



## COPING IN FIRST STAGE OF LABOUR-IMPACT OF ICE MASSAGE OVER ENERGY MERIDIAN POINT

### Nursing

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### ABSTRACT

Childbirth is not the joyous event; it is a time of pain, fear and sufferings. The fact is that the experience of giving birth through natural process can be a pleasant one.

**Research methodology:** Sixty primiparient mothers were selected through systematic random sampling technique. A True experimental-Time series design with multiple institution of treatment was conducted at selected hospital in Kanchipuram. Pain coping scale and WHO modified partograph and rating scale on the level of acceptability on ice massage over energy meridian point were used to collect the data.

**Results:** The mean and standard deviation of coping scores of the control group parturient mothers were low in after the therapy (M – 2.74, SD – 0.723) compared to the level of coping score before the therapy (M – 4.79, SD – 1.115). In the experimental group the coping score after the therapy was high (M – 5.60, SD – 0.928) compared to the level of coping score before the therapy (M – 2.96, SD – 0.331). The difference was found statistically significant at  $P < 0.001$  level of confidence and can be attributed to the effectiveness of ice massage. The ice massage increased uterine contraction, decreased frequency interval of contraction and shortens the duration of labour.

**Conclusion:** Ice massage over energy meridian point is a simple, easy to implement and most acceptable way to cope up with pain among parturient mothers with labour pain.

### KEYWORDS

Ice Massage, Energy Meridian Point, Coping, Who Partograph.

#### Introduction

The joy of giving birth is always colored with the fear of pain during labour. The alleviation of pain is important. Some women dread childbirth to the extent of demanding a caesarean section instead of going through natural childbirth. In United Kingdom among the live births only 46.7% had normal vaginal delivery whereas 23.5% had cesarean section and 11.1% had instrumental delivery whereas in India nearly one third of the (4.3 million) childbirths in 2006 were delivered via caesarean section, compared with one-fifth in 1997 (birth choice professionals in 2006).

Many complimentary non pharmacological therapies which are safe and simple are hidden behind the screen making the labour process so strange and crucial. There is a long gap between what we know to be effective, easily implemented pain reduction strategies and what we actually practice. Women in labour have a strong need to feel nurtured and protected, to increase the likelihood for themselves and their newborn.

Thus, the researcher was interested to conduct experimental study to provide evidence, that the intervention aids the midwives to provide a low-tech and high-touch, non-invasive, painless, non-pharmacological ways to cope with labour pain for a successful outcome of Labour.

#### Statement of the problem

An experimental study to assess the effectiveness of Ice massage over energy meridian point upon coping in first stage labour among parturient mothers at selected hospital, Kanchipuram.

#### Objectives of the study

1. To assess the level of Coping and feto-maternal parameters before and after the therapy in the control & experimental group of parturient mothers.
2. To compare the level of Coping and feto-maternal parameters before and after the therapy in the control & experimental group of parturient mothers.
3. To determine the level of acceptability upon experimental group parturient mothers on ice massage over energy meridian point.
4. To find out association between the selected demographic variables and the level of Coping, before and after the therapy in the control & experimental group parturient mothers.
5. To find out the association between the selected obstetric variables and the level of Coping, before and after the therapy in the control & experimental group parturient mothers.

#### Null Hypotheses

**Ho1-**There will be no significant difference in the level of coping and foeto maternal parameters before and after the therapy between control & experimental group of the parturient mothers at the level of  $P < 0.05$ .

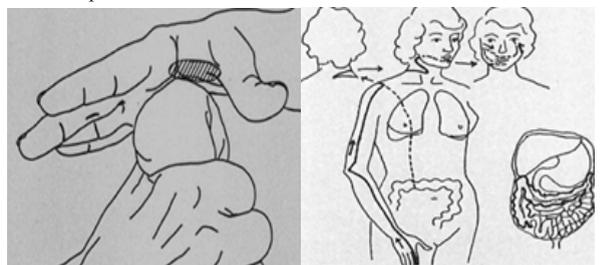
**Ho2-**There will be no significant association between selected demographic variables and the level of Coping before and after therapy in the control & experimental group of the parturient mothers at the level of  $P < 0.05$ .

**Ho3-**There will be no significant association between selected obstetric variables and the level of Coping before and after therapy in the control & experimental group of the parturient mothers at the level of  $P < 0.05$ .

#### Methods and Materials

The study was conducted by adopting time series design with multiple institution of treatment. Sixty primi parturient mothers in experimental and control group were selected using systematic random sampling technique. The researcher obtained permission from concerned authorities and written consent was taken from mothers. The rapport was established by a brief introduction about the ice massage over energy meridian points.

The parturient mothers in the control and experimental group, before the therapy were assessed for the following like demographic variables, obstetric variables, level of Coping using coping scale developed by Wuitchik (1999), Fetomaternal parameters with the help of the WHO modified Partograph. Application of ice bag over the Hegu (LI4) acupressure energy meridian point in either left or right hand and massaged during each contraction for 2 minutes in active and transition phase of labour for about 20 minutes in each hand.



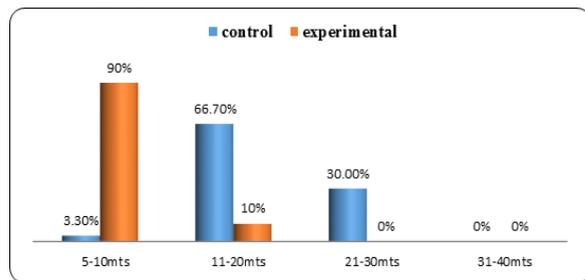
Every one hour, after the therapy the level of coping and fetomaternal parameters were assessed in both control and experimental group of

parturient mothers. After the delivery, in the experimental group of parturient mothers the level of acceptability was assessed using the rating scale on the level of acceptability on ice massage. The collected data was assessed using appropriate descriptive and inferential statistics.

**Results and Discussion**

Giving birth is one of the most miraculous things you will ever experience, and one of the most frightening. Acupressure is by far the best and safest way to reduce the labour pain and stress without having resort to chemicals that fear to harm the baby.

The present findings regarding the Demographic variables of the parturient mothers revealed that majority of the mothers were between age group of 21-25 years, housewives and moderate workers. In experimental and control group of parturient mothers, Obstetrical Variables denotes majority of the mothers were between the gestation age of 39-40 weeks, has not received any pain management and everybody had normal vaginal delivery. Fig 1 depicts that Majority (90%) of women were having duration of second stage of labour between 5-10 minutes in the experimental group whereas only 10% in the control group.



**Fig.1 Percentage Distribution of Duration of Second Stage of Labour in Control and Experimental Group of Parturient Mothers**

These findings make sure that the intervention of ice massage over energy meridian point was very effective in shortening the length of the labour. The study finding was consistent with the research conducted by Mariyam (2004) showed that the duration of active phase of labour and second stage of labour were significantly shorter in the experimental group than in the control group which shows LI-4 acupressure is effective for shortening the length of labour.

**Table 1 Comparison of Mean and Standard Deviation of Level of Coping Before and After Therapy in Control and Experimental Group of Parturient Mothers.**

Group	n	Mean	SD	't' value
<b>Control group (N=30)</b>	30	4.79	1.115	9.518***
Before therapy	30	2.74	0.723	
After therapy				
<b>Experimental group(N=30)</b>	30	2.96	0.331	17.426***
Before therapy	30	5.60	0.928	
After therapy				

\*\*\*P < 0.001

It can be incurred from table 1 that mean and standard deviation of coping score of control group parturient mothers were low in after therapy (M=2.74, SD=0.723) in comparison with the level of coping score before therapy (M=4.79, SD=1.115). In the experimental group the coping score after the therapy was high (M = 5.60, SD = 0.928) compared to the level of coping score before the therapy (M = 2.96, SD = 0.331) at P < 0.001 level of confidence and can be attributed to the effectiveness of ice massage.

The interpretation from the findings is that parturient mothers who received the intervention were able to cope up well with labour pain. This view was highlighted by Lubna (2007) in his study which revealed that, Jordanian women follows four labour pain coping methods that included physiological, psychological, spiritual and cognitive coping methods. This study also highlighted the important role that nurses and midwives who can play as educators and supporters during pregnancy and labour.

**Table 2 Comparison of Mean and Standard Deviation of Feto Maternal Parameters of Experimental Group of Parturient Mothers before and After Ice Massage**

(N=30)

Feto Maternal Parameters	Before Therapy		After Therapy		't' Value
	M	SD	M	SD	
Fetal Heart Rate	132.95	4.44	136.25	4.45	3.7**
Maternal Pulse Rate	77.21	3.52	78.26	4.6	1.3
Uterine Contraction Frequency	3.15	0.30	2.22	0.24	16.38***
Uterine Contraction Duration	53.69	6.31	68.10	7.86	9.02***
Systolic Blood Pressure	116.75	2.912	117.64	2.60	1.27
Diastolic Blood Pressure	76.61	2.99	77.39	2.12	1.26

\*\*\*P < 0.001

The results in the above table 2 shows that the mean and standard deviation of Uterine Contraction Frequency before therapy was high (M=3.15, SD=0.30) in comparison with after therapy (M=2.22, SD=0.24). The duration of Uterine Contraction was low before therapy (M=53.69, SD=6.31) in comparison with after therapy (M=68.10, SD=7.86).

This shows that ice massage over energy meridian point increases the duration of uterine contraction, decreases the frequency of uterine contraction, increases cervical dilatation and shorten duration of labour. Similar findings were obtained by Kim et al., (2002) on effects of SP-6 acupressure or LI-4 acupressure on labour pain in primipara women. The study concluded that the duration of delivery time for SP-6 acupressure group or LI-4 acupressure (400.77mins, 379.10mins) was shorter than in the control group (528.68mins). Difference in the effects of acupressure with SP-6 acupressure or LI-4 acupressure was effective in relation to both labour pain and duration of delivery time for primiparas.

All the mothers in the experimental group were highly satisfied with ice massage during the first stage of labour .There was no significant association between the selected demographic variables and the level of coping after the therapy in the control and experimental group. The perception of labour pain was not influenced by age and educational level. Hence null hypothesis H02 was accepted.

There was no significant association between the selected obstetric variables and the level of coping after the therapy in the experimental group. Hence null hypothesis H03 was accepted.

This showed that all mothers were not able to cope with labour pain, irrespective of their obstetric variables. It is the midwives responsibility to adopt ice massage which is a natural therapy in the area of pain management.

**Conclusion**

Ice massage over energy meridian point is easy to implement and most acceptable way to cope up with pain among parturient mothers with labour pain. The after therapy level of coping was significantly improved among the mothers those who received ice massage. The results supported that the incorporation of ice massage in nursing care to improve the level of coping labour pain.

**References**

- Kim, Y.R. (2002).Effects On Labour Pain & Length of Delivery Time For Primipara Women Treated By SP-6 & LI-4 Acupressure. Korean Journal of Women Health Nursing. 8 (2), 244-256.
- Kuti, O. Faponle, A.F. (2006). Perception of labour pain among the Yoruba ethnic Group in Nigeria. Journal of Obstetrics and Gynecology. 26(4), 332-334.
- Lubna A.(2007). Methods of Coping With Labor Pain Used by Jordanian Women. Journal of Transcultural Nursing. Volume: 18 issue: 1, page(s): 35-40
- Maryam Kashanian, Shadab Shahali. Effects of LI4 Acupressure on Labor Pain in the First Stage of Labor.Complement Ther Med 2004;12(June–September (2/3)): 136–40.
- Walters .B. L., Jeanne, R., (2003) Ice Massage for Reduction of Labour Pain. Journal of Midwifery Women's Health, 48(5), 317-321.