

Effectiveness of Reflexology on Labour Pain among Parturient Mothers in First Stage of Labour

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1. Introduction

“Birthing is a painful process
The body is designed for it
We’ll make it as comfortable as possible”

Morrison susan jane (1974)

Pregnancy is an amazing phenomenon of nature that is the core of our existence. The mother spends months in planning and imagining the day when she will bring new life into the world. Nature has designed labour and birth simply and elegantly, although evenly labour and birth is unique. Pain in labour is crucial and women in labour have a strong desire that the pain should be relieved or decreased. Many complimentary non pharmacological therapies which are safe and simple are hidden behind the screen making the labour process so strange and crucial. Hence the researcher was interested to incorporate the reflexology technique during labour process on insisting the pain relief as a blessing and triumph over the labour pain..

Statement of the problem

An experimental study to assess the “Effectiveness of reflexology on labour pain among parturient mothers in first stage of labour” at Government Hospital, Tambaram, Chennai.

2. Objectives

- 1) To assess the level of labour pain of control and experimental group parturient mothers before and after reflexology.
- 2) To assess the fetomaternal parameters of control and experimental group parturient mothers before and after reflexology.
- 3) To determine the effectiveness of reflexology upon labour pain among parturient mothers.
- 4) To compare the level of labour pain among control and experimental group after reflexology.
- 5) To determine the level of satisfaction upon experimental group parturient mothers on reflexology.
- 6) To find out the association between the selected demographic variables and the level of labour pain of parturient mothers before and after reflexology in control and experimental group.
- 7) To find out the association between the obstetric variables and level of labour pain of parturient mothers before and after reflexology in control and experimental group.

3. Methodology

The conceptual frame work of the study was developed on the basis of Wiedenbach’s Helping Art of Clinical Nursing Theory. The study variables were reflexology and level of labour pain. Hypotheses were formulated. The level of significance selected was $p < 0.05$. An extensive review of literature and guidance by experts formed the foundation to the development of modified pain intensity scale, simplified partogram, satisfaction rating scale. An experimental research with pre test-post test design was used to achieve the objectives of the study. The present study was conducted in labour ward at Government Hospital, Tambaram Chennai. The sample size was 60 and they were selected randomly, of which 30 were assigned to control group and 30 were assigned to experimental group by systematic random sampling technique. The researcher used demographic variable preformed, obstetric variable preformed, modified pain intensity scale, simplified partogram, and rating scale on satisfaction of reflexology for data collection. The data collection tools were validated and the reliability was established. After pilot study, the data for the main study was collected. The mothers in control group did not use any pain reduction strategies where as in the experimental group reflexology was provided for pain reduction. Before therapy the assessment of labour pain with the help of modified pain intensity scale and fetomaternal parameters with the help of simplified partogram was done for both control and experimental group. Reflexology was given 10-15 minutes for every one hour to the experimental group, 15 minutes after the therapy the level of labour pain and fetomaternal parameters was assessed for the both control and the experimental group. Then the level of satisfaction on reflexology was assessed using the rating scale for the experimental group. The collected data was tabulated and analyzed using descriptive and inferential statistics.

4. Findings/Results

In experimental group majority of the mothers experienced very severe pain 83.3% before reflexology and 100% of them experienced moderate pain after reflexology. The mean and standard deviation of uterine contraction frequency interval before the therapy was high ($M = 2.71, SD = 0.62$) compared to after the therapy ($M = 2.06, SD = 0.51$) uterine contraction duration was low in before therapy ($M = 66.72, SD = 3.24$) compared to after the therapy ($M = 75.34, SD = 2.51$). This showed that reflexology increased the uterine contraction and decreased frequency interval of contraction. The results were statistically significant at 99.9% level of confidence. Majority of mothers (93.3%) in the experimental

group were highly satisfied with reflexology during the first stage of labour.

Comparison of Mean and Standard Deviation of Feto Maternal Parameters of Control Group Parturient Mothers before and after Reflexology, (N=30)

Feto Maternal Parameters	Before therapy		After therapy		't' Value
	M	SD	M	SD	
1) Foetal heart rate	141.01	3.66	141.70	3.91	3.102
2) Mothers pulse rate	77.84	1.23	78.79	1.96	3.738***
3) Uterine contraction-Frequency	2.94	0.94	2.50	.84	7.207***
4) Uterine Contraction-Duration	58.17	12.18	60.37	12.09	7.272***
5) Systolic Blood pressure	117.98	1.49	120.51	3.34	4.081***
6) Diastolic Blood pressure	77.26	3.11	77.91	2.50	2.301

Comparison of Mean and Standard Deviation of Feto Maternal Parameters of Experimental Group Parturient Mothers before and after Reflexology. (N=30)

Feto Maternal Parameters	Before therapy		After therapy		't' value
	M	SD	M	SD	
1.Foetal heart rate	137.96	4.27	137.74	4.01	2.285
2.Mothers pulse rate	77.79	1.38	78.06	1.14	1.798
3.Uterine contraction-Frequency	2.71	0.62	2.06	.51	23.233***
4.Uterine Contraction-Duration	66.72	3.24	75.34	2.51	19.857***
5.Systolic Blood pressure	115.54	1.19	115.79	.95	1.269
6.Diastolic Blood pressure	80.38	3.66	80.00	3.16	1.454

Comparison of Mean and Standard Deviation of Level of Labour Pain of Parturient Mothers Before and After Therapy in Control And Experimental Group, (N = 60)

Group	n	M	SD	't' Value
Control group				
Before therapy	30	6.99	.80	7.115***
After therapy	30	7.63	.64	
Experimental Group				
Before therapy	30	7.18	.71	32.399***
After therapy	30	3.20	.27	

5. Implications

Nurses have a major role in assessing and providing necessary diversional therapy to decrease the level of pain of parturient mothers during labour. Therefore the reflexology can be given to the mothers during labour. Nurses should have the awareness of non pharmacological methods of pain relief during labour and to make them understand the benefits and practice of the new methods. Therefore the nursing students should be introduced with the alternative complementary therapies for pain reductions with the labour pain mothers to deliver the nursing care effectively. Nurse educators should incorporate the various methods of non pharmacological pain relief measures in their curriculum. Nurse administrator should collaborate with the governing bodies in formulating policies and protocols to emphasize nursing care during labour and plan for man power, money, material, methods and time to conduct successful and useful education programs. Nurse administrator provides opportunity for nurse midwives to attend training programs on complementary and alternative

therapy for pain management in labour. Nurse researchers should disseminate the findings of the research through conferences, seminars and publishing in nursing journal and promote effective utilization of research findings.

6. Recommendations

- A same study can be conducted on a larger sample to generalize the results.
- The comparative study can be conducted in different settings with similar facilities.
- A comparative study can be conducted between various alternative complementary methods to reduce pain perception during labour.
- A study can be conducted to assess the knowledge and attitude of nurse midwives on complementary and alternative therapies for labour pain management.

7. Conclusion

The findings of the study indicate that the reflexology reduces the labour pain of parturient mothers. Reflexology is a simple, easy to implement and most acceptable way to tackle pain among parturient mothers with labour pain. The after therapy level of pain was significantly reduced among the mothers those who received reflexology. The excavator results supported that the incorporation of reflexology in nursing care for the mother with labour is the best intervention to reduce the level of labour pain.

References

[1] Bennett, R.V.,Brown, L.K.(1999).Pain relief and comfort in labour. Myles textbook for midwives. Page 437.

[2] Chang m.y.,(2002).Effect of reflexology on pain and anxiety during labour. Journal of advanced Nursing. Page 68- 73.

[3] Mc.Neil, J, Alderdice, f. (2006). A Retrospective cohort study exploring the relationship between antenatal reflexology and intranatal outcomes. Complementary Theraphy clinical practice. 119-125.

[4] [http:// www.reflexology.research.com](http://www.reflexology.research.com)