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## A QUASI EXPERIMENTAL STUDY TO ASSESS THE EFFECT OF GUIDED SOMATO PSYCHIC RELAXATION TECHNIQUE ON PAIN AND ANXIETY AMONG PRIMIGRAVIDAE DURING FIRST STAGE OF LABOUR IN SELECTED HOSPITALS AT KOLLAM

### Nimmi Mani Daniel<sup>1</sup> and Annal Angeline<sup>2</sup>

Department of Obstetrics and Gynecological Nursing, Bishop Benziger College of Nursing, Kollam

#### **ARTICLE INFO**

#### ABSTRACT

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Key words:

Guided Somato Psychic Relaxation technique; primigravidae; first stage of labour; labour pain; anxiety. Subject: Quasi experimental study was conducted to assess the effect of Guided Somato Psychic Relaxation technique on pain and anxiety among primigravidae during first stage of labour. Objectives: The objectives of the study were to assess the effect of Guided Somato Psychic Relaxation technique on pain among primigravidae during first stage of labour, to assess the effect of Guided Somato Psychic Relaxation technique on anxiety among primigravidae during first stage of labour, to find the association between pain among primigravidae during first stage of labour and selected demographic variables and to find the association between anxiety among primigravidae during first stage of labour and selected demographic variables. Method: The conceptual frame work used was Katharine Kolcaba's comfort theory. A quantitative research approach was used with quasi experimental pre-test post-test control group design. Purposive sampling was used to select 60 samples. Pre-test was conducted using adapted numerical pain rating scale and Spielberg State Trait Anxiety Scale. For experimental group, Guided Somato Psychic Relaxation technique was given. Control group received routine nursing care. Post-test was conducted using the same tool. Results: The findings of the study showed that the mean post-test pain score of experimental group  $(4.5\pm0.57)$ was lower than the control group  $(6.37\pm0.96)$  and the mean post-test anxiety score of experimental group (43.77±2.16) was lower than control group (45.8±2.59) and it was significant at 0.05 level of significance. The findings of the study shows that there was a significant association between the pain with social support and anxiety with social support and previous knowledge regarding management of labour pain. Conclusion: The study concludes that Guided Somato Psychic Relaxation technique was effective in reducing pain and anxiety among primigravidae during first stage of labour.

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## INTRODUCTION

Motherhood is the greatest gift God gave to womankind, to know that we are instruments in God's creation, to know that we participated in God's purpose and plan.<sup>1</sup> Parturition is a unique, exciting, wondersome yet sometimes worrisome experience for the women.<sup>2</sup> Labour pain have been described as the most excruciating pains that a human being can experience.<sup>3</sup> Studies of pain have demonstrated that the anticipation of pain can raise the anxiety level significantly.<sup>2</sup> Motherhood means giving life to a life unlived, it means dreaming of things yet undreamed, and sustaining hope in a hopeless world. The physiological transition from being a pregnant women to becoming a mother means an enormous change for each women both physically and psychologically.<sup>4</sup> Although pregnancy is often portrayed as a time of great joy, that's not the reality for all women.<sup>5</sup> Anxiety during childbirth presents a problem for health care providers because of the resulting physiologic response.<sup>6</sup> Several techniques have been used to relieve the pain experienced during the first and second stage of labour. The choice of technique and also the timing of initiation has a bearing on successful relief from labour pain.<sup>7</sup> For managing pain both pharmacologic and non pharmacologic methods are used.<sup>2</sup> A study conducted in Finland found that women with an intense fear of labour who underwent cognitive (talk) therapy had shorter labour hours and fewer unnecessary caesarean sections than those who didn't.<sup>8</sup> Guided Somato Psychic Relaxation technique is a verbal instruction by the expert in the form of an audio recording which produces relaxation from body to mind. Hence the present study is an attempt to find the effect of Guided Somato Psychic Relaxation technique on pain and anxiety among primigravidae during first stage of labour.

#### Statement of the Problem

A study to assess the effect of Guided Somato Psychic Relaxation technique on pain and anxiety among primigravidae during first stage of labour in selected hospitals at Kollam.

\*Corresponding author: Nimmi Mani Daniel

Department of Obstetrics and Gynecological Nursing, Bishop Benziger College of Nursing, Kollam

#### **Objectives**

The objectives of the study were:

- To assess the effect of Guided Somato Psychic Relaxation technique on pain among primigravidae during first stage of labour in selected hospitals at Kollam.
- To assess the effect of Guided Somato Psychic Relaxation technique on anxiety among primigravidae during first stage of labour in selected hospitals at Kollam.
- To find the association between pain among primigravidae during first stage of labour and selected demographic variables.
- To find the association between anxiety among primigravidae during first stage of labour and selected demographic variables.

### **MATERIALS AND METHODS**

Quantitative approach was adopted in this study with pre-test post-test control group design. The independent variable chosen for this study was Guided Somato Psychic Relaxation technique. The dependent variables were pain and anxiety among primigravidae during first stage of labour and the demographic variables were age, education, occupation, area of residence, type of family, social support and previous knowledge regarding management of labour pain. The setting of the study was the labour room of Bishop Benziger Hospital, Kollam and LMS Hospital, Kundara. The population comprised of primigravidae admitted in labour room after 37 weeks of gestation and 60 samples were selected using purposive sampling technique. The tools used were

Section A: Demographic proforma Section B: Adapted numerical pain rating scale Section C: Adapted Spielberg State Trait Anxiety Scale Section D: Partograph

The samples were selected purposively. The purpose of the study was explained and informed consent was obtained from samples. Samples were asked to give baseline information. Then the pain and anxiety was assessed using adapted numerical pain rating scale and Spielberg State Trait Anxiety Scale. For experimental group, one session of modified Guided Somato Psychic Relaxation technique is given for 12 minutes. Control group received routine nursing care. Post-test was conducted immediately after therapy using the same tool for both the experimental and control group.

### **RESULT AND OBSERVATION**

#### Demographic data

Data shows that majority (66.67%) of samples belongs to the age group of 24-29 years and the least (11.66%) belongs to the age group of 30-35 years. Majority of samples (56.66%) had education of graduation and above and no one belongs to the category of primary education. Majority of samples (71.67%) were unemployed. Majority of samples (58.33%) were from rural area. Half of the samples (50%) belongs to nuclear family and half of the samples (50%) belongs to joint family. All the samples (100%) had support from both the family and partner. Majority (96.67%) of samples had no previous knowledge regarding management of labour pain.

# Description of pain among primigravidae during first stage of labour

The study revealed that (98.33%) of samples had moderate pain and (1.67%) of samples had mild pain and the mean pretest pain score was 5.57 with standard deviation of 0.74.

## Description of anxiety among primigravidae during first stage of labour

The study revealed that (95%) of samples has moderate anxiety and (5%) of samples had mild anxiety and the mean pre-test anxiety score was 45.9 with standard deviation of 2.74.

## *Effect of Guided Somato Psychic Relaxation technique on pain among primigravidae during first stage of labour*

**Table 1** Mean, mean difference, standard deviation and paired't' value of pre-test and post-test pain in experimental group(n=30)

Test	Mean	Mean difference	SD	t value
Pre-test	5.73		0.45	
		1.23		15.7*
Post-test	4.5		0.57	

 $t_{(29)}$ = 2.05, \*Significant at 0.05 level of significance

The data in the table1 shows that mean post-test pain score of experimental group  $(4.5\pm0.57)$  was lower than the pre-test pain score  $(5.73\pm0.45)$  and calculated 't' value (15.7) is greater than the table value at 0.05 level of significance. It indicates that there was a significant reduction in labour pain among primigravidae during first stage of labour in experimental group.

**Table 2** Mean, mean difference, standard deviation and unpaired 't' value of post-test pain among experimental and control group

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Group	Mean	Mean difference	SD	t value	-
Experimental	4.5		0.57		-
		1.87		9.12*	
Control	6.37		0.96		

t(58)= 2.00, \*Significant at 0.05 level of significance

The data in the table2 shows that the mean post-test pain score of experimental group  $(4.5\pm0.57)$  was lower than the mean post-test pain score of control group  $(6.37\pm0.96)$  and calculated 't' value (9.12) is greater than the table value at 0.05 level of significance. It indicates that there was a significant difference between mean post-test pain scores of experimental and control group.

So the present study shows that Guided Somato Psychic Relaxation technique was effective in reducing pain among primigravidae during first stage of labour.

# Effect of Guided Somato Psychic Relaxation technique on anxiety among primigravidae during first stage of labour

**Table 3** Mean, mean difference, standard deviation and paired't' value of pre-test and post-test anxiety in experimental group

					(n=30
Test	Mean	Mean difference	SD	t value	
Pre-test	46.07		2.82		
		2.3		6.77*	
Post- test	43.77		2.16		

 $t_{(29)}$  = 2.05, \*Significant at 0.05 level of significance

The data in the table 3 shows that the mean post-test anxiety score of experimental group  $(43.77\pm2.16)$  was lower than the mean pre-test anxiety score  $(46.07\pm2.82)$  and calculated 't' value (6.77) is greater than the table value at 0.05 level of significance. It indicates that there was a significant reduction in anxiety among primigravidae during first stage of labour in experimental group.

 Table 4 Mean, mean difference, standard deviation and

 unpaired 't' value of post-test anxiety among experimental and

 control group

			(N=60		
Mean	Mean difference	SD	t value		
43.77		2.16			
	2.03		3.3*		
45.8		2.59			
	43.77	43.77 2.03	43.77 2.16 2.03		

 $t_{(58)}$ = 2.00, \*Significant at 0.05 level of significance

The data in the table 4 shows that mean post-test anxiety score of experimental group  $(43.77\pm2.16)$  was lower than the mean post-test anxiety score of control group  $(45.8\pm2.59)$  and calculated 't' value (3.3) is greater than the table value at 0.05 level of significance. It indicates that there was a significant difference between mean post-test anxiety scores of experimental and control group.

So the present study shows that Guided Somato Psychic Relaxation technique was effective in reducing anxiety among primigravidae during first stage of labour.

# Association between pain and selected demographic variables

As the calculated chi-square value of social support (56.07) was more than the table value at 0.05 of level significance, there was a significant association between the pain and social support. As the calculated chi-square value of age, education, occupation, area of residence, type of family and previous knowledge regarding management of labour pain variables were less than the table value there was no significant association between pain and these demographic variables.

# Association between anxiety and selected demographic variables

As the calculated chi-square value of social support (48.6) and previous knowledge regarding management of labour pain (8.82) were more than the table value at 0.05 level of significance, there was a significant association between the anxiety and these demographic variables. As the calculated chi-square value of age, education, occupation, area of residence and type of family were less than the table value there was no significant association between anxiety and these demographic variables.

## CONCLUSION

The results of the present study revealed that Guided Somato Psychic Relaxation technique was effective in reducing pain and anxiety among primigravidae during first stage of labour.

*Conflict of Interest* – There is no conflict of interest for the present study.

*Source of funding* – No external funding agencies. Self funding.

**Ethical clearance** - Formal written permission was obtained from Ethical committee of Bishop Benziger College of Nursing. Data were collected after giving participant information sheet and informed consent.

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