



## A STUDY TO ASSESS THE EFFECTIVENESS OF FOOT REFLOXOLOGY IN REDUCTION OF LABOUR PAIN DURING 1ST STAGE AMONG PRIMI MOTHERS ADMITTED IN SELECTED HOSPITALS OF JABALPUR CITY

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**ABSTRACT** The act of giving birth is the only moment when both pain and pleasure converge in a moment of time. This study is intended to find out the effectiveness of foot reflexology in reduction of labour pain. An Quasi experimental post-test only control group design, Two group control group and experimental group design was carried out in selected hospitals with similar setting in Jabalpur city. Purposive sampling technique was used for study. Two pain scale were used in study for assessing the pain intensity, First was Fordyce labour pain scale and the second one was Visual analogue pain scale. All subjects were divided into two groups: control group and experimental group, each group contain 20 sample (primi mothers). The experimental group given foot reflexology during active phase, whereas the control group were not given any intervention. Experimental group Pain is reduced then compared to the control group. The t-test, compared result showed positive correlation  $t=3.1$  at the 0.05 level of Significance. Hence the study concluded that foot reflexology is effective in reducing

**KEYWORDS :** Effectiveness, Foot Reflexology, Primigravida, labour Pain

### INTRODUCTION

The natural and holistic approach of Foot reflexology in bringing on the labor and delivery has absolutely no adverse effect on the baby as no pharmaceuticals are being introduced into the body. It's safe for the mother, as well, because it only helps the body to function better. The control of labor pain and prevention of suffering are major concerns of clinicians and their clients. Non-pharmacologic approaches toward these goals are consistent with midwifery management and the choices of many women. A literature search of scientific articles categories 13 non-pharmacologic methods used to relieve pain and reduce suffering in labor. Result shows, adequate evidence of benefit in reducing pain exists for continuous labor support, baths, intradermal water blocks, and maternal movement and positioning. Acupuncture, massage, transcutaneous electrical nerve stimulation, and hypnosis are promising, but they require further study. The effectiveness of childbirth education, relaxation and breathing, heat and cold, acupressure, hypnosis, aromatherapy, music, and audio analgesia, all the methods studied had evidence of widespread satisfaction among a majority of users.

### REVIEW OF LITERATURE

Shyla Isaac, Magarani, W. Deepa Shalini (2016) conducted a study to evaluate the effectiveness of Foot 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.

### OBJECTIVES OF THE STUDY:

1. Assess the labour pain intensity among mothers in control group.
2. Assess the effectiveness of foot reflexology on labour pain intensity among mothers in experimental group after application of foot reflexology.
3. Compare the labour pain intensity in control group and after application of foot reflexology in experimental group.
4. Associate the labour pain intensity with selected socio demographic variable in control group.
5. Associate the labour pain intensity with selected socio-demographic variables in the experimental group

### ASSUMPTIONS

1. Reflexology promotes relaxation, thereby increasing the compliance of primigravida mothers during labour.
2. Reflexology helps to reduce labor pain intensity and labour duration.

### MATERIALS AND METHODS

The Research Approach used by investigator is Quantitative and evaluative research approach and the Research design is quasi

experiment post test only control group design. two group control group and experimental group design was carried out in selected hospitals with similar setting in Jabalpur city. Purposive sampling technique was used for study. All subjects were divided into two groups: control group and experimental group, each group 20 sample (primi mothers). The experimental group given foot reflexology to the primi mothers during active phase, whereas the control group were not given any intervention.

### HYPOTHESES

**H1-** There will be significant Mean difference between labour pain intensity in control group and experimental group.

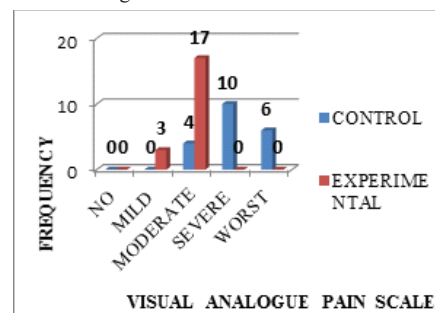
**H2-** There will be significant association between labour pain intensity among mothers with selected demographic variables in control group.

**H3-** There will be significant association between labour pain intensity among mothers with selected demographic variables in experimental group

### RESULTS

A total 40 primi mothers who were admitted in labor room were included in this study. In this study two pain scale were used, first one is Modified Fordyce behaviour labor pain scale and second is visual analogue pain scale. To compare both of the scale in each group. In Fordyce behaviour labor pain scale, t-value was 3.12. And in visual analogue pain scale t-value was 1.95 it was statistically significant. Table value was (1.685)

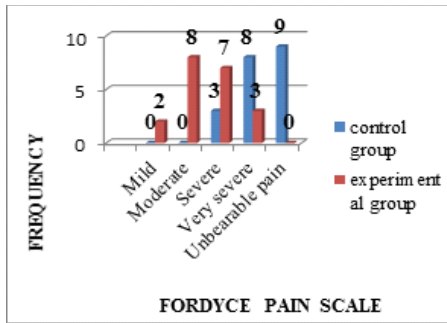
**FIGURE 1.** Bar Diagram Showing The Comparison Between Control Group And After Application Of Foot Reflexology in Experimental Group In Visual Analogue Pain Scale.



**Figure no:- 1** Control group indicate majority that In visual analogue pain scale belongs to Severe pain which is (10) 50% group, worst pain is (6) 30% and moderate pain is (4) 20%, mild, and no are 0% in control group.

**Figure no:-1** Experimental group indicate that Majority In visual analogue pain scale belongs to Moderate had 17(85%) in this group, Mild had 3 (15%) and severe, no pain and worst pain had none are 0% in experimental group.

**FIGURE 2.** Bar Diagram Comparison Between Control & After Foot Reflexology In Experimental Group Fordyce Behavioral Labor Pain Scale



**Figure no:-2** Control group Indicate that majority In modified Fordyce behavioural labor pain scale had unbearable pain which is(9) 45% and Very severe pain is (8) 40% and severe pain is (3)15%, mild and moderate 0% in control group

**Figure no:-2** Experimental group indicate that In modified Fordyce behavioural labor pain scale Majority of group belongs to moderate pain had 8 (40%) , severe had 7 (35%) and mild pain had 2 (10%), very severe 3 (15%) and unbearable 0% in experimental group.

**Comparison Of Control & Experimental Group Of Modified Fordyce Behavioral Labor Pain Scale**

**Table.No-1**  
(N=40)

S. NO	Description	Mean	Mean difference	SD	SD difference	t-value
1	Control group	10.55	4.35	2.33	0.76	3.12**
2	Experimental group	6.2		1.57		

(Table value = 1.685)  
(Result significant at 0.05% level of significance)  $t=3.12^{**}$  that is significant Data presented in the above table shows that the mean score in the control group without application of Foot reflexology was 10.55 and Standard deviation was 2.33. In result of Experimental group application of Foot reflexology means score was 6.2 and Standard deviation was 1.57.

Thus fulfils the objectives no 3 the comparison between control group and experimental group made by t-test. Statistically tested by applying t-test method at the level of 0.05%.in this case the calculated value of t is more than the table value (1.685), that is 3.12\*\* so this indicates that the foot reflexology was effective in reducing pain during first stage of labor among mothers.

Thus the hypothesis H1 is accepted.

**Comparison Of Control & Experimental Group Of Visual Analogue Pain Scale**

**TableNo-2**  
(N=40)

S. NO	Description	Mean	Mean difference	SD	SD difference	t-value
1	Control group	7.8	3.85	1.50	0.15	1.95**
2	Experimental group	3.95		1.35		

(Table value = 1.685)  
(Result significant at 0.05% level of significance)  $t = 1.95^{**}$  that is significant Data presented in the above table shows that the mean score in the control group without Application of Foot Reflexology was 7.8 and standard deviation was 1.50. In result of Experimental group application of foot Reflexology means score was 3.95 and Standard deviation was 1.35 .Thus, Fulfils the objectives no 3 the comparison between control group and Experimental group made by t-test. Statistically tested by applying t-test method at the level of 0.05%. In this case the calculated value of t- is more than the table value (1.685), that is 1.95 so this indicates that the acupressure was effective in reducing pain during first stage of labor among mothers.Thus the hypothesis H1 is accepted.

**DISCUSSION**

The comparison between the control and experimental group .

Experimental group Pain is reduced then compared to the control group.The t-test, compared result showed positive correlation  $t= 3.1$  at the 0.05 level of Significance. The mean score in the control group without application of Foot reflexology was 10.55 and standard deviation was 2.33. In result of experimental group application of Foot reflexology means score was 6.2 and standard deviation was 1.57 . Thus fulfils the objectives no 3 the comparison between control group and experimental group made by t-test.

**CONCLUSION**

The present study was undertaken to evaluate the effectiveness of foot reflexology in reduction of labour pain in first stage of labour. Result shows that Foot reflexology is very effective for reducing labour pain. During labour process pain increases because of the cervical dilatation as baby expels out, but through the help of foot reflexology the pain will be reduced and mothers feels less pain and also feels comfortable during labour.