Research article Available online www.ijsrr.org ISSN: 2279–0543

International Journal of Scientific Research and Reviews

Effectiveness of Progressive Muscle Relaxation Technique On Pain Among Mothers Underwent The Caesarean Section

A. Rajarajeswari

(Meenakshi University) HOD in OBD Department, Vinayaka Mission's College of Nursing, Puducherry

ABSTRACT:

A Quasi experimental study to assess the effectiveness of progressive muscle relaxation technique on pain among mothers underwent the caesarean section in New life Hospital at Cuddalore. The **aim** of the study was to assess the pretest level of pain among mothers underwent caesarean section in control and experimental group, to find the effectiveness of progressive muscle relaxation technique on pain among mothers underwent the caesarean section and to associate the pretest level of pain with selected demographic variables. **Methods:**A Quasi experimental research design was adopted for the study. Thirty mothers selected based on the convenient sampling techniques. The pretest was conducted for both the groups and intervention on progressive muscle relaxation technique was taught to the experimental group. The collected data were analyzed by using descriptive and inferential statistics. **Results:**In control group the uncomfortable pain was noticed on 1st day was 66.77% and it was decreases in to 6.67%. Regarding mild pain was noticed the mothers on 1st day 33.3% to increases in to increases in to 93.3%. In Experimental group the uncomfortable pain was noticed on 1st day was 60% and it was gradually decreases on 2nd day and 3rd day it was none. The unpaired "t" test to assess the effectiveness of progressive muscle relaxation technique on post test level of pain among mothers underwent the caesarean section on 1st day the "t" value is 9.2 and p value is $p < 0.000$. Comparatively on the 3rd day the "t" value is 11.3 and p value is $p < 0.000$. Hence it is interpreted the p value is highly significant and the progressive muscle relaxation technique was more effective. Conclusion: The study found the progressive muscle relaxation technique is more significant in the caesarean section mothers.

KEY WORDS: Progressive muscle relaxation, Caesarean section, Pain scale

*Corresponding author

A. Rajarajeswari

M.sc (N) ,

PhD Scholar (Meenakshi University) HOD in OBD Department,

Vinayaka Mission's College of Nursing, Puducherry

INTRODUCTION

Childbearing is a natural physiological event and is the most unforgettable experience in a woman's life and labour is the most critical period. For several decades the childbirth educators have focused on the alleviation or reduction of pain and suffering during the childbirth.

Relaxation is thought to increase pain tolerance through a number of mechanisms including reduction of anxiety, decreased catecholamine response, increased uterine blood flow and decreased muscle tension. In the last few decades the caesarean rates have increased dramatically in the developed countries. Progressive muscle relaxation is a deeply relaxing technique that was developed by Dr.Edmund Jacobson back in 1929. Studies shown that the progressive muscle relaxation technique given for 3 days of postoperative period just 5-20 minutes alone helps toimproved pain tolerance for Caesarean mothers.

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of progressive muscle relaxation technique on pain among mothers underwent the caesarean section in New life Hospital at Cuddalore.

OBJECTIVES

- To assess the pretest level of pain among mothers underwent Caesarean section in control and experimental group.
- To find the effectiveness of progressive muscle relaxation technique on pain among mothers underwent the caesarean section.
- To associate the pretest level of pain with selected demographic variables.

HYPOTHESIS

H1: There is a statistically significance difference between pretest and posttest level of pain among mothers($P<0.000$)

H2: There is a significance association between the pre test level of pain with selected demographic variables.

METHODOLOGY

RESEARCH APPROACH

A Quantitative research approach was used for this study.

RESEARCH DESIGN

Quasi experimental design with pretest and posttest design was chosen for this study.

POPULATION

The Population of study was Antenatal mothers who admitted for labour, in New Life Hospital at Cuddalore.

SETTING

The study was conducted in New Life Hospital at Cuddalore.

SAMPLE TECHNIQUE

Study samples for the present study were selected by convenient sampling techniques

SAMPLE SIZE

Sample size for the present study is 30 mothers. 15 mothers were selected for experimental group and 15 mothers were selected for control group.

CRITERIA FOR SAMPLE SELECTION:

INCLUSION CRITERIA

- ❖ Mothers who are subjected for caesarean section.
- ❖ Mothers who are willing to participate.
- ❖ Mothers who know English and Tamil.

EXCLUSIVE CRITERIA

- ❖ Mothers who developed post-operative complications.
- ❖ High risk mothers.

DEVELOPMENT OF TOOL

The research tool was developed by doing extensive literature review. The primary and secondary source of literature were reviewed to develops and appropriate tool. Five expects from various fields like medical surgical Nursing and Obstetrics and Gynecological Nursing and Medicine provided their opinions and their valuable suggestions to develop the research tool.

INSTURMENT

Visual analogue pain scale.

DESCRIPTION OF THE TOOL

It consist of two section

Section-A: Demographic data.

Section-B: Visuals analogue Pain scale

Section - A

It consisted of Age, Educational status, Religion, Occupation. Marital status, Income, Dietary pattern, Menstrual Pattern and sources of information on progressive muscle relaxation technique

TABLE -1 – SCORING TECHNIQUE FOR THE PAIN SCALE

S.NO	SCORE	PAIN LEVEL
1	0	No pain
2	1-2	Mild pain
3	3-5	Nagging, Uncomfortable pain
4	5-7	Distressing pain
5	7-9	Intensive dreadful
6	10	Worst possible, unbearable pain

RESULTS:

FINDINGS RELATED TO DEMOGRAPHIC VARIABLES:-

Most of the mothers were between the age group of 25-30 years both control 7(46.7%) and experimental 7(46.7%). The highest percentage of mothers were graduates in control group 8(53.3%) and experimental group 8(53.3%). Majority of the mothers were belongs to Hindus religion in control (40%) and experimental group (60%). In occupation status experimental group 100% of mothers were Home maker whereas in control groups 20% of mothers belong to private employee. The highest percentage of income above 10,000 in control 80% and in experimental group (53.3%).

Regarding the dietary pattern of both experimental & control group whereas in non vegetarian (93.3%). In menstrual pattern 100% of mothers belong to both groups has been regular menstrual pattern. Regarding source of information in control group most of mothers got information through Television 46.7% and experimental group (60%).

FINDING RELATED TO PRETEST LEVEL OF PAIN AMONG CONTROL AND EXPERIMENTAL GROUP:

Figure -1 Distribution of pretest level of pain regarding Progressive Muscle Relaxation Technique among mothers Underwent Caesarean Section in control group.

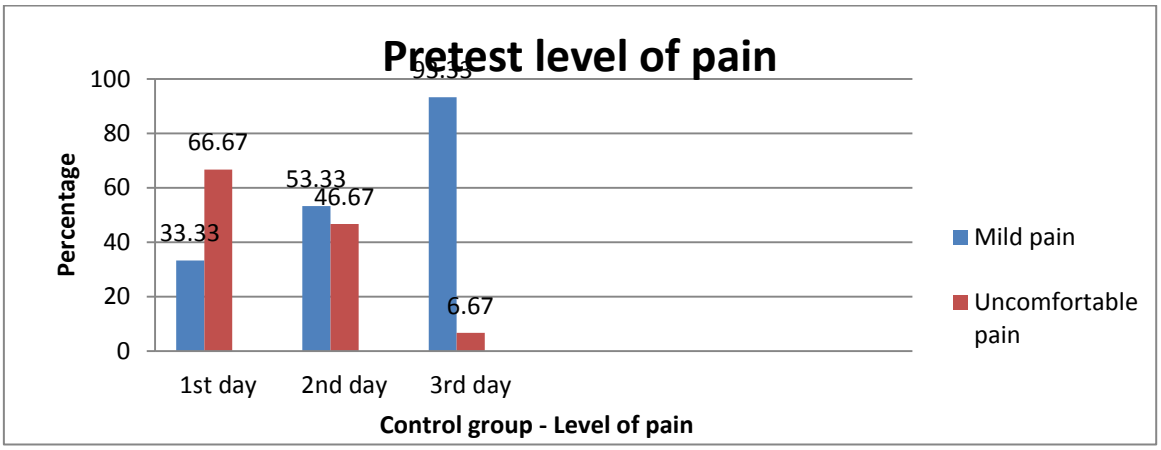

Figure -1 shows that in control group the uncomfortable pain was noticed on 1st day was 66.77% and it was decreases in to 6.67% on 3rd day. Regarding mild pain was noticed the mothers on 1st day 33.3% to increases in to increases in to 93.3% on 3rdday.

Figure -2 Distribution of pretest level of pain regarding Progressive Muscle Relaxation Technique among mothers Underwent Caesarean Section in experimental group.

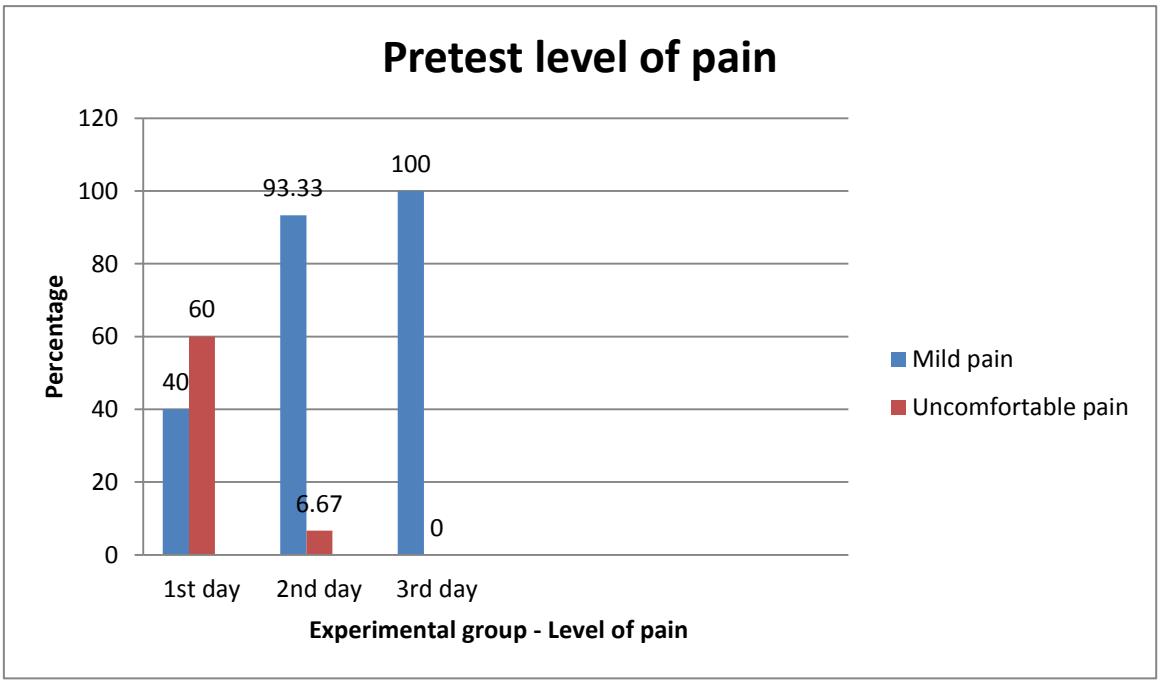

Figure -2 shows that in Experimental group the uncomfortable pain was noticed on 1st day was 60% and it was gradually decreases on 2nd day and 3rd day it was none. Regarding mild pain was noticed the mothers on 1st day 40% to increases into 100% on 3rd day.

EFFECTIVENESS OF PROGRESSIVE MUSCLE RELAXATION TECHNIQUE ON PAIN AMONG MOTHERS UNDERGONE CAESAREAN SECTION :

The unpaired "t" test to assess the effectiveness of progressive muscle relaxation technique on post test level of pain among mothers undergone the caesarean section on 1st day the "t" value is 9.2 and p value is $p < 0.000$. Comparatively on the 3rd day the "t" value is 11.3 and p value is $p < 0.000$. Hence it is interpreted the p value is highly significant and the progressive muscle relaxation technique was more effective.

ASSOCIATION BETWEEN THE PRETEST LEVEL OF PAIN WITH SELECTED DEMOGRAPHIC VARIABLES:

There is no association found between the pretest level of pain with selected demographic variables. Hence H_2 Hypothesis is not accepted.

CONCLUSION

Majority of mothers had increased level of pain due to caesarean section.Progressive muscle relaxation technique among caesarean section to be very effective method in terms of reducing the pain level mothers underwent caesarean section.

RECOMMENDATIONS:

- A study can be replicated on large sample there by findings can be generalized to a large population.
- Experimental study can be conducted to find out the similarities or difference in effectiveness of progressive muscle relaxation among the intranatal mothers in new life hospital at Cuddalore.
- A descriptive study can be conducted to find out the knowledge, attitude and practice regarding progressive muscle relaxation on caesarean section mothers.
- An experimental study can be conducted to find out progressive muscle relaxation pain with other complementary therapies among caesarean section mothers on new life hospital.

REFERENCE

1. Carolgn Kinger. Therapeutic Exercise. 4th Edition. Jaypee Brothers Medical Publication. New Delhi; 2002.
2. Piliter.A.Maternal and Child Health Nursing. 6th Edition. Lippincott Williams and Wikins.Philadelphia; 2010.
3. Delia Chaiaromonte, Brain Morrison. Practical Management of pain. 5th Edition. Elsevier Publication. New Delhi; 2014.
4. Raman AV. Maternity Nursing. 19th Edition. Lippincott Williams and Wilkins. New Delhi; 2014.
5. Denise F.Polit, Cheryl Tatano Beck, Nursing Research Generating and Assessing Evidence for Nursing Practice.8th Edition. Williams and Wilkins. New Delhi; 2010
6. Suresh. K.Sharma. Nursing Research & Statistics. Elsevier publication. New Delhi; 2011.
7. Sharma.J.B. Midwifery and Gynecological Nursing. 1st Edition. Avichal Publishing Company. New Delhi; 2015.
8. Dutta DC. Textbook of Obstetrics. 8th Edition. The Health Sciences Publisher. New Delhi; 2015.
9. Barbara Cherry, Susan R.Jacob. Contemporary Nursing. 6th edition. Elsevier Publication. Missouri; 2015.
10. Burns and Gravew. Understanding Nursing Research. 11th edition. Elsevier Publication. New Delhi; 2007.
11. Gita Ganguly. Current of Obstetrics of Gynecology. 1st edition. Jaypee Publication. New Delhi; 2007.

12. Roger.P.Smith. Netter's Obstetrics Gynecology and Women's Health. 1st Edition. ICON learning system Publications. Candada; 2002.
13. Shaws. Textbook of Gynecology. 12th Edition. Churchill Livingstone Publication. New Delhi; 1999.
14. Micartely A Bonnie. Progressive Muscle Relaxation and Pain Perception. 6th Edition. Lippincott publication. Philadelphia. 2010.
15. Marth Davis. Elizabeth Robbins Eshelman etal. Progressive Muscle Relaxation: The relaxation and stress Reduction Workbook. 6th Edition. Harbinger Publications. Mumbai; 2008.
16. Freeman L. Relaxation Therapy in Mosby's complementary and alternative medicine: A Research – Based Approach. 3rd Edition. Mosby Elsevier Publication. Louis;
17. Jacobson E. Progressive relaxation: a Physiological Clinical Investigation of muscular states and their significance in psychological and Medical practice. 3rd Edition. University of Chicago Press. Chicago; 1974.
18. Payne. RA. Relaxation Techniques: a practica: l Handbook for the health care professionals. Churchill Livingstone: New York; 1985.
19. Adriana Aparecida Delloiagono De Paula etal. The use of the progressive Muscle Relaxation Technique for pain relief in gynecology and Obstetrics. 2002; 10(5)
20. Palak Patel. A study to assess the effectiveness of progressive muscle relaxation therapy on stress among staff nurses working in selected hospitals at Vadodara city. IOSR Journal of Nursing and Health sciences. 2014;3(3):34-59.
21. Conard A, Roth, WT. Muscle relaxation therapy for anxiety disorders. It works but how?. Journal of Anxiety disorders. 2006; 21 (2): 243- 264.
22. Dhyani D,Sen S, Raghmahanti R. Effect of progressive muscular relaxation on stress and disability in subjects with chronic low back pain. IOSR Journal of Nursing and Health Sciences. 2015;4(1): 40-45.
23. Paula A, Caralho E , Santos. The use of the progressive muscle relaxation technique for pain relief in gynecology and obstetrics. Rev Lat Am Enfermagem. 2002; 10(5): 654- 659.
24. Manjuri A & Latheef F. Effectiveness of foot reflexology and back massage in improving the quality of sleep among post caesarean mothers. International journal of research in Ayurveda Pharmacy. 2016.7 (5). 103-108.
25. Gitanjali N & Sreehari.R. Progressive Muscular Relaxation as a Multi – pronged Psychotherapeutic technique for Insomnia. Amrita Journal of Medicine, 2014; 10(1):33-35.

26. Gupta B Kumari M, Karur T. Effectiveness of Progressive muscle relaxation technique on physical symptoms among patients receiving chemotherapy. Nursing and Midwifery Research Journal. 2016; 12(1):33-40.
27. Chin E, Vincent C & Wilkie D. A comprehensive description of postpartum pain after cesarean delivery. Journal of Obstetric Gynecologic & Neonatal Nursing. 2014; 43(6): 729-741.
28. Topcu S & Findik U. Effect of relaxation exercises on controlling postoperative pain. Pain management Nursing.2012; 13(1): 11-17.
29. Susan M etal. Major concerns of women after cesarean Delivery. Journal Gynecology and Neonatal Nursing. 2013. 4(1).53-59.
30. Shobeiri F etal. Effects of progressive muscle relaxation counseling on anxiety among primigravida women referred to Health care Centers in Hamadan. Journal of Education Community Health. 2015; 2(2): 1-9.
31. Mirbagher- Ajorpaz N, Ranjbar N. Effects of recitation of holy Quran on anxiety of women before casarean section: A randomize clinical trail. Journal of Qom University Medical Science. 2012; 4(1): 15-19.
32. Sam ML. Effectiveness of progressive muscle relaxation technique on anxiety. Sinhgad e-Journal of Nursing. 2014; 17 (1): 23-5.
33. Nahid Golmakani etal. Comparing the Effects of progressive muscle relaxation and sleep quality in primigravida women referring to Mashhad health care centers. 2015; 3(2):335-342.
34. Wenzel.W.R.Jennifer.Anxiety symptoms and disorders at eight weeks post – partum. Journal of anxiety disorders. 2005; 19(3): 295-311.
35. Khorsandi M, Ghorfranipour.The effect of childbirth preparation class on childbirth fear among primiparous woman. Journal of Arab University of Medical science. 2008; 11(3): 29 – 36.
36. Clements S. Psychological aspects of caesarean section. Best Practice and research clinical obstetrics and gynecology. 2001; 15 (2): 109 – 126.
37. Nancy Jallo, Cheryl Bourguignon. Biobehavioural Effects of Relaxation Guided Imagery on Mental stress. Advances in mind body medicine. 2009; 1(4): 7-9.
38. Karlstroma A etal. Post operative pain after casarean birth affects breastfeeding and infant care. Journal of Obstetrics Gynecology neonatal Nursing. 2007; 36(5): 430-440.