A QUASI EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF DYADIC SUPPORT ON PRE-OPERATIVE ANXIETY AND POST OPERATIVE PAIN AMONG PRIMI CESAREAN MOTHERS AT SAHRUDAYA HOSPITAL ALLEPPEY, KERALA.

BY

30083624

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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SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN NURSING FROM THE TAMILNADU DR. M.G.R. MEDICAL UNIVERSITY, CHENNAI.

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- John. F. Kennedy

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CHAPTER – I

INTRODUCTION

"Cast all your anxiety on him because he cares for you"

- 1 Peter 5:7

BACKGROUND OF THE STUDY

Gradually, childbirth changed from an entirely female-centered activity to a medical process overseen by predominately male physicians. By the early twentieth century, childbirth moved from the home to the hospital. By the mid- twentieth century, childbirth had become a completely medical process, attended by physicians and managed by medical equipment and procedures, such as fetal monitors, anesthesia, and surgical interventions.

A cesarean delivery (also called a surgical birth) is a surgical procedure used to deliver an infant. It requires regional (or rarely general) anesthetic to prevent pain, and then a vertical or horizontal incision in the lower abdomen to expose the uterus (womb). Another incision is made in the uterus to allow removal of the baby and placenta.

Cesarean deliveries may be performed because of maternal or fetal problems that arise during labor, or they may be planned before the mother goes into labor. More than 30 percent of births in the United States occur by cesarean delivery.

A planned cesarean delivery is one that is recommended because of the increased risks of a vaginal delivery to the mother or her infant. Cesarean deliveries that are done

because the woman wants, but does not require, a cesarean delivery are called "maternal request cesarean deliveries".

The present modern society brings storm and stress to all human beings in everyday life. Often when people become ill they are anxious, afraid, disempowered, depressed, pained and experience low self esteem. When hospitalized it triggers their anxiety as they are introduced to a new environment, new procedure and expenditures.

Today caesarean section is not performed as a last reset but as a safe alternative to risky vaginal deliveries. Some women welcome caesarean section as a means of escaping the rigors of labour, others feel disappointed that they have not had the experience of a normal delivery and have not enjoyed the accompanying sense of achievement says Kathyrin (1996)

Reducing pre-operative anxiety

The general preoperative teaching also helps decrease anxiety in many patients knowing a head of time about the possible need types of equipments used helps decrease anxiety in post operative period.

The relief of post-cesarean delivery pain is important. Good pain relief improves mobility and reduces the risk of thromboembolic disease, which may have been increased during pregnancy. Pain may impair the mother's ability to optimally care for her infant in the immediate postpartum period and may adversely affect early interactions between mother and infant. It is necessary, therefore that pain relief be safe and effective and results in no adverse neonatal effects during breast-feeding.

The advantages of effective postoperative pain management include patient comfort and therefore satisfaction, earlier mobilization, fewer pulmonary and cardiac complications, a

reduced risk of deep vein thrombosis, faster recovery with less likelihood of the development of neuropathic pain, and reduced cost of care.

NEED FOR THE STUDY

It seems that everyone is aware that the cesarean section is the number one surgery these days. More babies are born abdominally than people lose gall bladders and tonsils. We are very grateful for the medical technology that has enabled us to save the lives of babies and mothers who would not have made it otherwise.

However, as the cesarean rates rise to close to 25% nationally, and even higher in some places. The safety of anesthesia, improved surgical techniques, availability of blood transfusion and the wide range of effective antibiotics have made cesarean section very safe. Obviously, its incidence has risen sharply from the previous 5 % to as much as 15-20% in recent years, covering a wide range of indications.

For many years, cesareans were performed for only the truest of emergencies. Only 40 years ago the cesarean rate in the United States hovered around 5%. Now cesarean rates in the US are just under 30%. The US is not alone in seeing the dramatic climb in cesarean rates; In fact, cesarean rates have skyrocketed in the last 20-40 years in nearly all parts of the world.

Cesarean Rates Around the World

Today, nearly 1 in 3 babies are born by cesarean in the United States. Cesarean rates in Canada are only slightly lower at 26% and in the UK; the cesarean birth rates are similar at 23% of all births. Japan's cesarean rate has doubled in the last 18 years from 11% to now about 21%.

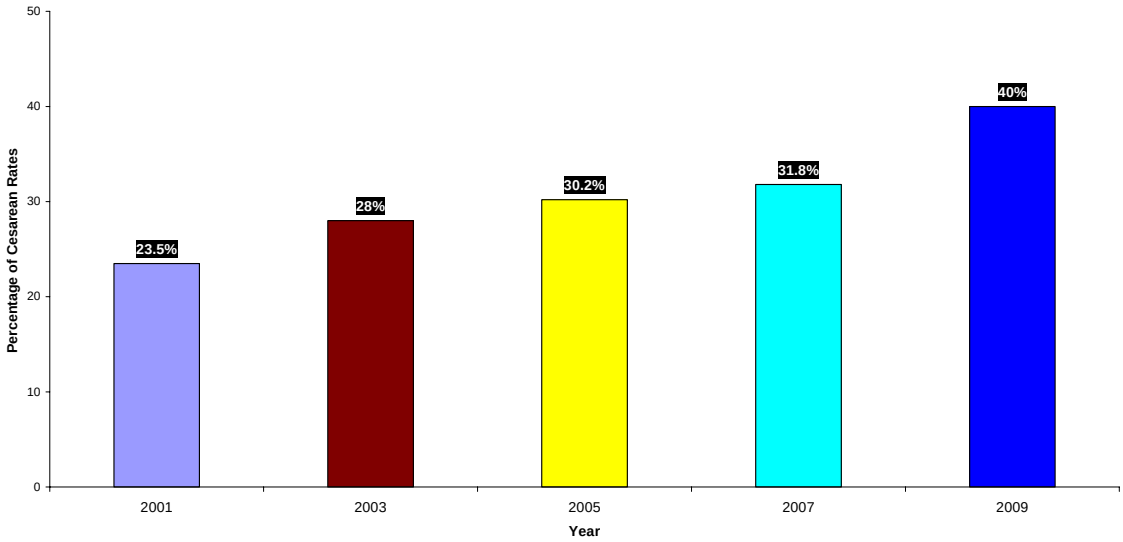
One of the highest cesarean rates can be found in Brazil, where about 35% of the mothers in public health care have cesareans. In private medical settings, cesarean rates are just under 80% for Brazilian women. One of the only countries to maintain a low cesarean rate has been in the Netherlands where about 12% of mothers give birth by cesarean. This low cesarean rate in the Netherlands may be, in part, due to the high rate (30%) of mothers who choose homebirth.

World Health Organization Recommendations

Despite the fact that the World Health Organization recommends a cesarean rate closer to 10-15% in developed countries, they believe that only about 10% of the times, cesareans are needed for true medical indications. This recommendation translates to the reality that in some parts of the world, about 50% of cesareans are unnecessary.

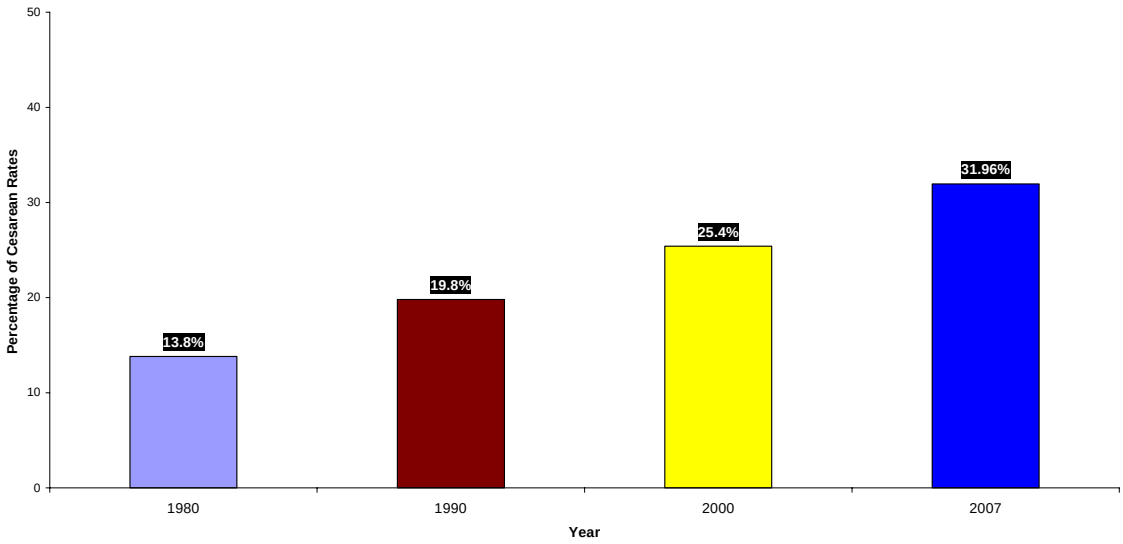
The WHO estimates the rate of Caesarean sections at between 10% and 15% of all births in developed countries. In 2004, the Caesarean rate was about 20% in the United kingdom, while the Canadian rate was 22.5% in 2001-2002.In Italy the incidence of Caesarean sections is particularly high, albeit it varies from Region to Region. In Campania reportedly 60% of 2008 birth occurred via Caesarean sections In the Rome region, the mean incidence is around 44%, but can reach as high as 85% in some private clinics.

In the United States the Caesarean rate has risen 48% since 1996, reaching a level of 31.8% in 2007. A 2008 report found that fully one-third of babies born in Massachusetts in 2006 were delivered by Caesarean section. In response, the state's Secretary of Health and Human Services, Dr. Judy Ann Bigby, announced the formation of a panel to investigate the reasons for the increase and the implications for public policy Among developing countries, Brazil has one of the highest rates of caesarean sections in the world. In the public health network, the rate reaches 35%, while in private hospitals the rate approaches 80%. (U.S National health statistics 2007)



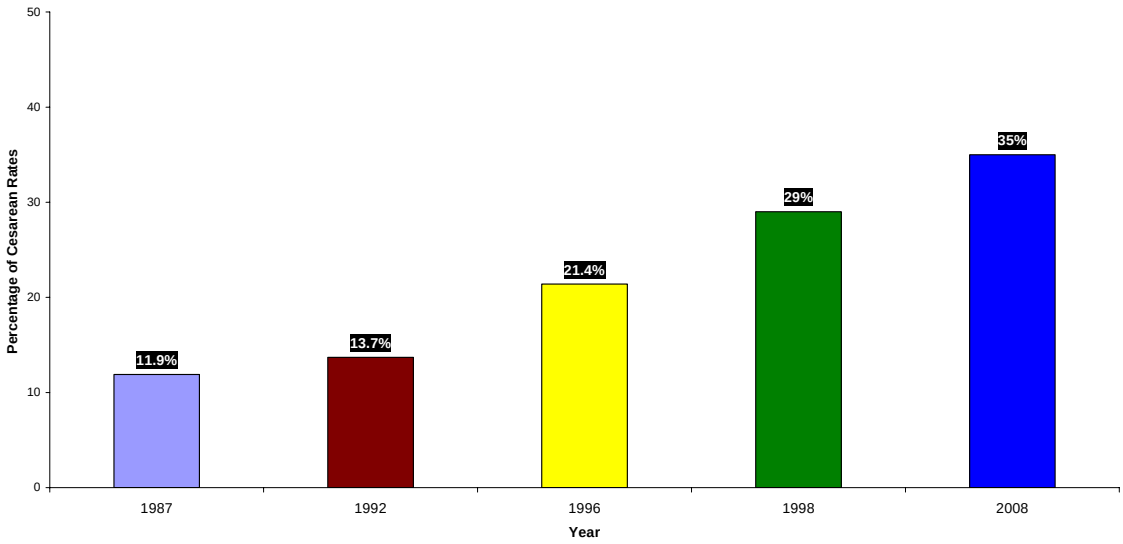
Cesarean rates in United States

Over the last 20 years there has been a disturbing increase in the rate of Caesarean sections in India. It used to be a matter of pride to have low Caesarean section rates, especially in teaching hospitals. A collaborative study done by the Indian Council of Medical Research (ICMR) in the 1980s showed a Caesarean section rate of 13.8 per cent in teaching hospitals.



Cesarean rates in India

In a study over a two-year period in an urban area of India, the total Caesarean section rates even in the public and charitable sectors were 20 and 38 per cent respectively. In the private sectors, the rate was an unbelievable 47 per cent. A similar study from an affluent part of Chennai showed that almost every other woman (45 per cent) had a Caesarean section.



Cesarean rates in Kerala

The rate of Caesarean section is relatively higher in Kerala and Goa. A 1995 study in Thiruvananthapuram, Kerala, found that the Caesarean section rate in the private sector (30 per cent) was three times that of the public sector (10 per cent). In addition, in Andhra Pradesh, Bihar, Gujarat, Karnataka, Punjab and Uttar Pradesh the chance of having a Caesarean is four or more times higher in private institutions as compared to public ones. This raises the question of whether this life-saving surgical intervention is being motivated by monetary profit in several states.

The incidence of the caesarean section is steadily rising. The basic purpose of caesarean section is to preserve the mother and the baby. Any surgical procedure is followed by some type of emotional reaction in a mother posted for caesarean section. She may view

the surgery as a threat to her life. Nurses have the responsibility to promote and teach coping abilities and the use of relaxation techniques to the mothers to reduce their anxiety. (National vital statistics system 2009)

The nurse must be sensitive in her dealings with women who are getting ready for Cesarean section. Anxiety is a normal to any surgical procedures. A women experiencing anxiety may feel uneasy and apprehensive and may have vague sense of dread. The intensity of these feelings may be mild to severe enough to cause pain and the intensity may decrease depending upon the coping abilities and coping measures given to the individual.

Interventions to alleviate anxiety

Medication – Use of anti-anxiety and anti-depressant requires prescription from doctor, and only under guidance and monitor from doctor or qualified psychiatrist, the patient will receive the correct dosage, minimize the danger of side effects.

Herbal – This is considered an alternative treatment for anxiety. However, the Chinese and native people had used them for thousands of years to cure the problems, and studies find that they are as effective as prescription medicine without the side effect, and if you don't want side effect or prescription medication doesn't work for you, you can try Herbal based medicine.

Relaxation Exercise – Taiji and QiGong are very good relaxation exercises, it can help to relax your mind and body, and restore them to a healthier stat, balance up your body chemical and reduce your mind anxiety and stop feeding anxious sense to the body.

Regular Exercise – 30 Minutes of regular exercise every day will reduce the panic attack, and shorten the duration during panic attacks, and eventually eliminate anxiety. When doing exercise, your mind will be distracted from thinking something anxious, and your body will be healthier, less symptoms of anxiety will occur.

Psychological Treatment for Anxiety – One of the most common and effective anxiety treatments is Cognitive Behavioral Therapy (CBT), and this method can be used with drugs or without drug. However, herbal based anxiety relief medicine is highly recommended.

Diaphragmatic or Deep Breathing Exercise – Using special deep breathing technique to help relax the mind and body, increase the oxygen level and reduce chemical imbalance in the body in the body. This kind of techniques has proven itself to be effective for most sufferers to reduce duration and frequency of panic attacks.

Complementary Therapies – These are not exactly treatment for anxiety, but rather to restore health and strength of the body. Namely, Messages, Shiatsu, Tuina (Chinese acupressure treatment), Guasa, Acupuncture and Aromatherapy. (Chris. Dicicco, Cure Anxiety 2009)

The aim of postoperative pain treatment is to provide subjective comfort in addition to inhibiting trauma-induced impulses in order to blunt autonomic and somatic reflex responses to pain and subsequently to enhance restoration of function by allowing the patient to breathe, cough and move more easily.

Factors influencing analgesic requirements

Assessment of pain after surgery should be frequent and simple. Elements that influence analgesic requirement and consumption include Age of the patient: elderly patients request smaller doses, sex, pre-operative analgesic use, past history of poor pain management, coexisting medical conditions such as substance abuse or withdrawal, hyperthyroidism, anxiety disorder, affective disorder, hepatic or renal impairments, cultural factors and personality. (e.g., patients vary from being intolerant of any discomfort to surprising self-control or patients consider pain to be a normal part of life), preoperative patient education.

Appropriate pre-operative education can improve expectations, compliance and ability to effectively interact with pain management techniques, Site of operation: thoracic and upper abdominal operations are associated with the most severe pain, Individual variation in response and pain threshold, attitude of the ward staff.

Pain management techniques

Optimal application of pain control methods depends on different members of the health care team throughout the patient's course of treatment. To ensure that this process occurs effectively, formal means must be developed and used within each institution to assess pain management practices and to obtain patient feedback to calibrate the adequacy of pain control.

Pre-emptive Analgesic Therapy

There is a lot of interest in controlling the "wind-up" phenomenon as related to postoperative pain. To this end the application of opioids, local anaesthetic blocks and other analgesic modalities are being instituted and established before surgery to attempt to decrease the intensity and duration of postoperative pain.

Pharmacological Management

Treatment modalities that are now available for postoperative pain control include intramuscular, subcutaneous, intravenous, oral, rectal, transdermal or transmuscular analgesics; continuous infusions of opioids and/or NSAIDs; patient-controlled administration of opioids and/or NSAIDs; and intermittent boluses and/or continuous infusion of epidural or intrathecal opioids.

Physical Methods

Commonly used physical agents include applications of cold, massage, movement, TENS, and rest or immobilization. Transcutaneous electrical nerve stimulation (TENS) may be effective in reducing pain and improving physical function. This has been used with varying degrees of success in the management of postoperative pain. Evidence is accumulating that TENS acts by increasing CSF levels of beta-endorphins, together with activating of the "pain gate" by counter irritation.

Patient education

Preparing patients in order to understand their responsibilities in pain management is important. To ensure that postoperative pain measurement is both valid and reliable, the staff should review the selected pain management tool or scale with the patient before surgery. (Virtual Anesthesia textbook 2009)

ADVANTAGES OF DYADIC SUPPORT

Dyadic support is defined as any set of planned education activities that the similar other patient designed to improve patients' health behaviors and health status. Its main purpose is to maintain or to improve patient health or, in some cases, to slow deterioration and to reduce anxiety preoperatively and post operatively. However, patient and family education goes beyond this main purpose. An informed and educated patient can participate in his or her own treatment, improve outcomes, help identify errors before they occur, and reduce his or her length of stay.

Other benefits of dyadic support includes increase the patient's ability to cope with and manage her or his health; facilitate patients' and families' understandings of their health status, options, and consequences of care; encourage patients to help with decision making; Increase

patients' potential to follow a health care plan; help patients learn behaviors and promote recovers and improve function; Increase patient confidence in his or her self care; and decrease treatment complications.

Organizations that provide targeted and appropriate patient and family education can reap other benefits as well as increase customer satisfaction; compliance with regulatory standards; improved efficiency through cost-effective care; and better informed patients, thus lessening the chance of malpractice claims. (The Joint Commission Guide to Patient and Family Education, 2009)

Anxiety as a major area where the nurses can play an important role in nursing in relieving the anxiety of patients and relatives by implementing various nursing interventions. It has also given importance in helping families to cope up with the situation. The nursing diagnosis association (1994)

Anxiety level predicts postoperative pain. It may alter a patient's surgical course and cause increased postoperative pain. A review of the literature was undertaken to evaluate the presence and significance of any correlation between preoperative anxiety and postoperative pain. Although inconsistency was found in the articles that were reviewed, most of the available evidence revealed a positive correlation between preoperative anxiety and postoperative pain. Further studies should be conducted to establish the correlation between preoperative anxiety and postoperative pain and to determine appropriate nursing interventions Vaguhn, Wichowski & Bosworth (2007)

A study on the effectiveness of Cryotherapy on postoperative pain among 60 randomly selected clients with abdominal surgery in government hospital, Erode. The findings of the study revealed that there was a significant reduction in the postoperative pain $t= 50.34$ ($p<0.05$) before and after the cryotherapy in the experimental group Malavizhi.S. (2005)

A study on preoperative anxiety and postoperative satisfaction in women undergoing elective cesarean section among 85 women awaiting for elective cesarean section. Anxiety, social support and aspects of preparation were measured in the 24 hours preceding surgery. Maternal satisfaction and perceptions of recovery were assessed around the third postoperative day. Preoperative trait anxiety and state anxiety were inversely associated with post operative maternal satisfaction. State anxiety was also inversely associated with better recovery. Lower preoperative anxiety is associated with greater maternal satisfaction with elective cesarean section and better recovery Hobson J.A (2005).

A prospective study on the effects of cold therapy on postoperative pain in gynecological patients undergoing laparotomy at university of south florida.randomly selected 26 patients were included. The ice was applied to 13 patients and 13 patients were in control group. All the patients underwent exploratory laprotomy and received postoperative pain relief with intravenously self administered morphine sulfate through a patient controlled analgesic pump. Data was collected by interview schedule. Compared with the control group, the cold pack group used less morphine sulfate on the first postoperative day 90.129 +/- 0.102 mg/kg/day,$p<0.05$). The results shows that cold pack improves preoperative pain control in gynecological patients undergoing exploratory laparotomy Finan et.al (2002).

A study on anxiety, stress and pre-operative surgical nursing among patients awaiting for surgery with various types of diseases was assessed by STAI and cognitive questionnaire. The study showed that the complex aspect of hospital life stressful condition and surgical procedures mere increases the level of anxiety. The study result showed that surgical procedure is a stressful condition that requires positive adaptation Pierantognetti et.al (2002)

The provision of pre operative instruction is a fundamental practice of most surgical division. Preoperative teaching varies in different settings. Some hospital provides designed

education sessions incorporated with patient activities. Midwife support and encouragement contribution to gain overall positive birth experience Niven et.al., (1994)

Admission to hospital for surgery is universally accepted as a stressful situation, provoking a certain level of anxiety in all patients. A multitude of research has shown a positive correlation between preoperative anxiety and postoperative pain. Hence, reducing preoperative anxiety would assist in improved postoperative comfort for the patient, potentially reducing the patient's analgesic requirements and the associated side effects from these medications. The aim of the literature review was to determine if a preoperative intervention by the anesthetic nurse could be effective in reducing a patient's anxiety.

STATEMENT OF THE PROBLEM

A quasi experimental study to assess the effectiveness of dyadic support on pre-operative anxiety and post operative pain among primi cesarean mothers at Sahrudaya hospital Alleppey, Kerala.

OBJECTIVES

1. To assess the pre-operative anxiety among primi cesarean mothers before and after dyadic support in experimental group.
2. To compare the mean difference in pre-operative anxiety among primi cesarean mothers in experimental and control group.
3. To compare the post operative pain among primi cesarean mothers in experimental and control group.
4. To correlate between the mean difference of pre operative anxiety and post operative pain in experimental and control group.

5. To test the association between the mean difference in pre operative anxiety and selected factors among primi cesarean mothers in experimental group.
6. To test the association between postoperative pain and selected factors among primi cesarean mothers in experimental group.

HYPOTHESES

H_1 : There will be a significant difference between the preoperative anxiety before and after dyadic support among primi caesarean mothers in experimental group.

H_2 There will be a significant difference in the mean difference of pre-operative anxiety among primi cesarean mothers in experimental and control group.

H_3 There will be a significant difference in post operative pain among primi cesarean mothers in experimental and control group.

H_4 There will be a significant correlation between the mean difference in pre-operative anxiety and post operative pain among primi cesarean mothers in experimental and control group.

H_5 There will be a significant association between the mean difference in pre-operative anxiety and selected factors among primi cesarean mothers in experimental group.

H_6 There will be a significant association between the post operative pain and the selected factors among primi cesarean mothers in experimental group.

OPERATIONAL DEFINITIONS

1. Effectiveness: refers to the difference in the preoperative anxiety and post operative pain among primi cesarean mothers. It was measured in terms of reduction in post operative pain and preoperative anxiety.
2. Dyadic support: refers to the help, counsel, verbal support, interaction given by the 5th day post operative mother in a continued relationship to the preoperative

mother with an aim to reduce the preoperative anxiety. The dyadic support envisaged the areas such as admission, hospital stay, nursing care, doctor's care, success of surgery, hospital policies, visitor's time, care to the baby and advices received.

3. Pre-operative anxiety: refers to the emotional reaction to the perception of danger, real or imagined that is experienced physiologically or behaviorally as measured by the questionnaire. it was measured in terms of pre-operative anxiety scores.
4. Post operative pain: refers to the subjective physical or psychological unpleasant sensation experienced and reported by the mothers after cesarean surgery as measured by visual analogue scale (VAS). Post operative pain was measured in terms post operative pain scores.
5. Primi cesarean mothers: refers to the first time pregnant mothers who were awaiting for elective cesarean section.
6. Selected factors: refers to those factors and issues which influence the pre-operative anxiety or post operative pain. The variables selected for the purpose of the study includes; age, level of education, family income, previous hospitalization, previous surgeries, nature of demands in your job, cared for post operative patients, nature of sleep for the past one month, your ability to tolerate pain, health problem during antenatal period, Was your husband present with you, which of the following is relevant to you, time of conception after marriage, members present with you to help you, hours of sleep per day, time elapsed for after the decision for L.S.C.S, number of antenatal visits to this hospital.

ASSUMPTIONS

1. The permission for the study will be granted by the authorities.
2. The patients will co-operate with the investigator and were willing to participate effectively in the dyadic interaction session.

3. The items included in the tool were adequate to measure the anxiety level and pain perception.
4. The 5th day postoperative mothers' will co-operate to offer dyadic support.

DELIMITATIONS

The study was limited to

1. Pre-operative anxiety and post operative pain
2. Anxiety measured by Modified Amsterdam Preoperative Anxiety and Information scale
3. Primi mothers who are admitted in Sahrudaya hospital at Alleppey for elective cesarean section.
4. Primi mother allotted by non random method.

CONCEPTUAL FRAME WORK OF THE STUDY

Polit (1999) stated that, conceptual model of frame work deals with concepts or abstractions that are assembled by virtue of their relevance to a commom theme.

The Roy's Model (1991) focuses on the responses of the adaptive system to a constantly changing environment. Adaptation is the central feature and care concept of the model. Problems of adaptation arise when the adaptive system is unable to cope with or respond to constantly changing stimuli from the internal and external environment in a manner that maintains the integrity of the system. This model explains the concepts of structure, process, outcome, and feedback. A system consists of a number of interacting components input (structure), throughput (process), output (outcome) and feedback.

INPUT: Input refers to the stimuli from the external environment and the internal self, including information from the cognator and regulation mechanisms.

In this study the input referred to

1. Selected variables of primi cesarean mothers
2. Pre test pre-operative anxiety
3. 5th post operative day mothers for dyadic support
4. Nursing agency
5. Investigator
6. Preparing mothers for dyadic support
7. Setting: Sahrudaya Hospital

THROUGHPUT: It is the biological and psychological coping mechanisms of the persons, as well as cognator and regulator responses. In this study throughput included dyadic support by interaction between the primi cesarean mothers in pre-operative phase.

OUTPUT : It is the adaptive and effective behavioral responses of the person. In this study it included reduction in pre-operative anxiety and post operative pain among primi cesarean mothers.

FEEDBACK : It is the information regarding the behavioral responses that is conveyed as input in the system. Roy's model visualizes the person as an adaptive system that responds to internal and external environment stimuli in four adaptive modes, namely physiological, self concept, role function and interdependence. It is an essential tool for assessing and analyzing the client's health patterns. This was not include in the study.

The study attempted to evaluate the effect of dyadic support on pre-operative anxiety and post operative pain among primi cesarean mothers.

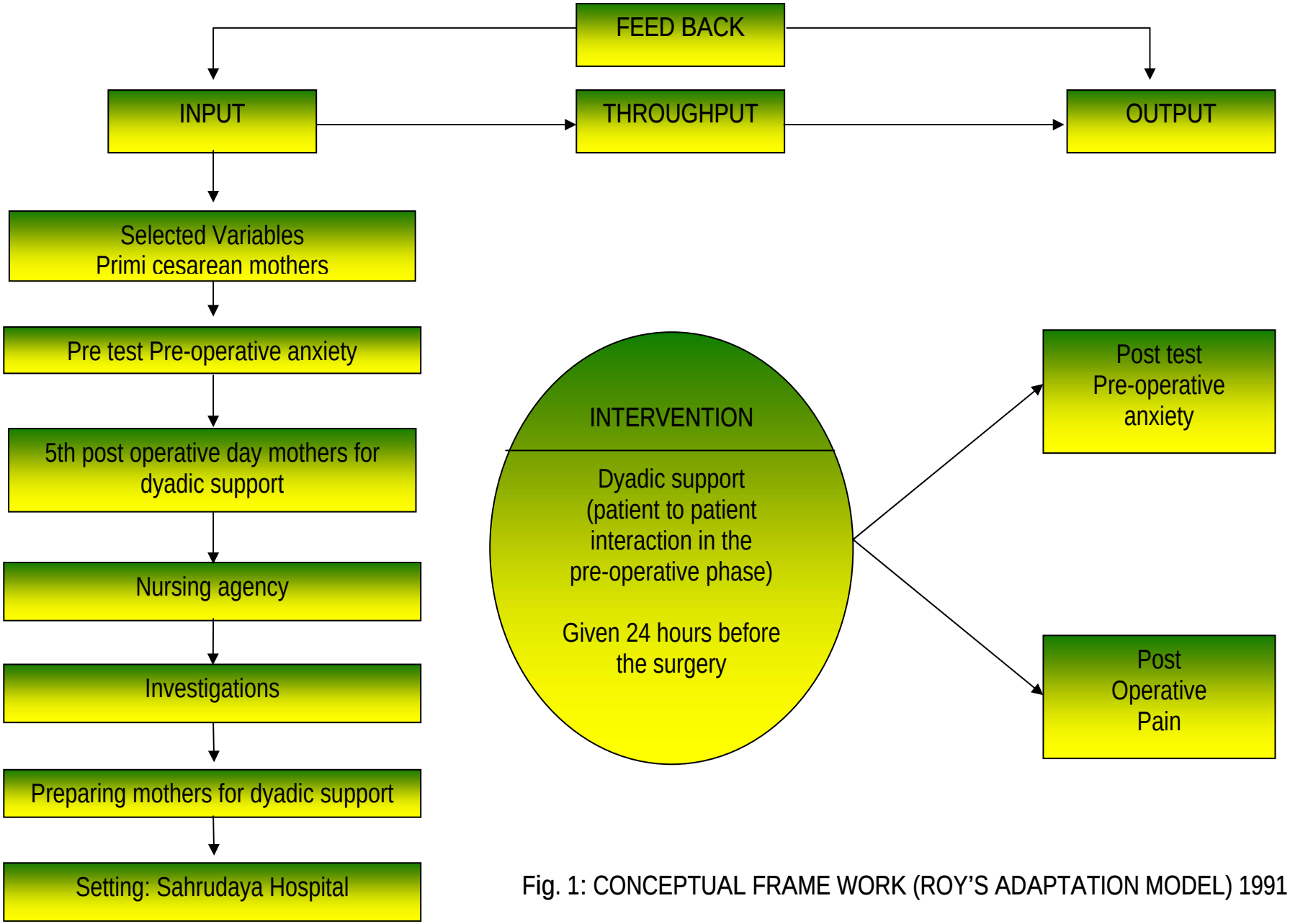


Fig. 1: CONCEPTUAL FRAME WORK (ROY'S ADAPTATION MODEL) 1991

CHAPTER – II

REVIEW OF LITERATURE

A literature review serves a number of important functions in the research process. It helps the investigator to generate ideas or to focus on research topic. It also can be useful in pointing out the research approach, methodology, tools and even type of statistical analysis that might be productive in pursuing the research problem.

The review of literature related to the present study is grouped under the following headings.

I. Studies related to pre-operative anxiety
II. Studies related to post operative pain
III. Studies related to dyadic support
IV. Studies related to pre-operative anxiety and its influence on post operative pain
V. Studies related to pre-operative anxiety and its interventions.

I. STUDIES RELATED TO PRE-OPERATIVE ANXIETY

Khan. A and Nazir. S (2007) carried out a prospective observational study to measure the anxiety scores at four geographical locations in the hospital, using the visual analogue scale (VAS) tool, in thirty patients coming for elective surgery. Scores were recorded at the preoperative anesthesia clinic, in the ward, in holding area of the operating room and in the operating room after application of monitors. Pre-medication was administered after the patient was shifted to the holding area. The anxiety scores were highest in the preoperative clinic (5.8) and decreased in the ward (4.9). The scores in the holding area (4.4) were slightly lower than

the operating room (4.5).The clinic scores and the ward scores were also significantly different. Anxiety scores were found to be significantly higher among females than males p value<0.01) at the preoperative anesthesia clinic, holding area (p value<0.04) and in the operating room (p value<0.038).

Moerman et. al (2003) reported the patients anxiety level and the information requirement in the pre-operative phase,320 patients were asked to assess their anxiety and information requirement on a six item questionnaire the Amsterdam Pre-operative Anxiety And Information Scale (APAIS). Two hundred patients also completed Spiegelberger's Stait Trait Anxiety Inventory Scale (STAI scale).32% of the patients could be considered as "anxiety cases" and over 80% of the patients have a positive attitude towards receiving information. Women were more anxious than men; patients with high information requirement also had a high level of anxiety. The anxiety scale correlated highly (0.74) with the STAI scale.

Ayral .X et al. (2002) has studied the effects of video information on pre-operative anxiety level and tolerability of joint lavage in knee osteoarthritis, among randomly selected 122 patients.56 patients were given video information on joint lavage in the operating room. Pre-operative anxiety was measured a 100mm Visual Analogue Scale. The study showed that pre-operative anxiety was lowered by half for patients who had viewed the video (p=0.005).

John (1998) conducted an experimental study to find the effect of pre-operative teaching on the anxiety level of 66 conveniently selected patients undergoing cardio thoracic surgery. The anxiety was assessed using Max Hamilton's Anxiety Rating Scale. The major findings were 5.3% patients in the experimental group and 37% in the control group were hospitalized for 1st time, there were significant effect of pre-operative teaching on anxiety level of individuals with age less than or equal to 25 years, than the other age group, teaching had more effect in reducing the anxiety levels in females than that of males, teaching was more

effective in moderately educated group than in highly educated group and anxiety reduced more in high income group than in low income group.

II. STUDIES RELATED TO POST OPERATIVE PAIN

Pan P.H et.al (2006) aimed to determine predictive factors for post cesarean pain and analgesia using an assessment of pain threshold and suprathreshold thermal stimuli as well as degree of somatization and anxiety. Thirty-four healthy parturients scheduled for cesarean delivery under subarachnoid anesthesia were enrolled. Preoperative thermal pain threshold, intensity, and unpleasantness to heat stimuli applied to arm and lower back, State Trait Anxiety Inventory, and patient expectation for postoperative pain and need for analgesia were assessed. After surgery, overall, resting, and movement pain and analgesic consumption were recorded. Results explained with multiple regression analysis on resting pain was predicted by two factors, thermal pain and unpleasantness and patient expectation ($r^2 = 0.26$, $P < 0.01$), evoked pain by thermal pain threshold in the back ($r^2 = 0.20$, $P < 0.009$), composite pain by thermal pain and unpleasantness and preoperative blood pressure ($r^2 = 0.28$, $P < 0.008$), intraoperative analgesic need by preexisting pain ($r^2 = 0.22$, $P < 0.006$), recovery room analgesia by thermal pain threshold and State Trait Anxiety Inventory ($r^2 = 0.27$, $P < 0.01$), and total analgesic need by State Trait Anxiety Inventory ($r^2 = 0.22$, $P < 0.01$). These models predicted the upper twentieth percentile of composite pain scores and analgesic requirement with sensitivity of 0.71 to 0.80 and specificity of 0.76 to 0.80

Auburn et .al.,(2003) reported an observational study to assess the use of VAS and other pain scales by the nurses in the post anesthesia care unit at university Pierre et Marie curie, Paris. Among 600 patients included in the study, nurses used the VAS in 53 %, the numerical rating scale in 30%, the verbal rating scale in 12% and the behavioral scale.

Juhl et.al., (2003) conducted a prospective study on post operative pain from patients and nurses point of view in central hospital, Nigeria.191 patients were interviewed after surgery about the pain on 1st and 2nd post operative period. Data was collected by structured interview schedule. Findings revealed that 80% of the patients had moderate to severe pain but only 64% would always tell the staff they had pain.

Kolawole et.al., (2003) conducted a descriptive study on the experience of pain after cesarean section under general anesthesia at Ilorin teaching hospital, among 88 patients who had undergone elective cesarean section. They used 4 point verbal rating scale for the post operative pain assessment. The results showed that 95% experienced some degree of pain in immediate post operative period and 1st post operative day was painful for 79.6% and 54.6% reporting moderate pain in the recovery room and day 1 respectively.

Manju.D., et.al., (2002) measured the pain perception in post operative neurosurgical patients with in 24 hours of surgery consenting to volunteer information on pain perception were included in the study. All patients were on intramuscular analgesics. Numerical rating scale was used to assess pain with in 12 hours and 13-24 hours following surgery. The mean value of the pain score within 12 hours of surgery was 3.51 (SD = 2.53) and the mean score within 13-24 hours was 5.06 (SD= 2.6). The difference was statistically significant ($p < 0.001$)

Nair.V. (2002) conducted a quasi experimental study on the effect of selected nursing interventions in the management of pain in patients with sternotomy in ICU at municipal hospital Mumbai. 50 patients who had undergone sternotomy were selected for the samples. Numerical Rating Scale was used to assess the post operative pain. The study results revealed that the planned nursing interventions brought a relief of pain indicated by lowering of pain scores in the experimental group, ($t= 12.2$, $p=0.01$)

Good (2002) conducted a study on the effect of 3 non pharmacological nursing interventions relaxation, music and combination of relaxation and music on pain following gynecological surgery at Mid Western hospital among 311 patients who had undergone gynecological surgery. The Visual Analogue Scale was used to assess the post operative pain scores. The study results showed that the intervention group has significantly less post test pain than control group (p=0.022-0.001)

Faponle et.al., (2001) surveyed on post operative pain experience in the university college hospital ibadan, Nigeria. Study was conducted over a 6 months of period. 149 elective general surgical patients who were on admission for at least 72 hours after interview schedule using questionnaire at 24 and 48 hour post operatively. Data was analyzed by descriptive and inferential statistics. The results of the study shows that moderate to unbearable pain was reported in 68.7% of the patients at 24 hours and 51.7% of the patients by 48 hours.

III. STUDIES RELATED TO DYADIC SUPPORT

Nicole et.al (2000) conducted a randomized controlled trial of vicarious experience through peer support for 56 male first time cardiac surgery patients; impact on anxiety, self efficiency expectation and self reported activity. The purpose of the study was to determine whether the vicarious experience, in which former patients exemplify the active lives they are leading, reduces anxiety and increases self efficacy expectations and self reported activity in patients after cardiac surgery. It was used to evaluate an intervention that linked volunteers who had recovered from cardiac surgery in dyadic support with patients about to undergo similar surgery. Anxiety was measured 48 and 24 hours before surgery and again 5 days and 4 weeks after surgery. Only experimental group showed a significant decrease in anxiety during hospitalization. Dyadic support is a valuable tool for recovery from cardiac surgery that needs to be maintained and explored through nursing practice and research.

Kulik; James; Mahler & Heike (2000) observed the effects of preoperative room mate assignment on preoperative anxiety and recovery from coronary by-pass surgery among 27 male coronary-bypass patients. They were assigned preoperatively to a roommate who was either similar or dissimilar in surgical status (preoperative vs postoperative) and in his type of operation (cardiac vs noncardiac). Results indicated that patients before their operations, had a postoperative roommate were less anxious preoperatively, were more ambulatory postoperatively, and were discharged quickly than who, before their operations, had a preoperative roommate. The similarity or dissimilarity of the roommate's type of operation exerted no significant affects either separately or in interaction with the similarity of the roommate's surgical status

Thoits, et.al., (2000) examined effects of a support intervention on the physical and mental health of coronary artery bypass graft (CABG) surgery patients. Control participants (N = 90) received usual hospital care; experimental participants (N = 100) also received visits from a "similar other" while in the hospital. Similar others were Veterans Administration veterans who had CABG surgery previously and were trained in simple supportive techniques. Outcomes were assessed prior to surgery and at 1, 6, and 12 months afterwards. Further analysis showed that participants who talked often with fellow cardiac patients in the hospital experienced improvements in their physical and emotional well-being over time.

IV. STUDIES RELATED TO PRE OPERATIVE ANXIETY AND ITS INFLUENCE ON POST OPERATIVE PAIN

Kain et.al., (2006) conducted a study on Preoperative Anxiety, Postoperative Pain, and Behavioral Recovery in Young Children Undergoing Surgery. Findings from published studies suggest that the postoperative recovery process is more painful, slower, and more complicated in adult patients who had high levels of preoperative anxiety. 241 children aged 5 to 12 years were scheduled to undergo elective outpatient tonsillectomy and adenoidectomy.

Before surgery, child and parental situational anxiety and temperament were assessed. After surgery, all subjects were admitted to a research unit in which postoperative pain and analgesic consumption were assessed every 3 hours. After 24 hours in the hospital, children were discharged and followed up at home for the next 14 days. Pain management at home was standardized. Parental assessment of pain in their child showed that anxious children experienced significantly more pain both during the hospital stay and over the first 3 days at home. Preoperative anxiety in young children undergoing surgery is associated with a more painful postoperative recovery and a higher incidence of sleep and other problems.

Sjoling, et.al., (2006) studied the impact of preoperative information on state anxiety, post operative pain and satisfaction with pain management. The primary objective of this study was to test whether specific information given prior to surgery can help patients obtain better pain relief after total knee arthroplasty (TKA). Secondary objectives were to study the impact of preoperative information on state and trait anxiety, satisfaction with pain management and satisfaction with nursing care. The study was an intervention study with two groups of equal size (n=30). The intervention group was given specific information while the control group received routine information. Pain assessments were made preoperatively and every 3hrs for the first three postoperative days, using the visual analogue scale (VAS). The results of this study suggest that information does influence the experience of pain after surgery and related psychological factors. The postoperative pain declined more rapidly for patients in the treatment group, the degree of preoperative state anxiety was lower and they were more satisfied with the postoperative pain management.

Granot, et.al., (2005) conducted a study on the roles of Pain Catastrophizing and Anxiety in the Prediction of Postoperative Pain Intensity. The Pain Catastrophizing Scale and the State-Trait Anxiety Inventory were administered to 38 patients scheduled for elective abdominal surgery. The questionnaires were completed on the day of admission, a day before the operation. On day 1 and day 2 following the operation, perception of pain intensity at the

surgical wound was assessed by visual analog scale. The Pain Catastrophizing Scale and State-Trait Anxiety Inventory scores were significantly correlated with the postoperative pain scores.

Zeev, et.al., (2000) measured preoperative anxiety and post operative pain in women undergoing hysterectomy. To determine whether psychological variables such as preoperative anxiety can serve as predictors for the postoperative pain response. The study sample included 53 women who underwent elective abdominal hysterectomy. Two weeks prior to surgery, characteristics such as trait anxiety, coping style, and perceived stress were evaluated. Throughout the preoperative period, state anxiety, pain, as well as analgesic consumption were assessed at multiple time points. Path analysis demonstrated that there are both direct and indirect effects of preoperative state anxiety on postoperative pain. Preoperative state anxiety is a significant positive predictor of the immediate postoperative pain (beta=0.30), which, in turn, is a positive predictor of pain on the wards (beta=0.54). Pain on the ward, in turn, is predictive for pain at home (beta=0.30) the results of this study indicate that preoperative anxiety may have a critical role in the chain-of-events that controls the postoperative pain response.

V. STUDIES RELATED TO PRE-OPERATIVE ANXIETY AND ITS INTERVENTIONS.

Haleh et.al., (2006) examined the effect of hypnosis on preoperative anxiety. Subjects were randomized into 3 groups, a hypnosis group (*n* = 26) who received suggestions of well-being; an attention-control group (*n* = 26) who received attentive listening and support without any specific hypnotic suggestions and a "standard of care" control group (*n* = 24). Anxiety was measured pre- and post intervention as well as on entrance to the operating rooms. The patients in the hypnosis group were significantly less anxious post intervention as compared with patients in the attention-control group and the control group (31 ± 8 versus 37 ± 9 versus

41 ± 11) analysis of variance, *P* = 0.008). Moreover, on entrance to the operating rooms, the hypnosis group reported a significant decrease of 56% in their anxiety level whereas the attention-control group reported an increase of 10% in anxiety and the control group reported an increase of 47% in their anxiety (*P* = 0.001). In conclusion, it was found that hypnosis significantly alleviates preoperative anxiety. Future studies are indicated to examine the effects of preoperative hypnosis on postoperative outcomes.

Lee et. al (2006) studied the effect of music on pre surgical procedures anxiety levels of 113 Chinese patients produced striking results in a recent pre and post test quasi experimental study. The physiological parameters for both the control and intervention groups were reduced significantly during pre procedure period. More over only the intervention group was provided with self selected music had a remarkable reduction in reported anxiety levels. Recommendations were there fore made to administer self selected music to day surgery patient. Pre and post test measures of anxiety were under taken in the STAI. The results revealed that music significantly reduced the state anxiety level of intervention group.

Agarwal. A et.al., (2005) investigated the effects of acupressure on pre-operative anxiety and Bispectral index (BIS) values. Seventy-six adults, undergoing elective surgery, were randomly assigned to two equal groups. Group 1 (control) received acupressure at an inappropriate site and group 2 (acupressure) received acupressure at extra 1 point. The study was conducted during the pre-operative period and the duration of the study was 40 min (acupressure was applied for 10 min and thereafter patients were observed for another 30 min). Anxiety was recorded on a visual stress scale (VSS) at the start of the study and thereafter at 10 and 40 min. BIS was recorded at 0, 2, 5, 10, 12, 15, 30 and 40 min. The VSS decreased in both groups following pressure application for 10 min: median VSS (interquartile range) were 5 (1) vs. 8 (1) in the acupressure and 7 (0) vs. 8 (1) in the control groups ($p < 0.001$). Both pre-operative anxiety and BIS decreased significantly during acupressure

application at extra 1 point ($p < 0.001$). Acupressure is effective in decreasing both pre-operative anxiety and BIS.

Danino et.al., (2005) carried out a randomized trial on the effect of information by images on patient's anxiety and comprehension before aesthetic surgery on abdominal wall among 60 patients. The pre operative anxiety and post operative anxiety were assessed with the STAI scale. Patients who watched the CD-Rom were significantly less anxious before aesthetic surgery than those who did not (Mean STAI-45 for the "image group" [38.2-46.3] and 55 for the "non image group" [49.9-63.8]

Bondy.et.al., (2000) evaluated the effects that materials mailed to the home relating to anesthetic-focused patient education may have effect on preoperative patient anxiety. Patients scheduled for a total hip arthroplasty or for a total knee arthroplasty were screened via telephone for inclusion in a prospective, randomized study. Subjects were randomly assigned to either the intervention group and received two pamphlets and a video describing general and regional anesthesia or to the usual care group. All subjects were mailed a preoperative demographic questionnaire and a State Trait Anxiety Inventory (STAI), Questionnaires were completed at least 96 hours prior to admission and again preoperative on the day of surgery. Of 236 patients screened, 26 had no access to a VCR, 6 were hearing or visually impaired, and 4 declined participation. Of 200 subjects randomized, 134 completed both sets of questionnaires and thus form the basis of this report. A statistically significant difference between the subjects who received the video and pamphlets and the usual care subjects was detected with respect to change in STAI-assessed anxiety from baseline to immediately prior to surgery ($P = .035$). The intervention subjects experienced a smaller mean increase in anxiety. Increase in preoperative anxiety is diminished when additional anesthesia information in printed and video format is made available.

Koesis (2000) conducted a study to identify the role of information provided by nurses in addition to doctor's information. A survey using self designed questionnaire was administered to 60 patients' pre and post operatively at the department of urology in a hospital in Hungary. The intervention group received special pre operative preparation by nurses, while control group underwent the usual and traditional pre operative practices. Galvanic Skin Reflex Meter was used to measure the anxiety level of the two groups. The study found that the patients in the intervention group had received specific preparation by nurses had sufficient information and exhibited lower anxiety levels. Findings seem to support a strong case for the importance of consciously planned pre operative information by nurses.

CHAPTER – III

METHODOLOGY

Methodology is a significant part of any study, which enables the investigator, to project a blue print of the research undertaken. This chapter deals with methodology adopted in the study. It includes the research approach, research design, variables, setting, population, sample, sample size, sampling technique, sampling criteria, development of the tool, scoring, content validity, reliability, pilot study, data collection procedure, plan for data analysis and ethical issues.

This study was undertaken to assess the effectiveness of dyadic support on pre operative anxiety and post operative pain among primi cesarean mothers at Sahrudaya Hospital at Alleppey, Kerala.

RESEARCH APPROACH

According to Polit Hungler (2008) evaluative research is in an extremely applied form of research and involves finding out how well a programme, practice or policy is working. Its goal is to assess or evaluate the success of the programme. An evaluative research is generally applied where the primary objective is to determine the extent to which a given procedure meets the desired results.

RESEARCH DESIGN

A research designs helps the investigator in the selection of subjects, manipulation of independent variables and observation of the type of statistical method to be used to interpret on the data. The selection of design upon the purpose of study, research approach and variables to

be studied. The research design used in the study was Quasi Experimental Research Design, non equivalent control group pre test – post test design.

In this study the effectiveness of the dyadic support was assessed using Modified Amsterdam Pre-operative Anxiety Information Scale and Simple Descriptive Pain Intensity Scale. The characteristic of randomization was missing, making the study a quasi experimental study.

RESEARCH DESIGN NOTATION

Group	*Pre Test*	*Intervention*	*Post Test*
E	O1	X	O2 O3
C	04	–	O5 O6

E : Experimental group

C : Control group

O_1, O_4 : Pretest anxiety of experimental and control group

O_2, O_5 : Posttest anxiety of the experimental and control group

O_3 : Posttest pain of experimental group

O_6 : Posttest pain of the control group

X : Dyadic support

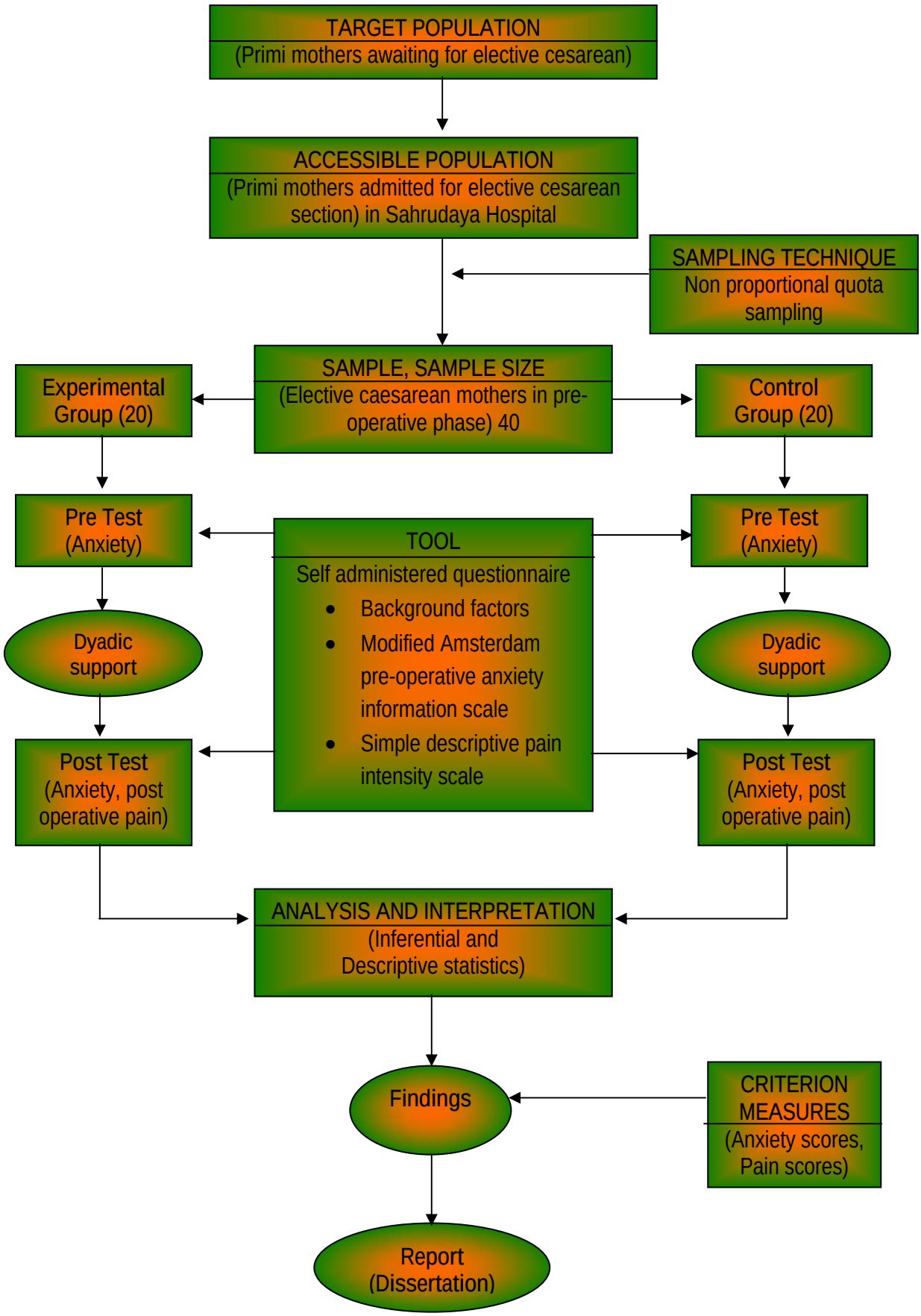


Fig. 2: DIAGRAMMATIC REPRESENTATION OF RESEARCH DESIGN

VARIABLES

Independent variable : Dyadic support given by 5th post operative mother.

Dependent variable : Anxiety, pain

Attribute variable : It included the background factors selected which could influence the pre-operative anxiety and post operative pain. The variables selected for the purpose of the study includes age, level of education, family income, previous hospitalization, previous surgeries, nature of demands in your job, cared for post operative patients, nature of sleep for the past one month, your ability to tolerate pain, health problem during antenatal period, Was your husband present with you, which of the following is relevant to you, time of conception after marriage, members present with you to help you, hours of sleep per day, time elapsed for after the decision for L.S.C.S, number of antenatal visits to this hospital

RESEARCH SETTING

Research settings are the specific places where data collection takes place. The setting was selected based on feasibility of conducting the study, availability of the subject, co-operation from the primi mothers and authorities of the hospital. The setting for the study was Sahrudaya Hospital Alleppey, Kerala .

POPULATION

Target population is the population that the investigator wishes to study and make generalization. The target population in the study was primi mothers who were admitted for elective cesarean section.

Accessible population refers to the aggregate of cases which confirmed to the designated criteria and accessible to the investigator. The accessible populations in the study were the primi mothers who were admitted for elective cesarean section at the time of data collection at Sahrudaya Hospital, Alleppey, Kerala.

SAMPLE AND SAMPLE SIZE

The sample size were 40 primi cesarean mothers who were admitted for elective cesarean section at Sahrudaya Hospital.

SAMPLING TECHNIQUE

In this study non proportional quota sampling technique was used to select subject by using sampling criteria.

SAMPLE SELECTION CRITERIA

Inclusion criteria

- Primi mothers who were admitted for elective cesarean section
- Primi mothers between the age group of 20- 30 years
- Mothers who are willing to participate

Exclusion criteria

- Mothers who are not willing to participate
- Primi mothers posted for emergency cesarean section
- Mothers who are having post operative complications
- Prim mothers with complications

Criteria for dyadic mother

- Mothers with a satisfaction score of 27& above as screened by the screening form.
- Primi mothers who underwent elective cesarean section.
- Singleton mothers
- Post operative mothers with successful recovery
- Mothers who are in 5th post operative day.

DESCRIPTION OF THE TOOL

The tool used for the data collection was self administered questionnaire developed by the investigator, comprising of three parts

Part – 1: Background factors

Part – 2: Modified Amsterdam Pre-operative Anxiety Information Scale (APAIS)

Part – 3: Simple Descriptive Pain Intensity Scale

Part – 1: Background factors: It contained items seeking information regarding background factors of the primi cesarean mothers like age, level of education, family income, nature of demand in your job, previous hospitalization, previous surgeries, care given to post operative patients, nature of sleep, sharing of problems, ability to tolerate pain, health problems, presence of husband during antenatal period, time of conception and your husbands presence at present.

Part – 2: Modified Amsterdam Pre-operative Anxiety Information Scale (APAIS): Preoperative anxiety was assessed using the Modified Amsterdam Preoperative Anxiety Information Scale.

Part -3: Simple Descriptive Pain Intensity Scale: The 0 - 10 point scale was used to assess the level of pain experienced after cesarean section.

VALIDITY OF THE TOOL

The tool was submitted to the seven experts in the field of nursing and medicine to establish the content validity. Based on the experts' suggestions the investigator finalized the tool for the original study. Few items were modified and included in the study.

RELIABILITY OF THE TOOL

Reliability of APAIS was established by test retest method and Inter-rater method was used to establish reliability of Simple Descriptive pain Intensity Scale. The structured questionnaire was administered to 7 primi cesarean mothers. Reliability was computed by Karl Pearson's reliability coefficient method. The reliability coefficient for Modified Amsterdam Pre-operative Anxiety Information scale and simple descriptive pain intensity scale were r= 0.97 and r=0.90 respectively, the tool found to be highly reliable for the study.

PREPARATION FOR DYADIC SUPPORT

The researcher selected the dyadic mothers according to the score of satisfaction criteria 27 & above. The mothers who had already undergone the cesarean section were prepared to interact with the mother who is newly admitted in the Sahrudaya Hospital for elective cesarean section regarding particular aspects were clearly explained in the Appendix (VI). Dyadic support was given 24 hours before the surgery.

PILOT STUDY

Formal permission was obtained from the authorities form the ethical committee and subjects prior to the pilot study.

The pilot study was conducted for 2 weeks among 7 primi cesarean mothers. The results of the pilot study found that the time required for the assessing the anxiety of the patients was an average 20 minutes. The pilot study found that the present study was feasible to conduct.

DATA COLLECTION PROCEDURE

The data collection was done for a period of one month. The formal permission to conduct the study was obtained from the administrator of the Sahrudaya hospital Alleppey. The primi mothers were selected on the basis of selection criteria.

A list of primi mothers who were admitted in the antenatal ward for cesarean section was selected and the investigator established a good rapport with the patients. The purpose of the study was explained and got consent sign from the primi mothers.

Questionnaire was administered to the primi mothers to assess the preoperative anxiety. The dyadic support was given by those mothers who had recovered from cesarean section. The post operative pain perception was assessed by simple descriptive pain intensity scale used at 12th hour, 20th hour, 28th hour and 36th hour after the surgery. The period of data collection was from 1. 10. 09 to 1. 11. 09.

DATA ANALYSIS PLAN

The data collected from the subjects were edited, compared and correlated using both descriptive and inferential statistics on the basis of objectives and hypothesis of the study. The analysis was done using the statistical package SPSS version 10.

- Frequency, percentage distribution, chi square values were used to describe the background factors of primi cesarean mothers.
- The association between the mean difference of preoperative anxiety and post operative pain were analyzed using "'t' test.
- The correlation between the preoperative anxiety and postoperative pain were analyzed by Karl Pearson's coefficient of correlation.
- The association between the preoperative anxiety and selected factors were analyzed by linear regression.
- The association between the postoperative pain and selected factors were analyzed by linear regression.

ETHICAL ISSUES

The research committee approved the research problem and objectives. Informed consent was obtained from the primi cesarean mothers orally. The purpose of the study was explained. The individual participants had the right to withdraw from the study without assigning any reason to the investigator. Thus ethical considerations were ensured in the study.

CHAPTER – IV

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the analysis and interpretation of data collected from 40 patients who were admitted for elective caesarean section at Sahrudaya Hospital, Alleppey. The results were analyzed using descriptive and inferential statistics based on the objectives of the study. The SPSS version 10 was used in this study. A probability of < 0.05 was considered to be significant.

OBJECTIVES OF THE STUDY

1. To assess the pre-operative anxiety among primi cesarean mothers before and after dyadic support in experimental group.
2. To compare the mean difference in pre-operative anxiety among primi cesarean mothers in experimental and control group.
3. To compare the post operative pain among primi cesarean mothers in experimental and control group.
4. To correlate between the mean difference of pre-operative anxiety and post operative pain in experimental and control group.
5. To test the association between the mean difference in pre-operative anxiety and selected factors among primi cesarean mothers in experimental group.
6. To test the association between post operative pain and selected factors among primi cesarean mothers in experimental group.

The findings of the study are organized and presented under following section.

Section – I : Data on background factors of primi cesarean mothers in experimental and control group.

Section – II : Data on pre-operative anxiety among primi cesarean mothers before and after dyadic support in experimental and control group.

Section – III : Data on post operative pain among primi cesarean mothers in experimental and control group.

Section – IV : Data on correlation between the mean difference in pre-operative anxiety and post operative pain in experimental and control group.

Section – V : Data on association between the mean difference in pre-operative anxiety and selected factors among primi cesarean mothers in experimental group.

Section – VI : Data on association between the post operative pain and selected factors among primi cesarean mothers in experimental group.

SECTION – I: DATA ON BACKGROUND FACTORS OF PRIMI CESAREAN MOTHERS IN EXPERIMENTAL AND CONTROL GROUP.

TABLE -1

Frequency, percentage and chi square distribution of background factors in experimental and control group

Selected Factors	*Experimental (n = 20)*		*Control (n = 20)*		χ^2	*Sig. P*
	Freq.	*%*	*Freq.*	*%*		
Level of education					Not applicable	--
a. Less than high school	--	--	--	--		
b. High school graduate	--	--	--	--		
c. Post high school	20	100	20	100		
Family income					Not applicable	--
a. above poverty line	20	100	20	100		
b. below poverty line	--	--	--	--		
Nature of demands in job					3.584	0.058 (NS)
a. Physically demanding	7	35	2	10		
b. Psychologically demanding	--	--	--	--		
c. Physically and psychologically demanding	13	65	18	90		
d. Comfortable and no hard demand	--	--	--	--		
Care for post operative patients					0.100	0.752 (NS)
a. Yes	10	50	9	45		
b. No	10	50	11	55		

Selected Factors	*Experimental (n = 20)*		*Control (n = 20)*		χ^2	*Sig. P*
	Freq.	*%*	*Freq.*	*%*		
Which of the following are relevant to you						
a. share with husband	20	100	20	100	Not	
b. share with parents	--	--	--	--	applica	--
c. share with friends	--	--	--	--	ble	
d. pray or do meditation	--	--	--	--		
e. Hear my pains alone and cry.	--	--	--	--		
Presence of husband						
a. Yes	16	80	20	100	4.444	0.035
b. No	4	20	--	--		(S)
Time of conception						
a. Within a year	15	75	11	55	1.758	0.185
b. More than a year	5	25	9	45		(NS)
Members present with you						
a. Mother	19	95	20	100		
b. husband	1	5	--	--	1.026	0.311
c. In laws	--	--	--	--		(NS)
d. Friends	--	--	--	--		
Time elapsed after the decision for L.S.C.S						
a. < 24 hours	--	--	1	5		
b. 24-48 hours	20	100	18	90	2.105	0.349 (NS)
c. > 48 hours	--	--	1	5		

Selected Factors	*Experimental (n = 20)*		*Control (n = 20)*		χ^2	*Sig. P*
	Freq.	*%*	*Freq.*	*%*		
Hours of sleep per day						
a. < 8 hours	--	--	--	--	0.100	0.752 (NS)
b. 8 hours	10	50	11	55		
c. > 8 hours	10	50	9	45		
Number of antenatal visits						
a. < 3	--	--	--	--	Not applicable	--
b. 3 and more	20	100	20	100		

S- Significant, NS- Non significant

Table 1 explains the background factors of primi cesarean mothers such as level of education, family income, nature of demands in job, seen or cared for the post operative patients, which of the following are relevant to you, presence of husband during antenatal period, time of conception after marriage, members present with you, time elapsed after the decision for L.S.C.S, hours of sleep per day and number of antenatal visits.

Regarding the level of education, all primi cesarean mothers 20(100%) were post high school graduate in experimental and control group.

Regarding the family income, all primi cesarean mothers 20(100%) were above poverty line in experimental and control group.

Regarding nature of demands in job, majority of primi cesarean mothers 13 (65%), 18 (90%) reported about physical and psychological demand in experimental group and control

group respectively. The obtained chi square χ^2 = 3.584 (P = 0.058) was not significant. Therefore the group was comparable with regard to nature of demands in job.

Regarding the care given for post operative patients, majority of primi cesarean mothers in experimental group 10 (50%) and control group 11 (55%) did not care for the post operative patients. The obtained chi square χ^2 = 0.100 (P = 0.0752) was not significant. Therefore the group was comparable with regard to care given for post operative patients.

Regarding which of the following are relevant, all the primi cesarean mothers 20(100%) shared their problems with husband in experimental and control group.

Regarding the presence of husband throughout the antenatal period, the majority had the presence of husband 16 (80%), 20 (100%) in experimental and control group respectively. The obtained chi square χ^2 = 4.44 (P = 0.035) was not significant. Therefore the group was comparable with regard to presence of husband during antenatal period.

Regarding the time of conception after marriage, the majority had within a year in experimental group 15 (75%), in control group 11 (55%). The obtained chi square χ^2 = 1.758 (P = 0.185) was not significant. Therefore the group was comparable with regard to time of conception after marriage.

Regarding the members present to help among primi cesarean mothers, the majority had mothers with them in experimental group 19 (95%) and in control group 20 (100%). The obtained chi square χ^2 = 1.026 (P = 0.311) was not significant. Therefore the group was comparable with regard to the members present with you at present to help you.

Regarding the time elapsed after the decision for L.S.C.S. among primi cesarean mothers, majority were under 24-48 hours of time in experimental group 20 (100%), in control

group 18 (90%).The obtained chi square χ^2 = 2.105 (P = 0.349) was not significant. Therefore the group was comparable with regard to the time elapsed after the decision for L.S.C.S.

Regarding the hours of sleep per day among primi cesarean mothers, was equally distributed under 8 hours of sleep and > 8 hours of sleep 10 (50%) in experimental group and majority 11 (55%) reported under 8 hours of sleep in control group. The obtained chi square value χ^2 = 0.100 (P = 0.751) was not significant. Therefore the group was comparable with regard to hours of sleep per day.

Regarding the number of antenatal visits all the primi cesarean mothers 20(100%) had more than 3 visits in the experimental and control group.

It was inferred that majority of primi cesarean mothers in experimental group were post high school graduate, above poverty line, had physical and psychological demands, did not care for post operative patients, had presence of husband, conceived with in a year, had mothers to stay with, 24-48 hours of time elapsed after the decision of L.S.C.S, had >8 hours of sleep and >3 times of antenatal visits.

It was inferred that majority of primi cesarean mothers in control group were post high school graduate, above poverty line, had physical and psychological demands, did not care for post operative patients, had presence of husband, conceived with in a year, had mothers to stay with, 24-48 hours of time elapsed after the decision of L.S.C.S, had >8 hours of sleep and >3 times of antenatal visits.

Figure-3 reveals the frequency and percentage distribution of primi cesarean mothers regarding age in years.

Majority of mothers were in the age group of 20-23 years in experimental group 9(45%) and in control group majority were in 24-26 years 10 (50%). The obtained chi square χ^2 = 0.965 (p< 0.05) was not significant. There fore the primi cesarean mothers in the experimental and control group were comparable.

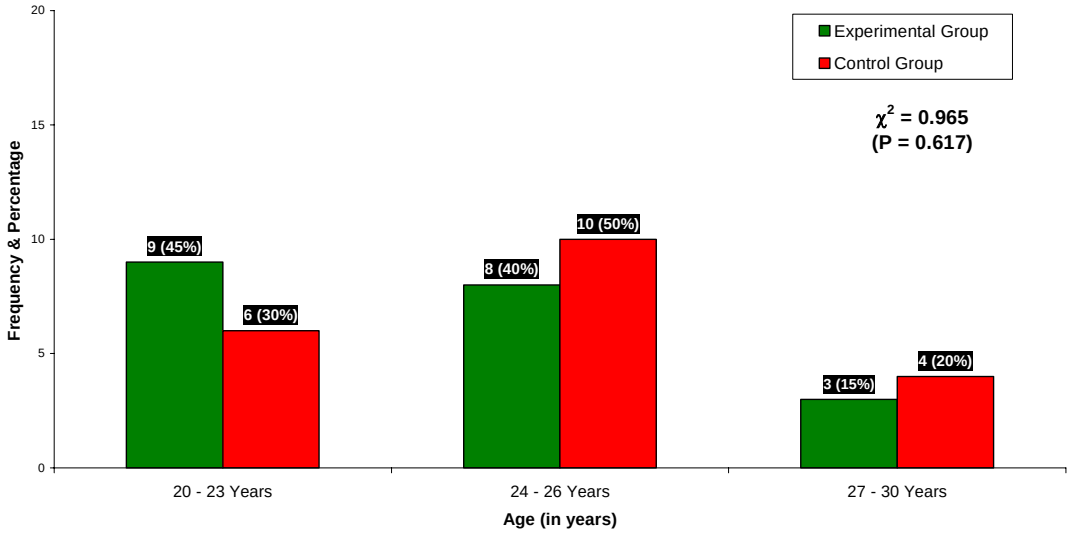


Figure -3: Frequency and percentage distribution of primi cesarean mothers regarding age in years.

Figure-4 reveals the frequency and percentage distribution of primi cesarean mothers regarding previous hospitalization.

Majority of mothers 17 (85%), 12 (60%) in experimental and control group respectively were not hospitalized previously. The obtained chi square χ^2 = 3.135 ($p < 0.05$) was not significant. Therefore the primi cesarean mothers in the experimental and control group were comparable

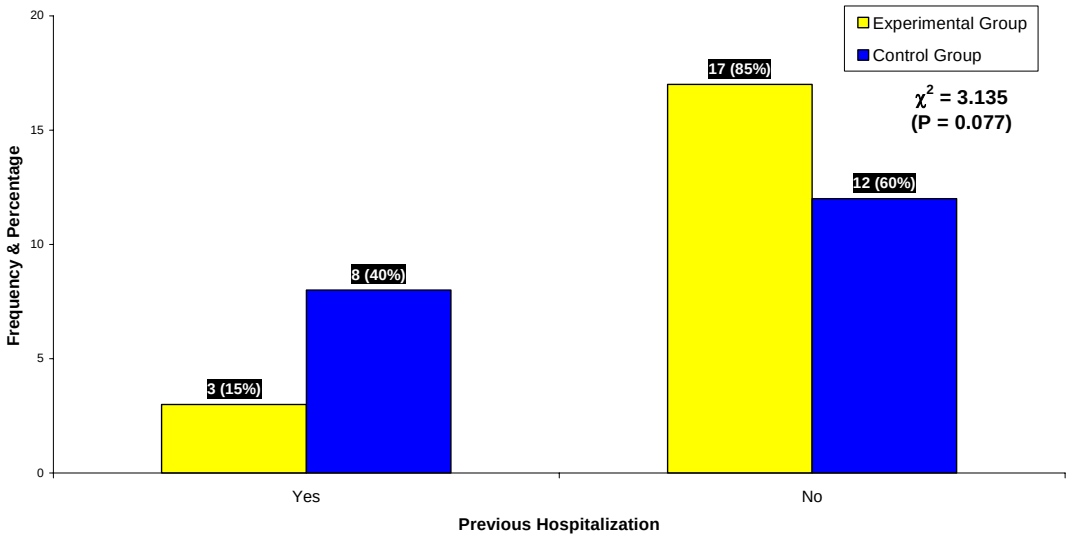


Figure -4: Frequency and percentage distribution of primi cesarean mothers regarding previous hospitalization.

Figure-5 reveals the frequency and percentage distribution of primi cesarean mothers regarding previous surgeries.

Majority of mothers 20 (100%), 19 (90%) did not had previous surgeries in the experimental and control group respectively. The obtained chi square $\chi^2 = 1.026$ ($p < 0.05$) was not significant. Therefore the primi cesarean mothers in the experimental and control group were comparable.

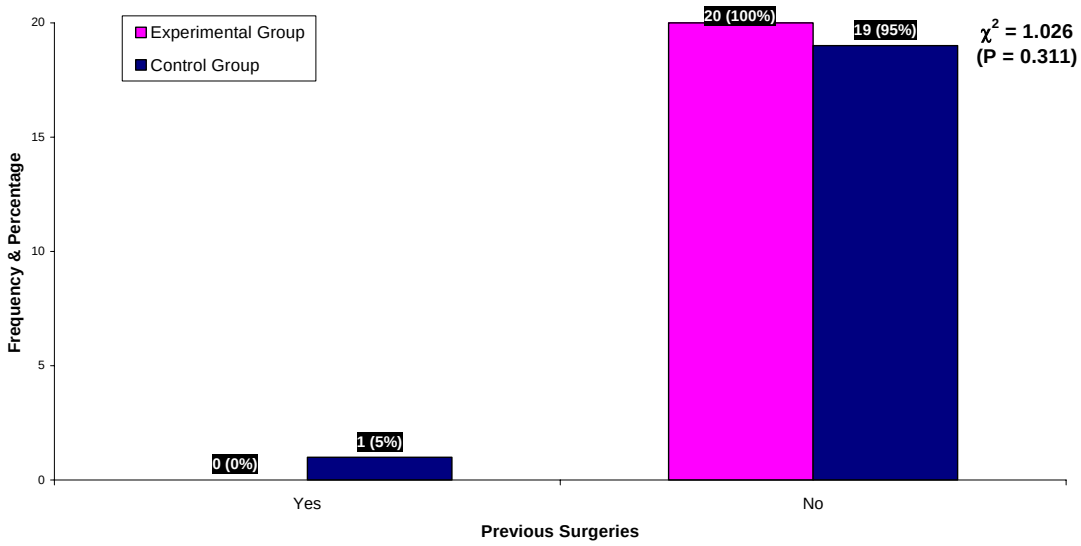


Figure -5: Frequency and percentage distribution of primi cesarean mothers regarding previous surgeries.

Figure-6 reveals the frequency and percentage distribution of primi cesarean mothers regarding nature of sleep in the past one month.

Majority of mothers 13 (65%), 19(95%) in experimental and control group respectively had peaceful sleep with few disturbances. The obtained chi square $\chi^2 = 5.625$ ($p < 0.05$) was not significant. Therefore the primi cesarean mothers in the experimental and control group were comparable.

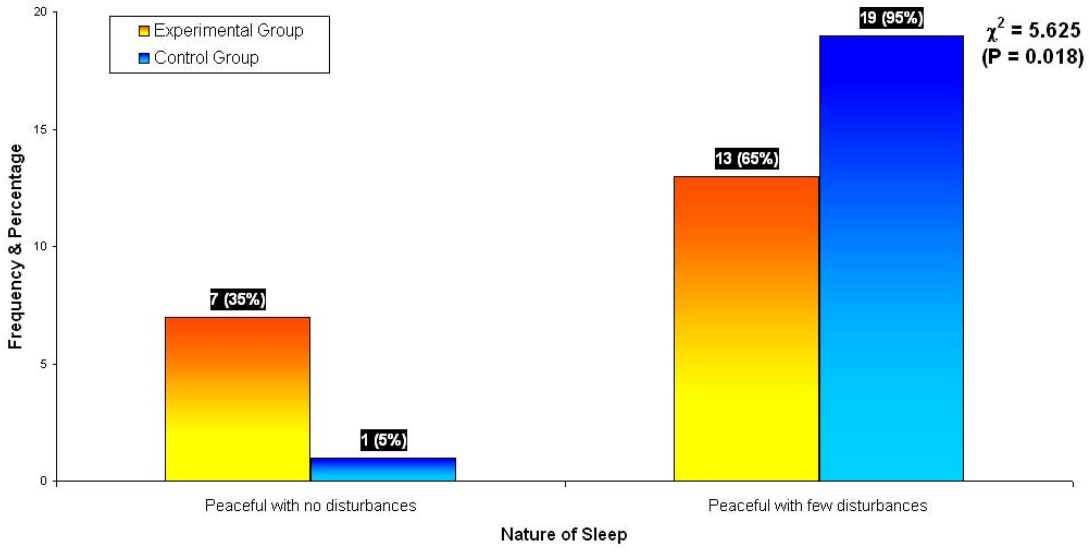


Figure -6: Frequency and percentage distribution of primi cesarean mothers regarding nature of sleep in the past one month.

Figure-7 reveals the frequency and percentage distribution of primi cesarean mothers regarding the ability to tolerate the pain.

Majority of mothers 15 (75%), 16 (80%) had average ability to tolerate pain in experimental and control group respectively. The obtained chi square $\chi^2 = 1.318$ ($p < 0.05$) was not significant. Therefore the primi cesarean mothers in the experimental and control group were comparable.

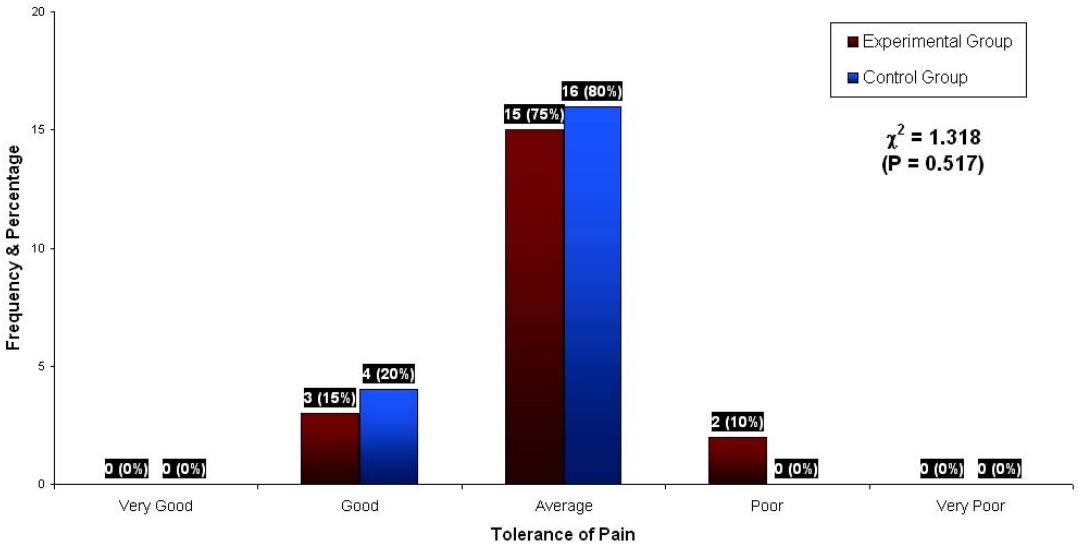


Figure -7: frequency and percentage distribution of primi cesarean mothers regarding your ability to tolerate pain.

Figure-8 reveals the frequency and percentage distribution of primi cesarean mothers regarding the health problems during antenatal period.

Majority of mothers 14 (70%), 11(55%) in experimental and control group respectively had physical and psychological problems. The obtained chi square $\chi^2 = 2.558$ ($p < 0.05$) was not significant. Therefore the primi cesarean mothers in the experimental and control group were comparable.

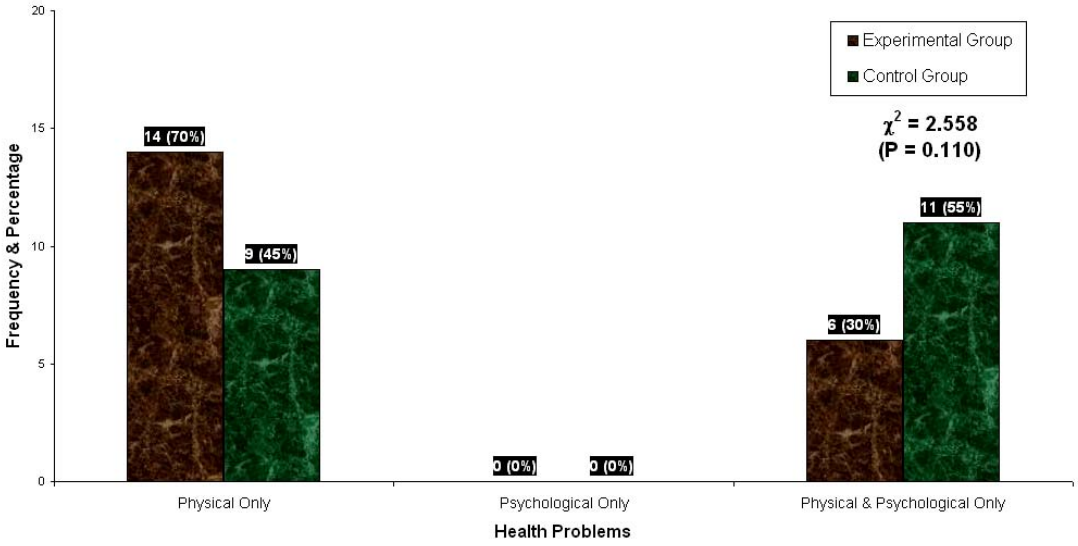


Figure -8: frequency and percentage distribution of primi cesarean mothers regarding health problems during antenatal period.

SECTION – II: DATA ON PRE-OPERATIVE ANXIETY AMONG PRIMI CESAREAN MOTHERS BEFORE AND AFTER DYADIC SUPPORT IN EXPERIMENTAL AND CONTROL GROUP.

For the purpose of the study, the following null hypothesis was stated.

H_{01} - There will be no significant difference between the preoperative anxiety before and after dyadic support among primi cesarean mothers in experimental group.

H_{02} - The mean difference in the pre-operative anxiety among primi cesarean mothers between experimental and control group will be equal.

TABLE – 2

Mean , standard deviation, mean difference and "t" value of pre-operative anxiety among primi cesarean mothers before and after dyadic support in experimental group

(N = 20)

Test	*Pre operative anxiety of Experimental Group*			
	Mean	*SD*	*Mean Difference*	*"t" value P*
Pre Test	31.10	2.40	25.25	42.246 (P < 0.05)
Post Test	5.85	1.136		

Table 2 reveals the Mean, SD, Mean difference and 't' value on pre-operative anxiety among primi cesarean mothers before and after dyadic support in experimental group.

The posttest pre-operative anxiety M= 5.85 (1.13) was less than the pre test pre-operative anxiety M=31.1 (2.40).

The obtained 't' value, t= 42.25 9 (p=0.001) was highly significant. Therefore the null hypothesis H_{01}, was significantly rejected.

It was inferred that the post test pre-operative anxiety significantly reduced after the dyadic support.

TABLE – 3

Frequency, mean, standard deviation, mean difference and 't' value on mean difference of preoperative anxiety in experimental and control group.

(N = 40)

Groups	*Mean difference of pre-operative anxiety*			
	Mean Difference	*SD*	*Difference of mean difference*	*"t" value P*
Experimental Group (N=20)	25.25	2.67	24.25	26.27 (P < 0.05)
Control Group (N=20)	1.00	3.14		

Table -3, reveals the Mean difference, SD, difference of mean difference and 't' value on pre-operative anxiety among primi cesarean mothers in experimental and control group.

The mean difference of pre-operative anxiety in experimental group M= 25.25 (2.67) was more than the mean difference of pre-operative anxiety in control group M=1.0 (3.14).

The obtained 't' value, t= 26.27 9 (p=0.001) was highly significant. Therefore the null hypothesis H_{02}, was significantly rejected.

It was inferred that the mean difference of pre-operative anxiety among primi cesarean mothers in experimental group were high in comparison with control group.

SECTION – III: DATA ON THE POST OPERATIVE PAIN AMONG PRIMI CESAREAN MOTHERS IN EXPERIMENTAL AND CONTROL GROUP.

For the purpose of the study, the following null hypothesis was stated.

H_{03} - There will be no significant difference in post operative pain among primi cesarean mothers in experimental and control group.

TABLE – 4

Frequency, mean, standard deviation, mean difference and "t" value of post operative pain in experimental and control group

(N = 40)

Groups	*Post Operative pain*			
	Mean	*SD*	*Mean Difference*	*"t" value P*
Experimental Group (N=20)	7.23	0.722	1.405	6.77 (P <0.05)
Control Group (N=20)	8.63	0.582		

Table 4, reveals the mean, SD, mean difference and 't' value on the post operative pain among primi cesarean mothers in experimental and control group.

The post operative pain in experimental group M=7.23 (0.722) was less than the control group M=8.63 (0.582).

The obtained 't' value, t= 6.77 (p=0.05) was significant and therefore the null hypothesis H_{03}, was rejected.

It was inferred that the post operative pain in the experimental group was significantly reduced after the dyadic support.

SECTION – IV: DATA ON THE CORRELATION BETWEEN THE MEAN DIFFERENCE IN PRE OPERATIVE ANXIETY AND POST OPERATIVE PAIN.

For the purpose of the study, the following null hypothesis was selected.

H_{04} - There will be no significant correlation between the mean difference in pre-operative anxiety and post operative pain perception among primi cesarean mothers in experimental group.

H_{05} - There will be no significant correlation between the mean difference in pre-operative anxiety and post operative pain perception among primi cesarean mothers in control group

TABLE – 5

Mean, standard deviation, and "r" value regarding mean difference in pre-operative anxiety and post operative pain in experimental group.

(N = 20)

Experimental Group	*Max Score*	*Mean*	*SD*	*"r" Value*
Pre-operative anxiety	34	25.25	2.67	-0.065
Post operative pain	9	7.22	0.72	(p=0.78)

Table-5 reveals mean, SD, and "r" value regarding pre operative anxiety and post operative pain in experimental group.

The obtained co-efficient of correlation r = -0.065 was low negative. There was negative correlation between pre-operative anxiety and post operative pain in experimental group. However, it was not statistically significant (P> 0.05). Therefore, the null hypothesis was accepted.

It was inferred that there was no significant correlation between pre-operative anxiety and post operative pain in experimental group.

TABLE – 6

Mean, standard deviation, and "r" value regarding mean difference in pre-operative anxiety and post operative pain in control group

(N = 20)

Control Group	*Max Score*	*Mean*	*SD*	*"r" Value*
Pre-operative anxiety	34	1.00	3.14	0.34
Post operative pain	9	8.61	0.57	(p=0.141)

Table 6, reveals mean, SD, and "r" value regarding pre operative anxiety and post operative pain among primi cesarean mothers in control group.

The obtained co-efficient of correlation r = 0.34 was positive. There was positive correlation between pre-operative anxiety and post operative pain in control group. How ever, it was not statistically significant (p> 0.05).

It was inferred that there was no significant correlation between preoperative anxiety and post operative pain in control group. Therefore, the null hypothesis was accepted.

SECTION – V: DATA ON THE ASSOCIATION BETWEEN THE MEAN DIFFERENCE IN PRE-OPERATIVE ANXIETY AND SELECTED FACTORS AMONG PRIMI CESAREAN MOTHERS IN EXPERIMENTAL GROUP.

For the purpose of the study, the following null hypothesis was stated.

H_{06} : There will be no significant association between the mean difference in pre-operative anxiety and selected factors among primi cesarean mothers in experimental group.

TABLE – 7

Linear regression on the mean difference in pre-operative anxiety and selected factors in experimental group

(N = 20)

Selected factors	*Standardized Co-efficient*	*'t' Value*	*Sig. p*
Age in years	-0.188	-0.582	0.576 (NS)
Nature of demands in the job	0.289	0.710	0.498 (NS)
Previous hospitalization	0.190	0.833	0.429 (NS)
Ever seen or cared for post operative patients	0.115	0.470	0.651 (NS)
Nature of sleep	0.186	-0.728	0.487 (NS)
Rating one's ability to tolerate pain	0.400	1.606	0.147 (NS)
Health problem during antenatal period	0.454	1.937	0.089 (NS)
Presence of husband	-0.367	-1.145	0.285 (NS)
Time of conception after marriage	0.057	0.200	0.847 (NS)
Members present for help	-0.434	-1.804	0.109 (NS)
Hours of sleep per day	-0.105	-0.406	0.695 (NS)

S- SignSificant , NS- not signifciant

Table - 7, reveals the association between the mean difference in pre- operative anxiety and selected factors among primi cesarean mothers.

None of the selected factors of primi cesarean mothers such as age t = -0.582 (P = 0.57); nature of demands in job t = 0.710 (P = 0.49); previous hospitalization t = 0.833 (P = 0.42); ever seen or cared for post operative patients t = 0.470 (P = 0.65); nature of sleep t = -0.728 (P = 0.48); ability to tolerate pain t = 1.60 (P = 0.147); health problems during antenatal period t = 1.93 (P = 0.08); presence of husband t = -1.14 (P = 0.28); time of conception t = 0.20 (P = 0.84); members present for help t = -1.80 (P = 0.109); hours of sleep per day t = -0.40 (P = 0.695) were not significantly (P > 0.05) associated with pre-operative anxiety among primi cesarean mothers.

Therefore the dyadic support independently reduced the pre-operative anxiety among primi cesarean mothers in experimental group.

SECTION – VI: DATA ON THE ASSOCIATION BETWEEN THE POST OPERATIVE PAIN AND SELECTED FACTORS AMONG PRIMI CESAREAN MOTHERS IN EXPERIMENTAL GROUP.

For the purpose of the study, the following null hypothesis was stated.

H_{07} - There will be no significant association between the post operative pain and the selected factors among primi cesarean mothers in experimental.

TABLE – 8

Linear regression regarding the association between post operative pain and selected factors in experimental group

(N = 20)

Selected background factors	*Standardized Co-efficient*	*'t' Value*	*Sig. p*
Age in years	-0.085	-0.221	0.831 (NS)
Nature of demands in the job	0.624	1.275	0.238 (NS)
Previous hospitalization	0.126	0.456	0.658 (NS)
Ever seen or cared for post operative patients	0.459	1.560	0.157 (NS)
Nature of sleep	0.145	0.474	0.649 (NS)
Rating one's ability to tolerate pain	-0.052	-0.174	0.866 (NS)
Health problem during antenatal period	-0.407	-1.448	0.186 (NS)
Presence of husband	0.067	0.173	0.867 (NS)
Time of conception after marriage	0.012	0.036	0.972 (NS)
Members present for help	-0.428	-1.467	0.181 (NS)
Hours of sleep per day	0.390	0.258	0.244 (NS)

S - Significant, NS - Not sifnificant

Table 8, reveals the association between the post operative pain and selected factors among primi cesarean mothers in experimental group.

The obtained 't' values regarding selected background factors of primi cesarean mothers such as age in years t = -0.221 (P = 0.831); nature of demands in your job t = 1.275 (P = 2.38); previous hospitalization t = 0.456 (P = 0.658); have you seen or cared for post operative patients t = 1.560 (P = 0.157); nature of sleep for the past one month t = 0.474 (P = 0.649); how do you rate your ability to tolerate pain t = -0.174 (P = 0.866); health problems during antenatal period t = -1.448 (P = 0.186) was your husband present with you t =0.173 (P = 0.867); time of conception t = 0.36 (P = 0.972); members present with you to help you t = -1.467 (P = 0.181); hours of sleep per day t = 0.258 (P = 0.244) were not significantly (P > 0.05) associated with post operative pain among primi cesarean mothers. There fore the post operative pain was independent of these selected factors.

It is inferred that there was no significant association between post operative pain and selected factors in experimental group.

CHAPTER – V

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

The essence of any research project lies in reporting the findings. This present study includes conclusions drawn from the findings, recommendations, limitations of the study, suggestions for further studies and nursing education.

SUMMARY

The primary aim of the study was to evaluate the effectiveness of dyadic support on pre-operative anxiety and post operative pain among primi cesarean mothers.

The objectives of the study were,

1. To assess the pre-operative anxiety among primi cesarean mothers before and after dyadic support in experimental group.
2. To compare the mean difference in pre-operative anxiety among primi cesarean mothers in experimental and control group.
3. To compare the post operative pain among primi cesarean mothers in experimental and control group.
4. To correlate between the mean difference of pre-operative anxiety and post operative pain in experimental and control group.
5. To test the association between the mean difference in pre-operative anxiety and selected factors among primi cesarean mothers in experimental group.
6. To test the association between postoperative pain and selected factors among primi cesarean mothers in experimental group.

HYPOTHESES

The study attempted to examine the following research hypotheses

H_1 : There will be a significant difference between the preoperative anxiety before and after dyadic support among primi caesarean mothers in experimental group.

H_2 There will be a significant difference in the mean difference of pre-operative anxiety between primi cesarean mothers in experimental and control group.

H_3 There will be a significant difference in post operative pain between primi cesarean mothers in experimental and control group.

H_4 There will be a significant correlation between the mean difference in pre-operative anxiety and post operative pain among primi cesarean mothers in experimental and control group.

H_5 There will be a significant association between the mean difference in pre-operative anxiety and selected factors among primi cesarean mothers in experimental group.

H_6 There will be a significant association between the post operative pain and the selected factors among primi cesarean mothers in experimental group.

Literature review done for the present study was organized under the following headings: studies related to pre-operative anxiety, studies related to post operative pain, studies related to dyadic support, studies related to pre-operative anxiety and its influence on Post operative pain, studies related to pre-operative anxiety and its interventions.

Roy's Adaptation Model (1991) was adopted as conceptual framework. The present study was a Quasi Experimental study with pretest posttest non equivalent control group design. The sample size of the study was 40. Non proportional quota sampling technique was used for the selection of subjects. Dyadic support was the independent variable. Pre-operative anxiety and postoperative pain were the dependant variables.

Tools used in the study were Modified Amsterdam Pre-operative Anxiety Information Scale and Simple Descriptive Pain Intensity Scale. Self administered questionnaire was used to collect information on pre-operative anxiety and post operative pain among primi cesarean mothers.

Content validity of the tool was established with the help of 7 experts. The reliability of the tool was elicited by using test retest and inter-rater method. Reliability was computed by Karl Pearson's Reliability coefficient method. The reliability coefficient for Modified Amsterdam Pre-operative Anxiety Information scale and simple descriptive pain intensity scale were r = 0.97 and r = 0.90 respectively, the tool was found to be highly reliable for the study.

The pilot study was conducted for 2 weeks among 7 primi cesarean mothers at Sahrudaya Hospital Alleppey.

The main study was conducted in Sahrudaya Hospital at Alleppey district. Forty primi cesarean mothers were selected using non proportional quota sampling method among those who fulfilled the sample selection criteria. Initial rapport was developed and the objectives of the study were explained to them. Informed consent was obtained from the primi cesarean mothers. Pretest was done to assess the pre-operative anxiety among the experimental and control group and dyadic support was given to the experimental group. Post test was done for both the experimental and control group for pre-operative anxiety and post operative pain. The collected data was analyzed and interpreted based on the objectives using SPSS package (version 10) by descriptive and inferential statistics method. A probability of <0.05 was considered to be significant.

CHARACTERISTICS OF THE STUDY SAMPLES

Majority of the primi cesarean mothers in experimental group were under the age group of 20-23years 9 (45%),were post high school graduate 20 (100%),were above poverty

line 20 (100%), had jobs physically and psychologically demanding 13 (65%), were not previously hospitalized 12 (60%), did not have previous surgeries 20(100%) equally, cared for post operative patients 10(50%) and did not care for post operative patients 10 (50%), had peaceful with few disturbances 13 (65%), shared the problems with husband 20(100%), had average ability to tolerate pain 15 (75%), had physical problems 14 (70%), had the presence of husband 16 (80%), had their conception within a year of marriage 15 (75%), had mothers for help 19(95%), decided 24-48 hours for L.S.C.S 20 (100%) equally, had 8 hours of sleep 10 (50%) and > 8 hours 10 50%) of sleep, had more than 3 times of antenatal visits 20(100%).

Also in the control group majority of primi cesarean mothers were under age group of 24-26years 10 (50%),were post high school graduate 20 (100%), were above poverty line 20 (100%), had jobs physically and psychologically demanding 18 (90%), were not previously hospitalized 17 (85%), did not have previous surgeries 19 (95%), did not care for post operative patients 11 (55%), had peaceful with few disturbances 19 (95%), shared the problems with husband 20 (100%), had average ability to tolerate pain 16 (80%), had physical and psychological problems 11 (55%), had the presence of husband 20 (100%), had their conception within a year of marriage 11 (55%), had mothers for help 20 (100%), decided 24-48 hours for L.S.C.S 18 (90%), had 8 hours of sleep 11 (55%) , had more than 3 times of antenatal visits 20 (100%).

FINDINGS

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

Objective-1: To assess the pre-operative anxiety among primi mothers before and after dyadic support in experimental group.

- There was a significant reduction in the level of pre-operative anxiety after the dyadic support $t= 42.24$ ($p<0.05$) among primi cesarean mothers in experimental group.

Objective-2: To compare the mean difference in pre-operative anxiety among primi cesarean mothers in experimental and control group.

- There was a significant reduction in the pre-operative anxiety among primi cesarean mothers in experimental than the control group, t = 26.27 ($p < 0.05$).

Objective-3: To compare the post operative pain among primi cesarean mothers in experimental and control group.

- There was a significant reduction in the post operative pain among the primi cesarean mothers in experimental than the control group t = 6.77, ($P < 0.05$).

Objective-4: To correlate between the mean difference in the pre-operative anxiety and post operative pain in experimental and control group.

- There was low negative but non significant correlation between pre-operative anxiety and post operative pain r= -0.065 ($p>0.05$) among primi cesarean mothers in experimental group.
- There was positive but non significant correlation between pre-operative anxiety and post operative pain r = 0.34 ($p>0.05$) among primi cesarean mothers in control group.

Objective-5: To test the association between the mean difference in pre-operative anxiety and selected factors among primi cesarean mothers in experimental group.

- There was no significant association ($p>0.05$) between pre-operative anxiety and selected factors such as age t = -0.582 (P = 0.57); nature of demands in job t = 0.710 (P = 0.49); previous hospitalization t = 0.833 (P = 0.42); ever seen or cared for post operative patients t = 0.470 (P = 0.65); nature of sleep t = -0.728 (P = 0.48); ability to

tolerate pain t = 1.60 (P = 0.147); health problems during antenatal period t = 1.93 (P = 0.08); presence of husband t = -1.14 (P = 0.28); time of conception t = 0.20 (P = 0.84); members present for help t = -1.80 (P = 0.109) and hours of sleep per day t = -0.40 (P = 0.695).

Objective-6: To test the association between post operative pain and selected factors among primi cesarean mothers in experimental group.

- There was no significant association (p>0.05) between post operative pain and selected factors such age in years t = -0.221 (P = 0.831); nature of demands in your job t = 1.275 (P = 2.38); previous hospitalization t = 0.456 (P = 0.658); have you seen or cared for post operative patients t = 1.560 (P = 0.157); nature of sleep for the past one month t = 0.474 (P = 0.649); how do you rate your ability to tolerate pain t = -0.174 (P = 0.866); health problems during antenatal period t = -1.448 (P = 0.186) was your husband present with you t =0.173 (P = 0.867); time of conception t = 0.36 (P = 0.972); members present with you to help you t = -1.467 (P = 0.181) and hours of sleep per day t = 0.258 (P = 0.244).

DISCUSSION

The result of the study has been based on the findings of the study.

Findings on association between pre-operative anxiety among primi mothers before and after dyadic support in experimental group.

- There was a significant reduction in the level of pre-operative anxiety after the dyadic support t= 42.24 (p<0.05) among primi cesarean mothers in experimental group.

The above findings were supported by the studies conducted by Nicole et.al (2000), reported experimental group showed a significant decrease in anxiety after the dyadic support. Kulik; James; Mahler & Heike (2009) reported that patients before their operations, had a postoperative roommate were less anxious pre-operatively.

Findings on association between the mean difference in pre-operative anxiety among primi cesarean mothers in experimental and control group.

- The was a significant reduction in the pre-operative anxiety among primi cesarean mothers in experimental than control group the obtained t = 26.27, ($p<0.05$)

The above findings were supported by the studies conducted by Nicole et.al., (2000), which revealed that there was a significant difference in the pre-operative anxiety in experimental group after the dyadic support. Kulik; James; Mahler & Heike (2009) reported that patients before their operations, had a postoperative roommate were less anxious pre-operatively.

Findings on association between the post operative pain among primi cesarean mothers in experimental and control group.

- There was a significant difference in the post operative pain among primi cesarean mothers in experimental and control group 't' value ($t=6.77$), $P <0.05$.

The above findings were supported by the studies conducted by Nair.V (2002), revealed that the planned nursing interventions brought a relief of pain indicated by lowering of pain scores in the experimental group, ($t=12.2$, $p=0.01$). Good (2002) which revealed that there was a significant difference in the postoperative pain in experimental than control group after selected nursing interventions ($p=0.022$-0.001)

Findings on correlation between the mean difference in the pre-operative anxiety and post operative pain in experimental and control group.

- There was low negative but non significant correlation between pre-operative anxiety and post operative pain r= -0.065 (p>0.05) among primi cesarean mothers in experimental group.
- There was positive but non significant correlation between pre-operative anxiety and post operative pain r= 0.34 (p>0.05) among primi cesarean mothers in control group.

The above results were not supported by the studies conducted by Kain et.al (2006), revealed that pre-operative anxiety in young children undergoing surgery is associated with a more painful post operative recovery and a higher incidence of sleep and other problems, Sjoling et.al., (2006), reported that the post operative pain declined more rapidly for patients in the treatment group who received specific information and they were more satisfied with the post operative pain management. Granot et.al., (2005), suggested that the Pain Catastrophizing Scale and State-Trait Anxiety Inventory scores were significantly correlated with the post operative pain scores. Zeev et.al., (2000) revealed that the pre-operative anxiety may have a critical role in the chain-of-events that controls the post operative pain response. There was association between the pre-operative anxiety and postoperative pain.

Finding on association between the mean difference in pre-operative anxiety and selected factors among primi cesarean mothers in experimental group.

- There was no significant association (p>0.05) between pre-operative anxiety and selected factors such as age t = -0.582 (P = 0.57); nature of demands in job t = 0.710 (P = 0.49); previous hospitalization t = 0.833 (P = 0.42); ever seen or cared for post operative patients t = 0.470 (P = 0.65); nature of sleep t = -0.728 (P = 0.48); ability to tolerate pain t = 1.60 (P = 0.147); health problems during antenatal period t = 1.93 (P = 0.08); presence of husband t = -1.14 (P = 0.28); time of conception t = 0.20

(P = 0.84); members present for help t = -1.80 (P = 0.109) and hours of sleep per day t = -0.40 (P = 0.695).

The above findings were supported by the studies conducted by Moerman et.al., (2003) reported high level of anxiety was found among women and patient with high information requirement. John (1998) revealed that age less than or equal to 25 years, among females, moderately educated group, high income group had significant effect on level of anxiety.

Findings on association between post operative pain and selected factors among primi cesarean mothers in experimental group.

- There was no significant association (p>0.05) between post operative pain and selected factors such age in years t = -0.221 (P = 0.831); nature of demands in your job t = 1.275 (P = 2.38); previous hospitalization t = 0.456 (P = 0.658); have you seen or cared for post operative patients t = 1.560 (P = 0.157); nature of sleep for the past one month t = 0.474 (P = 0.649); how do you rate your ability to tolerate pain t = -0.174 (P = 0.866); health problems during antenatal period t = -1.448 (P = 0.186) was your husband present with you t =0.173 (P = 0.867); time of conception t = 0.36 (P = 0.972); members present with you to help you t = -1.467 (P = 0.181) and hours of sleep per day t = 0.258 (P = 0.244).

IMPLICATIONS

The investigator with the findings of the study elaborates the implication for strengthening the pre-operative nursing care under the following headings.

1. Implication for nursing service.
2. Implication for nursing education.
3. Implication for nursing administration.
4. Implication for nursing research.

1. Nursing Service
    - Nurses have great responsibility for reducing the pre-operative anxiety in cesarean mothers.
    - Nursing personnel must know how to assess the level of anxiety in various situations while rendering nursing care.
    - The nursing intervention of dyadic support for reducing the pre-operative anxiety of the primi cesarean mothers must be incorporated with routine pre-operative preparation to get the co-operation of the mother, for early recovery in the post operative period and for decreasing post operative complications.
    - Nursing personnel must be motivated to perform nursing interventions to reduce preoperative anxiety of the patients.
    - The recovering primi cesarean mothers can give direct support to new primi mothers admitted for elective cesarean section.
2. Nursing Education
    - The nursing students should be taught the importance of assessing pre-operative anxiety and post operative pain.
    - Nurse educators need to lay emphasis on imparting the dyadic support practice to the primi cesarean mothers during hospitalization among students.
3. Nursing Administration
    - Dyadic support is cost effective and dyadic support among patients would generate better socialization and goodwill among patients.
4. Nursing research
    - This study helped the investigator for extension of specialized knowledge in nursing profession.
    - The study serves as reference for future studies.
    - The study serve the foundation for the nursing profession to increase the knowledge, attitude and practice about standard of pre-operative patient care.

LIMITATIONS

- Random sampling could not be done.
- Extraneous variables like analgesics could not be controlled.
- The study setting was in a private hospital.

RECOMMENDATIONS

- A similar study can be conducted on a large sample size.
- A similar study can be conducted comparing two or more groups like government, semi government and private hospital.

CONCLUSION

The following conclusions were inferred from the findings of the study.

1. Dyadic support can be administrated to reduce pre-operative anxiety among primi cesarean mothers.
2. The nursing intervention through dyadic support can be given to reduce post operative pain among primi cesarean mothers.
3. Dyadic support through recovering mothers can be cost effective and acceptable to fellow primi mothers.

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SECONDARY SOURCES

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APPENDIX – I

LETTER REQUESTING OPINION AND SUGGESTION OF EXPERTS FOR ESTABLISHING CONTENT VALIDITY OF RESEARCH TOOL

From,

30083624
II YEAR M.S.c (N),
Annai JKK Sampoorani Ammal College of Nursing,
Komarapalayam 638183,
Namakkal district.

To,

Through,

The Dean,
Annai J.K.K. Sampoorani Ammal College of Nursing,
Komarapalayam- 638183.

Respected Sir/madam,

(Sub: Letter requesting consent to validate the tool.)

I am, 30083624, II year M.S.c (N) student studying at Annai J.K.K Sampoorani Ammal College of Nursing, Komarapalayam.

I have selected the following topic for research "A quasi experimental study to assess the effectiveness of dyadic support on pre-operative anxiety and post operative pain among primi cesarean mothers in Sahrudaya Hospital at Alleppey, Kerala."In partial fulfillment of the requirement for the award of the Degree of Master of Nursing under the Tamilnadu Dr. MGR Medical University, Chennai.

Here with I have enclosed the tool for its content validity and request you to kindly examine the tool and give your valuable opinion and suggestions.

Thanking you.

Place: Komarapalayam
Date:

Yours sincerely,
(30083624)

APPENDIX – II

CONTENT VALIDITY CERTIFICATE

I hereby certify that I have validated the tool of 30083624, M.Sc(N) student of MATERNITY HEALTH NURSING speciality studying at Annai J.K.K. Sampoorani Ammal college of Nursing, Komarapalayam, who is undertaking the following study "A quasi experimental study to assess the effectiveness of dyadic support on pre-operative anxiety and post operative pain among primi cesarean mothers in Sahrudaya Hospital at Alleppey,Kerala."

Place: Komarapalayam

Date:

Signature of the Expert

Designation

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.,Ph.D
   Principal,
   Annai JKK Sampoorani Ammal College of Nursing,
   Komarapalayam.

4. Mrs. PRATHIBA, MSc
   Psychologist
   Annai JKK Sampoorani Ammal College of Nursing,
   Komarapalayam.

5. Miss. SHOBHANA, MSc (N)
   Medical Surgical Nursing department,
   Annai JKK Sampoorani Ammal College of Nursing,
   Komarapalayam.

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

7. Miss. SOPHIA, MSc (N)
   Mental Health Nursing Department,
   Annai JKK Sampoorani Ammal College of Nursing,
   Komarapalayam.

APPENDIX – IV

LETTER SEEKING PERMISSION TO CONDUCT THE RESEARCH STUDY

From,

30083624
II year M. Sc (Nursing),
Annai J. K. K. Sampoorani Ammal college of Nursing,
Komarapalayam- 638183.

To,
The Administrator
Sahrudaya Hospital
Alleppey, Kerala
.

Through,

The Dean,
Annai J. K. K. Sampoorani Ammal college of Nursing,
Komarapalayam- 638183.

Sub: Seeking permission to conduct the research study.

Respected Sir / Madam,

I am, 30083624, II year M.S.c (N) student studying at Annai J.K.K Sampoorani Ammal College of Nursing, Komarapalayam under the TamilNadu Dr. MGR Medical University, Chennai .

I would like to bring to your kind notice that as a partial fulfillment of M.Sc. Nursing programme, I am conducting "A quasi experimental study to assess the effectiveness of dyadic support on pre-operative anxiety and post operative pain among primi cesarean mothers in selected hospital at Alleppey, Kerala."

I would like to conduct this research study in your esteemed Hospital. Hence I request you to kindly grant permission for the same.

Thanking you,

Place: Komarapalayam
Date: .

Yours faithfully,
(30083624)

APPENDIX – V

PERMISSION LETTER

SAHRUDAYA HOSPITAL, THATHAMPALLY

Estd: 1967

THATHAMPALLY P.O., ALAPPUZHA - 688 013

KERALA, INDIA. PHONE: (0477) 2252269

Tele Fax : (0477) 2263658, e-mail : sahrudaya_sws@yahoo.co.in

SPONSORS : SOCIAL WELFARE SOCIETY THATHAMPALLY, KERALA

Reg. No. 28/66, Estd: 1966

Ref: No.....

Date.....

This is to certify that 30083624 **IInd year M. Sc nursing student from Annai J. K. K. Sampoorani Ammal College of Nursing , Komarapalayam, Namakkal Dist., is granted permission to do her research study for a period of one month from** 01-10-2009 **in this institution.**

This is a multi-specialty hospital with the following departments- General Medicine, General Surgery, Obstetrics & Gynecology, Pediatrics, Pediatric Surgery, Cardiology, E.N.T., Ophthalmology, Psychiatry, Orthopedics, Physiotherapy, Dental & Psychology. Our departments are equipped with all modern facilities.

Administrator

Date: 22/09/2009
Place: Alappuzha

SAHRUDAYA HOSPITAL THATHAMPALLY
SPONSORS SOCIAL WELFARE SOCIETY THATHAMPALLY REG. NO. 28/66
ALLEPPEY-688 013

APPENDIX – VI

QUESTIONNAIRE ON PRE-OPERATIVE ANXIETY AND POST OPERATIVE PAIN AMONG PRIMI MOTHERS

CODE NO: DIAGNOSIS:

DATE:

PART-1: BACKGROUND VARIABLES

Instruction

This part is to obtain the information regarding background variables of the primi mothers who got admitted in hospital for elective caesarean section. The instructor is requested to pose the question and get responses one by one. The best choice opted by the respondent may be marked by placing a (✓) mark.

1. Age in years
   a) 20- 23 ☐
   b) 24-26 ☐
   c) 27-30 ☐

2. Level of education
   a) less than high school ☐
   b) high school graduate ☐
   c) post high school ☐

3. Family income Rs. /month
   a) above poverty line (> Rs.60,000/year) ☐
   b) below poverty line (< Rs.60,000 /year) ☐

4. State the nature of demands in your job?

   a) physically demanding ☐
   b) psychologically demanding ☐
   c) physically and psychologically demanding ☐
   d) comfortable and no hard demand ☐

5. Previous hospitalization if any?

   a) Yes ☐
   b) No ☐

6. Previous surgeries if any?

   a) Yes ☐
   b) No ☐

7. Have you ever seen or cared for post operative patients?

   a) yes ☐
   b) no ☐

8. State the nature of sleep in the past one month

   a) peaceful sleep with no disturbances ☐
   b) peaceful sleep with few disturbances ☐
   c) disturbed sleep ☐

9. Which of the following are relevant to you?

   a) I share my problems with husband ☐
   b) I share my problems with my parents ☐
   c) I share my problems with my friends ☐
   d) I regularly pray or do meditation ☐
   e) I hear my pains alone and cry ☐

10. How do you rate your ability to tolerate pain?

a) very good ☐

b) good ☐

c) average ☐

d) poor ☐

e) very poor ☐

11. Health problems during antenatal period

a) physical only ☐

b) psychological only ☐

c) physical and psychological ☐

12. Was your husband present with you through out the antenatal period?

a) Yes ☐

b) No ☐

13. Time of conception after marriage

a) with in a year ☐

b) more than a year ☐

14. Who are the members present with you at present to help you?

a) mother ☐

b) husband ☐

c) in-laws ☐

d) friends ☐

15. State the time elapsed after the decision for L.S.C.S

a) < 24 hours ☐

b) 24-48 hours ☐

c) > 48 hours ☐

16. State the hours of sleep per day

a) < 8 hours ☐

b) 8 hours ☐

c) > 8 hours ☐

17. Number of antenatal visits to this hospital

a) < 3 ☐

b) 3 and more ☐

PART-2: MODIFIED AMSTERDAM PREOPERATIVE ANXIETY

INFORMATION SCALE (APAIS)

Instruction:

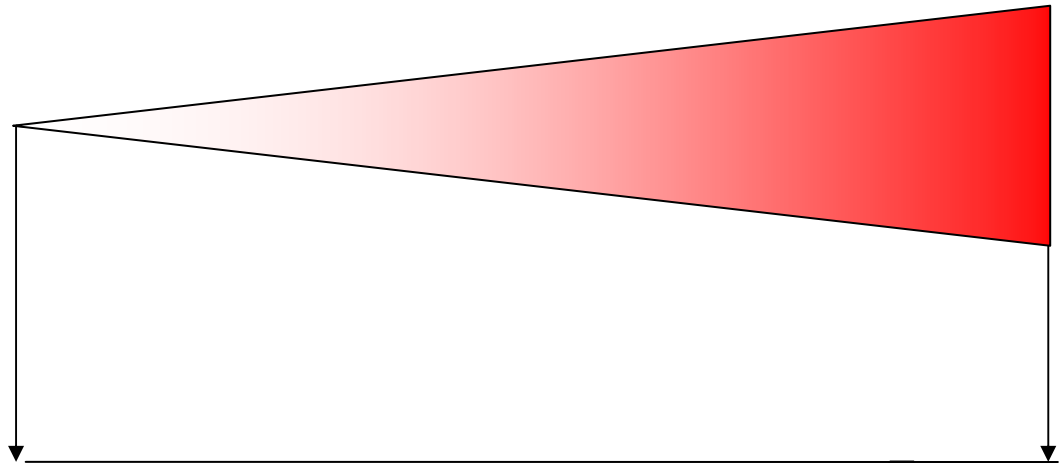
Read each statement and then tick the appropriate number of the statement to indicate how anxious you feel. There is no right or wrong answers. Do not spend too much of time on any one statement but give the answer which seems to describe how you generally feel by placing a (✓) mark in the relevant column.

S. No.	Statements	Not at all	Mildly	Mode-rately	Mode-rately severe	Extre-mely severe
		1	2	3	4	5
1.	I am worried about the anesthetic					
2.	The anesthetic is on my mind continually					
3.	I would like to know as much as possible about the process of cesarean section/surgery					
4.	I am worried about the cesarean surgery					
5.	The surgery is on my mind continually					
6.	I would like to know as much as possible about the care after surgery					
7.	I am worried about the health of the baby					
8.	Health of the baby is on my mind continually					
9.	I am worried about the process of delivery					
10.	Recovery from cesarean is on my mind continually					

PART-3: SIMPLE DESCRIPTIVE PAIN INTENSITY SCALE

Instruction:

This scale is to measure the intensity of the pain. The participants are instructed to indicate how much pain you are feeling in that particular point of time in the listed scale of numbers carefully and specifically.



0 1 2 3 4 5 6 7 8 9 10

No pain worst pain

Time of surgery: hrs.

	DAY-1 12th hour	DAY – 1 20th hour	DAY-2 28th hour	DAY-2 36th hour
Pain score				
Analgesics (if any)				
Time of administration of last dose of analgesics				

SCREENING FOR SATISFACTION OF DYADIC MOTHER

Instruction:

Read each statement and then (✓) appropriate number of the statement to indicate how you feel satisfied. Give the answer which seems to describe how you feel satisfied.

S. No.	Satisfaction Regarding	Highly dissatis-fied	Dissatis-fied	Not satisfied	Satisfied	Highly Satisfied
1.	Admission at the hospital					
2.	Stay in the hospital					
3.	Care by nurses					
4.	Care by doctors					
5.	Outcome of surgery					
6.	Hospital rules & visitors time					
7.	Care to the baby					
8.	Care to the mother					
9.	Health advice or information receive					

PREPARATION OF THE DYADIC MOTHER

Instruction:

The dyadic mother who had already undergone the cesarean section is prepared to interact with the mother who is newly admitted in the women and children hospital for elective cesarean section regarding the following aspects to:

1. tell about the admission procedure done in the hospital
2. tell about the stay in the hospital
3. tell about the care given by the nurses
4. tell about the care provided by the doctors
5. tell about the outcome and success of the surgery
6. tell about the hospital rules and visitors time schedule they maintained in the hospital
7. tell about the care given to the baby
8. tell about the care given to the mother
9. tell about the advice and information which you received from the doctors and the nurses.

APPENDIX- VII

ആദ്യഗർഭിണികളുടെ (ഓപ്പറേഷൻ) / ശസ്ത്രക്രിയയ്ക്ക് മുൻപുള്ള ഉത്കണ്ഠയേയും, വേദനയേയും കുറിച്ചുള്ള ചോദ്യാവലി:

കോട് നമ്പർ: രോഗനിർണ്ണയം:
തീയതി:

ഭാഗം – 1 പശ്ചാത്തല വിവരങ്ങൾ

നിർദ്ദേശങ്ങൾ

താഴെ കൊടുത്തിരിക്കുന്ന ചോദ്യങ്ങൾ ആദ്യ പ്രസവത്തിനു വേണ്ടി (W&C ഹോസ്പിറ്റലിൽ) അഡ്മിറ്റായിരിക്കുന്ന അമ്മമാരിൽ നിന്ന് പശ്ചാത്തലഘടകങ്ങൾ സംബന്ധിച്ച കാര്യങ്ങൾ അറിയുന്നതിനു വേണ്ടിയാണ്. ഓരോ ചോദ്യങ്ങൾ വായിക്കുകയും ഉചിതമായ പ്രതികരണത്തിനു നേരെ (✓) അടയാളം രേഖപ്പെടുത്തുകയും ചെയ്യുക.

1. വയസ്സ്
   a) 20-23 ☐
   b) 24-26 ☐
   c) 27-30 ☐
2. വിദ്യാഭ്യാസ യോഗ്യത
   a) ഹൈസ്കൂളിൽ താഴെ ☐
   b) ഹൈസ്കൂൾ വരെ ☐
   c) ഹൈസ്കൂളിനു മുകളിൽ ☐
3. കുടുംബവരുമാനം Rs. ..... / മാസം
   a) ദാരിദ്ര്യരേഖയ്ക്ക് മുകളിൽ (> Rs. 60,000/വർഷം) ☐
   b) ദാരിദ്ര്യരേഖയ്ക്ക് താഴെ (< Rs. 60,000/വർഷം) ☐
4. ഏതുതരം കഴിവാണ് മുഖ്യമായും നിങ്ങളുടെ ജോലിയിൽ ഉപയോഗിക്കുന്നത്?
   a) ശാരീരികമായുള്ള കഴിവ് ☐
   b) മാനസികമായിട്ടുള്ള കഴിവ് ☐
   c) ശാരീരികവും, മാനസികവുമായിട്ടുള്ള കഴിവ് ☐
   d) ആശ്വാസകരമായ അസ്വസ്ഥതയില്ലാത്ത കഴിവ് ☐
5. മുൻപ് ഹോസ്പിറ്റലിൽ (ആശുപത്രിയിൽ) അഡ്മിറ്റ് ആയിട്ടുണ്ടോ?
   a) ഉണ്ട്. ☐
   b) ഇല്ല. ☐
6. മുൻപ് ശസ്ത്രക്രിയയ്ക്ക് വിധേയമായിട്ടുണ്ടോ?
   a) ഉണ്ട്. ☐
   b) ഇല്ല. ☐
7. താങ്കൾ ഇതിന് മുൻപ് ശസ്ത്രക്രിയയ്ക്ക് വിധേയമായവരെ കാണുകയോ, ശുശ്രൂഷിക്കുകയോ ചെയ്തിട്ടുണ്ടോ?
   a) ഉണ്ട്. ☐
   b) ഇല്ല. ☐

8. കഴിഞ്ഞ ഒരു മാസക്കാലത്തെ താങ്കളുടെ ഉറക്കരീതി പ്രസ്ഥാവിക്കുക
   a) സ്വസ്ഥമായ ഉറക്കം ☐
   b) കുറച്ച് അസ്വസ്ഥതകളോടുകൂടിയ ഉറക്കം ☐
   c) അസ്വസ്ഥമായ ഉറക്കം ☐

9. താഴെ കൊടുത്തിട്ടുള്ള പ്രസ്താവനയിൽ ഏതാണ് നിങ്ങൾ യോജിക്കുന്നത്?
   a) ഞാൻ എന്റെ പ്രശ്നങ്ങൾ ഭർത്താവുമായി പങ്കു വയ്ക്കും ☐
   b) ഞാൻ എന്റെ പ്രശ്നങ്ങൾ മാതാപിതാക്കളുമായി പങ്കുവയ്ക്കും. ☐
   c) ഞാൻ എന്റെ പ്രശ്നങ്ങൾ കൂട്ടുകാരുമായി പങ്കുവയ്ക്കും ☐
   d) ഞാൻ സ്ഥിരമായി പ്രാർത്ഥിക്കുകയും, ധ്യാനിക്കുകയും ചെയ്യും. ☐
   e) ഞാൻ എന്റെ പ്രശ്നങ്ങൾ സ്വയം പറയുകയും കരയുകയും ചെയ്യും. ☐

10. നിങ്ങളുടെ വേദന സഹിക്കുന്നതിനുള്ള കഴിവിനെ എങ്ങനെ വിലയിരുത്തുന്നു.
   a) വളരെ അധികം ☐
   b) തൃപ്തികരമായ ☐
   c) ശരാശരി ☐
   d) മോശമായ ☐
   e) വളരെ മോശമായ ☐

11. ഗർഭകാലത്തെ ആരോഗ്യപ്രശ്നങ്ങൾ
   a) ശാരീരികം മാത്രം ☐
   b) മാനസികമായി മാത്രം ☐
   c) ശാരീരികവും, മാനസികവുമായി. ☐

12. ഗർഭകാലം മുഴുവൻ താങ്കളുടെ ഭർത്താവ് കൂടെ ഉണ്ടായിരുന്നോ?
   a) ഉണ്ടായിരുന്നു ☐
   b) ഇല്ലായിരുന്നു ☐

13. വിവാഹശേഷം എപ്പോളാണ് ഗർഭം ധരിച്ചത്?
   a) ഒരു വർഷത്തിനുള്ളിൽ ☐
   b) ഒരു വർഷത്തിനു മുകളിൽ ☐

14. ഇപ്പോൾ താങ്കളെ സഹായിക്കാൻ ആരെല്ലാം കൂടെയുണ്ട്.
   a) അമ്മ ☐
   b) ബന്ധുക്കൾ ☐
   c) ഭർത്താവ് ☐
   d) കൂട്ടുകാർ ☐

15. നിങ്ങൾക്ക് സിസേറിയൻ ചെയ്യാൻ തീരുമാനിച്ചതിന്റെ സമയദൈർഘ്യം പ്രസ്താവിക്കുക?
   a) < 24 മണിക്കൂർ ☐
   b) 24 - 48 മണിക്കൂർ ☐
   c) > 40 മണിക്കൂർ ☐

16. താങ്കളുടെ ഒരു ദിവസത്തെ ഉറക്കസമയം പറയുക
   a) < 8 മണിക്കൂർ ☐
   b) 8 മണിക്കൂർ ☐
   c) >8 മണിക്കൂർ ☐

17. എത്ര തവണ ഈ ഹോസ്പിറ്റലിൽ ഗർഭപരിശോധനയ്ക്ക് വന്നിട്ടുണ്ട്.
   a) < 3 ☐
   b) 3 ഉം അതിൽ കൂടുതൽ തവണ ☐

ഭാഗം: 2 - നവീകരിച്ച ആംസ്റ്റർഡാമിന്റെ ഓപ്പറേഷനു മുൻപുള്ള ഉത്കണ്ഠ അളക്കാനുള്ള സ്കെയിൽ:

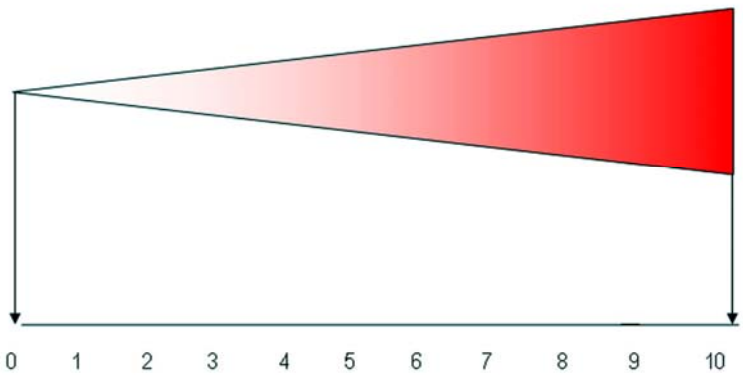
നിർദ്ദേശം:- താഴെ കൊടുത്തിരിക്കുന്ന ഓരോ പ്രസ്താവനയ്ക്കും നേരെ എത്രത്തോളം ഉത്കണ്ഠയുണ്ടെന്ന് (✓) അടയാളപ്പെടുത്തുക. ഓരോ പ്രസ്താവനയ്ക്കും അധികസമയം ചിലവഴിക്കാതെ ഉത്തരം അടയാളപ്പെടുത്തുക:

പ്രസ്താവനകൾ	ഒരിക്കലും ഇല്ല	കുറേശ്ശെ	കുറച്ചധികം	വളരെയധികം	അങ്ങേയറ്റം
1. ഞാൻ അനസ്തേഷ്യയെ കുറിച്ച് ഓർത്ത് വിഷമിക്കുന്നു					
2. അനസ്തേഷ്യയെ കുറിച്ചാണ് എന്റെ മനസ്സിൽ എപ്പോഴും					
3. എനിക്ക് സിസേറിയനെക്കുറിച്ചും അതിന്റെ പ്രക്രിയയെകുറിച്ചും വളരെയധികം അറിയാനുള്ള ആഗ്രഹമുണ്ട്.					
4. ഞാൻ സിസേറിയനെ കുറിച്ച് ഓർത്ത് വളരെ വിഷമിക്കുന്നു.					
5. ശസ്ത്രക്രിയയെ കുറിച്ചാണ് എപ്പോഴും എന്റെ മനസ്സിൽ					
6. ശസ്ത്രക്രിയയ്ക്ക് ശേഷമുള്ള പരിചരണത്തെക്കുറിച്ച് അറിയാൻ വളരെ ആഗ്രഹമുണ്ട്.					
7. കുഞ്ഞിന്റെ ആരോഗ്യത്തെകുറിച്ച് ഞാൻ ആകുലപ്പെടുന്നു.					
8. കുഞ്ഞിന്റെ ആരോഗ്യത്തെ കുറിച്ചാണ് എന്റെ മനസ്സിൽ എപ്പോഴും					
9. പ്രസവത്തിന്റെ പ്രക്രിയയെ കുറിച്ച് ഞാൻ വളരെ ആകുലതപ്പെടുന്നു.					
10. സിസേറിയനു ശേഷമുള്ള വീണ്ടെടുക്കലിനെ കുറിച്ചാണ് എപ്പോഴും എന്റെ മനസ്സിൽ					

ഭാഗം – 3 വേദന അളക്കുന്നതിനുള്ള സ്കെയിൽ

നിർദ്ദേശങ്ങൾ:

ഈ സ്കെയിൽ താങ്കളുടെ വേദനയുടെ തീവ്രത എത്രത്തോളമാണോ തോന്നുന്നത് അത് താഴെ കൊടുത്തിരിക്കുന്ന നമ്പറുകളുടെ നേരെ അടയാളപ്പെടുത്തുക.



വേദന ഇല്ല

അങ്ങേയറ്റം/വളരെയധികം വേദന

ശസ്ത്രക്രിയയുടെ സമയം:

	ദിവസം -1 12.ാം മണിക്കൂർ	ദിവസം -1 20.ാം മണിക്കൂർ	ദിവസം -2 28.ാം മണിക്കൂർ	ദിവസം -2 36.ാം മണിക്കൂർ
വേദനയുടെ അളവ്				
വേദന സംഹാരി				
അവസാനമായി വേദനസംഹാരി നൽകിയ സമയം ഏത്?				

ഡയാഡിക്ക് മതറിന്റെ സംതൃപ്തിയെ കുറിച്ച് വേർതിരിക്കാനുള്ള പത്രിക

നിർദ്ദേശം:

ഓരോ പ്രസ്താവനയും വായിച്ചു നോക്കിയിട്ട് അതിനു അനുയോജിതമായ നമ്പറിനു നേരെ അടയാളപ്പെടുത്തുക. (✓) ചെയ്യുക. താങ്കൾക്ക് എത്രത്തോളം സംതൃപ്തി തോന്നിയിട്ടുണ്ട് എന്ന് ഉത്തരം നൽകുക.

സംതൃപ്തിയെക്കുറിച്ച്	അത്തരമൊന്നുമല്ല അസംതൃപ്തി	അസംതൃപ്തി	തൃപ്തികരമല്ല	തൃപ്തികരം	അത്തരമൊന്നും തൃപ്തികരമായി
1) ഹോസ്പിറ്റൽ അഡ്മിഷൻ					
2) ഹോസ്പിറ്റലിലെ താമസം					
3) നഴ്സുമാരുടെ പരിചരണം					
4) ഡോക്ടർമാരുടെ പരിചരണം					
5) സർജറിയുടെ ഫലം					
6) ഹോസ്പിറ്റൽ നിയമങ്ങളും, സന്ദർശന സമയവും					
7) കുട്ടിയോടുള്ള പരിചരണം					
8) അമ്മയ്ക്കുള്ള പരിചരണം					
9) ആരോഗ്യ ഉപദേശങ്ങളും, നിർദ്ദേശങ്ങളും, വിവരങ്ങളും ലഭിച്ചത്.					

ഡയാഡിക്ക് മതറിനു വേണ്ടിയുള്ള ഒരുക്കങ്ങൾ (തയ്യാറെടുപ്പുകൾ)

നിർദ്ദേശങ്ങൾ:

സിസേറിയൻ കഴിഞ്ഞ അമ്മമാരെ സിസേറിയനു വേണ്ടി അഡ്മിറ്റായിരിക്കുന്ന അമ്മമാരുമായി സംസാരിക്കാൻ / ഇടപഴകാൻ താഴെ കൊടുത്തിരിക്കുന്ന കാര്യങ്ങൾ ഉൾപ്പെടുത്തുക.

1. അഡ്മിഷൻ പ്രക്രിയയെക്കുറിച്ച് പറയുക.
2. ഹോസ്പിറ്റലിന്റെ താമസത്തെക്കുറിച്ച്.
3. നേഴ്സുമാരുടെ പരിചരണത്തെ കുറിച്ച്.
4. ഡോക്ടർമാരുടെ പരിചരണത്തെ കുറിച്ച്.
5. സർജറിയുടെ ഫലവും, വിജയത്തെകുറിച്ചും.
6. ഹോസ്പിറ്റൽ നിയമങ്ങളും, സന്ദർശന സമയത്തേയും കുറിച്ച്.
7. അമ്മയ്ക്കു കൊടുത്തിട്ടുള്ള പരിചരണത്തെ കുറിച്ച്.
8. കുട്ടിക്ക് കൊടുത്തിട്ടുള്ള പരിചരണത്തെ കുറിച്ച്.
9. നിർദ്ദേശങ്ങളും, വിവരങ്ങളും ലഭിച്ചതിനെ കുറിച്ച്.

ABSTRACT

A quasi experimental study to assess the effectiveness of dyadic support on pre-operative anxiety and post operative pain among primi cesarean mothers in Sahrudaya hospital at Alleppey, Kerala submitted as the partial fulfillment of the requirements for the degree of Master of Science in Nursing. It was done by 30083624 from Annai J.K.K Sampoorani Ammal College of Nursing, under the Tamilnadu Dr.MGR Medical University, Chennai, March -2010.

The objectives of the study were, to assess the pre-operative anxiety among primi cesarean mothers before and after dyadic support in experimental group, to compare the mean difference in pre-operative anxiety among primi cesarean mothers in experimental and control group, to compare the post operative pain among primi cesarean mothers in experimental and control group, to correlate between the mean difference of pre operative anxiety and post operative pain in experimental and control group, to test the association between the mean difference in pre-operative anxiety and selected factors among primi cesarean mothers in experimental group, to test the association between postoperative pain and selected factors among primi cesarean mothers in experimental group.

The research hypotheses were H_1) There will be a significant difference between the preoperative anxiety before and after dyadic support among primi caesarean mothers in experimental group. H_2) There will be a significant difference in the mean difference of pre-operative anxiety among primi cesarean mothers in experimental and control group. H_3) There will be a significant difference in post operative pain among primi cesarean mothers in experimental and control group. H_4) There will be a significant correlation between the mean difference in pre-operative anxiety and post operative pain among primi cesarean mothers in

experimental and control group. H_5) There will be a significant association between the mean difference in pre-operative anxiety and selected factors among primi cesarean mothers in experimental group. H_6) There will be a significant association between the post operative pain and the selected factors among primi cesarean mothers in experimental group.

The review of literature was collected under the headings such as: 1) Studies related to pre-operative anxiety, 2) Studies related to post operative pain, 3) Studies related to dyadic support, 4) Studies related to pre-operative anxiety and its influence on post operative pain, 5) Studies related to pre-operative anxiety and its interventions.

The investigator had developed a conceptual framework based on Roy's Adaptation Model. The research approach adopted for the study was a quasi experimental design. Sample size was 40 primi cesarean mothers in Sahrudaya Hospital at Alleppey district. The sampling technique used in this study was non proportionate quota sampling technique.

A self administered questionnaire was used for data collection. It comprised of Background factors, Modified Amsterdam Pre-operative Anxiety Information Scale, Simple Descriptive Pain Intensity Scale. It was validated by 7 experts. The reliability of the tool was elicited by test retest method and inter rater method. The reliability of the tool was computed using Karl Pearson's correlation coefficient method. The reliability was found to be r = 0.97, r = 0.9 high.

Pilot study was conducted among 7 primi cesarean mothers. The main study was conducted in sahrudaya hospital, non proportionate quota sampling was used to select samples. A self administered questionnaire was used for the data collection. The data gathered

were analyzed by descriptive and inferential statistics using SPSS version 10. The interpretation was made on the basis of objectives of the study.

Findings of the study revealed that dyadic support reduced the pre operative anxiety and post of pain among primi cesarean mothers.

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