

## EVALUATING THE EFFECTIVENESS OF BACK MASSAGE ON INTENSITY OF LABOUR PAIN AMONG PRIMI-PARTURIENT MOTHERS

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### ABSTRACT

A quasi experimental study was conducted to gauge the effectiveness of Back Massage on intensity of labour pain throughout 1st stage of labour among primi-parturient mothers in some highly selected hospitals at Kanyakumari district of Tamil Nadu. The study was conducted among primi-parturient mothers in George Mission Hospital, CSI Hospital and JK Hospital at Nagercoil in Tamilnadu. The sample size was sixty of which thirty were appointed to control cluster, thirty were appointed to experimental cluster by non-probability convenient sampling technique. The standardised Numerical visual analogue scale was used for the study. The pre-test score of intensity of labour pain was assessed on admission to labour room. It was followed by nursing intervention which was enforced on experimental cluster (Back massage) throughout every contraction till 7 cm cervical dilatation, whereas control cluster received solely routine medical aid as per hospital policy. The post-test intensity of labour pain score was assessed throughout 3, 5, 7 cm cervical dilatation. Finally, the collected information was tabulated and analysed by victimisation descriptive and inferential datum check and interpretation in terms of objectives and hypotheses of the study. The result revealed that in the experimental cluster during pre-test, thirty-seven percent had severe pain and sixty-three percent mothers had moderate pain whereas in control cluster, thirty-three percent had severe pain and sixty-seven percent had moderate pain. The mean in pre-test and average mean of post-test scores on intensity of labour pain of control cluster showed 6.33 and 8.6 respectively. The mean in pre-test and average post-test scores of experimental cluster showed 6.47 and 4.08 respectively. Then again, the post-test score on intensity of labour pain among experimental cluster and control cluster were compared by victimisation 't' check analysis. The 't' value in control cluster and experimental cluster was  $t_{58}=32.142$ . It was extremely important at  $P<0.05$ . It reveals that the back massage was effective in reducing the intensity of pain among primi-parturient mothers.

**Keywords:** *Back Massage, Intensity of labour pain, Primi-parturient mothers, First stage of labour*

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**INTRODUCTION**

Labour pain could be a complicated, personal, subjective, multi-factorial development that is influenced by psychological, biological, socio-cultural and economic factors. Though labour is usually thought of collectively as the foremost painful event in human expertise, it varies widely from girl to girl and even from gestation to gestation. First-time mothers are a lot of probably to grant their pain the next rating than girl who've had babies before. The distinctive side of accouchement is the association of this physical method with pain and discomfort. However, the experience of pain throughout labour isn't an easy reflection of the physical processes of birth. Instead, labour pain is the result of a complex and subjective interaction of multiple physiologic and psychological factors on a woman's individual interpretation of labour stimuli. Associate understanding of labour pain in an exceedingly third-dimensional framework provides the premise for a woman-centred approach to labour pain management that features abroad vary of medicine and non - medicine intervention ways. A wide variety of childbirth preparation strategies will offer the girl plenty of non-Pharmacological ways to assist her address the discomfort of labour and scale back the perception of labour pain.

The Non-Pharmacological ways followed to encourage relaxation and to alleviate pain are first, psychological feature ways like kid birth education, respiratory technique, music, imagery, use of native points and psychological state, secondly, cutaneous stimulation ways like counter pressure, massage (effleurage), therapeutic bit, walking, dynamic position, application of warmth or cold, TENS, acupressure and water medical care.

Many of the non-pharmacological pain relieving measures support the natural physiological responses to labour pain by promotion of relaxation of the muscles that increase blood supply to the painful muscles, promotes unleash of endogenous opiates (endorphin) and fewer stimulation of free nerve endings that are closing the gate of pain perception and decreasing the labour pain perception, helps the girl to participate a lot of actively within the birth of the baby and conjointly promotes maternal satisfaction.

Non pharmacological strategies support the natural physiological responses to labour pain; the discharge of endogenous opioids and also the gate mechanism. And it's typically straight forward, safe and comparatively cheap. They supply the girl with a way of management over her kid birth as she makes decisions regarding the measures that are best for her. Labour return easier and quicker if the girl gets relaxed and works along with her body.

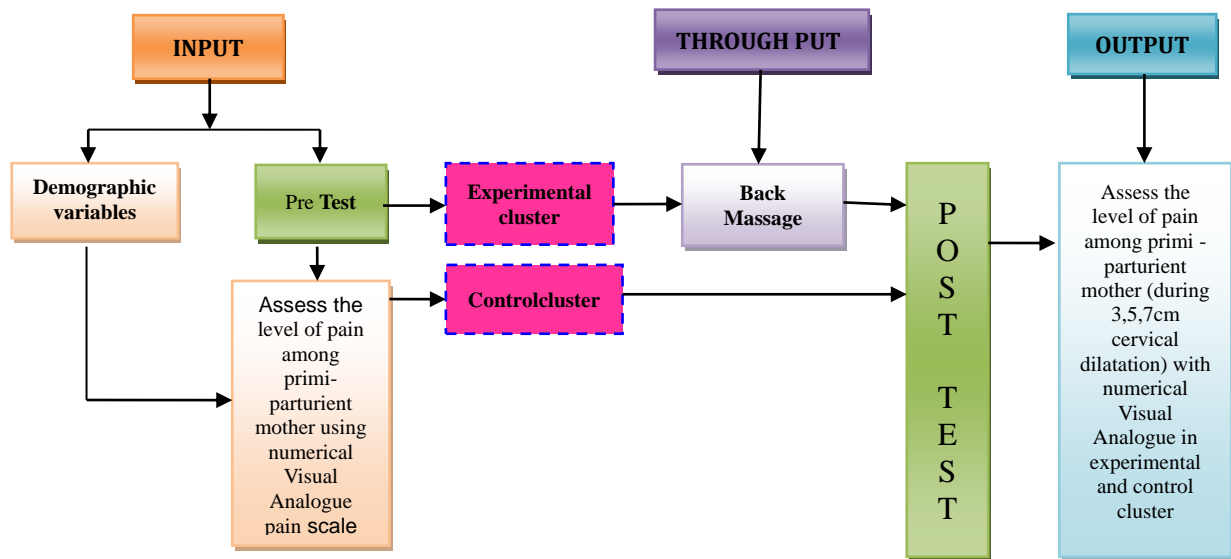
This created the investigator to grant non-pharmacological interventions to scale back the amount of labour pain perception throughout 1<sup>st</sup> stage of labour and conjointly supported the literature review the investigator found that the back massage (simple, safe, inexpensive) are applicable to our socio economic and cultural observe. That the research worker determined to grant back massage throughout 1<sup>st</sup>stage of labour and determine the precise impact on intensity of labour pain.

**OBJECTIVES**

1. To assess the intensity of labour pain throughout first stage of labour among primi-parturient mothers in experimental cluster and control cluster.
2. To determine the effectiveness of back massage on intensity of labour pain throughout first stage of labour among primi-parturient mothers in experimental cluster and control cluster.
3. To find association between the intensity of labour pain throughout first stage of labour among primi-parturient mothers in experimental group and their selected demographic variables.

**CONCEPTUAL FRAMEWORK**

The abstract framework was supported Kenny's Open System model. All the living systems are open, in this there's continuous exchange of matter, energy and data. Open system has dynamic degree of interaction with the surroundings from that the system receives input, and offers back output within the kind of matter energy and data. the most ideas of open system model are input, throughput, output and feedback.



**METHODOLOGY**

**Research approach**

Quantitative analysis approach was used for the study.

**Research design**

The study utilised Quasi-experimental design

Cluster	Pre-test	Intervention (During each contraction)	Post-test
E	O <sub>1</sub>	X	O <sub>2</sub> O <sub>3</sub> O <sub>4</sub>
C	O <sub>1</sub>	-	O <sub>2</sub> O <sub>3</sub> O <sub>4</sub>

E → Experimental cluster

C → Control cluster

O<sub>1</sub> → Pre-test pain score

X → Back massage

O<sub>2</sub> O<sub>3</sub> O<sub>4</sub> → Post-test pain scores at 3, 5, 7 cm cervical dilatation respectively.

**Setting of the study**

The study was conducted in CSI Hospital, JK Hospital and George Mission Hospital, Nagercoil, Tamilnadu, India.

**Population**

Target population: Primi-parturient mothers

Accessible population: Primi-parturient mothers with labour pain in CSI Hospital, JK Hospital and George Mission Hospital, Nagercoil

**Sample**

Sample consists of Primi-parturient mothers with labour pain from CSI Hospital, JK Hospital and George Mission Hospital, Nagercoil

**Sample Size**

Sample size consisted of sixty primi-parturient mothers who fulfilled the inclusion criteria from CSI Hospital, JK Hospital and George Mission Hospital – Nagercoil. [Thirty in experimental cluster and thirty in control cluster]

**Sampling technique**

Non-Chance, convenient sampling technique was used.

**Description of the tool**

The tool consisted of 2 parts

Part-1 — Assessment of demographic variables

Part-2 —

A - Numerical Visual Analogue Scale to assess the amount of pain in primi-parturient mothers

B - Flow table was customised to mark the time, cervical dilatation in cms, intensity of labour pain scores and the style of delivery.

**Level of pain**

The level of pain among primi-parturient mothers was assessed victimization Numerical Visual analogue scale marking

**Scoring key:**

Score	Category of Pain
0	No pain
1 to 3	Mild pain
4 to 6	Moderate pain
7 to 9	Severe pain
10	Worst pain.

**Method of information assortment:**

Step 1: Getting permission

Step 2: Pre -test assessment of pain

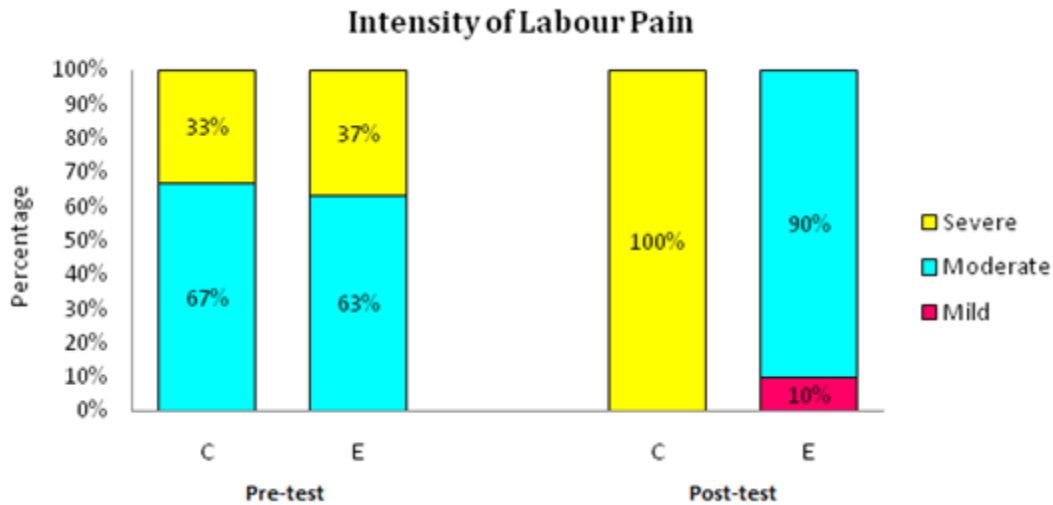
Step 3: Intervention given

Step 4: Post-test assessment of pain

**Data analysis and interpretation**

Assess the amount of pain victimization numerical visual analogue pain scale.

**Percentage distribution of level of intensity of labour pain throughout pre-test and post-test among primi-parturient mothers in experimental cluster and control cluster**



The above Figure shows that in pre-test sixty-seven percent of mothers had moderate pain and thirty-three percent of mothers had severe pain in control cluster. The post-test finding reveals 100% of mothers had severe pain. In experimental cluster, in pre-test sixty-three percent of mothers had moderate pain and thirty-seven percent of mothers had severe pain. Post-test finding reveals 100% of Mothers had delicate pain and ninety percent of mothers had moderate pain

**Comparison between the pre-test and post-test scores on intensity of labour pain throughout 1st stage of labour among primi-parturient mothers in experimental cluster and control cluster**

N1=N2=30

GROUP	PRE-TEST		AVERAGE POST-TEST		PAIRED 't' VALUE
	Mean	SD	Mean	SD	
Control Cluster	6.33	0.479	8.60	0.32	46.00*
Experimental Cluster	6.47	0.681	4.08	0.42	34.28*

\* Significant at P < 0.05 df 29 Table value 2.060.

The above table reveals that in control cluster, the mean pre-test and average post-test score show as 6.33 (0.479) and 8.6 (0.32) respectively. The information was subjected to applied mathematics check to understand the distinction between the pre-test and post-test from the above values. The calculated Paired 't' value 46.00 is greater than the table value of 2.060 at 0.05 level of significance. In experimental cluster the mean pre-test and average post-test score show as 6.47 (0.681) and 4.08 (0.42) respectively. The information was subjected to applied mathematics check to understand the distinction between the pre-test and post-test from the above values. The calculated 't' value 34.28 is greater than the table value of 2.060 at 0.05 level of significance.

**Comparison between the pre-test and post-test scores on intensity of labour pain throughout 1st stage of labour among primi-parturient mothers between experimental cluster and control cluster**

N1=N2 =30

Group	Pre Test		Student 't' Value	Average Post-Test		Student 't' Value
	Mean	SD		Mean	SD	
Control group	6.33	0.479	0.876**	8.60	0.32	32.142*
Experimental group	6.47	0.681		4.08	0.42	

\*\* Not Significant at  $P < 0.05$ ,  $df_{58}$ , table value 2.000.

\*Significant at  $P < 0.05$ ,  $df_{58}$ , table value 2.000.

The above table shows that in control cluster and experimental cluster the common mean post-test scores were 8.6 (0.32) and 4.08 (0.42) respectively. The information underwent applied mathematics analysis and calculated 't' worth was 32.142 which is greater than the table value of 2.000 at 0.05 level of significance. The 't' worth on control cluster and experimental cluster was  $t_{58}=32.142$ ; it is extremely significant at  $P < 0.05$ . Therefore, it becomes evident that back massage was effective in reducing intensity of labour pain in the experimental cluster.

### CONCLUSION

The present study was aimed to assess the effectiveness of Back Massage on intensity of labour pain throughout first stage of labour among primi-parturient mothers. The findings disclosed that the mean average post test score of pain in the experimental cluster was 4.08 with SD 0.42 and in the control cluster was 8.86 with SD 0.32. The calculated 't' value = 32.142 was found to be statistically significant at  $p < 0.05$  level. Therefore, it becomes evident that the back massage is effective in reducing intensity of labour pain among primi-parturient mothers. Back massage could be a straight forward, simple and easy to implement and most acceptable way to tackle labour pain among parturient mothers. The excavator results supported that the incorporation of back massage therapy in nursing care for the parturient mothers was the best intervention to scale back intensity of labour pain which can have influence on positive labour outcome.

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