# RESEARCH ARTICLE

## A STUDY TO ASSESS THE EFFECTIVENESS OF BACK MASSAGE ON PAIN AMONG PRIMIGRAVIDA MOTHERS DURING FIRST STAGE OF LABOUR

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**ARTICLE INFO**

**ABSTRACT**

Labour pain is the result of many complex interactions, physiological and psychological, excitatory as well as inhibitory. Women experience a wide range of pain in labour and exhibit an equally wide range of responses to it. The woman is educated to take an active role in decision-making and using self-comforting techniques and non-pharmacologic methods to relieve pain and enhance labour progress. The aim of the present study was to assess the effectiveness of back massage on labour pain among Primigravida mothers in Govt. Maternity Hospital Anantnag, Kashmir. **Methodology:** A true experimental research design was adopted with experimental & control group. **Results**: The findings indicated that back massage helped in reduction of labour pain level in the experimental group and the mother perceived less pain. **Conclusion:** Provision of back massage was effective in the reduction of labour pain.

## INTRODUCTION

Motherhood is a great responsibility and it is women's highest crown of honour (Shirley, 2002). Therefore maintaining good health during pregnancy, intranatal and postpartum period is very important especially in the present stressful life. Childbirth is a time when a woman's power and strength emerges full force, but it is also a vulnerable time and a time of many changes, persisting opportunities for personal growth. The labour and birth process is an exciting. Anxiety provoking situation for a woman and her family. The time of labour and birth, though short in comparison with the length of pregnancy, is the most dramatic and significant period of the expectant woman (Lowe, 2002). The transition from pregnancy to labour is a sequence of events that begins gradually, the first stage of labour is usually recognized by the onset of regular uterine contractions and culminates in complete dilatation of cervix (Bobak, 1993). Pain is an unpleasant and highly personal experience that may be imperceptible to others while comparing all parts of the person's life. Pain is an unpleasant sensory, subjective symptom and emotional experience associated with actual or potential tissue damage (Nancy, 1996).

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The pain of childbirth results from hypoxia of uterine muscle, dilation and stretching of the cervix, pressure and pulling on adjacent organs and pressure from the presenting part on the vagina and perineum during birth. The fetal size and position influence length of labour as well as pain. Vaginal examinations and use of oxytocin increase the strength of contractions. A woman's expectations, the level of fatigue, anxiety, availability and actions of a support person also affects her perception of pain. Pregnant women commonly worry about the pain that they are experiencing during labour and childbirth and also they will worry, how to react and deal with this pain. If nurse understands the nature and effects of pain during the labour process they will be better prepared to provide supportive care to the mothers who are in labour process (Bowers, 2002). Physical comfort includes various non-pharmacologic and pharmacologic intervention. Comfort measures that provide natural pain relief can be very effective during labour and childbirth. A birthing technique such as hydrotherapy, patterned breathing, relaxation and visualization can increase the production of endogenous endorphins that bind to receptors in the brain for pain relief. Other methods of comfort therapy such as massage can provide pain relief and reduce the need for narcotic analgesia or anesthesia by naturally creating competing impulses in the central nervous system that can prevent the painful stimuli of labour contractions from reaching the brain (Sylvia, 2001). Pain control during labour is a very woman-centered concept.

The role of the midwife then is to encourage and assist the women in anticipating positively the birth of their baby (Lowe, 1996). A variety of non-pharmacologic methods for pain, anxiety, and discomfort are taught in many different types of prenatal preparation classes. These techniques teach to relieve pain, anxiety and discomfort during labour. Lamaze is also known as a method of psycho prophylaxis. This method prepares a pregnant woman to deal actively with contractions. It includes various techniques such as effleurage, thermal stimulation, sacral pressure, positioning, distraction, aromatherapy, breathing techniques, massage, guided imagery, music. This is the most well-known model for childbirth preparations. The theory of conditioned reflex is followed in the method that has two components: education and training. Each woman is conditioned (trained) to respond to her contractions with relaxations. Childbirth preparation methods practiced around the world to prepare both the mother through different relaxation and breathing techniques (Jaya Bharathi, ?).

### Objectives of the Study

- To assess the labour pain during the first stage of labour among control and experimental group.
- To determine the effectiveness of back massage on labour pain among primigravida mothers during first stage of labour in experimental group.

## MATERIALS AND METHODS

A quasi experimental research approach with time series non-equivalent pre-test-post–test-control group design was adopted for conducting this study. The sample consisted of 30 primigravida women selected randomly from labour wards of selected hospital of J&K. Independent variable was back massage and dependent variable was pain during first stage of labour. Tool used for the study was demographic Performa, Structured Observational Checklist and Wonback's pain assessment scale to collect data about socio-demographic characteristics, and pain perception during labour. Records were also analyzed by the researcher to collect data.

### Data collection

Data was collected from first November 2017 to 31st February 2018. The initial/baseline assessment was done for both experimental and control group of study subjects. Intervention was administered systematically only on experimental group during first stage of labour by providing back massage. Both the experimental and control group subjects were observed for pain perception. Consent was taken from the selected subjects to participate in the study. The collected data was analyzed according to the objectives of the study, then tabulated and interpreted using descriptive and inferential statistics.

## RESULTS

*Age:* Most of the prim gravid women in the experimental group (66.6%) and control group (60%) belonged to the age group of 26-30 years.

*Religion:* Data represented that most of the primigravida women in the experimental group (40%) and control group (46.66%) were from Muslim religion.

### Family Monthly Income

In experimental group (60%) and control group (50%) majority of the women belonged to the income group of Rs. 5000-Rs 10000 respectively.

### Education

Majority of mothers in the experimental group (33.3%) had a primary education where as the majority of women in control group had a secondary education (60%).

### Knowledge regarding back massage (Lamaze technique)

According to data collected 90 % of women both in experimental and control group did not have any knowledge about the Lamaze methods.

**Comparison of post observational pain scores between experimental and control group by pain scale**

| Research Group | Observation | Mean | MD | SD | SE$_{MD}$ | 't' value |
|---|---|---|---|---|---|---|
| Experimental Group n$_1$ =15 | Post test | 6.17 | 2.06 | 1.10 | .282 | 2.41 |
| Control Group n$_2$ =15 | Post test | 8.23 | | | | |

t(58)=2.00, p≤0.05 level of significance, significant at 0.05 level

Data presented in indicates that the mean structured pain score in the experimental group is decreased than in the control group which signifies that the back massage had reduced the pain effectively. This indicates that back massage helped in perception of pain less in the experimental perceived comparing to the control group.

### Conclusion

Childbirth is a unique and special experience for every woman. It is exciting as well as strenuous with pain, fatigue and fear both physically and psychologically. Pain in labour is nearly a universal experience for childbearing women and pain relief process a major role. This can be achieved by relaxation which is thought to increase pain tolerance, reduction of anxiety, and decreased muscle tension. Relaxation may be enhanced through concentration on a specific breathing pattern and massage during contractions, which is a cognitive activity and is most successful as a pain management strategy. The massage therapy which was administered to the primigravida women in the first stage of labour not only gave comfort but also conveyed care, sympathy, encouragement, acceptance and support.

### Recommendation

On the basis of the findings of the study, the following recommendations are made:

- A similar study can be replicated on a large scale to generalize the findings.
- A similar study can be conducted to find the differences in the knowledge and skill level of the Staff Nurses on the basis of various institutional settings such as public institutions and private institutions.
- Other teaching strategies i.e., self-instructional module (SIM), skill development programme etc. can be used to

assess the knowledge of pregnant women regarding massage therapy for pain-relief during first stage of labour.

- A longitudinal study can be conducted to assess the practice of Staff Nurses regarding massaging technique during labour.
- A study can be carried out to determine the cost-effectiveness of in-service education programmes for Staff Nurses.

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