

A STUDY TO ASSESS THE EFFECTIVENESS OF SACRAL MASSAGE ON LABOUR PAIN INTENSITY DURING FIRST STAGE LABOUR AMONG PRIMIPARA MOTHERS

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Abstract

Motherhood is an awesome experience. but the area of major concern lies in labour pain and its management .The main goal focus in reducing these labour discomforts with cost effective and hassle free approach . Nonpharmacologic approaches toward these goals are up breast in midwifery management. Adequate evidence of benefit in reducing pain exists for continuous massage during labour sacral massage offers a woman in labour a very unobtrusive and gentle method of pain control. .Purposive sampling with 60 samples were used for the study. It was Quasi –experimental post test only control two group design ,to measure the labor pain intensity during first stage of labor on practice of sacral massage. Fordyce behavioural labor pain scale and visual analogue pain scale assessed the pain intensity.

The mean score of the Modified Fordyce behavioural labour pain scale of control group without application of sacral massage was 9.9 and standard deviation was 1.77. In result of group experimental group application of Sacral massage means score was 8.73 and standard deviation was 1.28 .and mean score of the visual analogue pain scale of control group without application of sacral massage was 7 and standard deviation was 2.68. In result of group experimental group application of sacral massage means score was 4.2 and standard deviation was 0.74. The comparison between control group and experimental group made by t-test. The calculated value of t was 3.5 And 3. So this indicates that the sacral massage was effective

Keywords: Sacral Massage, Labour Pain Intensity, First Stage Of Labour, Primi Para Mothers

INTRODUCTION

Non pharmacological technique of massage has been widely employed during labor. Its a cost effective nursing intervention to reduce labour pain and anxiety without any side effects and any health professional could give it .Endorphins released are the responsible for the “feel good” factor. Sacral Massage is also linked with the short labor time duration and a low risk for postpartum depression and is recommended by child birth experts because it has been shown to ease pain and

reduce anxiety in the first stage of labor .During moderate and severe contractions, massage will work on both sacral area, concentrating mainly on the points around the pelvis, uterus and vagina.

The Gate Control Theory Of Pain

This theory of gate control given by Melzack and Wall is the core principle of all the nonpharmacological modalities of pain management.

They postulated that there is a physiological gate in the substantia gelatinosa of the dorsal horn of the spinal cord .the gate is influenced by two sensory fibres. The large diameter and the small diameter fibres .the large fibres are inhibitory fibres which gets closed by the stimulation of the large fibres by hydrotheraphy,massaging.music, relaxation techniques etc. Habituation of these interventions stay back only for 15-20 min after which they have to be repeated .The small nerve fibres are facilitatory fibres which open ups the gate .

Statement Of The Problem

A quasi experimental study to assess the effectiveness of sacral massage on labour pain intensity during first stage labour among primipara mothers in selected hospitals of Jabalpur city

Objectives Of The Study

1. Assess the labour pain intensity during first stage labour among primipara mothers in control group.
2. Assess the labour pain intensity during first stage labour After admission of sacral pressure among primipara mothers in experimental group..
3. Evaluate the effectiveness of sacral massage on labour pain intensity during first stage labour among primipara mothers in experimental and control group.
4. Determine the association between the labour pain intensity of primipara mothers with the selected demographic variable in control group.
5. Determine the association between the labour pain intensity of primipara mothers with the selected demographic variable in experimental group.

Research Hypotheses

(All hypothesis were tested at level of 0.05 level of significant)

H₁- There will be significant mean difference between labour pain intensity in control group and experimental group.

H₂- There will be significant association between labour pain intensity among mother with

selected demographic variables in control group.

H₃- There will be significant association between labour pain intensity among mother with selected demographic variables in experimental group.

Operational Definitions

- **Sacral Massage**:- Refers to massage is the systematic manipulation of the soft tissues of the body particularly the muscles, tendons and skin on sacral region

Methods: Sacral Massage is application of sacral pressure in lower thoracic to sacrococcygeal region, for 15 minutes duration during uterine contraction. After intervention pain perception was assessed with visual analogue pain intensity scale in the phases of labour during Active phase (4-7 cm) of dilatation. **3x5=15 min.**

There are 5 Sacral message techniques were used

- Kneading
- Percussive
- skin rolling
- tapping
- vibration

Labour pain intensity:- It refers to the pain experienced by the mothers during the process of labour as measured by- Fordyce behaviour pain scale and Visual analogue pain scale

Primipara mothers: The mothers who become pregnant for the first time.

First stage of labour:- Active phase 4-7 cm of the cervical dialation.

Sacral area :- Refers to the area between the lumbar and coccygeal region of spine where the mothers feel more pain during labour.

Materials And Methods

An Quantitative & evaluative research approach was used in the study . Quasi experimental post test-only control two group design was used to assess the effectiveness of Sacral Massage

This study was conducted in Rani Durgawati Elgin hospital of Jabalpur.

Accessible Population included Primi mothers in first stage of labor (Active Phase 4cm to 7cm cervical dilatation) admitted in labour

Independent variable :-In this study the independent variable was the Sacral Massage.

Dependent variables: - In this study dependent variable was labor pain intensity.

Sample for study was 60 mothers . 30 mothers during labor pain in first stage of labor in control group and 30 mothers during labor pain in first stage of labor in experimental group of selected hospitals in Jabalpur which fulfilled the sample criteria..Non probability Purposive sampling technique was be used for study.

The sample frame structured by the researcher include the following criteria-

Inclusion criteria-

Pregnant mothers,

1. Who are undergoing normal vaginal delivery
2. Who are in the first stage of labor (active phase: 4-7cm)
3. Who have completed 37weeks of gestation

Exclusion criteria-

Pregnant mothers,

1. Who are in high risk
2. Who are going for lower segment caesarean section
3. Who are not willing to participate in study
- 4.mothers with medical and obstetric complications

Instrument Used In The Study

- 1) Section A: demographic data of primi mothers.
- 2) Section B: assessment of cervical dilatation by using partograph
- 3) Section C: assessment of labor pain intensity
 - i. Modified Fordyce behavioural labor pain scale
 - ii: Visual analogue pain scale.

SEC I (A) It Deals With The Analysis Of The Demographic Data Of The Samples Of Control Group.

Control Group

Finding of the variables shows that maximum number of mothers that majority of mothers are shows out of 30 samples the majority of samples belonged to age group of 21- 25years 21(70%) the majority of sample had middle school education12 (40%) the majority of samples were 21 House wife (70%) majority had family monthly income 21,000-30,000 (4 0%). the majority of samples belonged to joint family 15 is (50%) the majority of samples had marital life of 1 year 18 that is (60%) the majority of samples belonged to No information related to sacral massage for

pain relief in labor is information is (70 %) the majority had 12 is other present that Is (40%).

Section B -Clinical Variables

The majority of samples belonged to 151cm-155 cm (50%) the majority of samples had 12 were in 61-70 kg is (40%),. the majority of samples had 15 four time were is (50%) the majority of samples had 21 is no preparation class were is (70%).

Experimental Group

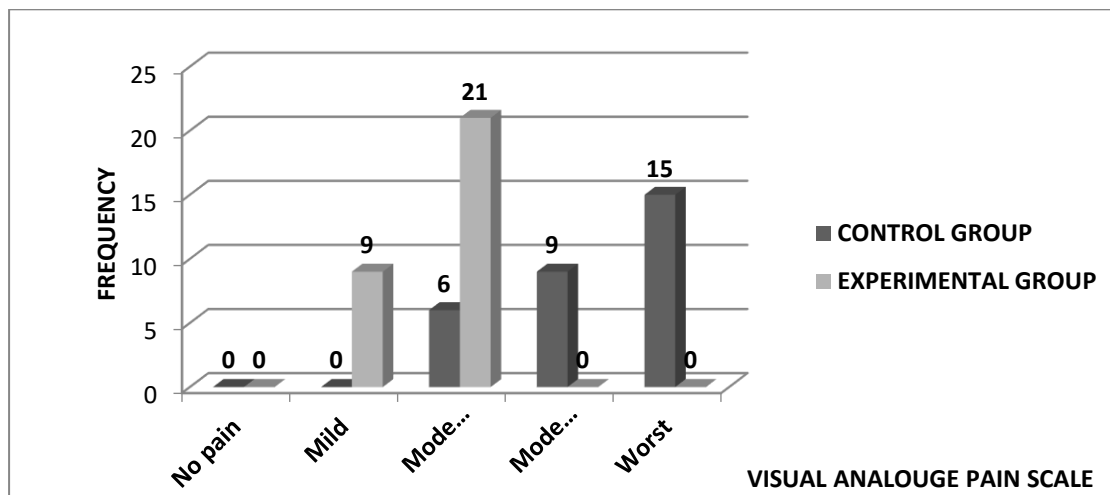
Finding of the variables shows that maximum number of mothers that majority of mothers are shows out of 30 samples the majority of samples belonged to age group of 21- 25years 21(70%) the majority of sample had higher school education middle school education12 (40%) and 20 % had primary school education (0%) and 3 were UG is (10%)and only 3 was PG (10%) . the majority of samples were 21 House wife (70%) majority had family monthly income 21,000-30,000 (4 0%). the majority of samples belonged to joint family 15 is (50%) the majority of samples had marital life of 1 year 18 that is (60%) the majority of samples belonged to No information related to sacral massage for pain relief in labor is information is (70 %) the majority had 12 is other present that Is (40%).

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Section C- Comparison Between Control Group & Experimental Group And Assessment Of Effectiveness Of Sacral Massage By Visual Analogue Scale

Figure No-1 Comparison Between Control Group & Experimental Group By Visual Analogue Pain Scale.



Control group indicate majority that In visual analogue pain scale belongs to Severe pain which is 6(20 %) group, worst pain is 9 (30%) and moderate pain is 15 (50%) mild, and no are 0% in control group.

Experimental group indicate that Majority In visual analogue pain scale belongs to Moderate had 21(70) in this group, Mild had 9 (30%) and severe ,no pain and worst pain had none are 0% in experimental group.

Table No-1 The Effectiveness Of Control & Experimental Group by Visual analouge pain scale

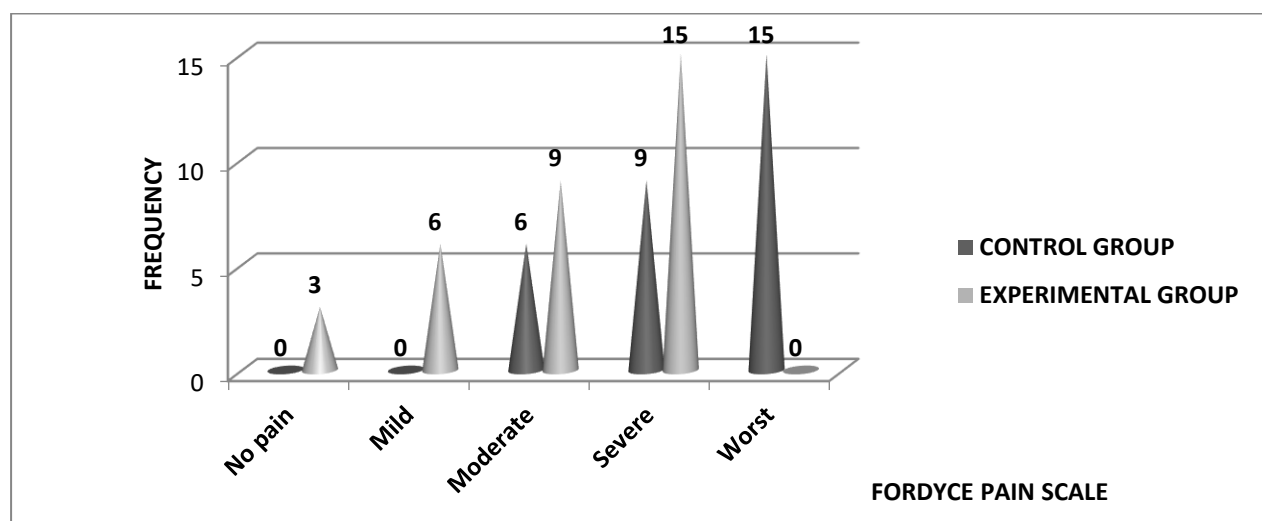
S NO.	DESCRIPTION	MEAN	MEAN DIFFERENCE	SD	SD DIFFERENCE	t- VALUE
1	Control group	8.83	1.2	1.41	0.4	3.5
2	Experimental group	10.03		1.81		

(Table value = 2.0010)

Comparison between control group and experimental group made by t-test. Statistically tested by applying t-test method at the level of 0.05%. In this case the calculated value of t is more than the table value (2.0010), that is 3.2 So this indicates that the Sacral Massage was effective

Section D- Comparison Between Control Group & Experimental Group and assessment of effectiveness of Sacral message by Fordyce Pain scale

Figure No-2 Comparison Between Control Group & Experimental Group by Fordyce Pain scale



It show Control group Indicate that majority In modified Fordyce behavioral labor pain scale had unbearable pain which is(15) 50 % and Very severe pain is (9) 30% and severe pain is (3)10%, mild and moderate 0% in control group.

It show Experimental group indicate that In modified Fordyce behavioral labor pain scale Majority of group belongs to moderate pain had 6 (20%) , severe had 9 (30%) and mild pain had 3 (10%), very severe 15 (50%) and unbearable 0% in experimental group.

Table No—2 Effectiveness of control & after application of sacral massage in experimental group by modified Fordyce behavioural labor pain scale.

S NO.	DESCRIPTION	MEAN	MEAN DIFFERENCE	SD	SD DIFFERENCE	t- VALUE
1	Control group	9.9	1.17	1.77	0.39	3
2	Experimental group	8.73		1.28		

(Table value = 2.0010) (Result significant at 0.05% level of significance)

Data presented in the above table shows that the mean score in the control group without application of Sacral Massage was 9.9 and standard deviation was 1.77 In result of experimental group application of Sacral Massage means score was 8.73 and standard deviation was 1.28 ,mean difference 1.17

this case the calculated value of t is more than the table value (2.0010), that is 3 so this indicates that the Sacral Massage was effective

Section E

Findings related to the association of each variable with selected samples with their demographic and clinical variables in control and experimental group

Significant- Prior knowledge of Sacral Massage , Educational status

Not significant- Age , Height, Weight, Family Income, ,occupation, Marital Life, Antenatal Visits, , Family Members Present During 1st Stage Of Labor

CONCLUSION

During labour women experience stressful and steady pain that may negatively affect both mothers and neonate . Sacral massage Moreover massage helps to induce relaxation and also evokes an atmosphere of acceptance, respect for the body and being caring for. This in turn creates ambience towards health and healing. sacral massage are beneficial methods to relieve the pain perceptions, more over these are having less side effects and cost free methods as compared to pharmacological method. Antenatal teachings should be motivated by the midwifery officers in the

clinical and community settings to the expectant mothers and their family members. These self-care activities would also bridge up the gap between research studies and its utilization in clinical practice .

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