

A Study to Evaluate the Effectiveness of Lamaze Breathing and Relaxation Technique regarding Labour Pain Management among Gravid Mothers in Selected Maternity Hospitals at Bangalore

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Abstract: Statement of the problem: "A study to evaluate the effectiveness of lamaze breathing and relaxation technique regarding labour pain management among gravid mothers in selected maternity hospitals at Bangalore". Background of the study: Pregnancy is a crucial period and childbirth represents the most painful event in most women's lifetime. Pregnant women commonly worry about the pain they will experience during labour and childbirth. Pain during labour is primarily caused by uterine muscle contractions and somewhat by pressure on the cervix. This pain manifests as cramping in the abdomen, groin, and back, as well as a tired, achy feeling all over the body. Some women experience pain in their sides or thighs as well. A study was conducted to find the effect of Lamaze method on child birth experiences among primi gravid women in first stage of labour. The study concluded that, lamaze method is an effective non - invasive, cost - effective, non pharmacologic, supportive and educative alternative for reducing the labour pain and to improve the behavioral responses of women in first stage of labour. Lamaze method was effective in labour pain reduction. OBJECTIVE OF THE STUDY: 1) To assess the level of labour pain before lamaze breathing and relaxation technique among gravid mothers in experimental and control groups. 2) To assess the level of labour pain after lamaze breathing and relaxation technique among gravid mothers in experimental and control groups. 3) To evaluate the effectiveness of lamaze breathing and relaxation technique in reduction of labour pain among gravid mothers in experimental groups. 4) To compare the level of labour pain among gravid mothers in the experimental and control groups. 5) To find out the association between the levels of labour pain and select. Hypothesis: H1: There is a significant reduction in labour pain after lamaze breathing and relaxation technique than before among gravid mothers in the experimental group. H2: There is a significant reduction of labour pain among gravid mothers in experimental group than in the control group. H3: There is a significant association between the level of labour pain and selected variables among labour pain in experimental group. H4: There is a significant association between the level of labour pain and selected variables among gravid mothers in the control group. Methods: A Quasi - Experimental design was adapted in the present study. Convenient sampling technique was used to select 70 caregivers 35 in experimental group and 35 in control group. The data was collected using a interview method. A lamaze breathing and relaxation technique was adopted for experimental group to manage labour pain among gravid mothers. Content validity was obtained from the experts of related specialties. Following this, a pilot study was conducted to test the feasibility and the practicality of the study. Pre intervention pain scores were assessed using numeric pain rating scale during first stage of labour. Experimental group received Lamaze breathing and relaxation technique during first stage of labour. The intensity of pain was reassessed after the intervention. The control group mothers received the routine measures as per the hospital policy after the post test. Results: The Mean post - intervention score was 27.886, with a standard deviation of 3.367 and the mean post intervention score was 11.286 with standard deviation of 3.77 among control group. The mean difference was 16.60. The t - value, 19.438*** was found to be significant at 0.001 level between experimental group and control group. The p values ($p < 0.001$) provides sufficient justification to accept the H1, i. e. mean post intervention pain scores in the experimental group is lower than that of control group at 0.001 level of significance. The Mean value of pre and post test score were 28, and 11.286 respectively with mean difference of 16.714 and t - value of 33.297*** and was found to be significant at 0.001 level among the experimental group. Interpretation and conclusion: The effectiveness of the Lamaze breathing and relaxation technique was tested using inferential statistics using the paired 't' test. t - value 19.438*** was found to be significant at 0.001 level between experimental group and control group. The Mean value of pre and post test score were 28, and 11.286 respectively with mean difference of 16.714 and t - value of 33.297*** and was found to be significant at 0.001 level among the experimental group. Hence the Lamaze breathing and relaxation technique was found to be effective in reducing the labour pain among gravid mothers and there is a significant association between age and occupation in the experimental group and in the control group association is found with age.

Keywords: Lamaze breathing and relaxation technique, labour pain and gravid mothers

1. Introduction

"The aim of the wise is not to secure pleasure, But to avoid pain".

[Aristotle]

Pain is highly unpleasant and very personal sensation that cannot be shared with others. Although pain is a universal experience, its exact nature remains a mystery. Pregnancy is a crucial period and childbirth represents the most painful event in most women's lifetime. Pregnant women commonly worry about the pain they will experience during labour and childbirth. Pain during labour is primarily caused by uterine

muscle contractions and somewhat by pressure on the cervix. This pain manifests as cramping in the abdomen, groin, and back, as well as a tired, achy feeling all over the body. Some women experience pain in their sides or thighs as well. Other causes of pain during labor include pressure on the bladder and bowels by the baby's head and the stretching of the birth canal and vagina.²

Relaxation is thought to increase pain tolerance through a number of mechanisms, including the reduction of anxiety, decreased catecholamine response, increased uterine blood flow, and decreased muscle tension.

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2. Methods

Research methodology is a science of studying how research is done scientifically. It is a way to systematically solve the research problem by logically adopting various steps. Methodology helps to understand not only the products of scientific inquiry but the process itself. This chapter deals with the methodology adopted for the current study. It includes research approach, research design, variables, setting, population, sample, sampling technique, sample size, criteria for sample selection, development and description of the tools, data collection procedure and protection of human subjects.

Research approach:

A research approach is about what data are to be collected and how to analyze it. It also suggests possible conclusions to be drawn from the data. In view of the nature of the study and the objectives to be accomplished, an evaluative research approach was considered as appropriate research approach for the present study. An evaluative research is an applied form of research that involves finding out how well a program, practice, procedure, or policy is working.

Research design:

Research design is the overall plan for addressing a research question, including specifications for enhancing the study's integrity. It is the backbone structure of the study. It determines how the study will be organized when the data will be collected and when the interventions are to be implemented in a way that is most likely to achieve the intended goal. The research design for the present study is quasi-experimental design. The study tends to evaluate the effectiveness of Lamaze breathing and relaxation technique in reduction of labour pain among gravid mothers. A schematic outline of the research design is given below:

3. Results

Data analysis is the systematic organization and synthesis of research data and testing of research hypothesis using those data. Interpretation is the process of making sense of the results of a study and examining the implications.

This chapter deals with the analysis and interpretation of data collected from 70 gravid mothers to evaluate the effect of the effectiveness of Lamaze breathing and relaxation technique regarding labour pain management. The purpose of the analysis was to reduce the collected data to an intelligible and interpretable form so that the relation of the research problem can be tested.

Organization of the findings: The data is organized and described in the following sections:

Section - A: Frequency and percentage distribution of the selected variables of the respondent in the experimental and control groups.

Section - B: Assessment of the level of labour pain in experimental and control groups before Lamaze breathing and relaxation technique.

Section - C: Assessment of the level of labour pain in the experimental group after Lamaze breathing and relaxation technique and post-test assessment in control group.

Section - D: Assessment of the effectiveness of Lamaze breathing and relaxation technique among gravid mother in experimental and control groups.

Section - E: Association between labour pain scores and selected variables of respondents in the experimental group.

Section - F: Association between labour pain scores and selected variables of respondents in the control group.

4. Discussion

The purpose of the study was to evaluate the effectiveness of Lamaze breathing and relaxation technique regarding labour pain management. The findings of the study have been based on the findings obtained from the statistical analysis of the collected data. Paired 't' was used to test the difference between pre-test and post-test results for the experimental group and unpaired t test was used to test the difference between control group and experimental group. Chi square test was used to find out the association of selected demographic variables.

Description of baseline variables of gravid mothers

In the experimental group, majority of the sample i.e. 15 (42.86%) were in the age group of 26 - 30 years, whereas in the control group, 17 (48.57%) were in the age group of 26 - 30 years. Regarding occupation, majority of the respondents i.e. 26 (74.29%) were housewife as well as in control group majority of respondents i.e. 27 (77.14%) were housewife. Regarding family income, 19 (54.29%) earn around Rs.15001 - Rs.20000 per month in experimental group whereas in the control group, 21 (60%) of respondents earn around Rs.10000 - Rs.15000 per month.

With regard to no. of live birth, 18 (51.43%) respondents have no children in experimental group whereas in the control group, 21 (60%) have 2 children. In experimental group, regarding mode of delivery, 18 (51.43%) respondents had no delivery and in control group 21 (60%) had caesarean section. Regarding dietary pattern, very few respondents i.e. 4 (11.43%) in experimental group and 5 (14.29%) in control group are vegetarian whereas majority of respondents i.e. 31 (88.57%) in experimental group and 30 (85.71%) in control group are non-vegetarian.

1) To assess the level of labour pain before lamaze breathing and relaxation technique among gravid mothers in experimental and control groups.

have reported mild pain, 31.43% (11) moderate pain and none reported severe or no pain in the interventional group whereas 65.71% (23) scored severe, 34.29% (12) scored moderate and none scored mild or no pain in the control group.

2) To assess the level of labour pain after lamaze breathing and relaxation technique among gravid mothers in experimental and control groups.

The data in the table - 4, shows that in the experimental group the Mean post intervention score was 27.886, with a standard deviation of 3.367 and the mean post intervention score was 11.286 with standard deviation of 3.77 among control group. The mean difference was 16.60. The t-value, 19.438*** was found to be

significant at 0.001 level between experimental group and control group. The p values ($p < 0.001$) provides sufficient justification to accept the H_0 , i. e. mean post intervention pain scores in the experimental group is lower than that of control group at 0.001 level of significance. This finding also elicits that there is a significant reduction in postoperative pain among experimental group when compared to the control group.

3) ***To evaluate the effectiveness of lamaze breathing and relaxation technique in reduction of labour pain among gravid mothers in experimental groups.***

The data in the table - 3, shows that the Mean value of pre and post test score were 28, 11.28 respectively with mean difference of 16.714 and t - value of 33.297*** and was to be significant at 0.001 level among the experimental group.

4) ***To compare the level of labour pain among gravid mothers in the experimental groups.***

The data in the table - 3, shows that the Mean value of pre and post test score were 28, and 11.28 respectively with mean difference of 16.714 and t - value of 33.297*** and was found to be significant at 0.001 level among the experimental group.

5) ***To find out the association between the levels of labour pain and selected variables of gravid mother in the experimental and control group.***

5. Conclusion

The present study is supported by other studies, which ensure that the lamaze breathing and relaxation technique was an effective teaching tool used to reduce the level of labour pain among mother in selected hospital, Bangalore

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"The wealth of knowledge is the greatest of all wealth's."

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