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# Effectiveness of Benson's Relaxation Therapy on Stress and Anxiety Among Post Caesarean Mothers in Selected Hospitals, Lucknow

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**Abstract**

This research aimed to investigate the anxiety and stress levels among the post caesarean mothers in experimental and control group. Many mothers face some discomfort after caesarean section like pain, mood changes, postpartum depression and stress. Anxiety and stress levels were evaluated by using quantitative research approach with quasi experimental pre-test and post-test control group design and by using non probability purposive sampling technique, total 30 subjects {Experimental group (15) and Control group (15)} were recruited. The intervention was given to the experimental group twice in a day for four consecutive days. Benson's relaxation therapy was used to get the anxiety and stress results of the caesarean mothers.

The subjects were examined by using SPSS version 20.The t-test was used to analyses the data. The p-value less than 0.05 were considered as significant level. The standard deviation of stress for experimental and control group is 6.734 and 9.841and the t value is 23.667 and for anxiety the standard deviation of experimental and control group is 4.329 and 3.195 and the t value 16.219. Themean stress score for experimental group reduced from 97.40 to 27.27 while in control group it was 101.33 at pre-intervention and 100.13 at follow-up. The mean anxiety score for the experimental group reduced from 55.00 to 35.20 while in control group it was 57.87 at pre-intervention and 57.73 at follow-up of the patients. This proves that there is a significant difference in the pre and post- test level score of stress and anxiety in experimental and control group.

**Keywords:** Benson's Relaxation therapy, post caesarean mothers, Anxiety and Stress level.

## 1. Introduction

Pregnancy is one kind of reviving as well as jovial time in a women's life, as it characterize the women's most imaginative plus supporting powers while giving an expansion to what's to come.

Patients' are suffering due to the lack of knowledge and information regarding the factor for anxiety and

depression coming from the patients' concerns [1]. Now considering the present scenario Caesarean section (CS) count are increasing worldwide and according to the recent research 41% in South America, and 25% in Europe, 32% in North America [2]. Approximately 18.5 million Caesarean sections (CS) are performed every year throughout the world [3], the Caesarean section (CS) count has tremendously increased around the world [4-5]. There are many ways of delivery like normal vaginal delivery, assisted delivery or operative delivery which includes caesarean section (CS). Caesarean section (CS) surgery is includes various problems which are related to the birth experience, age, labor pain, anxiety and stress. After caesarean section, mothers' faces variety of discomfort and problems that are vary to one woman to another complication [6-7]. Although some researchers reported that the Caesarean section CS is considered to be a harmless surgery but it has various complications, like bladder or uterus infection, urinary tract injury, Sevier blood loss, infection, uterine wounds, and many others [8-9].

A resent research reported that 72.7% of women who planned for the Caesarean section CSs had Very high levels of preoperative fear, stress and anxiety levels in comparison with the women go for the normal procedures [10]. There are several elements which affect the preoperative anxiety in terms of pain, fear of death, gender and delivery experience [11]. Benson's Relaxation Therapy is one kind of a non-pharmacological technique which can relax the body through breathing awareness. Dr. Benson, professor has defined the term, "Benson's relaxation therapy" it characterized individual capacity to secret synthetic substances and brain signal that makes organs and muscles relax and increment blood stream to the brain and It reduce the pain, increase appetite, reduce stress, promote sleep, boost energy, feel relax which increase attachment and affection with child. The Benson's relaxation therapy can reduce stress and anxiety level [12]. The present study was conducted to evaluate the effect of Benson's relaxation therapy on stress level and anxiety among the post caesarean mothers. There is a need to assess the level of post caesarean stress and anxiety among mothers and

The proper knowledge and awareness reduces the anxiety and stress level which allowing them to remain positive and calm while undergoing for the CS [13]. The main aim of this research was to investigate the effect of Benson's relaxation therapy on stress and anxiety levels among women undergoing for caesarean section CSs.

## 2. Materials and Methods

### 2.1 Research design

The research approach used for this study was quantitative approach. Quasi experimental pretest, post-test control group design was selected. the present study was conducted in the month of august 2022, 30 post caesarean mothers from the Fatima Hospital, Mahanagar , Lucknow were included in this pilot study, a non - probability purposive sampling technique used to select samples 15 samples in each group (Experimental group and control group).

**Inclusion criteria:**

Post caesarean mothers who are underwent elective/ emergency caesarean section and admitted in postnatal ward at selected hospital, Lucknow.

- Mothers who are in second day to fifth day of caesarean section**.**
- Mothers who are available and willing to participate in study.

**Exclusion criteria:**

- Mothers with medical or obstetrical complication who are restricted to sit and critically ill.

### 2.1 Tools and techniques

A well organized and structured questionnaire was prepared for the sample and data collections the questionnaire contains all the information and details of patients. The questionnaire was categorized into three categories as Part-A Sociodemographic variables, Part-B Checklist for stress assessment, Part-C Zung Self rating anxiety scale. Analysis and interpretation of data includes compilation, editing, coding, classification and presentation of data. Analysis is referred as a method of organizing and synthesizing the data in such a way that research questions can be answered and hypothesis can be tested. The data were analyzed according to the hypothesis formulated for the research with the help of SPSS (statistical package for social sciences).

### 2.2 Sample Size

The sample size was 30 as calculated statistically, using the following formula. According to basic Formula to calculate the sample size is,

- Sample Size Formula = $[z^2 * p(1-p)] / e^2 / 1 + [z^2 * p(1-p)] / e^2 * N]$
- Where,
- N is the population size
- z is the z-score
- e is the margin of error
- p is the standard of deviation

## 3. Results and Discussion

The result was obtained based on the questionnaire answered by the 30 post caesarean mothers. The participants were divided into two sections the first 15 participated in intervention section and rest 15 in control section.

**Section –I:** Frequency and percentage distribution of samples on demographic variables of experimental and control group.

**Section – II:**

- Frequency, percentage distribution, mean and standard deviation of pre-test score of stress among experimental and control group.
- Frequency, percentage distribution, mean and standard deviation of pre-test score of anxiety among experimental and control group.
- Frequency, percentage & mean distribution of post interventional level of stress among experimental group.
- Frequency, percentage & mean distribution of post interventional level of Anxiety among experimental group.
- Comparison of level of stress among experimental and control group after Benson's relaxation Therapy
- Comparison of level of anxiety among experimental and control group after Benson's relaxation Therapy.

**Section – III:** Association between pre interventional level of stress and anxiety among post caesarean mothers with their selected demographic variables.

**TABLE -1 Frequency and percentage distribution of samples on demographic variables of experimental and control group**

| Socio demographic variables | | Experimental N= 15 | | Control N=15 | |
|---|---|---|---|---|---|
| | | (f) | (%) | (f) | (%) |
| **Age** | 19-23 years | 2 | 13.3 | 2 | 13.3 |
| | 24- 26 years | 5 | 33.3 | 5 | 33.3 |
| | 27- 30 years | 5 | 33.3 | 2 | 13.3 |
| | Above 30 years | 3 | 20.0 | 6 | 40.0 |
| **Gravida** | Primi gravida | 7 | 46.7 | 9 | 60.0 |
| | Multigravida | 8 | 53.3 | 6 | 40.0 |
| **Parity** | Primi parous | 7 | 46.7 | 9 | 60.0 |
| | Mutiparous | 8 | 53.3 | 6 | 40.0 |
| **Educational status of mother** | Illiterate | 3 | 20.0 | 5 | 33.3 |
| | High school education | 8 | 53.3 | 7 | 46.7 |
| | Higher secondary education | 2 | 13.3 | 3 | 20.0 |
| | Graduate | 2 | 13.3 | 0 | 0.0 |
| **Educational status of father** | Illiterate | 0 | 0.0 | 0 | 0.0 |
| | High school education | 5 | 33.3 | 2 | 13.3 |
| | Higher secondary education | 7 | 46.7 | 13 | 86.7 |
| | Graduate | 3 | 20.0 | 0 | 0.0 |
| **Occupation Of the mother** | Housewife | 8 | 53.3 | 9 | 60.0 |
| | Private Job | 3 | 20.0 | 4 | 26.7 |
| | Government | 1 | 6.7 | 1 | 6.7 |
| | Others | 3 | 20.0 | 1 | 6.7 |
| **Occupation of the Husband** | Unemployment | 0 | 0.0 | 0 | 0.0 |
| | Private Job | 8 | 53.3 | 10 | 66.7 |
| | Government | 1 | 6.7 | 1 | 6.7 |
| | Others | 6 | 40.0 | 4 | 26.7 |
| **Monthly income of the family( in rupees)** | Upto 5000 | 1 | 6.7 | 0 | 0.0 |
| | 5001- 10,000 | 2 | 13.3 | 4 | 26.7 |
| | 10,001- 20,000 | 7 | 46.7 | 9 | 60.0 |
| | Above 20,000 | 5 | 33.3 | 2 | 13.3 |
| | Caesarean section | 8 | 46.7 | 4 | 26.7 |
| | Normal vaginal delivery | 7 | 0.0 | 2 | 13.3 |

| | | | | | |
|---|---|---|---|---|---|
| **Type of family** | Nuclear family | 5 | 33.3 | 7 | 46.7 |
| | Joint family | 8 | 53.3 | 6 | 40.0 |
| | Extended family | 2 | 13.3 | 2 | 13.3 |
| **Gender of baby** | Male child | 6 | 40.0 | 5 | 33.3 |
| | Girl child | 9 | 60.0 | 10 | 66.7 |
| **Family support** | Husband | 5 | 33.3 | 6 | 40.0 |
| | In laws | 1 | 6.7 | 2 | 13.3 |
| | Sister | 7 | 46.7 | 7 | 46.7 |
| | All | 2 | 13.3 | 0 | 0.0 |
| **No of post op** | 2nd day | 4 | 26.7 | 3 | 20.0 |
| | 3rd day | 5 | 33.3 | 5 | 33.3 |
| | 4th day | 4 | 26.7 | 6 | 40.0 |
| | 5th day | 2 | 13.3 | 1 | 6.7 |
| **Hours of sleep** | less than 2 hours | 3 | 20.0 | 3 | 20.0 |
| | less than 5 hours | 7 | 46.7 | 7 | 46.7 |
| | More than 4 hours | 5 | 33.3 | 5 | 33.3 |
| **Gender of baby** | Male child | 2 | 13.3 | 2 | 13.3 |
| | Girl child | 5 | 33.3 | 5 | 33.3 |
| **Family support** | Husband | 5 | 33.3 | 2 | 13.3 |
| | In laws | 3 | 20.0 | 6 | 40.0 |
| | Sister | 7 | 46.7 | 9 | 60.0 |
| | All | 8 | 53.3 | 6 | 40.0 |

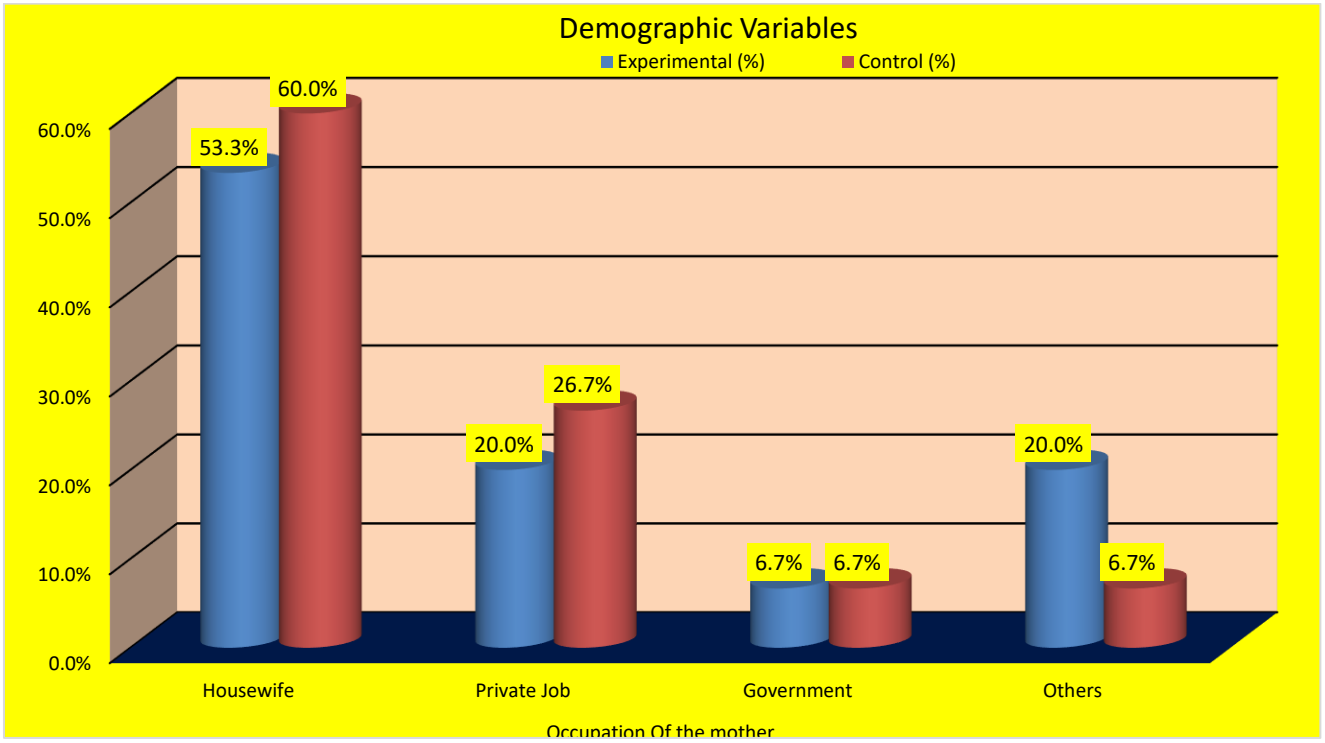


**Fig.1: Bar diagram shows percentage distribution of Occupation of the Mother among post caesarean mothers in experimental and control group**

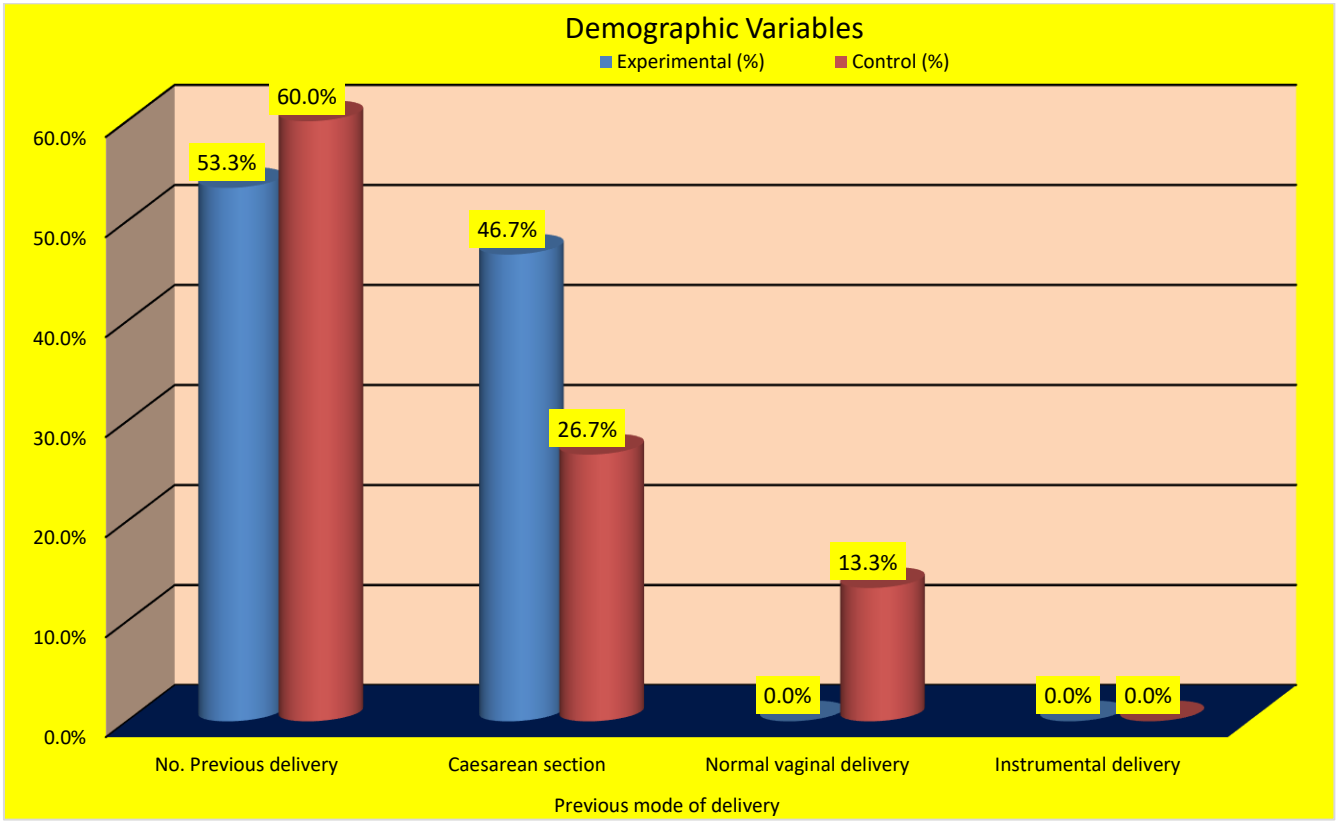


**Fig.2: Bar diagram shows percentage distribution of previous mode of delivery of the Mother among post caesarean mothers in experimental and control group**

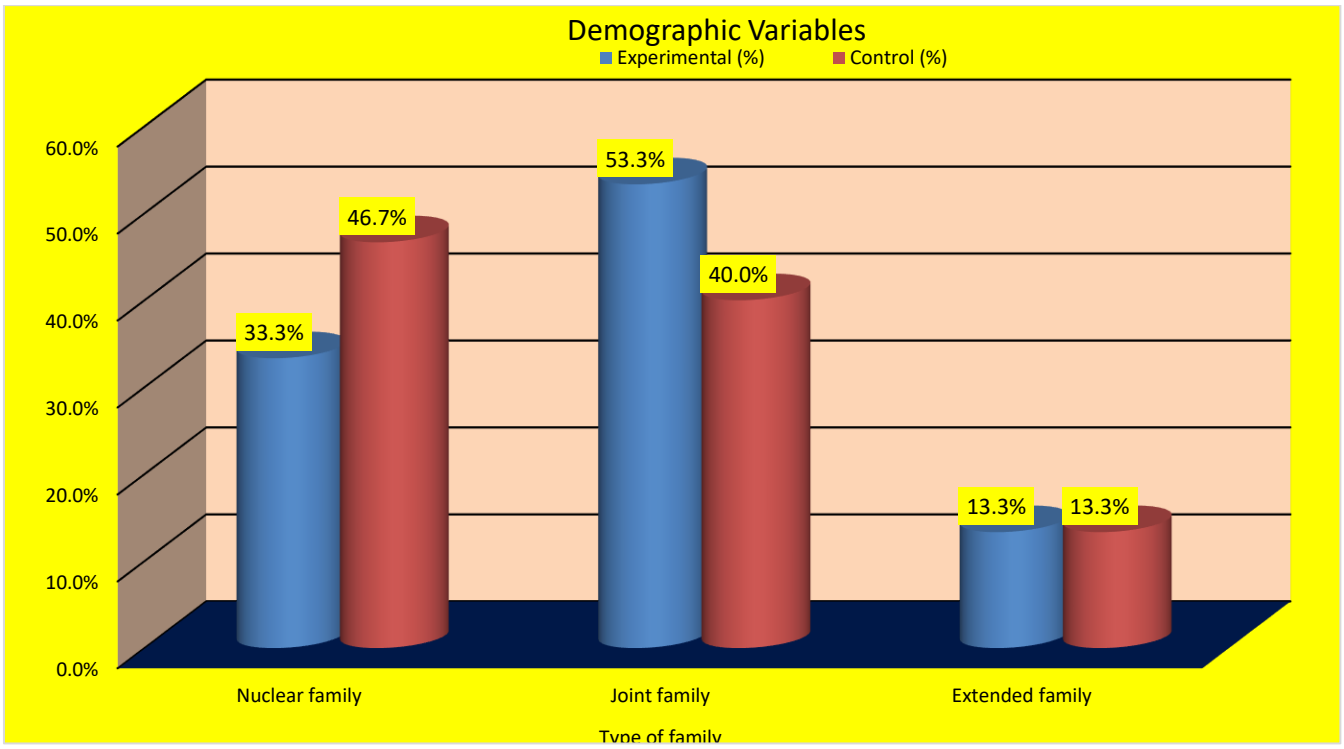


**Fig.3: Bar diagram shows percentage distribution of Type of family of the Mother among post caesarean mothers in experimental and control group**

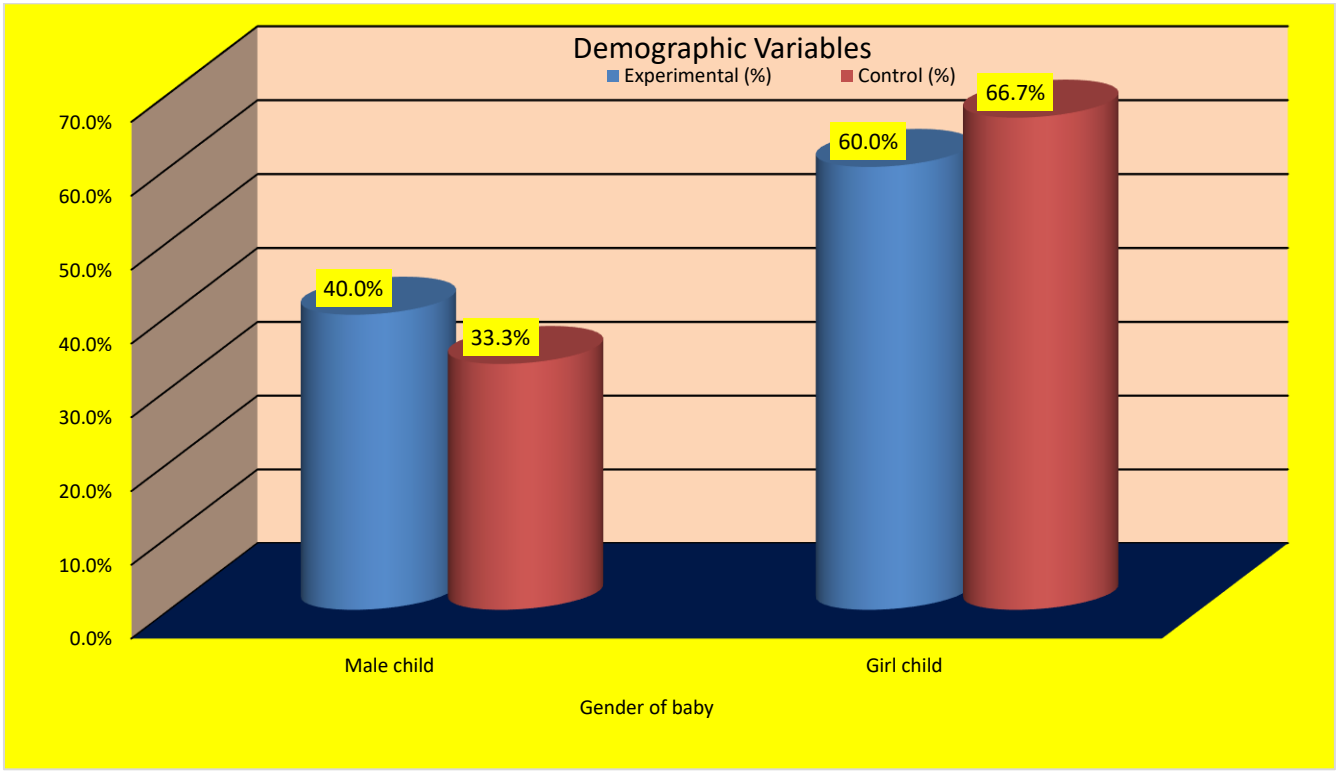


**Fig.4: Bar diagram shows percentage distribution of Gender of baby among post caesarean mothers in experimental and control group**

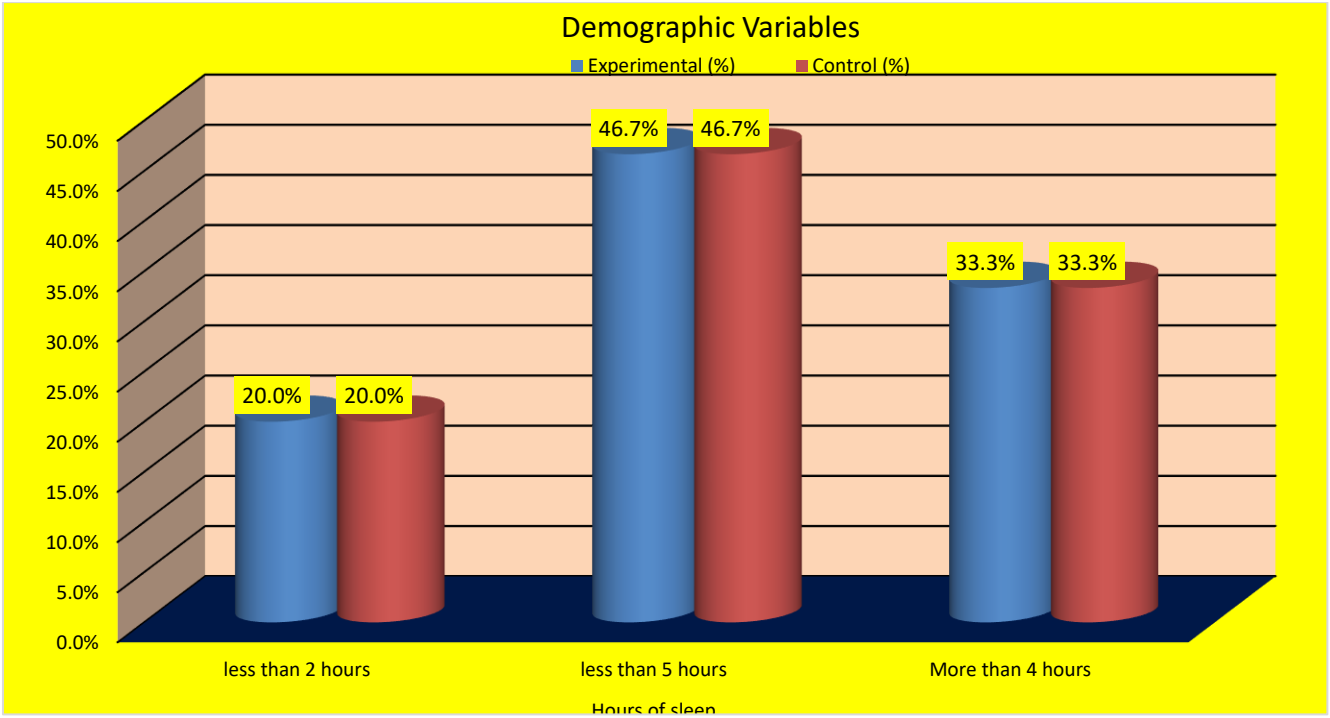


**Fig.5: Bar diagram shows percentage distribution of hours of sleep of mother among post caesarean mothers in experimental and control group**

**TABLE -2**

**Frequency, percentage distribution, mean and standard deviation of pre-test score of stress among experimental and control group**

**N N=30**

| **CRITERIA MEASURE OF STRESS SCORE** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Level of Stress** | **Experimental Group** | **Mean** | **SD** | **Level of Stress** | **Control Group** | **Mean** | **SD** |
| **Severe stress (114-150)** | 3(20%) | 97.40 | 10.17 | **Severe stress (114-150)** | 2 (13.3%) | 101.33 | 8 |
| **Moderate stress (76- 113)** | 12(80%) | | | **Moderate stress (76- 113)** | 13 (86.7%) | | |
| **Mild stress (38- 75)** | 0 (0%) | | | **Mild stress (38- 75)** | 0 (0%) | | |
| **No stress (0-37)** | 0 (0%) | | | **No stress (0-37)** | 0 (0%) | | |
| **Maximum score=150,minimum score=00** | | | | | | | |

Table-2:Depicts the pre-test score in experimental group majority 12(80%) of the post caesarean mothers had experienced moderate stress 3(20%) of post caesarean mothers had experienced severe stress and about where as in control group majority 13(86.7%) of the post caesarean mothers had experienced moderate stress 2(13.3%) of the post caesarean mothers had experienced severe stress and 0(0%) in experimental group ,0(0%) in control group had no mild pain and no stress.

The comparison between the stress in experimental and control group among post caesarean mothers before following the Benson's relaxation therapy was investigated. The data shows that mean in experimental group is 97.40 and in control group is 101.3 and the standard deviation is 10.176 in experimental group and 8 in control group.

**TABLE -3 Frequency, percentage distribution, mean and standard deviation of pre-test score of anxiety among experimental and control group**

| **CRITERIA MEASURE OF ANXIETY SCORE** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Level of Anxiety** | **Experimental Group** | **Mean** | **SD** | **Level of Anxiety** | **Control Group** | **Mean** | **SD** |
| **Severe anxiety** | 0(0%) | | | **Severe anxiety** | 0(0%) | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **( 75- 80)** | | 55.00 | 4.243 | **( 75- 80)** | | 57.87 | 3.758 |
| **Moderate anxiety ( 60- 74)** | 4(26.7%) | | | **Moderate anxiety ( 60- 74)** | 7(46.7) | | |
| **Mild anxiety ( 45- 59)** | 11(73.3%) | | | **Mild anxiety ( 45- 59)** | 8(53.3) | | |
| **Normal range ( 20- 44)** | 0(0%) | | | **Normal range ( 20- 44)** | 0(0%) | | |
| **Maximum score=80,minimum score=20** | | | | | | | |

**N=30**

Table –3: Depicts that in experimental group majority 11(73.3%) of post caesarean mothers had experienced moderate anxiety and about 4(26.7%) of the post caesarean mothers had experienced mild anxiety where as in control group majority 8(53.3%) and of the post caesarean mothers had experienced mild anxiety and 7(46.7%) had moderate anxiety, respectively 0(0%) in experimental group and 0(0%) in control group had no severe anxiety.

The comparison between the anxiety in experimental and control group among post caesarean mothers before following the Benson's relaxation therapy was calculated. The data shows that experimental group means anxiety score was 55.00 than the control group 57.87 and the standard deviation is 4.24 and 3.76 in control group.

**TABLE -4 Frequency, percentage & mean distribution of post interventional level of stress among experimental group**

**N=15**

| **Level of stress** | **n** | **Percentage ( %)** | **Mean** | **S.D** |
|---|---|---|---|---|
| **Severe stress (114-150)** | **0** | **–** | **27.27** | **6.73** |
| **Moderate stress (76-113)** | **0** | **–** | | |
| **Mild stress (76-113)** | **3** | **20%** | | |
| **No stress (76-113)** | **12** | **80%** | | |

The findings of table- 4 revealed that, post- interventional group, majority 12(80%) of post caesarean mothers had no stress and 3(20%) had mild stress, and none of the mothers had moderate and severe stress.

Data presented in the above table-3 depicts that post interventional level of stress the mean score is 27.27. The standard deviation of experimental group is 6.734 this proves that there is a significant difference in the post test level score of stress in experimental group.

**TABLE -5 Frequency, percentage & mean distribution of post interventional level of Anxiety among experimental group**

**N=15**

| Level of Anxiety | n | Percentage ( %) | Mean | S.D |
|---|---|---|---|---|
| Severe anxiety (75-80) | 0 | – | 35.2 | 4.32 |
| Moderate anxiety ( 60-74) | 0 | – | | |
| Mild anxiety ( 45-59) | 2 | 13 | | |
| Normal range ( 20-44) | 13 | 87 | | |

The findings of table- 5 revealed that, post- interventional group, majority 13(87%) had in normal range, 2(13.3%) had mild anxiety and none of the samples in severe and moderate anxiety. Data presented in the above table -5 depicts that post interventional level of anxiety, the mean score is 35.20 the standard deviation is 4.329 this proves that there is a significant difference in the post test level score of anxiety in experimental group.

**TABLE- 6 Comparison of level of stress among experimental and control group after Benson's relaxation Therapy N=30**

| Stress Score | | | | | |
|---|---|---|---|---|---|
| Group | N | Post test | | df | T |
| | | Mean | SD | | |
| Experimental group | 15 | 27.27 | 6.73 | 28 | 23.66 |
| Control group | 15 | 100.13 | 9.84 | | |

The above table: 6 conclude that the mean score level of stress in experimental group was 27.27 and SD was 6.73 and the mean score in control group was 100.13 and SD was 9.84. The'T' value is 23.66 which is significant at P< 0.05 level thus it becomes evident that Benson's Relaxation therapy was effective in reducing the stress in experimental group.

**TABLE- 7 Comparison of level of anxiety among experimental and control group after Benson's relaxation Therapy**

**N=30**

| Anxiety Score | | | | | |
|---|---|---|---|---|---|
| Group | N | Post test | | df | T |
| | | Mean | SD | | |
| Experimental group | 15 | 35.20 | 4.32 | 28 | 16.21 |
| Control group | 15 | 57.73 | 3.19 | | |

The above table: 7 revels that the mean score level of anxiety in experimental group was 35.20 and SD was 4.32 and the mean score in control group was 57.73 and SD was 3.19 the'T' value is 16.21 which is significant at P< 0.05 level thus it becomes evident that Benson's Relaxation therapy was effective in reducing the anxiety in experimental group.

## Conclusion

The study concludes that the Benson's relaxation therapy helps in reducing stress and anxiety among post caesarean mothers, Providing the right educational sessions together with a booklet containing information about CS surgery and its advantages and disadvantages, as well as instructions for aftercare following a CS, can help reduce preoperative anxiety, improve patient outcomes, and enhance patients' involvement in their care and decision-making. The study findings reveals that the Benson's relaxation therapy was effective in reducing the post caesarean level of stress and anxiety among post caesarean and also improve the wellbeing of mother as well as newborn. The main aim behind the study is to make post caesarean mothers understand the importance of Benson's relaxation therapy and generate enthusiasm among the mothers to practice by themselves to reduce the stress and anxiety.

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