Pain is an intolerable sensation which Rene Descartes, during the renaissance period, described as an internal mechanical process. The major health care professional organisations describe pain as fifth vital sign and inadequate pain management is linked to numerous immediate and long term negative outcomes.

Caesarean delivery, one of the oldest surgical procedures, is considered as a major abdominal surgery. Caesarean section is the 2nd commonest surgery performed on women in India after tubectomy. Post-operative pain interferes with the daily activities of the mother and her newly adopted maternal role affecting breastfeeding and new born care. Post-caesarean pain remains a major problem, and there is a dire need for further studies as well as testing of some current strategies to assuage post-operative pain in post-caesarean section mothers to ensure delivery of quality care to both mother and baby. Joint commission on accreditation of Health care recommends relaxation therapy as one of the recommended non-pharmacologic strategies for pain management.

Studies show that implementing non-pharmacological pain management strategies decreases the feeling of weakness, improves the activity level and functional capacity, and reduces the dosage of analgesic drugs thus decreasing side effects of the treatment.

In post-operative pain management non-pharmacological methods are used in conjunction with analgesics when analgesics cannot be used to increase analgesic effect or in case of insufficient use of analgesics. Relaxation, the adjuvant therapy on medication acts on pain by decreasing anxiety and lowering muscle tension and distracting attention thereby affecting the central control processes that modulate pain transmission.

Relaxation is increasingly suggested as a pain control technique that can be used by nurses in daily practice. Benson’s relaxation technique is a very simple procedure that can easily be taught and self-practised by the post-caesarean mothers. This simple intervention requires minimum effort and time and is cost effective. It is a convenient nursing intervention that could be easily practised in clinical setting to relieve pain without side effects.

Caesarean sections started to increase globally. In the last decade, it reached as high as 41 percent in Kerala and 58 percent in Tamil Nadu as reported by the ICMR School of public Health. Post-operative pain although expected is an undesirable experience after surgery, can have a significant effect on patient recovery. There is no “gold standard” for post-caesarean management; the choice of method is partly determined by drug availability, regional and individual preferences, resource limitations and financial considerations. Like most other surgical populations, the new mother needs effective pain relief so as to mobilise early but she also has the added responsibility of needing care for her new born baby. Post-operative pain exerts several adverse psychological and physical effects; it is a challenge for the obstetricians as it interferes with the mother and baby’s wellbeing. A study on pain prevalence and perception among inpatient individuals reported that patients preferred relaxation and distraction more than non-pharmacological pain control methods. Nurses are the health care professionals who spend most time with patient in pain. Nurses have used different techniques for years to help patients in managing pain. The author sought to assess the effectiveness of selected pain relieving technique the “Relaxation therapy” in which researcher attempted to identify the effect of Benson’s relaxation technique in terms of reducing pain among post-caesarean mothers.

Objectives

The study was intended to assess the effect of Benson’s relaxation therapy on pain among post caesarean mothers admitted in a tertiary care centre.
Hypotheses

H₀: There will be no significant difference in pain score after Benson’s relaxation therapy among post-caesarean mothers.

H₁: There will be significant difference in pain score after Benson’s relaxation therapy among post-caesarean mothers.

Conceptual framework: The framework of present study is based on General system model (theory) (Fig 1). The present study aims to assess the effect of Benson’s relaxation therapy on pain among post-caesarean mothers. The system theory relates and interacts with other systems. It is an organisational theory that is more concerned with study and describing the way things are interrelated together than with analysing the things themselves.

Input refers to the problem identified by the nurse and use of Benson’s relaxation technique. Post-caesarean patients report their subjective pain perception to the researcher. Benson’s relaxation technique is used as input to alleviate their pain with the expert opinion.

Process refers to the different operational procedures in the overall implementation and includes the factors that facilitate or act as barriers in the implementation of the programme. In the present study processes consists of an assessment of pain perception, performing Benson’s relaxation technique and evaluate effectiveness of the technique.

Output refers to the pain perception after intervention (expected reduction in intensity of pain level or no change in pain score).

Feedback refers the process by which a system monitors the internal and environmental process to its behaviour (output) and accommodates or adjusts itself (Weiner, 1948). It involves receiving and responding to the return of its own output.

Feedback can be positive or negative. Positive feedback refers to the systems information that moves the system away from the equilibrium and toward change. Conversely negative feedback is information output that it returns to the system, promoting equilibrium and stability of the system (Lasey, 1989). In this study feedback is evaluation of pain intensity after Benson’s relaxation therapy.

The importance of system approach lies in its potential for evaluating information to help the individual’s progress towards the goal of healthy living. In this theory the nurse’s job is to assess the extent to which all parts of the patient’s system are working in order and to identify and correct actual or potential threats to the patient’s stability.

Review of Literature

Abdul-Monim Batiha conducted a study qualitative content analysis with 37 participant nurses from Jordanian critical care units. The results identified potential pain management barriers which can be considered when developing and disseminating policies and procedures in managing the pain in Jordanian critical care settings.

Twycross A in her review of articles published in 10 years using CINAHL, Medline and British Nursing Index on educating nurses about pain management highlighted the importance of nurses’ education in pain assessment and management.

There is a pressing need to update the present curriculum of nursing and medical programs to include updated strategies for pain relief in critically ill patients. Drawing from the study results, the researcher topics such as pain symptoms, pain assessment, mechanisms of analgesia, evaluation of analgesia, effects and side-effects of pain medications and non-pharmacological pain management. At the same time, nurses’ knowledge and pain management ability should be enhanced by using case studies and related courses should be regularly updated.

The National Institutes of Health (NIH) recognises the relaxation response as having broad benefits including the reduction of pain and restoration of sleep. A Hanna et al conducted an interventional study on 150 caesarean mothers 75 each in control as well as experimental groups to investigate the effect of natural measures to relieve pain in caesarean mothers in Ain Shams Maternity University hospital Egypt. Experimental group received hand and foot massage for 20 minutes and control group received hospital routine analgesics. The results showed a statistically significant difference in mean of pain level among study groups at 6, 12, 18 hours after delivery (p=0.00). Also there was a statistical significant difference between mean of pain score before and after massage immediately and one hour after massage.

Tetti Solehti conducted a quasi-experimental pre-test post-test to assess the effect of Benson’s relaxation on reduction of pain level among post-caesarean section mothers in a hospital on Indonesia. A sample of 30 caesarean mothers were given Bensons relaxation and pain intensity was studied before and after each intervention. The results found the Benson’s relaxation techniques proved to be have the greatest influence on decrease in pain intensity (p= 0.00).

A randomised trial was conducted to study the efficacy of relaxation training on pain perception among
patients undergoing haemodialysis. Benson’s relaxation was implemented in the interventional group. There was significant difference between pain perception in interventional group before and after intervention (p<0.001).

**Methodology**

A quasi-experimental single group pre-test post-test design was conducted in Aug 2016 in a tertiary care hospital; 30 post-caesarean mothers on their 1st and 2nd post-operative day were selected by simple random technique using computer generated random numbers. Pain assessment of all the post-caesarean mothers was done by the ward staff. Investigator administered Benson’s relaxation therapy individually to the subjects for 10 minutes. BRT administered in the morning (6 am) and evening (6 pm) on 1st and 2nd post-operative day.

**Results**

There was an observable shift in the number of subjects having severe pain score category to the mild and moderate category

Table 1 shows statistically significant reduction in pain score after BRT. Pre-interventional mean pain score was 6.26 and was 5.00 after the intervention in the morning. Mean pain score on the second day morning was 5.74 and 4.71 in the evening. Data shows statistical significant reduction in pain score after BRT.

**Discussion**

Majority (83%) of women who underwent caesarean section were from the age group 20-30 years. The age group is also in agreement with an RCT done in India By V Jipi et al in 2000 to determine the effect of foot reflexology on intensity of pain and quality of sleep in post caesarean mothers where the majority of the subjects were in the age group 26-29 years.

As per the 2001 census of Maharashtra, females from the urban area engaged in economic activities were only 12.6 percent. These finding support the findings of the present study; majority (89%) of the subjects in the study were unemployed women (homemakers) and 11 percent were employed women.

Primiparous women quantified about half (50%) of the study group. This is consistent with a study by Kaur H et al also showed more than half of the subjects in her study were primiparous women. The average pain score of post-caesarean mothers on first post-post-operative day was 6.26.

The average pain score of post caesarean mothers on second post-operative day was 5.70. There was an observable shift in the number of post-caesarean mothers from severe to moderate pain score category and from moderate to mild pain score category. This indicates that Benson’s relaxation therapy was effective in reducing the pain score of post caesarean mothers.

This study shows the positive effect of Benson’s relaxation therapy on post caesarean patients for reducing pain perception. The result of the study will be helpful for the nurses to enlighten their knowledge about Benson’s relaxation technique for pain management in post caesarean mothers. Nurses can play vital role...
in administering Benson’s relaxation therapy.

**Implications**

**Nursing practice:** The nursing staff should take active part in pain assessment and administering non-pharmacological pain management strategies.

**Nursing education:** Nursing education can create awareness among student nurses about the effectiveness of complementary and alternative therapies.

With changing health care trends nursing education must emphasise on holistic approach focusing on alternative therapies to enhance the health status. Within the nursing curriculum nursing students can be taught how to administer the alternative/complementary therapies which are evidence-based. Pain management including assessment and documentation and non-pharmacological strategies may be emphasised in nursing curriculum.

**Nursing administration:** The administrator can revise, or plan the existing strategies of health education and pain strategy management. The findings of the study will help in formulating and designing educational programmes like continuing education programmes, special courses, workshop and conferences for nurses which will improve the quality of nursing practice and education. Nurse administrator can take initiative to introduce this technique by making it an institutional policy for practice.

**Nursing research:** There is need for extended and intensive nursing research in the area of clinical practices and pain management. Nurses need to broaden their boundaries and involve alternative/complementary medicines so that they can give better qualitative health services to the clients. Extensive research is needed in this area.

**Recommendations**

- Benson’s relaxation therapy should be a standard protocol for post-caesarean pain management in postnatal wards and nurses must be trained in administering this therapy.
- A similar study may be conducted in a larger or different setting or different target populations.
- An RCT can be conducted with placebo-control group for better authentication of the findings.
- A comparative study can be conducted to find out the effect of other alternative or complimentary therapies on pain management.
- Studies can be conducted to find out the effectiveness of Benson’s Relaxation as labour analgesia
- Complimentary therapy cell could be arranged at an institutional level with multidisciplinary team. Also, nursing audits can be done to assess the effectiveness of the pain management strategies followed in the institution
- A study may assess how nurses perceive themselves in assisting the post-caesarean women for pain relief.

**Conclusion**

The present study has showed that Benson’s relaxation therapy has a positive impact on reducing pain perception among post-caesarean mothers.

**References**