

# Effectiveness of a Planned Teaching Programme on Primigravid Mothers' Awareness of Specific Natural Pain Relief Techniques Used During Labor in Particular Bangalore Hospitals

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## Abstract

**Background:** Pain is an exciting sensation and is caused by the stimulus during labor. Always Pain plays a major role in labor in empowering the women, whereby they triumph by giving delivery to the newborn. **Objectives:** Assess the knowledge level about selected natural pain relief methods. **Methodology:** A quantitative research approach and the design used in this study was a pre-experimental research design. Sixty primigravid mothers were selected for the study through a purposive sampling technique. The information from the subjects was gathered using a planned interview schedule. **Results:** Most women 47 (78.03%) had insufficient understanding of natural pain management techniques prior to the pre-test. Most of the mothers, that is 38 (63.3%) of them, performed adequately on the post-test. When compared to their pre-test knowledge of natural pain management techniques (mean score 10.32), most mothers performed better on the post-test (mean score 21.43). The structured teaching program using charts and demonstrations is a very effective way to increase knowledge of pain treatment techniques.

**Keywords:** Effectiveness, structured teaching program, natural pain relief methods, labor, primigravid mother

## INTRODUCTION

Pain during delivery is a nearly universal practice. Pregnant women commonly worry about the delivery pain which they experience during childbirth. A pain threshold causes the amount of pain experienced by the individual. Fear and Anxiety are commonly related to increased pain during labor

[1–4]. Non-pharmacological management of pain relief during labor is generally a new concept. Most people throughout the United States are using alternative and corresponding medicine for various reasons, and women during delivery are starting to follow this trend.

Labor units in hospitals generally do not offer non-pharmacological management for pain relief [5]. Position adjustments and mobility are key components of labor, particularly when using gravity and your own body. The optimum positions are upright and forward because the uterus contracts forward when it contracts. Working with your body and the contraction surges will therefore be more

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effective and efficient, resulting in less discomfort for the laboring woman. The nurse-midwives encourage and assist the parturient to anticipate positively in birthing their babies. Emotions such as fear, anxiety, confidence, and cognition affect a woman's perception of pain. Besides, previous experience, anxiety, rest, and sleep also play an important role in the woman's perception of pain. Any motivation recalls pain tends to bring about changes in the sympathetic nervous system like increased heart rate, raised blood pressure, the release of epinephrine into the bloodstream, and a rise in the level of blood glucose. There is a decrease in gastric motility reduction in blood supply to the skin causing perspiration [6, 7].

### **NEED FOR THE STUDY**

To underline the relevance of pain and raise awareness among medical practitioners of the need for efficient pain management, Campbell lists pain as the fifth vital sign. During labor, both pharmaceutical and non-pharmacological techniques are employed to lessen pain perception. Medication used during labor and delivery may increase the risk of hypertension in the mother and bradycardia in the fetus. So, any use of them must weigh the alternative risk to the mother against it [8–10]. Both pharmaceutical and non-pharmacological techniques are employed to ease labor discomfort. Most of the suggested methods are predicated on these. The first is that pain during labor can be reduced if the woman goes into labor prepared with breathing techniques to utilize during contractions and is informed about what is happening. According to the researcher, ladies don't know enough about pregnancy and labor [11–13]. She reported that 59% of the women did not know that delivery would take place through the vaginal orifice. During the first pregnancy that primigravida was not able to adjust themselves during painful labor; women in labor start screaming and become exhausted early in labor and they start pushing much easier than the onset of expulsive contraction, leading to premature rupture of membrane and prolonged labor [14–17].

### **STATEMENT OF THE PROBLEM**

Effectiveness of a planned teaching program on primigravid mothers' awareness of specific natural pain relief techniques used during labor in Bangalore hospitals.

### **Study Objectives**

- Prior to a systematic education program, assess the level of knowledge among primigravid mothers about a few natural pain management techniques used during labor.
- After a systematic teaching program, assess your degree of knowledge of a few natural painkillers.
- Compare knowledge of a few natural pain treatment techniques between the pre- and post-test periods.
- The average post-test knowledge score of mothers' knowledge of a few natural labor pain relief techniques will be significantly greater than the average pre-test score, according to the following hypothesis.

### **Study Hypothesis**

- The mean post-test knowledge score will significantly correlate with several demographic factors, including age, education level, religion, occupation, family income, family structure, location, and presence of family members in the medical field.
- Evaluate the relationship between post-test knowledge of natural pain treatment techniques and particular demographic factors, such as age, educational attainment, religion, etc.

### **OPERATIONAL DEFINITIONS**

#### **Effectiveness**

It is an improvement of knowledge on selected natural pain relief methods during labor.

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### **Structured Teaching Program**

Systematically developed information about selected natural pain relief methods during labor.

### **Knowledge**

It means what is known about the natural pain relief method.

### **SELECTED NATURAL PAIN RELIEF METHODS**

The methods of pain relief such as position, breathing exercises, back massage, and heat application contribute naturally to reduce the stress and strain of labor pain.

### **Primigravid Mothers**

It refers to a lady who is pregnant for the first time and whose gestational age is greater than 37 weeks.

### **Supposition**

- Every mother is different, and every mother reacts to pain else.
- Women go through violent agony during labor, and because mothers do not use the multitudinous natural anodynes available to them, their maters do not admit the backing they need.
- Having fresh information about pain relief ways will affect pain curatives that lessen labor discomfort.

### **Limitation**

- The study was limited to the period of six weeks of data collection.
- The sample size was 60 only.

### **METHODOLOGY**

The quantitative approach was used.

- *Research design:* A pre-experimental exploration design was used, including a pre-test and post-test for one group.
- *The study's setting:* The exploration was carried out in a chosen sanatorium in Bangalore.
- *Population:* The target population named for the study was primigravid mothers in the age group of 16–40 times who had gravid periods of 37 weeks.
- *Size of the sample:* There are 60 primigravid mothers.

### **VARIABLES**

- *Dependent variable:* Structure teaching program.
- *Independent variables:* The knowledge of natural anodynes among primigravid women.

### **CRITERIA FOR SAMPLE SELECTION**

#### **Inclusion Criteria**

- Primigravid mothers, who were at the gravid age of above >37 weeks.
- Who came to the in-patient department?
- Who was available at the time of data collection?
- Who was eager to share?

#### **Limitation Criteria**

Primigravid mother who was in labor was 37 weeks along in her gestation and was unintentional to cooperate.

## SUMMARY OF TOOL

- *Part 1:* Demographic information.
- *Part 2:* Semi-structured knowledge questionnaire.

### Part 1. Data on Population

It includes information on the family's age, education position, religion, occupation, kind of family, position, and availability to the medical labor force.

### Part 2. Structured Knowledge Questionnaire

It consists of 28 multiple-choice questions regarding named natural pain relief styles during labor.

## PERFORMANCE SCORE

Each question has four possible answers, one of which is the proper one, and three distracting options. A score of one was assigned to each question. The knowledge score had outside of 28, and it was interpreted in Table 1.

**Table 1.** The knowledge scores.

Score	Percentage (%)	Category
0–14	0–50	Inadequate
15–21	51–75	Moderately adequate
22–28	76–100	adequate

## ANALYSIS AND INTERPRETATION OF DATA

### Arrangement of the Research Results

In the next section, descriptive and inferential statistics were used to analyze, tabulate, and interpret the data.

#### Section I

The demographic profile data that were acquired are discussed under the following subheadings, including age, education, religion, occupation, monthly income, etc. (Table 2).

- *Part 1:* Distribution of knowledge score and percentage for the pre-test and post-test.
- *Part 2:* Evaluation of knowledge before and after the test.

Relationship of the post-test knowledge scores with the chosen demographic variables in section IV.

#### Section II

Figure 1 shows the data, which shows the frequency and percentage distribution of samples by knowledge level in the pre- and post-test. The results of the pre-test showed that 47 (78.3%) of the samples lacked sufficient knowledge. None of the samples had adequate knowledge, while 13 (21.7% of the samples) had knowledge that was just adequate. 38 (63.3%) of the samples performed moderately well on the post-test. Among the samples, 22 (36.7%) had sufficient knowledge.

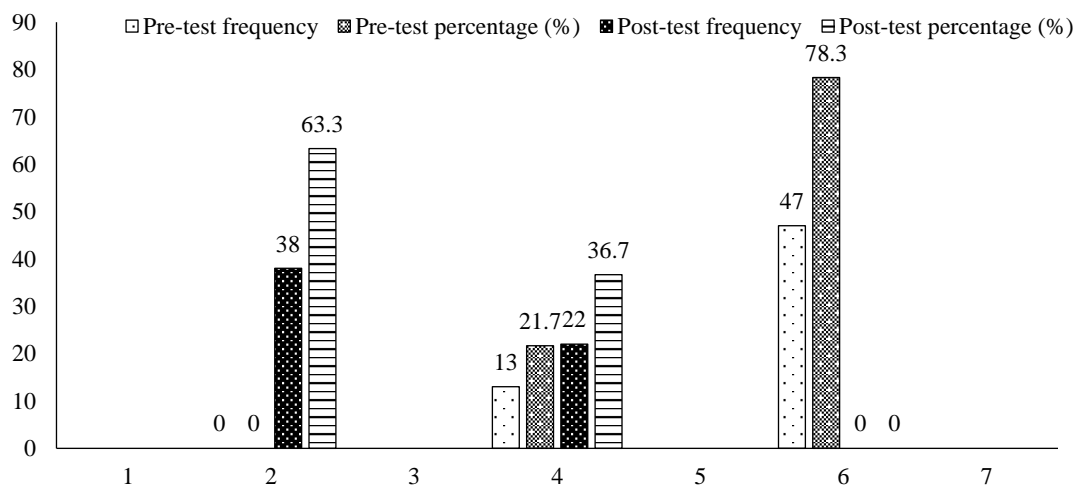
#### Section III

According to the information in Table 3, the samples' mean post-test knowledge level scores were significantly greater than their respective pre-test knowledge level scores. To determine whether there is a significant difference between the samples' mean knowledge scores on the pre-test and the test afterward. Used as the paired t-test.

At the 0.05 level, the computed t-value is 20.44 significant. The table value is lower than the calculated value. The research hypothesis was accepted, while the null hypothesis was rejected. The researcher concluded that the systematic education program on effective natural pain treatment techniques, rather than chance, was responsible for the knowledge increase.

**Table 2.** Frequency and percentage distribution of samples on selected demographic variables among Primigravid mothers.

S.N.	Demographic variables	Frequency (N=60)	Percentage
1.	<i>Age</i>		
	15–20	14	23.3
	21–25	27	45.0
	26–30	15	25.0
	31 and above	4	6.7
2.	<i>Religion</i>		
	Hindu	30	50.0
	Muslim	13	21.7
	Christian	17	28.3
3.	<i>Educational level</i>		
	Illiterate	9	15.0
	Primary	24	40.0
	Higher secondary	17	28.3
	Graduates and above	10	16.7
4.	<i>Occupation</i>		
	Housewife	35	58.3
	Coolie	4	6.7
	Government employee	0	0
	Private/business	21	35.0
5.	<i>Family income</i>		
	Below Rs. 1000	2	3.3
	Rs. 1001–2000	14	23.3
	Rs. 2001–3000	15	25.0
	Rs. 3000 and above	29	48.3
6.	<i>Family type</i>		
	Nuclear family	33	55.0
	Joint family	27	45.0
	Extended family	0	0
7.	<i>Location</i>		
	Rural	21	35.0
	Urban	39	65.0
8.	<i>Availability of health personnel in the family</i>		
	Yes	3	5.0
	No	57	95.0



**Figure 1.** Distribution of pre-test and post-test knowledge scores among primigravid mothers.

**Table 3.** Comparison of mean pre-test and post-test knowledge score regarding selected natural pain relief methods.

	Mean	Standard deviation	Paired 't' test value
Pre-test	10.32	3.703	20.449
Post-test	21.43	2.878	

**Section IV**

The findings indicate that there was no correlation between knowledge and the demographic factors that were chosen, including age, education, occupation, religion, family income, family type, position of the family, and availability to the medical labor force (Table 4).

**Table 4.** Association between post-test knowledge level scores and demographic variables.

S.N.	Demographic variables	Adequate knowledge	Moderately adequate knowledge	Adequate knowledge	Chi-square values
1.	<i>Age</i>				.894#
	15–20	10	4	0	
	21–25	16	11	0	
	26–30	9	6	0	
	31 and above	3	1	0	
2.	<i>Religion</i>				.661#
	Hindu	20	10	0	
	Muslim	7	6	0	
3.	<i>Educational level</i>				4.950#
	Illiterate	3	6	0	
	Primary	15	9	0	
	Higher secondary	13	4	0	
	Graduates and above	7	3	0	
4.	<i>Occupation</i>				2.994#
	Housewife	20	15	0	
	Coolie	4	0	0	
	Government employee	0	0	0	
	Private/business	14	7	0	
5.	<i>Family income</i>				6.589#
	Below Rs. 1000	2	0	0	
	Rs. 1001–2000	8	6	0	
	Rs. 2001–3000	13	2	0	
	Rs. 3000 and above	15	14	0	
6.	<i>Family type</i>				1.047#
	Nuclear family	19	14	0	
	Joint family	19	8	0	
	Extended family	0	0	0	
7.	<i>Location</i>				.912#
	Rural	15	6	0	
	Urban	23	16	0	
8.	<i>Availability of health personnel in the family</i>				1.224#
	Yes	1	2	0	
	No	37	20	0	

\*Significant at 0.05 position, non-significant at 0.05 situations

### **Study Findings**

The majority of the samples, 27 (45), belonged to the 21–25 age range. The majority of the participants, 30 (50), identified as Hindu. Twenty-four individuals, or 40 percent, had completed primary education, while 35 participants, or 58 percent, were housewives. The vast majority of them (about 21) worked in the private sector. A majority of 33 (55) of them are from nuclear families, while 27 (45) are from common families. Between Rs.1000 and Rs.3000 was the range of income for the bulk of the sample's 15 advanced earners (or 25). A maximum of 57 (95%) of the samples were eligible for inclusion in the health labor force regarding the scarcity of the health labor force in the family. Pre-test knowledge of natural pain management techniques was inadequate for 47 (78.03%) people, and 38 post-tests (63.3%) were conducted.

### **RECOMMENDATION**

- To determine the position of the caregivers' current knowledge of pain operation ways, an exploratory study can be conducted.
- Further exploration of midwives' understanding of, and use of non-pharmacological pain operation ways is possible.
- It is possible to conduct a study like this utilizing a control group.
- A similar study comparing mothers in civic and pastoral areas can be done.
- Comparing pharmacological versus non-pharmacological treatments for labor pain can be the subject of a similar study.

### **CONCLUSION**

The methodical tutoring program that utilized maps and demonstrations to enhance participants' mindfulness of pain management techniques has been concluded, as described in this article. For every woman, giving birth is a natural procedure. It should be handled naturally as important as possible. The mother should know about pain relief styles to help them to face this situation as the happiest and most memorable event in her life. When tutoring the pain relief styles in the antenatal classes will help the midwives to reduce their responsibility for pain relief measures during the busy time of their care during labor in the hospitals.

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