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EFFECTIVENESS OF REFLEXOLOGY ON PAIN DURING FIRST STAGE OF LABOUR AMONG PRIMI GRAVIDA MOTHERS

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ABSTRACT

Labour is the only blind date you can be sure that you will meet the love of your life. Labour is the bridge between pregnancy and motherhood, and for the laboring woman. It is often an intense experience of the pregnancy. Child birth is a painful experience for almost all women. Among all the non-pharmacological methods for labour pain, reflexology is one of the best methods.

The study was to evaluate the effectiveness of reflexology on pain during first stage of labour among primi gravida mothers. A quasi experimental pre-test post test control group design was used in this study. Sixty subjects in active phase were selected by using non probability purposive sampling technique. Reflexology intervention was given to the experimental group. Data was collected before and after intervention immediately, 1 hour and 2 hour intervals, by using "SAN DIEGO NON VERBAL PAIN SCALE". The study finding showed that the obtained 't' value (19.37) was significant at 0.05 level. It shows that reflexology was effective in reducing pain during active phase of first stage of labour.

KEYWORDS

Pain, First stage of labour, Reflexology and Primigravida mothers.

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INTRODUCTION

Labour pain is an unpleasant, complex, highly individualized phenomena with both sensory and emotional components. Pregnant women commonly worry about pain they will experience during labour and birth and how they will react to and deal with that pain. Childbirth is an experience in a woman's life that has power to transform her forever. It can be influenced by a number of factors such as cultural practices, anxiety, fear and psychological support. Although labour is often thought of as one of the

most painful events in human experience, it ranges widely from woman to woman and even from pregnancy to pregnancy¹.

Childbirth is painful in order to show how serious a thing life is. During the first stage of labour, uterine contraction causes cervical dilatation and effacement. Labour pain results in physiologic effects, sensory and emotional (affective) responses. During childbirth, pain gives rise to identifiable physiologic effects².

Most women in labour request pain relief and hence various pharmacological and non-pharmacological interventions are used for this purpose. An increased availability of these methods can provide effective alternative for women in labour³.

Some mothers go for pharmacological management like epidural analgesia during labour, which has side effects like nausea, vomiting, dizziness, higher rates of assisted delivery, decreased maternal cardiac output, prolongation of second stage labour or problems like high blood pressure and fever and foetal side effects like hypoxia, respiratory distress and still births. To avoid such unwanted outcome to the foetus and the mother such non-pharmacological managements are helpful. These managements also give satisfaction to the mother⁴.

Among all the non-pharmacological methods for labour pain, reflexology is one of the best methods, because in reflexology the treatment is safe, free from side effects, giving lasting cure, economical, and it is compatible with other forms of treatment. Reflexology is an ancient art. Reflexology provides good comfort and relaxation. Studies reported that reflexology manage symptoms and provide comfort. Reflexology involves massage and the application of pressure, to points on the feet, which correspond to various organs and system in the body⁵.

Objectives

1. To assess the level of pain during first stage of labour among primi gravida mothers in experimental and control group.
2. To evaluate the effectiveness of reflexology on pain during first stage of labour among primi gravida mothers in experimental group.

Hypotheses

H1: There is a significant difference in pain score of reflexology during first stage of labour among primi gravida mothers in experimental and control group.

H2: There is a significant difference in pre and post score of reflexology during first stage of labour among primi gravida mothers in experimental group.

MATERIAL AND METHOD

A quasi experimental pre-test post test control group design was used in this study. Sixty samples in active phase of labour were selected by using non probability purposive sampling technique, Out of 30 were allotted to experimental group and 30 to control group. After obtaining their oral consent, the labour pain level was assessed for the subjects by observational method using San Diego Non-verbal pain scale during the active phase of first stage of labour. The pre-test level of labour pain of both experimental and control group was assessed by pain scale, then the reflexology intervention was given to each sample in experimental group about 30 minutes. After that the post pain level was assessed for both the groups immediately, after one hour and after 2 hour intervals. The level of pain was measured by San Deigo Non Verbal Pain Scale Ranging from 0 - No pain, 1-3 - Mild Pain. 4-6 - Moderate Pain, 7-10 - Severe Pain.

RESULTS

Table No.1 showed that the level of pain during first stage of labour among primi gravida mothers. This findings revealed that in pre-test among 30 mothers 7 (23%) had moderate pain, 23 (77%) had severe pain and no one had mild pain. In post test, at 0 hour, 14 (47%) had mild pain, 16 (53%) had moderate pain and no one had severe pain, at 1 hour 29 (97%) had moderate pain, 1 (3%) had severe pain and no one had mild pain, and after 2 hours 27 (90%) had moderate pain, 3 (10%) had severe pain and no one had mild pain. It is inferred that reflexology is effective in reducing labour pain immediately.

Table No.2 reveals that the mean value during pre-test was 7.13 and the mean value during post test was 3.6, 4.8, and 5.9 respectively at 0, 1 and 2 hour. The obtained 't' value during post test was significant

at $p < 0.05\%$ in all readings (0, 1 and 2 hours). Hence, it reveals that reflexology has been effective in reducing pain during 1st stage of labour.

Figure No.1 projects that the average unpaired 't' test value of interventional and control group was 14.02, which was highly significant at $p < 0.05$. It is thus inferred that reflexology was effective in reducing the labour pain.

DISCUSSION

The basic aim of the study was to compare the effectiveness of reflexology on pain during first stage of labour among primi gravida mothers. A quasi experimental pre-test post test control group design was used in this study.

San Deigo non-verbal pain scale was administered to assess the pain level. The response was analyzed through descriptive (mean, frequency, percentage, and standard deviation) and inferential statistics (paired 't' test). Discussions on findings were arranged based on the objectives of the study.

This findings revealed that among primi gravida mothers in experimental group, during the pre-test majority of 23 (77%) had severe pain and none of

them had mild pain. In post test, at 0 hour 14 (47%) had mild pain, 16 (53%) had moderate pain and no one had severe pain, pain after 2 hour 27 (90%) had moderate pain and 3 (10%) had severe pain. It is inferred that reflexology is effective in reducing labour pain.

This finding was supported by Valiani, who conducted a quasi-experimental study to assess the effect of reflexology on the pain and outcome of labour. The result concluded that reflexology can lead to decrease in the labour pain⁶.

Regarding the effectiveness of reflexology on pain during the first stage of labour among primi gravid mothers, the results showed that reflexology was effective in reducing pain during the active phase of labour.

This finding was supported by Dolation, who conducted a randomized clinical trial to study, the effect of reflexology on pain intensity as well as to determine the duration of labour in 120 primi paras parturient women with low risk pregnancy. Results showed that reflexology was effective in reducing pain during active phase of first stage of labour⁵.

Table No.1: Level of pain during first stage of labour among primi gravida mothers in experimental group

S.No	Level of pain	Pre test		Post test					
				0 hour		1 hour		2 hour	
		n	%	n	%	n	%	N	%
1	Mild pain	0	0	14	47	0	0	0	0
2	Moderate pain	7	23	16	53	29	97	27	90
3	Severe pain	23	77	0	0	1	3	3	10

Table No.2: Mean, Standard deviation, 't' value of pain during first stage of labour among primi gravida mothers after reflexology in experimental group at 0,1 and 2 hour

S.No	Variables	Mean	Standard deviation	Mean difference	't' Value
1	Experimental group Pre-test	7.13	0.708		
	Post test				
	a) Zero hour	3.6	0.63	3.53	19.23*
	b) At one hour	4.8	0.71	2.33	12.43*
	c) At two hour	5.9	0.60	1.33	8.02*

*significant at $p < 0.05$ level

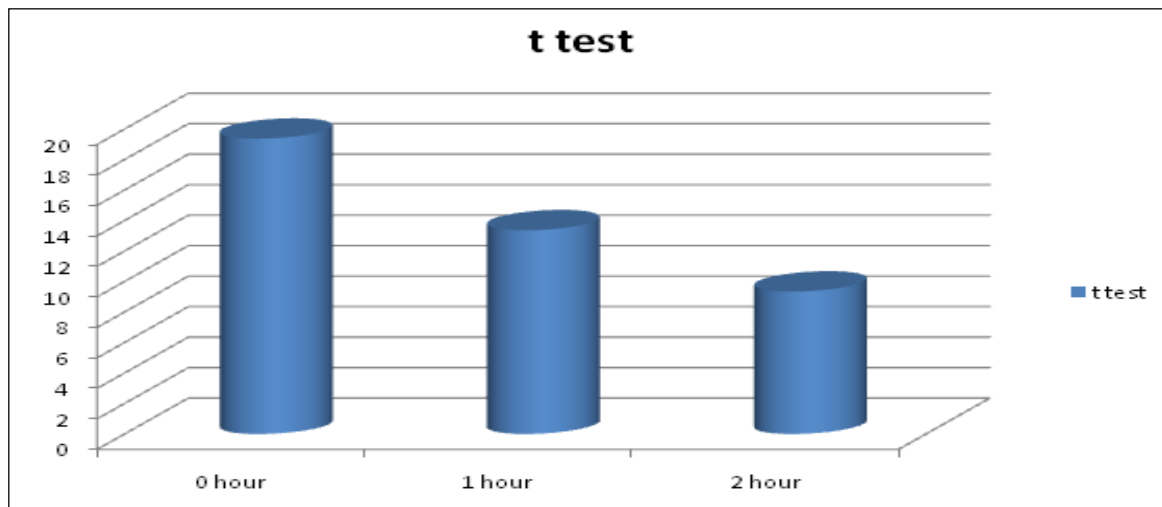


Figure No.1: Unpaired 't' test level of pain during first stage of labour among primigravida mothers in Interventional and Control group

CONCLUSION

This study finding showed that reflexology helped to reduce pain during first stage of labour. The midwives have a very important role in enabling effective pain relief during the first stage of labour. This study proves the effectiveness of reflexology in reducing pain during first stage of labour and hence can be adopted as an independent nursing intervention.

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CONFLICT OF INTEREST

We declare that we have no conflict of interest.

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