

Original article

Effect of Benson Relaxation Therapy on Pain among Post- Caesarean Mothers

Kalabarathi S^{1,*}, Christy Savitha A², Elakkyavani S², Emiline Joy E¹

¹Principal, Department of Obstetrics and Gynecological Nursing, Saveetha College of Nursing, SIMATS, Chennai – 602105, India;

²B Sc (Nursing) Final Year, Saveetha College of Nursing, SIMATS, Chennai – 602105, India.

ARTICLE INFO:

Received: 05 Apr 2022

Accepted: 11 May 2022

Published: 30 Jun 2022

Corresponding author *

Kalabarathi S, PG Scholar,
Department of Obstetrics and
Gynecological Nursing, Saveetha
College of Nursing, SIMATS,
Chennai – 602105, India.
Email:

sconpublication2019@gmail.com.

ABSTRACT:

Pregnancy and delivery are natural and joyous human events. It's an exquisite experience. The child birth may be a universally celebrated event and also the happiest occasion in a woman's life. Post-operative pain interferes with the daily activities of the mother and her newly adopted maternal role affecting breast feeding and new born care, post caesarean pain remains a major problem. In postoperative 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. The present study aimed in assessing the effect of Benson relaxation therapy on pain among post caesarean mothers. A quantitative research approach design was used to conduct the study in Saveetha Institute of Medical and Technical Sciences. Samples were selected by probability simple random sampling technique, among them 30 were assigned in experimental group and 30 were in control group in Saveetha Institute of Medical and Technical Sciences. The data was collected for a period of one month from 15.04.2021 to 18.05.2021. The demographic data were collected using semi structured interview questionnaire, the level of pain of the post caesarean mothers was assessed using Numerical Pain Scale. The present study result depicts that Benson's relaxation therapy was effective in reducing pain among post caesarean mothers. In association none of the demographic variable had shown statistically significant with post-test level of pain.

Keywords: Benson relaxation therapy, post caesarean mothers.

1. INTRODUCTION

The Pregnancy and delivery are natural and joyous human events. It's an exquisite experience; the child birth may be a universally celebrated event and also the happiest occasion in a woman's life [1]. Post-operative pain interferes with the daily activities of the mother and her newly adopted maternal role affecting breast feeding and new born care, post caesarean pain remains a major problem [2]. In postoperative 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 act on pain by decreasing anxiety and lowering muscle tension and distracting attention thereby affecting the central control processes that modulate pain transmission, a data through client interviews in 5 people post caesarean section was obtained that all clients feel pain on the first day after surgery [3]. According to the World Health Organisation, which considers the ideal rate for C-sections to be between 10% and 15%, these surgeries are effective in saving maternal and infant lives but only when they are required for medically indicated reasons.

“There is no evidence showing the benefits of caesarean delivery for women or infants who do not require the procedure,” the organisation said in a statement on C-section rates published in 2015. “At population level, caesarean section rates higher than 10% are not associated with reductions in maternal and new-born mortality rates” [4]. The term "Relaxation Response" was coined by Dr. Herbert Benson, professor, author, cardiologist, and founder of Harvard's Mind/Body Medical Institute. The response is defined as the personal ability to encourage the body to release chemicals and brain signals that make the muscles and organs slow down and increase blood flow to the brain. Dr. Benson describes the Relaxation Response as a physical state of deep relaxation which engages the other part of the nervous system—the parasympathetic nervous system [5]. At 28.1%, the share of women delivering through a C-section has risen by nearly 25 percentage points in two decades from as low as 3.2% in 1995-96. The survey findings also show that it is the private sector hospitals that are largely responsible for the high rate of C-sections in India, as a result of which average Indians pay more for childbirth than they would have.

According to a study posted in scientific magazine *Jama Network Open* in March, the caesarean delivery rate in India is above the benchmark set through the WHO. “The rate of caesarean births is growing in India and has already crossed the World Health Organization threshold of 15 in step with cent,” concluded the study. In 2018-19, India carried out 20 in step with cent of the overall institutional deliveries via C-section, in opposition to 18.7 in step with cent in the preceding year. The rate is above the tiers discovered in richer international locations including The Netherlands or Finland [6].

The purpose of the study [1] to assess the demographic variable of experimental and control group among post caesarean mothers [2]. To assess the pre-test level of pain among post caesarean mothers in both experimental group and control group [3]. To assess the post-test level of pain among post caesarean mothers in both experimental group and control group [4]. To assess the effectiveness of Benson’s relaxation therapy on reduction of pain among post caesarean mothers in experimental group and control group [5]. To associate between the post-test level of pain among post caesarean mothers with their selected demographic variables.

2. METHODS AND MATERIALS

A quantitative research approach design was used to conduct the study in Saveetha Medical College & Hospital. Samples were selected by probability simple random sampling technique, among them 30 were assigned in experimental group and 30 were in control group in Saveetha Medical College & Hospital. The criteria for sample selection were *primi gravida*, Mothers who are within second to fifth post-operative day, Mothers who have undergone elective/emergency caesarean section and able to understand Tamil/English. The exclusion criteria for the samples are Mothers who are having post caesarean complication with systemic illness, Mothers who are not willing to participate in the study. The data collection period was done with prior permission from ethical clearance was obtained from the institution. The data was collected for a period of one month from 15.04.2021 to 18.05.2021. The demographic data were collected using semi structured interview questionnaire; the level of pain of the post caesarean mothers was assessed using Numerical Pain Scale. The sample characteristics were described using frequency and percentage. Chi square was used to associate between the post-test level of pain among post caesarean mothers with their selected demographic variables. The collected data was analysed and discussed by using descriptive statistics and inferential statistics.

3. RESULTS AND DISCUSSION

Section A: Demographic variable

The Frequency and percentage distribution of post caesarean mothers according to their demographic variables are the age group shows that 11 (36.66%) of post caesarean mothers

were in the age group of 24- 26 years in experimental group and in control group majority 11 (36.66%) of the mothers were between the age of 21 - 23 years and 24 - 26 years, religion majority shows that 12(40%) were Muslims in experimental group and in control group majority 12(40%) were Muslim , the educational status majority of them had high school education (10th) 16(53.33%) mothers were in experimental group and in control group majority of them had high school education (10th) 15(50%) , occupation of the mother majority of them was home maker 17(56.6%) were in experimental group and in control group majority of them was home maker 19(63.3%), monthly income of the family majority of them was earning 5000-7000 rupees 15 (50%) in experimental group and in control group majority of them was earning 5000-7000 rupees 11(36.6%) , type of family majority of the mothers were from nuclear family 17 (56.66%) in experimental group and in control group majority of the mothers were from nuclear family 17(56.66%), place of residence majority of the mothers were from urban area 28(93.33%) in experimental group and in control group majority of the mothers are from urban area 26(86.66%), number of post-operative days majority of mothers completed 2 days 15(50%) in experimental group and in control group majority of the mothers completed 2 days 16 (53.33%).

Section B: Pretest score on level of pain in experimental and control group

The study reveals 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 them mothers had severe pain. During post test 60% of them mothers had 50 mild pain, 33.33% of them mothers had moderate pain, and 6.66% of them mothers had severe pain (Table 1).

Parmar *et. al*, conducted a study on Effect of Benson's Relaxation Therapy on Post Caesarean Section Pain and Stress: A Pilot Study. Quantitative research approach with quasi experimental: pre-test post-test control group design was used. By using convenient sampling technique, total 10 samples {experimental group (5) and control group (5)} were recruited. The intervention was given to the experimental group twice a day for 3 consecutive days. BRT was not administered in control group. Post-interventional pain and stress was assessed on 3rd day by using numerical pain rating scale for pain assessment and Modified Hung's postpartum stress scale for stress assessment. The study showed that BRT was effective in reducing pain level in experimental as well as in reducing stress level. The mean pain score for experimental group reduced from 7 to 2.2 while in control group it was 7.60 at pre-intervention and 4.6 at follow-up. The mean stress score for the experimental

group reduced from 90.60 to 57.60 while in control group it was 92.00 at pre-intervention and 75.20 at follow-up [7].

Table 1: Frequency and percentage distribution of post caesarean mothers according to pretest score on level of pain in experimental and control group. N= 60

Level of Pain	Percentage %	
	Experimental Group	Control Group
Mild pain	0%	0%
Moderate pain	26.66%	23.33%
severe pain	73.33%	76.66%

SECTION C: Post test score on level of pain in experimental and control group

A majority of 93.33% of the post caesarean mothers had experienced mild pain and about 6.66% of them had experienced moderate pain. Where as in control group majority 60% of the post caesarean mothers had experienced mild pain and about 33.33% and 6.66% of the mothers had experienced moderate and severe pain. (Table 2)

The presented study is supported by Sweetly Theresa D’Souza, Janet Prima Miranda conducted a study on the “Effectiveness of Benson’s Relaxation Therapy on Post-Operative Pain among Mothers Delivered by Caesarean Section in a Selected Hospital at Mangaluru, Quantitative research with quasi-experimental repeated measures design was used. Purposive sampling technique was adopted to select 40 mothers delivered by caesarean section to test effectiveness of Benson’s relaxation therapy. The data was collected by using numerical pain rating scale and the post intervention pain scores in the experimental group showed there was significant reduction in pain ($p < 0.05$) at various time interval. Whereas in the control group also there was significant reduction (< 0.05) at various time interval except for 2–12-hour comparison ($p = 0.346$) [8].

Table 2: Frequency and percentage distribution of post caesarean mothers according to post test score on level of pain in experimental and control group.

Level Of Pain	Percentage %	
	Experimental Group	Control Group
Mild pain	93.33%	60%
Moderate pain	6.66%	33.33%
severe pain	0%	6.66%

SECTION D: Effectiveness of Benson’s relaxation therapy on reduction of level of pain in experimental and control group.

The mean score in experimental group was 1.73 ± 0.81 and the mean score in control group 3.13 ± 2.16 . The ‘t’ value is 3.41 which is significant at $P < 0.05$ level. Thus, it proves that Benson’s relaxation therapy was effective in reducing the level of pain in experimental group. Hence H1 is proved. (Table 3).

Soumya Raj K, Rakhi R Pillai conducted a study on the Effectiveness of Benson’s Relaxation Therapy on Reduction of Post cesarean Pain and Stress among Mothers in a Selected Hospital at Kochi, the study revealed that there is a

significant difference in pain within the groups, within experimental group, mean and SD of pretest pain and posttest pain were 4.367 ± 1.326 , t-value is 18.041, and p-value is 0.000 which is significant at the level of pretest pain and posttest pain were 2.400 ± 1.831 , t-value is 7.180, and p-value is 0.000 which is also significant at the level of < 0.05 [9].

Table 3: Mean, standard deviation t value on the level of pain among post caesarean mothers in experimental and control groups.

GROUP	MEAN	S. D	‘t’ VALUE
Experimental group	1.73	0.81	3.41
Control group	3.41	2.16	

SECTION E: Association on level of pain among post caesarean mothers with their selected demographic variables in experimental and control group.

The major finding of the study there was no significant association between the level of pain with their selected demographic variables of post caesarean mothers in experimental and control group. Hence H4 is rejected.

Bommi (2016) conducted a study on a study to evaluate the effectiveness of Benson’s relaxation therapy on reduction of pain and stress among post caesarean mothers admitted at selected hospital, pudukkotta study reveals that in post test level of pain in experimental and control group, there was no significant association between the level of pain and their demographic variables at $p < 0.05$ level. Hence H3 is rejected.

In post test level of stress in experimental and control group, there was no significant association between the level of stress and their selected demographic variables, at $p < 0.05$ level. Hence H4 is rejected.

4. CONCLUSION

The study was conducted to evaluate the effectiveness of Benson’s relaxation therapy on reduction of pain among post caesarean mothers. The finding reveals that Benson’s relaxation therapy was effective in reducing pain among post caesarean mothers.

5. REFERENCES

1. Radha C, Bommi K, Sumithra S. Effectiveness of Benson’s Relaxation Therapy on Pain and Stress among Post Caesarean Mothers. *Int J Advances in Nur Management.* 2019; 7:316-20.
2. Thadathil, Smitha PK, Sindhumol. Effect of Benson’s Relaxation Therapy on Post Caesarean Pain. *International Journal of Science and Research* 2018; 7: 705-7.
3. Solehati Tetti, Rustina Yeni. The Effect of Benson Relaxation on Reduction of Pain Level among Post Caesarean Section Mother at Cibabat Hospital, Indonesia. *GSTF International Journal of Nursing and Health Care.* 2013; 1: 171 – 5.
4. Czech I, Fuchs P, Fuchs A, Lorek M, Tobolska-Lorek D, Drosdzol-Cop A, Sikora J. *Pharmacological and*

- Non-Pharmacological Methods of Labour Pain Relief- Establishment of Effectiveness and Comparison. *Int J Environ Res Public Health*. 2018; 15: 2792.
5. Dr. Herbert Benson's Relaxation Response, https://www.psychologytoday.com/us/blog/heart-and-soul-healing/201303/dr-herbert-benson-s-relaxation-response_. (Accessed March 29, 2013).
 6. Caesarean deliveries have become an 'epidemic' in India — record 300% jump in last decade <https://theprint.in/health/caesarean-deliveries-have-become-an-epidemic-in-india-record-300-jump-in-last-decade/334291/> (Accessed December 13, 2019).
 7. Parmar R, Tiwari A. Effect of Benson's Relaxation Therapy (BRT) on Post Caesarean Section Pain and Stress. *Indian Journal of Public Health Research & Development*. 2021; 12: 593–6.
 8. Sweetly Theresa D'Souza, Janet Prima Miranda. Effectiveness of Benson's Relaxation Therapy on Post-Operative Pain among Mothers Delivered by Caesarean Section in a Selected Hospital at Mangaluru. *International Journal of Scientific Research* 2022; 11: 56-8.
 9. Raj SK, Pillai RR. Effectiveness of Benson's Relaxation Therapy on Reduction of Postcesarean Pain and Stress among Mothers in a Selected Hospital at Kochi. *J South Asian Feder Obst Gynae*. 2021;13:121–4.

ACKNOWLEDGEMENT: None

CONFLICT OF INTEREST: The authors declare no conflict of interest, financial or otherwise.

SOURCE OF FUNDING: None.

AVAILABILITY OF DATA AND MATERIALS: Not applicable.

CONSENT FOR PUBLICATION: Not applicable.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE: Not applicable