

**Research article** 

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

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#### **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 1<sup>st</sup> day was 66.77% and it was decreases in to 6.67%. Regarding mild pain was noticed the mothers on 1<sup>st</sup> day 33.3% to increases in to increases in to 93.3%. In Experimental group the uncomfortable pain was noticed on 1<sup>st</sup> day was 60% and it was gradually decreases on 2<sup>nd</sup> day and 3<sup>rd</sup> 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 1<sup>st</sup> day the "t" value is 9.2 and p value is p < 0.000. Comparatively on the 3<sup>rd</sup> 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

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# **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

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

TABLE -1 – SCORING TECHNIQUE FOR THE PAIN SCALE

#### **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.

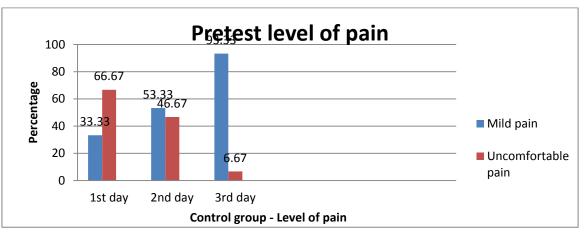


Figure -1 shows that in control group the uncomfortable pain was noticed on  $1^{st}$  day was 66.77% and it was decreases in to 6.67% on  $3^{rd}$  day. Regarding mild pain was noticed the mothers on  $1^{st}$  day 33.3% to increases in to increases in to 93.3% on  $3^{rd}$  day.

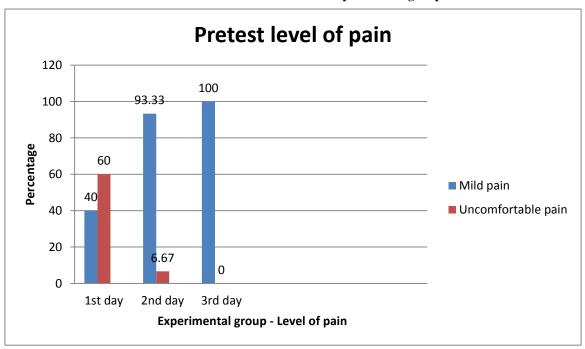


Figure -2 Distribution of pretest level of pain regarding Progressive Muscle Relaxation Technique among mothers Underwent Caesarean Section in experimental group.

Figure -2 shows that in Experimental group the uncomfortable pain was noticed on  $1^{st}$  day was 60% and it was gradually decreases on  $2^{nd}$  day and  $3^{rd}$  day it was none. Regarding mild pain was noticed the mothers on  $1^{st}$  day 40% to increases into 100% on  $3^{rd}$  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  $1^{st}$  day the "t" value is 9.2 and p value is p < 0.000. Comparatively on the  $3^{rd}$  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<sub>2</sub> 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.

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