

An Experimental Study to Investigate the Effectiveness of Back Massage on Reduction of Perception of Labour Pain During First Stage of Labour Among Expectant Mothers Admitted in Labour Room at District Hospital, Durg, Chhattisgarh

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Abstract: Labour pain is a universal phenomenon and is perceived as one of the most severe forms of pain experienced by women. Non-pharmacological methods such as back massage can play a vital role in reducing pain perception during labor. Hence, the present study was undertaken A quasi experimental study to investigate the effectiveness of back massage on reduction of perception of labour pain during first stage of labour among expectant mothers admitted in labour room at selected hospital Durg, Chhattisgarh.

Keywords: Back Massage, Labour pain.

1. Introduction

In order to achieve the objectives of the study, a Quasi-Experimental Research Design was adopted with one experimental group and one control group, and samples were selected using non-probability purposive sampling technique.

A. Objectives of the study

1. To assess the pre intervention level of pain during the 1st stage of labour in experimental & control group among expectant mothers admitted in labour room at selected hospital drug.
2. To assess the post intervention level of pain during 1st stage of labour in experimental & control group among expectant mothers admitted in labour room at selected hospital drug.
3. To assess the effectiveness of back massage in experimental group in reducing the perception of labour pain during the first stage of labour among expectant mothers.
4. To compare the level of pain perception before and after the intervention in experimental and control group among expectant mothers admitted in labour room at selected hospital drug.

5. To find out association between perception of labour pain with their socio-demographic variable among expectant mothers.

2. Material and Method

The present study adopted a quasi-experimental research design with one experimental group and one control group to evaluate the effectiveness of back massage in reducing labor pain perception during the first stage of labor. The study was conducted in the labor wards of selected hospitals at Durg, Chhattisgarh, among 60 mothers in the first stage of labor who were selected using non-probability purposive sampling technique. Out of these, 30 mothers were assigned to the experimental group and 30 to the control group. The inclusion criteria comprised mothers in active first stage of labor (3–7 cm dilatation), willing to participate, cephalic presentation, while mothers with obstetrical complications, contraindications to massage, or those who had received analgesics/sedatives were excluded. Pain was assessed using the Numerical Rating Scale (0–10). The experimental group received back massage for 20 minutes at regular intervals during the first stage of labor, whereas the control group received routine hospital care. Pre-test and post-test pain scores were recorded for both groups, and data were analyzed using descriptive statistics (mean, standard deviation) and inferential statistics ('t'-test) at a 0.05 level of significance.

3. Results

The present study was conducted to evaluate the effectiveness of back massage in reducing labor pain during the first stage of labor. In the experimental group, the pre-test mean pain score was 7.10 ± 0.82 , which decreased to 4.23 ± 0.76 in the post-test after administration of back massage. The

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calculated 't' value was 12.54, which was greater than the table value at 0.05 level of significance. This shows that back massage significantly reduced labor pain, and hence the first hypothesis (H₁) was accepted.

In the control group, the pre-test mean score was 7.05 ± 0.79 and the post-test mean remained almost the same at 7.02 ± 0.81 , indicating no significant change in pain perception with routine hospital care. A comparison of the post-test scores between the experimental and control groups showed a significant mean difference of 2.79, with a calculated 't' value of 10.62 ($p < 0.05$). Thus, the second hypothesis (H₂), which stated that there will be a significant difference in post-test pain scores between the two groups, was accepted.

Further, analysis of the association between post-test pain scores of the experimental group and selected demographic variables such as age, education, occupation, type of family, and parity revealed no significant association at the 0.05 level of significance.

Hence, the third hypothesis (H₃) was rejected, suggesting that the effectiveness of back massage in reducing labor pain was independent of maternal demographic factors.

4. Conclusion

The study concludes that back massage is an effective, simple, and safe non-pharmacological intervention to reduce labor pain and can be implemented by nurses and midwives in routine obstetric care to enhance maternal comfort and promote positive childbirth experiences.

References

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