was not significant.

Regarding previous hospitalization, in experimental group, majority of the primi gravida mothers, 14 (70%) did not have previous hospitalization and least 6(30%) had pervious hospitalization. In the control group majority of the primi gravida mothers 14 (70%) did not have previous hospitalization and least 6 (30%) had previous hospitalization. The obtained chi-square 0.00(p=1.00) was not significant.

Regarding activities during first stage of labour, the majority of the primi gravida mothers, 13(65%) were lying down/ confined to bed and least 7 (35%) were walking. In the control group majority of the primi gravida mothers 17 (85%) were lying down and least 3 (15%) were walking. The obtained chi-square 2.13(p= 0.14) was not significant.

Regarding the pain tolerance, majority of primi gravida mothers 15 (75%) among experimental had good pain tolerance and least 5 (25%) had poor pain tolerance. In the control group, majority of the primi gravida mothers 17 (85%) had good pain tolerance. The obtained chi-square is 4.79 (p=0.18) was not significant.

It was inferred that majority of primi gravida mothers in experimental group were educated reported regular ante natal check up, had complete rest in pregnancy, had house hold activities, had no previous hospitalization, were lying down during first stage of labour and reported ‘good pain tolerance.

Also, majority of primi gravida mothers in control group were educated, reported regular ante natal check up, had intermittent rest in pregnancy, had house hold activities, had no previous hospitalization, were lying down during first stage of labour and reported ‘good’ pain tolerance.

Fig 3, reveals the frequency and percentage distribution of primi gravida mothers regarding age, majority of mothers 11 (55%) were in the age group of 23- 27yrs and least 2 (10%) were 28-32yrs. In control group, majority of mothers were 14 (70%) in the age group of 23- 27yrs. The obtained chi-square value 2.16(P= 0.34) was not significant.

It was inferred that majority of primi gravida mothers in experimental and control group in the age group of 23-27yrs.

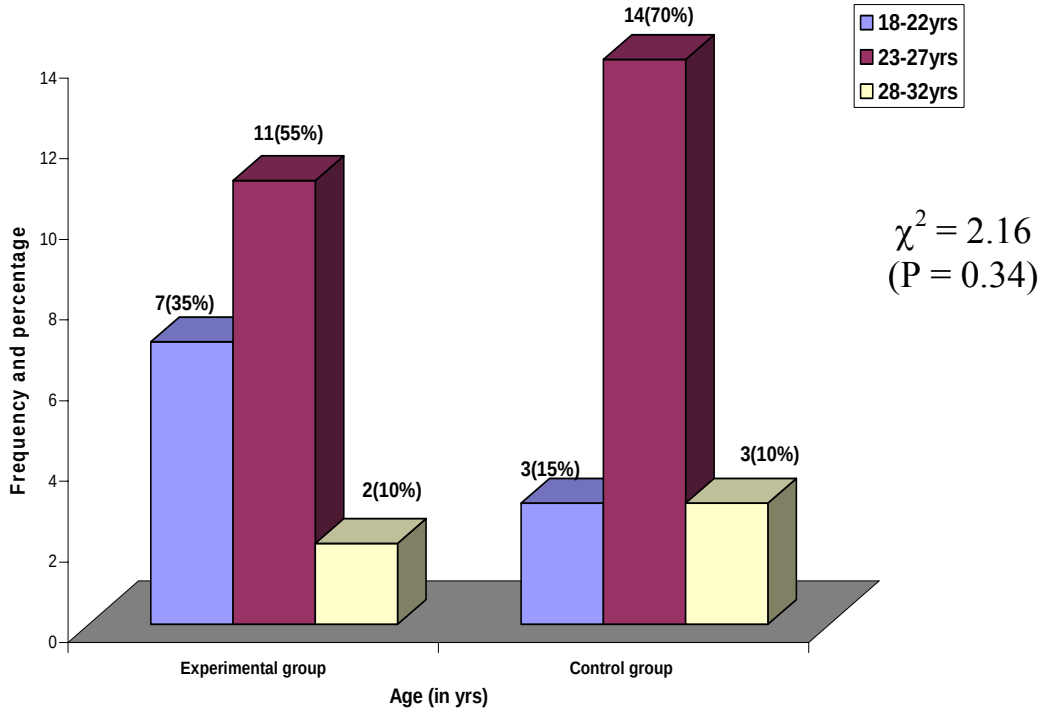


Fig 3: Frequency and percentage distribution of primi gravida mothers according to age

Fig 4, regarding occupation, majority of mothers 14 (70%) were unemployed/ house wife. In control group, majority of mothers 13 (65%) were unemployed/ house wife. The obtained chi-square 1.37 (p= 0.50) was not significant.

It was inferred that majority of primi gravida mothers in experimental and control group were unemployed / house wife.

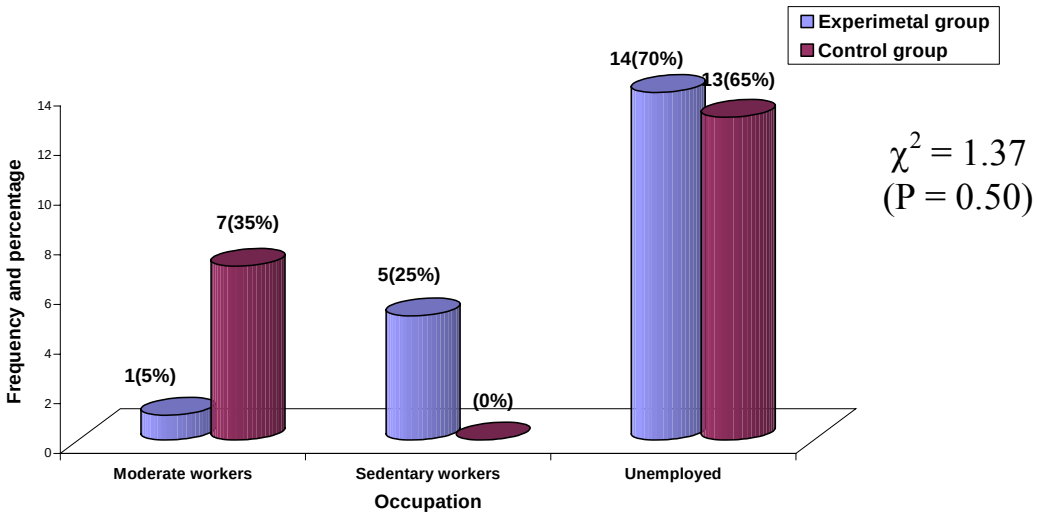
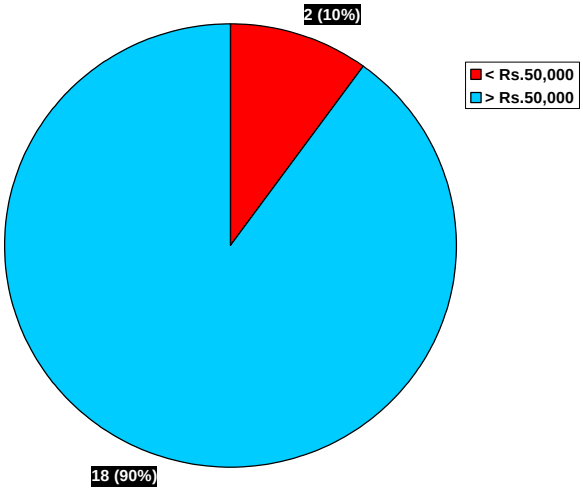


Fig 4: Frequency and percentage distribution of primi gravida mothers according to occupation

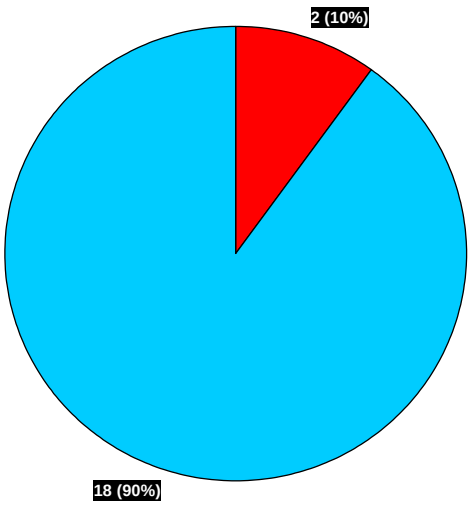
Fig. 5, regarding family income, majority of mothers 18 (90%) were above Rs.50, 000 per Annum. In control group, majority of mothers 18 (90%) were above Rs.50, 000 per Annum. The obtained chi-square 0.00 (p=1.00) was not significant.

It was inferred that majority of primi gravida mothers in experimental and control group were above Rs.50, 000 per Annum.



$\chi^2 = 0.00$
$(P = 1.00)$

Experimental Group

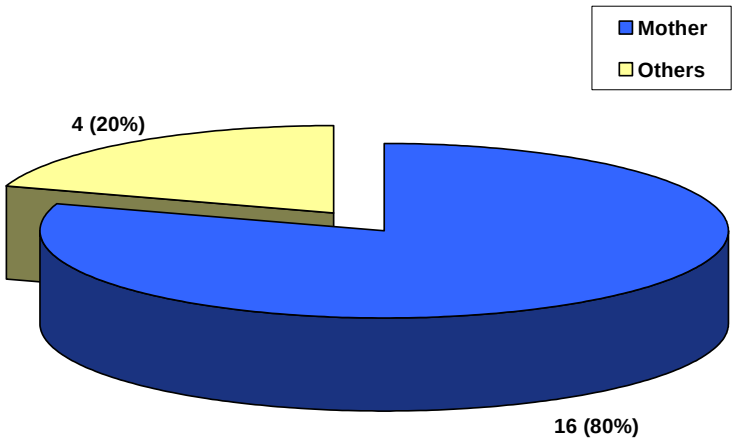


Control Group

Fig 5: Frequency and percentage distribution of primigravida mothers according to family income

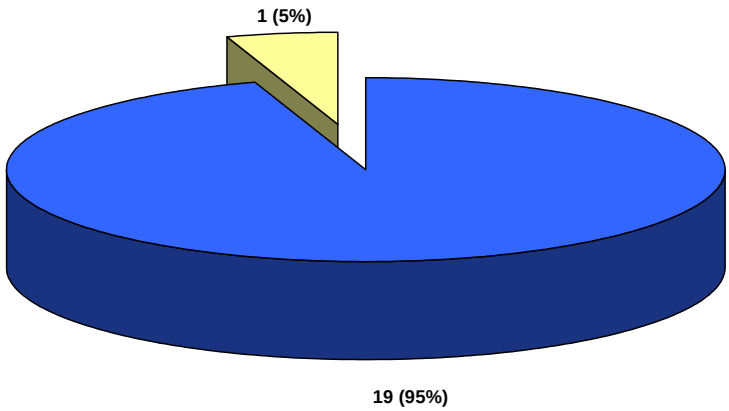
Fig 6, regarding human support, majority of mothers 16 (80%) had mother for support. In control group, majority of mothers 19 (95%) had mother for support. The obtained chi-square 5.25 (p=0.07) was not significant.

It was inferred that majority of primi gravida mothers in experimental and control group had mother for support



$\chi^2 = 5.25$
$(P = 0.07)$

Experimental Group



Control Group

Fig 6: Frequency and percentage distribution of primi gravida mothers according to human support

SECTION – II: DATA ON LABOUR PAIN AMONG PRIMI GRAVIDA MOTHERS BEFORE AND AFTER ROSE OIL MASSAGE IN EXPERIMENTAL GROUP

For the purpose of this study the following null hypothesis were stated

H_{01} : There will be no significant difference in the labour pain before and after Rose oil massage among primi grvida mothers in experimental group.

TABLE – 2

Mean, SD, Mean difference, and "t" value regarding before and after rose oil massage among primi gravida mothers in experimental group.

Test	*Labour pain in experimental group(n=20)*			
	Mean	*Standard Deviation*	*Mean Difference*	*"t" value (p)*
Pretest	3.85	.81	-1.01	-7.63 (P< 0.01) S
Average Posttest	4.86	.66		

S – Significant

Table 2 shows the mean, SD, mean difference and "t" value regarding before and after rose oil massage among primi gravida mothers in experimental group

The obtained post test mean labour pain 4.86(SD=0.66) was greater than the pretest labour pain 3.85 (SD= 0.81). The obtained mean difference was -1.01 and the "t" value t=7.63 (p= 0.00) was significant. Therefore the null hypothesis was rejected.

It was inferred that the labour pain was progressive and significant different among primi gravida mothers in experimental group

SECTION – III : DATA ON MEAN DIFFERENCE IN LABOUR PAIN AMONG PRIMI GRAVIDA MOTHERS IN EXPERIMENTAL AND CONTROL GROUP

For the purpose of this study the following null hypothesis were stated

Ho_2 : There will be no significant difference in the mean difference of labour pain among the primi gravida mothers between the experimental group and control group.

Figure 7, reveals the mean, SD and "t" value of the labour pain before and after the Rose oil massage in experimental group and control group

The obtained mean pretest labour pain were m= 3.85 (0.81) m= 4.10 (0.79), among the experimental and control group respectively. There was no significant difference in mean pretest labour pain among the experimental group and control group (t=0.975; p>.05).

The mean labour pain of first massage m= 2.5 (0.61) in experimental group was less than the mean labour pain m= 4.75 (0.97) in control group. There was a significant reduction in mean labour pain among experimental group, (t= 77.7; p< .01).

The mean labour pain of second massage m=4.25 (0.55) in experimental group was less than the mean labour pain m= 5.75 (0.97) in control group. There was a significant reduction in mean labour pain among experimental group, (t= 36.38; p<.01).

The mean labour pain of third massage m= 5.5 (0.76) in experimental group was less than the mean labour pain m= 6.75 (1.02) in control group. There was a significant reduction in mean labour pain among experimental group, (t=19.3; P<.01)

The mean labour pain of fourth massage m= 7.2 (1.11) in experimental group, m= 7.95 (1.32) among the control group. However there was no significant different in the labour pain level among primi gravida mothers in experimental and control group

It was inferred that, there was a significant reduction in the mean labour pain among the primi gravida mothers in the experimental group in all the post tests except fourth post test.

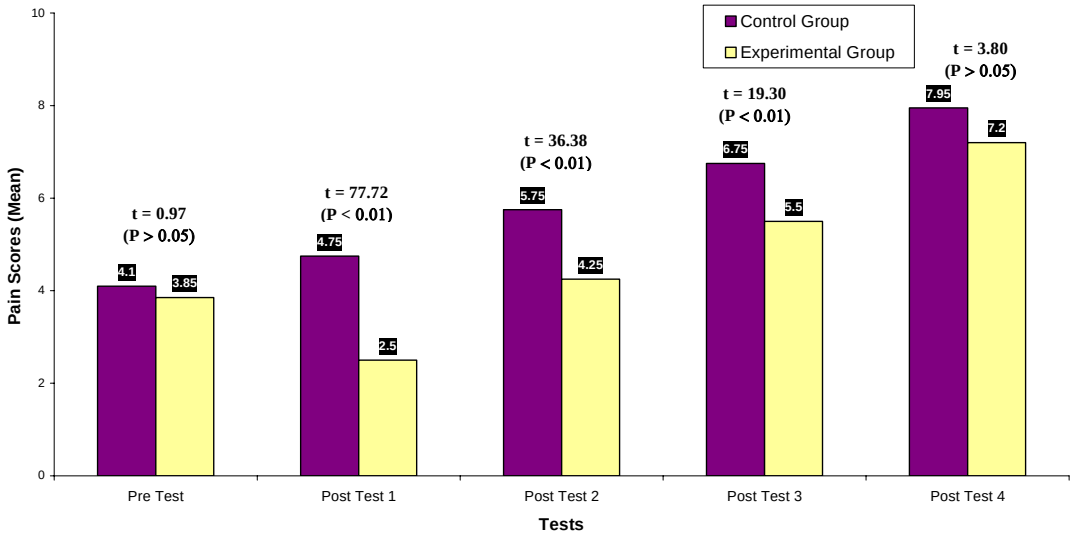


Fig. 7 : Mean, SD and "t" value of the Labour Pain before and after the Rose oil massage in experimental group and control group

Figure 8, Mean difference between each observation of pain, SD and “t” value of the labour pain in rose oil massage in the experimental group and control group

The mean difference between the first post test and pretest labour pain MD= -1.35 (0.49) in experimental group was less than the mean difference labour pain MD= 0.65(0.59) in control group .There was a significant reduction in mean difference labour pain among experimental group t= -11.7 ($p<0.01$) was significant.

The mean difference between the second post test and first post test labour pain MD= 1.75 (0.44) in experimental group was less than the mean difference labour pain MD= 1 (0.46) in control group .There was a significant reduction in mean difference labour pain among experimental group t= 5.25 ($p<0.01$) was significant

The mean difference between the third post test and second post test labour pain were MD= 1.25 (0.55),MD= 1.00 (0.32)among the experimental and control group respectively. There was no significant difference in mean difference between third post test and second post test among experimental and control group t= 1.75 ($p>.05$)

The mean difference between the fourth post test and third post test labour pain were MD= 1.7(0.57) ,MD= 1.2 (0.52) among the experimental and control group respectively. There was no significant difference in mean difference between fourth post test and third post test among experimental and control group t= 2.88 ($p>.05$)

The mean difference between the average post test and pre test labour pain MD= 1(0.59) in experimental group was less than the mean difference labour pain MD= 2.2 (0.69)in control group .There was a significant reduction in mean difference labour pain among experimental group t= -5.85 ($p<0.01$) was significant

It was inferred that, there was significant difference in the mean difference of labour pain among primi gravida mothers in the experimental group in all the observation between each massage except observation between third and second post test and fourth and third post test.

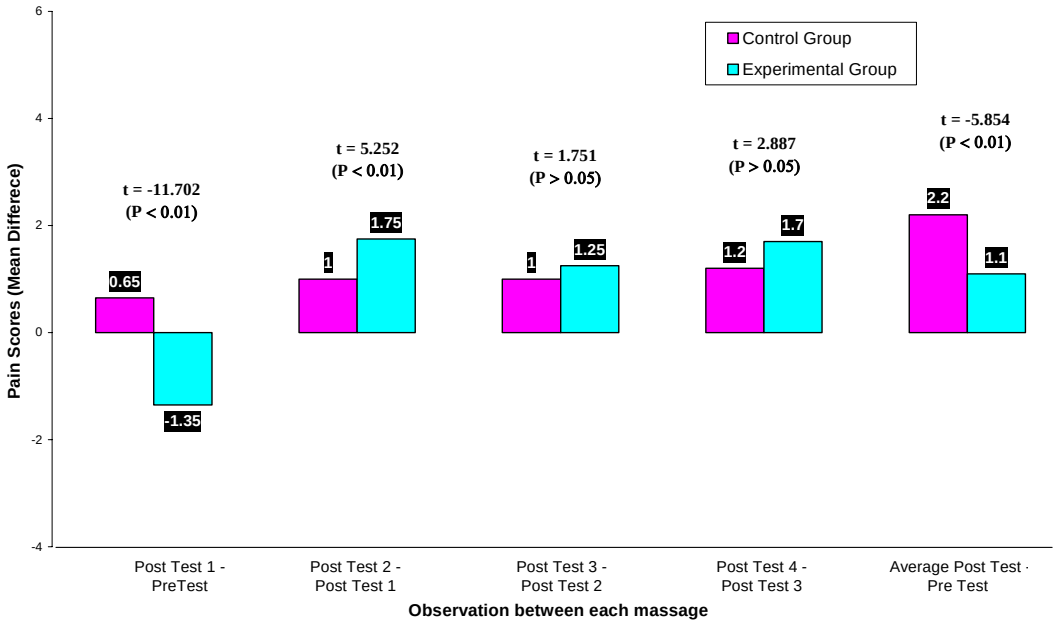


Fig. 8: Mean difference between each observation of pain, SD and "t" value of the labour pain in Rose oil massage in experimental group and control group

SECTION – IV: DATA ON ASSOCIATION BETWEEN SELECTED VARIABLES AND THE MEAN DIFFERENCE IN LABOUR PAIN AMONG PRIMI GRVIDA MOTHERS IN EXPERIMENTAL GROUP

For the purpose of this study the following null hypothesis were stated:

H_{03} : There will be no significant association between the mean difference in labor pain and selected variables among primi gravida mothers in experimental group.

TABLE – 3

Linear regression regarding association between selected variables and the mean difference in labor pain among primi grvida mothers in experimental group

Variable	*Standardized co-efficient (Beta)*	*"t" value*	*Significance (p< 0.05)*
Age	-0.17	-0.48	0.64 (NS)
Occupation	0.14	0.49	0.63 (NS)
Family income	-0.31	-1.19	0.25 (NS)
Human support	0.06	0.16	0.87 (NS)
Rest status	-0.34	-1.10	0.29 (NS)
Ante natal practice	0.32	1.13	0.28 (NS)
Previous hospitalization	-0.44	-1.59	0.14 (NS)
Activities during first stage of labour	-0.23	-0.72	0.48 (NS)
Pain tolerance	-0.02	-0.10	0.91 (NS)

NS= Not significant

Table 3 shows that the standard co-efficient "t" value regarding labour pain and selected factors among primi gravida mothers in experimental group based on linear regression.

The obtained “t” values: t= 4.81 (p=0.64); t= 0.49 (p= 0.63); t= 1.19 (p= 0.25); t= 0.16 (p= 0.87); t= 1.10 (p= 0.29); t= 1.13 (p= 0.28); t= 1.59 (p=0.14); t= 0.72 (p= 0.48); t= 0.10 (p=0.91) regarding age, occupation, family income, human support, rest status, ante natal practice, previous hospitalization, activities during labor and pain tolerance respectively were not significant.

It was inferred reduction of labour pain among primi gravida mothers in experimental group was not influenced by any selected factors.

CHAPTER- V

SUMMARY, FINDINGS, DISCUSSION, IMPLICATIONS, LIMITATIONS, RECOMMENDATIONS AND CONCLUSION

The essence of any research project is based on study finding, limitation, interpretation of the result and recommendations that incorporate the study implication. It also gives meaning to the results obtained in the study.

SUMMARY

The primary aim of the study was to assess the effect of Rose oil massage on reduction of the labour pain among primi gravida mothers.

The objectives of the study were,

1. To compare the labour pain before and after rose Oil massage among primi gravida mothers in experimental group.

2. To compare the mean difference in labour pain among primi gravida mothers in experimental and control group.

3. To find out the association between selected variables and the mean difference labor pain among primi gravida mothers in experimental group

The study attempted to examine the following research hypothesis:

H_1 : There will be a significant difference in the labour pain before and after rose oil massage among primi gravida mothers in experimental group.

H_2 : There will be a significant difference in the mean difference of labour pain among primi gravida mothers between the experimental group and control group.

H_3 : There will be a significant association between the mean difference in labour pain and selected variables among primi gravida mothers in experimental group such as age, education, occupation, family income, human support, ante natal check-up, Rest status in pregnancy, ante natal practice, previous hospitalization, activities during first stage of labour and pain tolerance.

The review of literature enabled the investigator to develop conceptual framework, tools and methodology for the study. Literature of review was done for the present study and was presented in the following headings; studies related to perception of labour pain, studies related to massage during labour pain, studies related to oil massage during labour pain.

The conceptual framework adopted for the present study was based on the Gate control theory developed by Malzack's and Wall (1965). This model helped the investigator to assess the effect of rose oil massage on labour pain among primi gravida mothers.

The research approach adopted for the study was, a quasi experimental repeated measures time series design. Dependent variable was labour pain. Independent variable was rose oil massage. Selected variables were age, education, occupation, family income, human

support, antenatal check-up, Rest status in pregnancy, ante natal practice, previous hospitalization, and activities during first stage of labour and pain tolerance.

The tool developed and used for data collection was a visual analogue pain scale to assess the labour pain. Structured interview schedule was developed and used for collecting data regarding the selected variables. The labour massage guide was developed on the basis of related literature. The content validity of the tool was established by 5 experts. The tool was found to be reliable and feasible. The reliability of the tool was established the inter-rater reliability. The reliability co efficient value r=0.92 was high. The pilot study was conducted in Railway hospital, Perambur and the study was found to be feasible.

The main study was conducted in railway hospital, Perambur. Prior permission was sought and obtained. Informed consent was obtained from the mothers after explaining the purpose of the study. The sample were selected by purposive sampling technique based on sample selection criteria a total of 40 mothers (20 experimental group, 20 control group) were selected. Pretest was done to assess the labour pain intensity in the experimental group and the control group. Posttest was done for the control group and the experimental group with 4 observations at regular intervals of 1 hour (each time massage was given 15minutes before the observation). The collected data was analyzed and interpreted based on objectives using SPSS package (version 10) at the level of 0.05 level of significance based on the study objectives.

CHARACTERISTIC OF STUDY SAMPLES

It was inferred that majority of primi gravida mothers in experimental group were age group of 23-27(11(55%), were educated 20(100%), were unemployed/ house wife 14 (70%), had above Rs.50, 000 per Annum 18 (90%), had mother for support 16 (80%), reported regular antenatal check up 20 (100%), had complete rest in pregnancy 14 (70%), had house hold

activities 12 (60%), had no previous hospitalization 14 (70%), were lying down during first stage of labour 13 (65%)and reported ‘good pain tolerance 15 (75%).

Also, majority of primi gravida mothers in control group were age group of 23-27(14(70%), were educated 20(100%), were unemployed/ house wife 13 (65%), had above Rs.50, 000 per Annum 18 (90%), had mother for support 19 (95%), reported regular antenatal check up 20 (100%), had intermittent rest in pregnancy 9 (45%), had house hold activities 10 (50%), had no previous hospitalization 14 (70%), were lying down during first stage of labour 17 (85%)and reported ‘good pain tolerance 17 (85%).

FINDINGS

The major findings of the study were presented based on the objectives of the study.

Objective 1: To compare the labour pain before and after rose Oil massage among primigravida mothers in experimental group

- It was inferred that the labour pain was progressive and significant different among primi gravida mothers in experimental group t=-7.63 ($p< 0.01$).

Objective 2: To compare the mean difference in labour pain among primi gravida mothers in experimental and control group.

- It was inferred that, there was a significant reduction in the mean labour pain among the primi gravida mothers in the experimental group in all the post tests except fourth post test, t= 77.7 ($p< 0.01$), t= 36.3 ($p<0.01$), t=19.3 ($p<0.01$), t= 3.8 ($p>0.05$)

- It was inferred that, there was a significant difference in the mean difference of labour pain among primi gravida mothers in the experimental group in all the observation between each massage except observation between third and second post test and fourth and third post test, t= -11.7 ($p<0.01$), t= 5.25 ($p<0.01$), t=1.75 ($p>.05$), t=2.88 ($p>.05$) and t=-5.85 ($p<0.01$) respectively.

Objective 3: To find out the association between selected variables and the mean difference in labor pain among primi gravida mothers in experimental group.

- Reduction of labour pain among primi gravida mothers in experimental group was not influenced by any selected factors such as age t= 0.48 (p=0.64), occupation t= 0.49 (p=0.63), family income t= 1.19 (p=0.25), human support t= 0.16 (p=0.87), rest status in pregnancy t= -1.1 (p=0.29), antenatal practice t=1.13 (p=0.28), previous hospitalization t=-1.59(p=0.14), activities during first stage of labour t=-0.72 (p=0.48) and pain tolerance t=-0.1 (p=0.91).

DISCUSSION

Discussion of this study had been on the basis of the study findings.

Finding on effectiveness of rose oil massage among primigravida mothers in experimental group

- The labour pain was progressive and significant different among primi gravida mothers in experimental group t=-7.63 ($p< 0.01$).

The above finding was supported by the studies conducted by Burns E.et al (2007), Spontaneous vaginal delivery (RR 0.99, 95%, CI: 0.75-1.3) and first stage augmentation (RR 1.01, CI: 0.83-1.4), pain perception was reduced in aromatherapy.

Hur MH etal, (2005) These findings indicate that delivery nursing care using essential oils could be effective in decreasing plasma epinephrine, norepinephrine (p=0.001, p=0.033).

Finding on mean difference in labour pain among primi gravida mothers in experimental group and control group

- There was a significant reduction in the mean labour pain among the primi gravida mothers in experimental group in all the post tests except fourth post test, t= 77.7 (p< 0.01), t= 36.3 (p<0.01), t=19.3 (p<0.01), t= 3.8 (p>0.05)

Ethel. E, et al., (2000), Reported rose oil rated helpful by most (71%) followed by lavender (50%). There was significant reduction in the mean difference labour pain among primi gravida mothers in the experimental group in all the observation between each massage except observation between third post test- second post test and fourth post test- third post test, t= -11.7 (p<0.01), t= 5.25 (p<0.01), t=1.75 (p>.05), t=2.88 (p>.05) and t=-5.85 (p<0.01).

Malathi (2006), there was a significant difference between the mean labour pain scores among the primi gravida mothers in simple massage group, franch oil massage group and the control group in all four post observation, F=122.4 (p=0.01), F=152.4 (p=0.01), F=150.1(p=0.01), F=63.9(p=0.01)

- There was a significant difference in the mean difference of labour pain among primi gravida mothers in the experimental group in all the observation between each massage except observation between third and second post test and fourth and third post test,t= -11.7 (p<0.01), t= 5.25 (p<0.01), t=1.75 (p>.05), t=2.88 (p>.05) and t=-5.85 (p<0.01) respectively.

Finding on association between selected variables and the mean difference in labour pain among primi gravida mothers in experimental group

- The reduction of labour pain among primi gravida mothers in experimental group was not influenced by any selected factors such as age t= 0.48 (p=0.64), occupation t= 0.49 (p=0.63), family income t= 1.19 (p=0.25), human support t= 0.16 (p=0.87), rest status in pregnancy t= -1.1 (p=0.29), antenatal practice t=1.13 (p=0.28), previous hospitalization t=-1.59(p=0.14), activities during first stage of labour t=-0.72 (p=0.48) and pain tolerance t=-0.1 (p=0.91)

Pirdel.M and Pridel.L (2009), Significant positive correlations were found between pain and tension from environmental factors in primi parous (r=0.16, p<0.01) and in multi parous (r=0.22, p<0.05) women.

Olayemi, et al., (2007), the presence of a doula also reduced the mean BNS scores significantly (−0.533 [95% CI −0.844, −0.222]. Increasing parity also reduced pain scores (−0.182 [95% CI −0.342, −0.022]). Increasing educational attainment increased pain scores in labor (0.189 [95% CI 0.017, 0.361]).

IMPLICATIONS

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

Implications for Nursing Practice

1. Rose oil massage is a cost effective measure to block the pain pathway and provide psychological support during labour
2. Rose oil massage help in reducing the need and frequency of administration of analgesics.

3. In latent phase of first stage of labour other analgesic may be administered
4. Rose oil massages help to conserve the energy of the mother during first stage, which helps to put her own effort during second stage
5. Rose oil midwives can plan the goal of nursing management and enhance the nurse patient relationship and sense of well being to the mother through the development of mutually agreed goals
6. Rose oil massage therapy should be made an integral part of pain relief in the management of labour pain

Implications for Nursing Education

1. Nurse educators should encourage nursing students to utilize rose oil massage as measure for the labour pain reduction

Implications for Nursing Research

1. The study will be a valuable reference material for future researcher
2. The findings of the study would help to expand the scientific body of professional knowledge upon which further researchers can be conducted
3. Massage therapy with Rose oil may be studies more scientifically and used as a specific nursing intervention

LIMITATIONS

1. It needs much explanation to get consent from the mothers and her relatives
2. The samples taken were only 20 for the experimental group and 20 for the control group
3. The data was collected using purposive sampling method
4. Samples taken were only primi gravida mothers
5. Study was limited to study on 1st stage of labour
6. Blinding technique would have been followed to avoid investigators bias

RECOMMENDATIONS

1. Similar study can replicate on a large scale
2. Similar study can be conducted in other way like increasing frequency and duration of massage therapy

CONCLUSION

Rose oil massage significantly reduces the labour pain. So in future nurses can incorporate rose oil massage as a part of nursing intervention in treating labour pain.

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SECONDARY SOURCES

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APPENDIX – I

LETTERS SEEKING PERMISSION FOR CONTENT VALIDITY

From,

30083622

II Year M.Sc., (Nursing),

Annai JKK Sampoorani Ammal College of Nursing,

Komarapalayam-638183, Namakkal distict.

To,

Through

The Dean,

Annai JKK Sampoorani Ammal College of Nursing,

Komarapalayam-638183.

Respected madam/sir,

Sub: Requisition for opinion and suggestion of experts for content validity.

I am 30083622, II year Msc Nursing student of Annai J.K.K Sampoorani Ammal College of nursing, komarapalayam, under the Tamil Nadu Dr. M.G.R Medical University, Chennai.

As a partial fulfillment of Msc, Nursing programme, I am conducting "A study to assess the effectiveness of Rose oil massage on labour pain during the first stage among primi gravida mother at Railway hospital, Perambur.

Here with I am sending the tool for the content validity for your expert opinion. I humbly request yourself to spare a little of your valuable time for me for which I remain ever grateful to you. It would be very kind of you to return the same to the undersigned at the earliest.

Thanking you

Date: Yours sincerely,

Place: 30083622

APPENDIX – II

LETTER SEEKING PERMISSION TO CONDUCT THE RESEARCH STUDY

LETTER SEEKING PERMISSION TO CONDUCT RESEARCH

From,

30083622

II year Msc (Nursing),

Annai JKK Sampoorani Ammal College of Nursing,

Komarapalayam-638183, Namakkal distict.

To,

THE MEDICAL DIRECTOR.
RAILWAY HOSPITAL.
PERAMBUR

Through

The Dean,

Annai JKK Sampoorani Ammal College of Nursing,

Komarapalayam-638183.

Respected madam/sir,

Sub: Requisition for permission to conduct the Research study.

I am, 30083622 II year Msc Nursing student of Annai J.K.K Sampoorani Ammal College of nursing, komarapalayam, under the Tamil Nadu Dr.M.G.R Medical University, Chennai

DEAN
J.K.K.Sampoorani
Annai College of Nursing
Komarapalayam - 638 183.

As a partial fulfillment of University requirement for the award of Master of Science in Nursing Degree, I am conducting a research on the following topic, "**A study to assess the effectiveness of Rose oil massage on** labour **pain during first stage among primi gravida mothers at Railway Hospital, Perambur, Chennai**

I would like to conduct the research in your esteemed institution. Please grant permission for the same.

Thanking you

Date: 3.10.09
Place: Perambur

Yours sincerely,

30083622

for me
3/10/09

Medical Director
S.Rly. Hd Q.s Hospital
Perambur, Chennai-23

APPENDIX – III

LIST OF EXPERTS

1. Dr. HEMALATHA, MBBS,DGO
   Joseph Hospital,
   Erode.

2. Dr. SUMATHI, MBBS, DGO
   Nishanth Hospital,
   Erode.

3. Dr. Mrs. TAMILMANI, MSc., (N), Ph.D.,
   Principal,
   Annai JKK Sampoorani Ammal College of Nursing,
   Komarapalayam.

4. Mrs. THANGAMANI, MSc (N)
   Obstetrics and Gynaecology Nursing department,
   Annai JKK Sampoorani Ammal College of Nursing,
   Komarapalayam.

5. Mrs.S. KOKILAVANI, B.P.T. MIAP
   H.O.D Exercise Therapy and Massage
   JKKMMRF College of Physiotherapy
   Komarapalayam.

APPENDIX – IV

CONTENT VALIDITY CERTIFICATE

I, hereby certify that I have validated the tool of 30083622, II Year M.Sc., Nursing student of Annai J.K.K Sampoorani Ammal College of Nursing, Komarapalayam, who is undertaking the following study "A study to assess the effectiveness of Rose oil massage on labour pain during the first stage among primi gravida mothers at Railway hospital, Perambur, Chennai.

Date : Signature of the Expert

Place : Designation

APPENDIX – V

Ph : 0091 - 04288 - 260032, 260588, Fax : 266760

J.K.K.MUNIRAJAHH MEDICAL RESEARCH FOUNDATION

COLLEGE OF PHYSIOTHERAPY

Ethirmedu, **B.Komarapalayam - 638 183.** Namakkal Dist, Tamilnadu, India.

Rtn. PHF. **Dr. J.K.K.MUNIRAJAHH** M.Tech., (Bolton)
Correspondent

D.KANNAN M.P.T (Neuro), M.Sc (Psy).,MIAP
Principal

18.09.2009

CERTIFICATE

This is to certify that 30083622 II Year M.Sc Nursing has been taught the Lower Back Massage Technique for Labour Pain in department of physiotherapy under the supervision of **Mrs.S.KOKILAVANI,** B.P.T. MIAP., H.O.D. of Exercise Therapy and Massage from **17.08.2009 to 21.08.2009**.

H.O.D.
Exercise Therapy & Massage

18/9/09
PRINCIPAL

PRINCIPAL,
COLLEGE OF PHYSIOTHERAPY,
J.K.K. Munirajahh Medical Research Foundation
KOMARAPALAYAM-638 183,
TAMIL NADU, INDIA.

APPENDIX – VI

INTERVIEW/ OBSERVATION SCHEDULE ON THE LABOUR PAIN AMONG THE PRIMI GRAVIDA MOTHERS

PART-1: SELECTED VARIABLES

Code No:_____

INSTRUCTION

This section seeks information regarding the primi gravida mothers who got admitted for delivery. The interviewer is requested to pose the question and get responses one by one. The best choice opted by the respondent may be marked by placing (✓) in appropriate option.

1. Age

a) 18-22 years □

b) 23-27 years □

c) 28-32 years □

2. Education

a) Illiterate (cannot read or write) □

b) Literate (can read or write) □

3. Occupation

a) Heavy workers- porter, farm work. □

b) Moderate workers- Tailoring, cooking , Dhobi, Working in Dyeing factory □

c) Sedentary workers- Typist, computer operators, Clerical job □

d) Unemployed/ House wife □

4. Family Income Rs._____/ month

a) Below Rs.50.000 (per Annum) □

b) Rs.50,000 and above (per Annum) □

5. Human support towards delivery

a) Mother □

b) Husband □

c) Other_____ specify □

6. Ante natal check-up

a) Regular (At least 3 antenatal visits) □

b) Irregular (less than 3 antenatal visits) □

7. Rest during last month of pregnant

a) Intermittent rest □

b) Complete rest □

c) No rest □

8. Ever performed, any of the following during AN period?

a) Breathing exercises □

b) Antenatal exercises □

c) Regular walking □

d) Any other_____ (specify) □

9. Ever had previous hospitalization?

a) Yes □

b) No □

10. State activities during first stage of labour

a) Lying down/ confined to bed □

b) Walking □

c) Any other_____(specify) □

11. State your ability to tolerance pain in general?

a) Very good □

b) Good □

c) Poor □

d) Very poor □

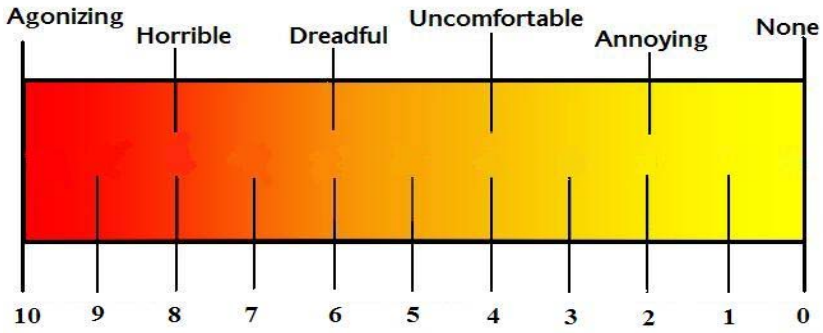
PART - II

VISUAL ANALOGUE PAIN SCALE

Code No.: ……

Instruction:

The interviewer is requested to show the visual analogue chart to the primi mother with labor pain and inform her to specify her level of pain(0-10) referring the colour:Dark red colour is severe pain and yellow colour represents no pain(0). The timing of massage and FHR are written in the given grids.



Time of 4-6 cm dilatation: --------

Massaging time					
Observation/ Time	O1 Pre test	02 Post test	O3	O4	O5
Pain					
FHR					

APPENDIX – VII

பிரசவ வலி பற்றிய முதல்முறை பிரசவிக்கும் தாய்மார்களுக்கான வினாத்தொகுப்பு

பகுதி ___ 1 பிண்ணணி விவரம்

குறியீட்டு எண் :

குறிப்பு :

இப்பகுதி பிண்ணணி விவரங்களை விவரிப்பதாகும். ஆய்வாளர் கீழே கொடுக்கப்பட்டுள்ள வினாக்களை முதல்முறை பிரசவிக்கும் தாயிடம் கேட்டு சரியான விடைகளை (✓) செய்து குறித்துக் கொள்வார்.

1. வயது

   அ. 18 - 22 வயது வரை ☐

   ஆ. 23 - 27 வயது வரை ☐

   இ. 28 - 32 வயது வரை ☐

2. கல்வி தகுதி

   அ. படிக்காதவர் (எழுத அல்லது படிக்க தெரியாதவர்) ☐

   ஆ. படித்தவர் (எழுத அல்லது படிக்க தெரிந்தவர்) ☐

3. வேலையின் தன்மை

   அ. கடினமான வேலை (பளு தூக்கும், தொழில் விவசாயம்) ☐

   ஆ. மிதமான வேலை (தையல், சமையல் தொழில், சலவைத்தொழில், சாயப்பட்டறை தொழில்) ☐

   இ. சரீர அலைப்பில்லாத வேலை (தட்டச்சு, வேலை கணினி வேலை, அலுவலக கணக்காளர்) ☐

   ஈ வேலையில்லாதவர் / இல்லத்தரசி ☐

4. குடும்பத்தின் மாத வருமானம்

அ. வறுமைக் கோட்டிற்கு கீழ் (வருடத்திற்கு ரூ.50000 கீழ்) ☐

ஆ. வறுமைக் கோட்டிற்கு மேல் (வருடத்திற்கு ரூ.50000 மேல்) ☐

5. பிரசவத்தின் போது உடன் துணையிருப்பவர் யார் ?

அ. தாய் ☐

ஆ. கணவன் ☐

இ. மற்றவர்கள் ☐

6. கருவுற்றிருந்த பொழுது பரிசோதனைக்கு சென்ற விவரம்

அ. குறைந்தபட்சம் 3முறை சென்றேன் ☐

ஆ. 3 முறைக்கும் கீழ் சென்றேன் ☐

7. கடைசி கர்ப்பகால மாதத்தில் ஓய்வு எடுக்கும் முறை பற்றி கூறுக

அ. இடைவெளிவிட்டு ஓய்வு ☐

ஆ. முழுமையான ஓய்வு ☐

இ.ஓய்வு எடுக்கவில்லை ☐

8. கீழே கொடுக்கப்பட்டுள்ள பயிற்சியை கர்ப்பகாலத்தில் செய்ததுண்டா?

அ. மூச்சி பயிற்சி ☐

ஆ. கர்ப்பகால உடற்பயிற்சி ☐

இ. தொடர்ச்சியாக நடத்தல் ☐

ஈ. மற்றவைகள் ☐

9. மருத்துவமனையில் அனுமதிகக்பட்ட முன் அனுபவம் உண்டா?

அ. உண்டு ☐

ஆ. இல்லை ☐

10.முதல் நிலை பிரசவ நேரத்தில் என்ன செய்தீர்கள்?

அ. படுத்து இருத்தல் ☐

ஆ. நடத்தல் ☐

இ. மற்றவைகள் ☐

11. பொதுவாக உங்களுடைய வலியை தாங்கும் தன்மை பற்றி கூறுக

அ. மிக நன்று ☐

ஆ. நன்று ☐

இ. குறைவாக ☐

ஈ. மிக குறைவாக ☐

APPENDIX-VIII

ROSE OIL LOWER BACK MASSAGE GUIDE

Timing of this procedure

1. At 4-6cm dilatation of the pretest massage
2. massage can be performed for 15 minutes, continuously for each time
3. massage is repeated every 1hour

STEPS:

a. Preparatory phase:

a. Explain the procedure and the effect of labour massage to the mother
b. Prepare the oil for massage using 8drops of Rose oil in 20ml of coconut oil
c. Give assurance to the mother in such a way that the procedure will not harm the fetus and also interfere with the uterine contraction
d. Place the mother in left lateral position
e. Expose the treatment area lower back (lower thoracic to coccygeal region) to abdomen
f. Warm up the palms by rubbing against each others
g. The masseur should take a comfortable position to do the massage (standing)

b. Active phase:

a. Stroking the back

i. Take 5ml Rose oil in hand and place them over the sacrum at the bottom of the lower back

ii. Using both hands together, stroke upwards towards the ribs, keeping hands either side of the spine

iii. Then glide hands down each side of the body, pull in gently at the waist and let the hands return to the starting position. Repeat 2 and 3, five times.

iv. Give Effleurage to improve lymph and venous drainage

b. Circular strokes

a) Take 5ml of rose oil in palms and rest one hand halfway up the back use the other to make circular strokes over the sacrum, at the base of the spine

b) Apply slightly more pressure on the upper semi-circle, less on the lower. Repeat five times

c) Give Effleurage 4 times to improve lymph and venous drainage

c. Relaxing the pelvis

a) Take 5ml of Rose oil in hands and place hands together, over the sacrum, with fingers pointing towards the head
b) Stroke hands outwards towards the fleshy part of the hips, letting your thumbs lag behind slightly
c) This takes hand over the sacro-iliac joints, which is soothing. Repeat five times
d) Give Effleurage 4times to improve lymph and venous drainage

d. Stroking the lower back

a) Take 5ml of Rose oil in hands and Place hands together, over the sacrum, stroke upwards and outwards from the base of spine and coming up higher to the waist. Repeat five times
b) Give Effleurage 4 times to improve lymph and venous drainage
c) To finish, cup your hands over the small of the back, and gently lift them away

Post Labour Massage Phase

a) Mother is allowed to adopt any position, in which she is comfortable
b) After massage the mother is instructed to maintain the oil in the exposed area for a while without covering the area.

ABSTRACT

A study to assess the effectiveness of Rose Oil massage on labour pain during the first stage among primi gravida mothers at Railway hospital, Perambur in partial fulfillment of the requirements for the award of the degree of master of science in nursing was done by 30083622 from Annai J.K.K. Sampoorani Ammal college of nursing, Komarapalayam, under the Tamilnadu Dr.M.G.R. Medical university, Chennai.

The objective of the study were, to compare the labour pain before and after rose Oil massage among primi gravida mothers in experimental group, to compare the mean difference in labour pain among primi gravida mothers in experimental and control group,to find out the association between selected variables and the mean difference labor pain among primi gravida mothers in experimental group

The hypothesis stated were, there will be a significant difference in the labour pain before and after rose oil massage among primi gravida mothers in experimental group, there will be a significant difference in the mean difference of labour pain among primi gravida mothers between the experimental group and control group, there will be a significant association between the mean difference in labour pain and selected variables among primi gravida mothers in experimental group such as age, education, occupation, family income, human support, ante natal check-up, rest status in pregnancy, ante natal practice, previous hospitalization, activities during first stage of labour and pain tolerance.

The study was conducted among 40 primi gravida mothers, 20 mothers in the experimental group and 20 in the control group, who were selected by purposive sampling method.

The conceptual framework of this study was based on Malzack's and Wall (1965) gate control theory of pain. Research approach selected for this study was evaluative in nature and the research design was a quasi experimental, repeated measures time series design.

The tool developed and used for data collection was an interview/ observation schedule and visual analogue pain scale. 5 Experts validated the tool. Reliability was established by inter rater reliability. The reliability coefficient r=0.92 was high. Pilot study was conducted among 10 primi gravida mothers in Railway hospital, Perambur.

The study was conducted in Railway hospital, Perambur. The data obtained were edited, organized, analyzed and interpreted using SPSS version 10.

The results showed that the labour pain was progressive and significantly different among primi gravida mothers in experimental group $t=-7.63$ ($p< 0.01$). Rose oil massage significantly reduced the labour pain among primi gravida mothers in experimental group.

Implications, limitations and recommendations were clearly defined and stated in the report of the study.