"Effectiveness Of Benson's Relaxation Therapy On Reduction Of Pain And Stress Among Post L.S.C.S Primigravida Mothers "

Pranali Macwan[1], Neha Parmar [2], Paras Savaliya[3]

[1]Second Year M.Sc Nursing, Dinsha Patel College of Nursing, Nadiad,

[2]Assistant Professor and HOD of obstetrics and gynecological Nursing Department, Dinsha Patel College of Nursing, Nadiad.

[3]Ex HOD OBG department , dinsha patel college of nursing, nadiad

Email Id: macwanpranali19198@gmail.com

Abstract

Background: Pregnancy and Childbirth are normal life events for all women but sometimes it creates pain and stress related to delivery and its most common in primigravida mothers with C – Section procedure. In 2021 birth rate is 17.1 % per 1000 population in India. Where according to 5th NFHS the national c-section rate is 21.5 higher than the ideal percent 10 -15 % in India. Now a days the trend of delivery by c – section is increased sometimes its necessary (big baby, contracted pelvic, prolong labor) to do c -section and sometime c- section do due to mother is not want vaginal delivery due to fear, lack of cooperativeness etc. Due to c – section mother feels stress, pain, disability due to operative trauma. For that painkillers, antibiotics (pharmacological) are necessary to give but with medicine also some therapies (non-pharmacological) are necessary to reduce pain, stress, anxiety etc. non – pharmacological methods are cheap, suitable and no need of any specific training.

Aims : The main aim of this study is to assess the effectiveness of non-pharmacological management especially Benson's relaxation therapy for pain and stress that occur due operative trauma among post LSCS women.

Objective : To assess the pre-test and post-test level of pain and stress among post LSCS mothers in experimental and control group before Benson's relaxation therapy.
To assess the effectiveness of Benson's relaxation therapy by comparing the pre-test and post-test level of pain and stress among post LSCS mothers in experimental and control group.
To find out the association between the post intervention pain and stress among post LSCS mothers with their selected demographic variables in both experimental and control group.

Methodology: Quasi experimental design with pretest – posttest only control group design was used by the researcher. 60 post-natal mothers were selected as a sample from those 30 mothers selected for experimental group and 30 selected for control group. samples were selected from Dr. N. D. Desai College and Hospital from Nadiad City. Samples was selected by Non-Probability Purposive Sampling Technique. Data were analyzed by using SPSS software and frequency and percentage, tables, graph etc. were used to represent the statistical data.

Results: Majority of women underwent C – section were primigravida mothers. For pain, in experimental group, Mean Difference of pre test and post test is 3.24 (32.4%) and calculated "t" value is 29.512 which is more than tabulated value 2.045. In control group, Mean Difference of pretest and posttest is 0.30 and calculated "t" value is 2.208. So, after administration of BRT pain score is reduced in experimental group than the control group. For stress, in experimental group, Mean Difference of pretest and posttest is 4.71 (11.77%) and calculated "t" value is 25.791 which is more than tabulated value 2.045. In control group, Mean Difference of pretest and posttest is 0.17 and calculated "t" value is 0.376. So, result reveals that on 3rd day after administrating BRT, stress were reduced in experimental group than the control group.

Conclusion: The result of present study shows that Benson's relaxation therapy has positive impact on reduction in pain and stress among post LSCS primigravida mothers in hospital where as in control group routine care is not much more effective to reduce pain.

Keywords: Primigravida Mothers, Benson's Relaxation Therapy, Pain, Stress, LSCS

DOI: 10.47750/pnr.2022.13.S04.120

INTRODUCTION

Pregnancy and child birth are normal and enjoyable event in every woman’s life but many mothers also experience unnecessary distress and anxiety simply because they don’t anticipate with this or don’t know about normal psychological upheavals, emotional changes and the adjustment that required in childbearing process.

Objectives

To assess the pre-test and post-test level of pain and stress among post LSCS mothers in experimental and control group before Benson’s relaxation therapy.

To assess the effectiveness of Benson’s relaxation therapy by comparing the pre-test and post-test level of pain and stress among post LSCS mothers in experimental and control group.

To find out the association between the post intervention pain and stress among post LSCS mothers with their selected demographic variables in both experimental and control group.

Hypotheses

H1: There will be a significant reduction in the level of pain among post LSCS mothers after implementing Benson’s relaxation therapy in experimental group at 0.05 level of significance

H2: There will be a significant reduction in the level of stress among post LSCS mothers after implementing Benson’s relaxation therapy in experimental group at 0.05 level of significance

H3: There will be a significant association between post test level of pain and stress among post L.S.C.S primigravida mothers and their selected socio-demographic variables at 0.05 level of significance

Material And Method

Research Approach : Quantitative research Approach

Research Design: quasi experimental design with pretest – posttest only control group design

Research Variables:

Independent Variable: Benson's relaxation therapy

Dependent Variable : Pain and stress level

Population: Post LSCS primi gravida mother

Research Setting : Private hospital of Nadiad city.

Sampling Technique: Non-probability convenient sampling technique.

Sample Size

Post L.S.C.S women

30 Mothers to whom researcher give relaxation therapy

30 Mothers to whom researcher is not giving any therapy

Sample Criteria:

Inclusion Criteria:

Women who delivered baby by c-section

Women who were willing to participate.

Women with pain and stress.

Women who admitted or available at data collection.

Women who are in first to third day

Women who have no experience of Benson's relaxation therapy or any other therapy which reduce pain and stress.

Primigravida mothers

Exclusion Criteria:

Women who are already practicing any therapy (guided imagery technique) or meditation(pranayama) to reduce pain or stress.

Women who were not willing to participate.

Women who are not available at data collection time.

Women who having post L.S.C.S complication like too much blood loss, infection etc.

Tool for Data Collection:

Part 1: It consist of demographic variable of post L.S.C.S mothers such as age, education, religion, sex of baby etc.

Part 2: Numerical pain scale

Part 3 : Perceived stress scale

Result

Analysis And Interpretation Of Demographic Data Of The Samples

Table 1: Frequency and percentage wise distribution of samples based on Demographic Variables.

[n-60]

SL No	Demographic variables	Variables	Control Group		Experimental group	
			(f)	%	(f)	%
1	Age in years	18-21 years	4	13.3	3	10
		22-25 years	8	26.7	10	33.3
		26-29 years	12	40	12	40
		>30 above	6	20	5	16.7
2	Religion	Hindu	15	50	14	46.7
		Muslim	7	23.3	7	23.3
		Christian	6	20	6	20
		Other	2	6.7	3	10
3	Education of mother	Informal	6	20	10	33.3
		Primary	13	43.3	7	23.3
		Secondary	8	26.7	8	26.7
		Graduate & above	3	10	5	16.7
4	Diet	Vegetarian	11	36.7	15	50
		Non –vegetarian	11	36.7	9	30
		Eggetarian	8	26.6	6	20
5	Habit	Smoking	0	0	2	6.7
		Alcohol	2	6.7	5	16.7
		Tobacco	8	26.7	2	6.7
		No any	20	66.6	21	70
6	Occupation of	Household	13	43.3	11	36.7

	mother	Labor /Farmer	13	43.3	10	33.3
		Private	3	10	6	20
		Government	1	3.3	3	10
7	Occupation of husband	Household	0	0	1	3.3
		Labor /Farmer	16	53.3	16	53.3
		Private	11	36.7	11	36.7
		Government	3	10	0	6.7
8	Monthly income of family	< 5000/-	0	0	3	10
		5001/- – 10000/-	16	53.3	15	50
		10001/- - 15000/-	9	30	9	30
		>15001/-	5	16.7	3	10
9	Type of family	Nuclear	9	30	8	26.7
		Join	17	56.7	21	70
		Extended	4	13.3	1	3.3
10	Residence	Rural	13	43.3	10	33.3
		Urban	17	56.7	20	66.7
11	No.Of POD	1st	30	100	30	100
12	Gender of baby	Male	12	40	15	50
		Female	18	60	15	50
		Other	0	0	0	0
13	Have you undergone any yoga classes?	Yes	0	0	0	0
		No	30	100	30	100
14	Age of marriage	< 19 yrs	4	13.3	3	10
		20-24 yrs	12	40	13	43.3
		25-29 yrs	14	46.7	12	40
		>30 yrs	0	0	2	6.7

Analysis Of Pre-Test And Post-Test Pain Score Of The Samples In Experimental And Control Group

Table 2: Pre test and post test n1=30, n2=30 of samples on in control and experimental group [n1=30, n2=30]

Group	Day	Control group			Experimental group		
		Mean	Mean %	Average Mean Difference	Mean	Mean %	Average Mean Difference
Pre test pain score	Day 1	7.53	75.3	0.31 (3.1%)	7.70	77	3.24 (32.4%)
	Day 2	7.53	75.3		7.50	75	
	Day 3	7.43	74.3		7.66	76.6	
	Average	7.50	75		7.62	76.2	
Post test	Day 1	7.23	72.3		4.56	45.6	
	Day 2	7.33	73.3		4.40	44	

pain score	Day 3	7.03	70.3		4.20	42	
	Average	7.19	71.9		4.38	43.8	

Table 3: Frequency and Percentage wise distribution of the Samples based on level of pain in experimental and control group [n-60]

Group	Control group				Experimental group			
	Pre test		Post test		Pre test		Post test	
	(f)	(%)	(f)	(%)	(f)	(%)	(f)	(%)
No pain	0	0	0	0	0	0	0	0
Mild pain	0	0	0	0	0	0	7	23.3
Moderate pain	4	13.3	5	16.7	1	3.3	23	76.7
Severe pain	26	86.7	25	83.3	29	96.7	0	0
Worst pain	0	0	0	0	0	0	0	0
Total	30	100	30	100	30	100	30	100

Table 4: pre test and post test stress score of samples in control and experimental group [n-60]

Group	Day	Control group			Experimental group		
		Mean	Mean %	Average Mean Difference	Mean	Mean %	Average Mean Difference
Pre test stress score	Day 1	28.50	71.25	0.18 (0.45%)	29.50	73.75	4.71 (11.77%)
	Day 2	28.66	71.65		27.26	68.15	
	Day 3	30.03	75.07		28.06	70.15	
	Average	29.06	72.65		28.27	70.67	
Post test stress score	Day 1	28.16	70.4		24.50	61.25	
	Day 2	28.96	72.4		22.43	56.07	
	Day 3	29.53	73.82		23.76	59.4	
	Average	28.88	72.2		23.56	58.9	

Table 5: Frequency and Percentage wise distribution of the Samples based on level of stress in experimental and control group [n-60]

Group Level	Control group				Experimental group			
	Pre test		Post test		Pre test		Post test	
	(f)	(%)	(f)	(%)	(f)	(%)	(f)	(%)
Low stress (0 – 13)	0	0	0	0	0	0	0	0
Moderate stress (14 - 26)	3	10	2	6.7	4	13.3	29	96.7
High perceived stress (27 – 40)	27	90	28	93.3	26	86.7	1	3.3
Total (40)	30	100	30	100	30	100	30	100

Table 6: Comparison of mean pain score , mean percentage, standard deviation and paired t test with in the experimental and control group [n-60]

GROUP	PAIN SCORE	MEAN	MEAN DIFFERENCE	SD	Calculated "t" value	Tabulated "t" value
EXPERIMENTAL GROUP	Pre Test	7.62	3.23	0.58	29.512*	2.045
	Post Test	4.38		0.50		
CONTROL GROUP	Pre Test	7.50	0.30	0.45	2.208*	2.045
	Post Test	7.19		0.55		

(*t = p<0.05, df=29)

Table 7: Comparison of mean stress score , mean percentage, standard deviation and paired t test with in the experimental and control group [n-60]

GROUP	STRESS LEVEL	MEAN	MEAN DIFFERENCE	SD	Calculated "t" value	Tabulated "t" value
EXPERIMENTAL GROUP	Pre Test	28.27	4.71	2.04	25.791*	2.045
	Post Test	23.56		1.88		
CONTROL GROUP	Pre Test	29.06	0.18	2.00	0.376*	2.045
	Post Test	28.88		1.86		

(*t = p<0.05, df=29)

Table 8: Association between post test level of pain with selected demographic variables in experimental and control group (n-60)

Sr. no	Demographic variable	Experimental group				Control group			
		X2	Table value	DF	R	X2	Table value	DF	R
1	Age (in Years)	2.283	7.81	3	NS	0.720	7.81	3	NS
2	Religion	2.343	7.81	3	NS	3.429	7.81	3	NS
3	Educational status	1.960	7.81	3	NS	0.249	7.81	3	NS
4	Diet	2.304	5.99	2	NS	2.880	5.99	2	NS
5	Habit of mother	1.630	5.99	2	NS	1.067	7.81	3	NS
6	Occupation of mother	4.200	7.81	3	NS	3.011	7.81	3	NS
7	Occupation of husband	2.145	5.99	2	NS	2.018	7.81	3	NS
8	Monthly income of the family	3.952	5.99	2	NS	3.120	7.81	3	NS

9	Types of family	0.817	5.99	2	NS	0.686	5.99	2	NS
10	Place of residence	0.810	3.84	1	NS	0.120	3.84	1	NS
11	No. of post operative day	No statistics are computed because this variable is constant							
12	Gender of baby	0.031	3.84	1	NS	2.160	3.84	1	NS
13	Have you undergone any yoga classes?	No statistics are computed because this variable is constant							
14	Age of marriage	3.314	5.99	2	NS	1.385	7.81	3	NS

S indicates Significant at $p \leq 0.05$ level; NS indicates non significant

Table 9: Association between post test level of stress score with selected demographic variables in experimental and control group (n-60)

Sr. no	Demographic variable	Experimental group				Control group			
		X2	Table value	DF	R	X2	Table value	DF	R
1	Age (in Years)	1.552	7.81	3	NS	4.554	7.81	3	NS
2	Religion	4.138	7.81	3	NS	5.510	7.81	3	NS
3	Educational status	2.845	7.81	3	NS	3.367	7.81	3	NS
4	Diet	2.845	5.99	2	NS	5.00	5.99	2	NS
5	Habit of mother	0.517	5.99	2	NS	2.847	7.81	3	NS
6	Occupation of mother	1.353	7.81	3	NS	0.925	7.81	3	NS
7	Occupation of husband	1.787	5.99	2	NS	0.323	7.81	3	NS
8	Monthly income of the family	2.414	5.99	2	NS	0.714	7.81	3	NS
9	Types of family	0.791	5.99	2	NS	0.918	5.99	2	NS
10	Place of residence	1.353	3.84	1	NS	0.268	3.84	1	NS

11	No. of post operative day	No statistics are computed because this variable is constant							
12	Gender of baby	0.690	3.84	1	NS	0.000	3.84	1	NS
13	Have you undergone any yoga classes?	No statistics are computed because this variable is constant							
14	Age of marriage	1.182	5.99	2	NS	4.554	7.81	3	NS

S indicates Significant at p≤0.05 level; NS indicates non significant

Discussion

A quasi experimental study were carried out in maternity ward of selected hospitals of Kheda districts. Consent was taken from the mothers. Pre test taken from both groups experimental group and control group, from that in experimental group the researcher addmistred Benson's Relaxation Therapy for 3 days. After that post test taken from same groups and same mothers. On analysis, it was found that in experimental group pain and stress were reduced and improve the mothers general condition than the control group. after giving Benson's Relaxation Therapy mothers feel good and stress-free. Mind were calm. For the control group researcher prepare leaflet and also explain how they can perform at home.

Recommendation

The similar study can be conducted with larger samples with different demographic variables

A similar study can be do at different settings to strengthens the findings.

The study can be done for the pregnant women with eclampsia, pre-eclampsia or hypertensive disorder

A similar study can be conducted in antenatal period.

The effectiveness of Benson's relaxation therapy can be done for other patients with trauma, surgery etc.

The same study can be conducted by administering Benson's Relaxation Therapy for a long time period.

A comparative study can be conducted to compare Benson's Relaxation Therapy with other therapies like pranayama, meditation etc.

Consent And Ethical Approval

The study was approved by the institutional ethical committee (IEC) of Dinsha Patel College of Nursing, Nadiad. There is a total 15 members in the committee from various departments. The Ethical Approval Reference number is DPCN/2nd IEC/2020-21/13 And a formal written consent was gathered from the samples prior to data collection.

Competing Interests

Author have declared that no competing interests exits.

REFERENCES

1. D.C. Datta. Text book of obstetrics, 4th edition, new central book agency publishhers 1998, page:
2. Tetti Solehati and Yeni Rustina (2015) Benson Relaxation Technique in Reducing Pain Intensity in Women After Caesarean Section Published 2015 Jun 22. doi: 10.5812/aapm.22236v2https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4493735/
3. Smitha Thadathil and Sindhumol PK Effect of Benson's Relaxation Therapy on Post Caesarean Pain November 2018 International Journal of Science and Research (IJSR) 7(11):705-707 DOI:10.21275/ART20192767
4. https://www.researchgate.net/publication/343987070_Effect_of_Benson's_RelaxationTherapy_on_Post_Caesarean_Pain

5. Soumya Raj K1 and Rakhi R Pillai2 (2021) Effectiveness of Benson’s Relaxation Therapy on Reduction of Post caesarean Pain and Stress among Mothers in a Selected Hospital at Kochi
6. https://www.jsafog.com/doi/JSAFOG/pdf/10.5005/jp-journals-10006-1875
7. Radha C., Bommi K., Sumithra S.. Effectiveness of Benson’s Relaxation Therapy on Pain and Stress among Post Caesarean Mothers. Int. J. of Advances in Nur. Management. 2019; 7(4):316-320. doi: 10.5958/2454-2652.2019.00074.X
8. https://ijanm.com/HTMLPaper.aspx?Journal=International%20Journal%20of%20Advances%20in%20Nursing%20Management;PID=2019-7-4-5
9. Annamma J. A comprehensive textbook of midwifery and gynaecological nursing. Edisi ke. 2012.
10. Riddhi Parmar , Anjali Tiwari (2021) Effect of Benson’s Relaxation Therapy on Post Caesarean Section Pain and StressVol. 12 No. 3 (2021): Indian Journal of Public Health Research & Development
11. https://jcdr.net/articles/PDF/15020/48029_CE[Ra1]_F(SHU)_PF1(SY_RK_SHU)_PN(KM).pdf
12. Suthar DB, Nagar K. A Study To Assess The Effectiveness Of Planned Teaching Programme On Prevention Of Selected Life Style Diseases In Terms Of Knowledge And Attitude Among Male Adults At Selected PHC Of Kheda District. Indian J Forensic Med Toxicol. 2021 May 17;15(3):15732. doi: 10.37506/ijfmt.v15i3.15732. PMID: 34434007.
13. Christian A, Nagar K. Understanding Patients Experiences Living with Diabetes Mellitus: A Qualitative Study, Gujarat, India. J Pharm Res Int. 2021;33(58A):464-471. doi: 10.9734/jpri/2021/v33i58A34139 . Epub 2021 Dec 15. PMID: 35024509
14. Nuri Luthfiatil Fitri, Immawati , Senja Atika Sari , Ludiana , Janu Purwono (2020) The Effect Of Relaxation Of Benson On The Intensity Of Section Cesarea Post Women Pain At Muhammadiyah Metro Hospital In 2018, ISSN 2515-8260 Volume 07, Issue 06, 2020
15. https://ejmcm.com/pdf_2804_41689d9e0d26ad948609a51f1ebe912e.html
16. Fiona Bragg, David A Cromwell. Variation in rates of C-section among NHS trusts after accounting for maternal and clinical risk: Cross sectional study. BMJ. 2010 [cited on 2019 Nov 15];341:5065.https://pubmed.ncbi.nlm.nih.gov/20926490/
17. Simi Paramban, Sireesha Bala, J Krishna Sowmya, M V. Raghavendra Rao, Praveen Kottath Veetil (2016)Effectiveness of Benson's relaxation therapy on reduction of stress among primigravid mothers Year : 2016, Volume : 3 , Issue : 2, Page : 133-140 DOI: 10.5530/ami.2016.2.2https://www.actamedicainternational.com/article.asp?issn=2349-0578;year=2016;volume=3;issue=2;spage=133;epage=140;aulast=Paramban
18. Mohannad Eid Aburuz, Enas A. Dhaher, Abdallah Rayyan, Mira Al Jaberi, and Rami Masa'Deh (2021) The Effect of Benson Relaxation Technique on Depression, Anxiety, and Stress of Jordanian Patients Diagnosed with Multiple Sclerosis: A Cross-Sectional Study, https://doi.org/10.1155/2021/8300497
19. Marilyn Mitchell. Dr. Herbert Bensons’s relaxation response.[document on internet]. Psychology Today; 2013 March 29 [cited on 2019 Nov 16].
20. https://www.psychologytoday.com/us/blog/heart-and-soul-healing/201303/dr-herbert-benson-s-relaxation-response
21. Jenny Mercy Thomas. (2016) A study to assess effectiveness of Benson’s relaxation therapy on anxiety among antenatal women in selected hospital at coimbator, Tamilnadu. M.Sc. Nursing [dissertation] The Tamil Nadu Dr. M.G.R Medical University
22. http://repository-tnmgrmu.ac.in/2762/1/3003034jemymercythomas.pdf
23. Lt Col Smitha Thadathil. (2018)A Study to Assess the Effect of Benson’s Relaxation Therapy on Pain among Post Cesarean Mothers Admitted in Selected Hospital. International Journal of Science and Research. [cited on 2019 May 15];7(11):296.
24. https://www.semanticscholar.org/paper/A-Study-to-Assess-the-Effect-of-Benson%E2%80%99s-Relaxation-Thadathil/4b8d4d6e5cefc67b170fb55ac1b45206f77d47c3
25. Tahany Hassan Mohamed alam , Naglaa Zaki Hassan Roma , Reda Mhmoud Mohamed Hables , Mayar Ezzeldeen El Nakeb4 (2020)The effect of Benson relaxation therapy on anxiety and the quality of sleep among preeclamptic women Volume-6, Issue-6, June, 2020 DOI: https://doi.org/10.53555/hsn.v6i6.1339
26. Lt Col Sindhumol P K , Lt Col Smitha Thadathil (2018) Effect of Benson's Relaxation Therapy on Post Caesarean Pain. Volume 7, Issue 11, November 2018, DOI: 10.21275/ART20192767
27. https://www.researchgate.net/publication/343987070_Effect_of_Benson's_Relaxation]_Therapy_on_Post_Caesarean_Pain