



## EFFECTIVENESS OF BENSON'S RELAXATION THERAPY ON PAIN AND STRESS AMONG POST CAESAREAN MOTHERS

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### ABSTRACT

**Background:** Child birth is considered as a multi-dimensional experience. During the journey of delivery, Pain is one of the major discomforts which drive the post caesarean section mothers to seek help in opting caesarean section even though caesarean section does not eliminate the pain of labour. Pain can last for several months. Not only that, it also interferes with the mother-infant interaction. If the mother is comfortable it will be easier to breast feed the baby and can also involve in newborn care, which helps in achieving mother infant bonding. **Objectives:** To assess the effectiveness of Benson's Relaxation therapy on level of pain and stress among post caesarean mothers. **Design:** True experimental pretest and posttest with control group design. **Settings:** Government Ranees Hospital, Pudukkottai, Tamilnadu. **Participants:** Sixty post caesarean section mothers, fulfilling the inclusion criteria were selected by Probability simple random sampling technique. **Selection criteria:** Primi gravid Post caesarean mothers who are within second to fifth post operative day and undergone elective/ emergency caesarean section were selected. **Methods:** The study was conducted with 60 post caesarean section mothers. Out of which 30 mothers were in experimental group and 30 were in control group. Pre and posttest assessment was done by Numerical pain scale and Perceived stress Assessment scale. **Results:** Benson's Relaxation therapy was effective in reducing the level of pain and stress among post caesarean mothers.

**Key words:** Benson's Relaxation therapy, Pain, stress, Post caesarean section mothers.

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### INTRODUCTION

Child birth is considered as a multi-dimensional experience. During the journey of pregnancy, women undergo anxiety, fear, and stress especially before delivery. Giving birth to a new life is the most painful experience in a woman's life, both in normal vaginal delivery as well as in caesarean deliveries.

Pain is one of the major discomforts which drive the post caesarean section mothers to seek help in opting caesarean section even though caesarean section do not eliminate the pain of labour. The midwife must perform frequent and careful assessment and should provide necessary care during the labour process to achieve a safe outcome of labour.

WHO recommends that caesarean section rates should not go above 15% in any country. Betran and her colleagues (2007) estimated that at the beginning of

twenty first century the average caesarean section rate was 15.9% in Asia.

**India** is also experiencing a rapid increase in caesarean section deliveries along with an increase in institutional deliveries. Caesarean section rates have increased from 25.4% to 32% in India and about 32.6% has been documented in South India.

As per the research study, reports and statistics of LSCS and the discomforts perceived by the post caesarean mothers the researcher identified a felt need of reducing the post caesarean discomfort particularly pain and stress which is the need of the hour in incorporating complimentary alternative therapies in providing nursing care for helping the mothers in reducing the post caesarean discomfort.



## OBJECTIVES:

The study sought to 1. To assess the level of pain and stress among post caesarean mothers before intervention in both experimental group and control group. 2. To assess the effectiveness of Bensons relaxation therapy on level of pain and stress among post caesarean mothers in experimental group and control group. 3. To associate between the post test level of pain among post caesarean mothers with their selected demographic variables. 4. To associate between the post test level of stress among post caesarean mothers with the selected demographic variables.

## Review of literature

For the present study, the related literature was reviewed on the selected studies related to Non-Pharmacological Method of pain relief, Post Caesarean Pain, Stress and effectiveness of Benson's relaxation therapy on Pain and Stress.

**Adachi et al (2014)** conducted an experimental study to evaluate the effectiveness of breathing exercises on pain relief among post caesarean mothers at selected Government Hospital in Delhi. The sample comprised of 26 post caesarean mothers in experimental group, and 26 in control group. The samples were selected through purposive sampling technique. A standardized pain assessment tool (Numerical Pain Scale) was used to collect the data. Data were analyzed using descriptive and inferential statistic. The study concluded that breathing exercises was an effective Non-Pharmacological measure in significantly reducing the intensity of pain among post caesarean mothers.

**Herrk, McCaffery (2015)**, conducted a Quasi experiment, prospective not blind, randomized two group parallel study among post caesarean women regarding their experiences due to operative trauma at Cibabat Hospital, Cimahi. This was quasi- experimental study with pre and post test design. Post caesarean section women with quota sampling who met the inclusion criteria were selected as samples. A total of 60 samples were assigned 30 in experimental and control group. Women in the experimental group received the Benson's relaxation therapy and those in control group received regular care from the health care workers. The outcome pain severity was measured by visual analogue pain scale before and after the intervention. The results of the study revealed that Benson's relaxation therapy was found to be effective in reducing pain among post caesarean women.

**Arul Kumari (2014)** conducted an Quasi experimental study to evaluate the Bensons relaxation therapy on reduction of stress among post caesarean mothers at Government Hospital in Punjab. A total of 80 samples (40 in experimental group, 40 in control group) were assigned by purposive sampling. The demographic data was collected from the post caesarean mothers and standardized stress rating scale was used for assessing the stress. The intervention group received relaxation therapy

for every day in the morning and evening for a period of six days. After the intervention the stress level was assessed which revealed that stress level was found to be reduced in the experimental group which received the relaxation therapy when compared to the control group. The study revealed that 41% of the mothers had high stress and 59% of the mothers had low stress.

**Tandoi F et al (2010)**, conducted a descriptive study to measure and characterize post caesarean section pain and to verify its relationship with limitations of physical activities 60 mothers in the post operative period of caesarean section were taken, and the intensity of pain was measured with both numerical scale and McGill pain questionnaire. Limitations of physical activities were measured with specific instruments developed for the study. All the 60 mothers (100%) reported that pain limited their movements for sitting down and standing up and characterized the pain as annoying, grasping and straining which stressed the need for reducing the post caesarean pain among women undergoing caesarean section.

**Dadelzen J A (2008)**, A quasi experimental pretest- posttest study was conducted to assess the effect of Benson's relaxation therapy on pain intensity of post caesarean mother in a hospital. It was given for 3 days every 12hrs for 5mins. The visual analog scale was used to measure the pain intensity. The result of the study showed that the mean of pain before intervention was 7.47 which were decreased to 3.62 after the intervention. The study found that there was a significant reduction in the pain intensity among post cesarean section mothers.

## Methods and materials

Evaluative approach using quasi experimental where pretest and posttest with control group design was used. The total sample size was 60 post cesarean mothers, who have been admitted in the post natal ward was selected by using probability simple random sampling technique, among them 30 was assigned to experimental group and 30 in control group .

**Criteria for sample selection:** Primi gravid Post caesarean mothers who are within second to fifth post operative day and undergone elective/ emergency caesarean section were selected **Study tool:** The selection and development of tool consists of two sections.

**Section A : Demographic Data** Consists of demographic data such as of post caesarean mothers age, religion, education of the mother and husband, occupation of the mother and husband, income, type of family, place of residence, indication for caesarean section, no of post operative days, sex of the baby, history of undergone yoga classes, awareness of parenthood classes, and social support after caesarean section. **Section B:** Consists of Numerical pain scale and Perceived stress scale was used to assess the level of pain and stress in post



caesarean mothers. The pain which was assessed was categorized as none, mild, moderate and severe. The stress which was assessed using PSS from the post caesarean mothers was grouped and categorized as follows Never, Almost never, Sometimes, Fairly often and Very often.

#### Data collection procedure:

The data was collected for a period of one month. The investigator obtained formal permission from the management authorities of the hospital. 80 samples were selected by probability simple random sampling technique. Among them 30 were assigned in experimental group and 30 were in control group in Government Ranees hospital respectively. The data was collected on all seven days of the week. The nature and purpose of the study was explained to the post caesarean mother. Written consent was obtained. Pre test level of pain and stress was assessed in the post caesarean mothers by using numerical pain

scale and perceived stress scale. The intervention of Benson's relaxation therapy was demonstrated to post caesarean mothers and period of morning and evening. The post test was conducted on the sixth day after demonstration and using the same scales. No intervention was given for control group. The collected data were tabulated and analyzed by using description and inferential statistical method. Frequency, percentage was used to describe the demographic variables.

Mean and standard deviation was used to assess the pre test and post test level of pain and stress among post caesarean mothers.

Paired t test was used to find out the difference between pre test and post test level of pain and stress in the experimental and control group. Chi-square test was used to find out the association between post test score of pain and stress with their selected demographic variables of post caesarean in experimental group.

## RESULTS

**Table 1. Effectiveness of Benson's relaxation therapy on reduction of level of pain in experimental and control group Mean, standard deviation, t value on level of pain among post caesarean mothers in experimental and control group.**

N=60

Groups	Mean	S.D	t value
Experimental group	1.73	0.81	3.41
Control group	3.13	2.16	

\*Significant at  $p < 0.05$  level; Table value 1.96 df:58

The above table reveals that the mean score in experimental group was 1.73+0.81 and the mean score in control group was 3.41 which is significant at  $P < 0.05$  level. Thus it becomes evident that the Benson's relaxation therapy was found to be effective in reducing the level of pain in experimental group.

**Table 2. Effectiveness of Benson's relaxation therapy on reduction of level of stress in experimental and control group Mean, standard deviation, t value on level of stress among post caesarean mothers in experimental and control group.**

N=60

Groups	Mean	S.D	t value
Experimental group	10.9	5.7	2.43
Control group	16.6	11.6	

\*Significant at  $p < 0.05$  level; Table value 1.96 df:58

The above table reveals that the Mean score in experimental group was 10.9+ 5.7 and the Mean score in control group was 16.6+ 11.6. The t value was 2.43, which is significant at  $P < 0.05$  level thus it becomes evident that the Benson's relaxation therapy was found to be effective in reducing the level of stress in experimental group.

Association on level of pain and stress among post caesarean mothers with their selected demographic variables in experimental and control group using chi square test revealed that there was no significant association between the level of pain and stress with their selected demographic variables of post caesarean mothers in both experimental and control group at  $P < 0.05$  level.

Hence it was found to be clear that the Benson's relaxation therapy was very effective in reducing the level of pain and stress among post caesarean mothers.

## DISCUSSION

The purpose of this study was to evaluate the effectiveness of Benson's Relaxation therapy on level of

pain and stress among post caesarean mothers.

**The first objective of the study was to assess the level of pain and stress among post caesarean mothers before and after administration of Benson's relaxation therapy in experimental and control group.**

The findings of the study revealed that among post caesarean mothers in experimental group during pre test 26.66% of them mothers had moderate pain, and 73.33% of them mothers had severe pain. During post test 93.33% of them mothers had mild pain, and 6.66% of them mothers had moderate pain. Where as in control group during pre test 23.33% of them had mothers had moderate pain, 76.66% of the mothers had severe pain.



During post test 60% of them mothers had mild pain, 33.33% of them mothers had moderate pain, and 6.66% of them mothers had severe pain.

In experimental group during pre test 66.66% of them mothers had moderate stress and 33.33% of them mothers had severe stress. During post test 90% of them mothers had mild stress, 10% of them mothers had moderate stress. Where as in control group during pre test 73.33% of them mothers had moderate stress, 26.66% of them mothers had severe stress. During post test 66.66% of them mothers had mild stress, 26.66% of them mothers had moderate stress, and 6.66% of them mothers had severe stress.

The study implies that mild, moderate and severe level of pain and stress is common among the post caesarean mothers and they require some innovative measure to reduce the level of pain and stress.

The present study findings were supported by **Costa.MH (2008)**, who conducted an experimental study in a maternity hospital in Brazil. The sample composed of 60 post caesarean mothers aimed to evaluate the effectiveness of relaxation techniques on reduction of stress during post operative days. The experimental group received Benson's relaxation therapy whereas the control group did not receive any intervention. The application of the Mann-Whitney, Wilcoxon, and Pearson's correlation statistical tests showed a significant reduction in the levels of stress in the experimental group.

**The second Objective was to assess the effectiveness of Benson's relaxation therapy on reduction of pain and stress among post caesarean mothers in experimental and control group.**

The findings of the study revealed that among post caesarean mothers in experimental group the post test pain mean score was  $1.73 + 0.81$  and in control group post test mean score was  $3.13 + 2.16$ . the t value was 3.14 which was significant at  $p < 0.05$  level. Thus it was become evident that the Benson's relaxation therapy was effective in reducing the post caesarean pain in experimental group.

In experimental group the post test mean score was  $10.9 + 5.7$  and in control group post test mean score was  $16.6 + 11.6$ . the t value was 2.43 which was significant at  $p < 0.05$  level. Thus it was become evident that the Benson's relaxation therapy was effective in reducing the post caesarean stress in experimental group.

The present study findings was supported by **Rosentfeldt F(2008)** A comparative study was conducted at Alfred Hospital Melbourne in Australia between November 2006 and 2008 among the Patients undergoing elective caesarean section using stress reduction programs within the public hospital setting. A total of 137 post caesarean mothers were assessed. Among them 60 received relaxation therapy and 57 received usual care. The stress was assessed by standardized stress rating scale. It was calculated that 60% of the patient experienced

reduction in the stress level in experimental group, where as 40% of the patients experienced reduction of stress in the usual care received group. Hence Benson's therapy was found to be very effective.

**The third objective was to associate between post test level of pain among post caesarean mothers with their selected demographic variables.**

The findings of the present study revealed that in post test level of pain there was no significant association between the level of pain and their demographic variables at  $p < 0.05$  level in experimental and control group.

**The fourth objective was to associate between post test level of stress among post caesarean mothers with their selected demographic variables.**

The findings of the present study revealed that in post test level of stress there was no significant association between the level of stress and their demographic variables at  $p < 0.05$  level in experimental and control group.

## CONCLUSION

Benson's relaxation therapy was effective, safe non pharmacological method in reducing pain and stress among post caesarean mothers.

## Implications for Nursing practice:

There are several important implications for nursing practice.

### Nursing Service:

Emphasis can be given to the antenatal mothers regarding self care rather than allowing them and their family to become dependent on the health care personnel. Benson's therapy can be used effectively by the midwife for significant reduction in pain and stress among post caesarean mothers.

### Nursing Education:

Nurse educator should be updated with knowledge of complimentary alternative medicine for reducing pain and stress. Nurse educators should take initiative in organizing continuing nursing education program on complementary and alternative medicine. The nurse educator should be able to develop specific skill in providing relaxation exercises in pain and stress. Booklet can be developed about various relaxation techniques that can be practiced in the antenatal, labour and postnatal units.

### Nursing Administration:

Nurse administrator should motivate the mass media to educate the importance of practicing complimentary alternative medicine.

Nurse administrator should arrange the demonstration program in the community and hospital regarding non- Pharmacological methods.



**Nursing Research:** This study may be issued for further references. Further large scale study can be done as replication to standardize the results of Benson's relaxation therapy.

#### **Recommendation for further Research**

A similar study can be conducted using large sample. A comparative study can be conducted with other complementary therapies. A comparative study can be conducted using Benson's therapy among primi and multigravida women.

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