Effectiveness of lower back massage with roseoil on labour pain among primi mothers during first stage of labour at Karpaga Vinayaga institute of medical sciences and research centre in Kanchipuram district

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Abstract---Labor is a special experience for a mother and her family. However, not only is labor pain one of the most painful conditions that women typically experience in life, the stress related to uncontrolled labor pain also has a negative impact on the mother, the fetus, and the newborn. Therefore, pain relief during labor is an essential aspect of obstetrical care. Labor pain relief methods are categorized into pharmacological (inhalation anesthesia, regional anesthesia, opioids such as pethidine) and nonpharmacological (hypnosis, laboring in water, acupuncture, massage) methods. The level of labour pain perception was significantly reduced among the mothers who received the rose oil massage during first stage of labour than the mothers in control group who didn't received it.

Keywords---lower back massage, roseoil, primi mothers, medical sciences.

Introduction

Labor is a special experience for a mother and her family. However, not only is labor pain one of the most painful conditions that women typically experience in life, the stress related to uncontrolled labor pain also has a negative impact on the mother, the fetus, and the newborn. Therefore, pain relief during labor is an

essential aspect of obstetrical care. Labor pain relief methods are categorized into pharmacological (inhalation anesthesia, regional anesthesia, opioids such as pethidine) and nonpharmacological (hypnosis, laboring in water, acupuncture, massage) methods. Nonpharmacological applications may be performed by a midwife and a nurse independently in cooperation with the pregnant woman. Using nonpharmacologic pain-relief measures such as touch, massage, aromatherapy, and acupressure are important because assessing labor pain and applying appropriate nonpharmacologic interventions make midwives and nurses responsible for managing the labor process. Pregnancy is a special event not only in the life of women but also to the entire family. Labour pain is one of the most severe pain a women experience in her life, whichoccurs with uterine contractions, cervical dilatation and effacement. Most women have experienced child birth and its pain, which is inevitable. If this pain is not controlled it leads to prolonged labor and injury to the mother and fetus Pain is an unpleasant, complex, highly individualized phenomenon with both sensory and emotional components.

Need for the study

Labour is a dynamic phenomenon. Active management of labour shortens the duration, outcomes which in turn relieve anxiety, apprehension of exhaustion among pregnant women. Primi mothers commonly worry about pain during labour and child birth and how they will react and to lead with the pain. The expectant mothers are not able to adjust themselves during painful labour. The mother during labour with labour pain become exhausted much earlier before in time by using their power of pushing the fetus, which may result in early rupture of membrane following prolonged and complicated labour. The alleviation of pain is important, commonly it is not the amount of pain the women experience, but whether she meets her goal for herself in coping with pain that influences her perception of the birth experience as "good" or "bad". Some nursing intervention can be given to the mother to reduce their perception of pain and to help the women to increase comfort and relaxation during labour.

Statement of the problem

Effectiveness of lower back massage with roseoil on labour pain among primi mothers during first stage of labour at karpaga vinayaga institute of medical sciences and research centre in kanchipuram district.

Objectives of the study

- To assess the level of labour pain among primi mothers in the experimental and control group during first stage of labour.
- To compare scores of labour pain between experimental and control group.
- To associate the level of labour pain among experimental and control group of primi mothers with their selected demographic variables.

Hypothesis

There is a significant difference in labour pain between experimental and control group during first stage of labour among primi mothers. There is a significant association of labour pain with their selected demographic variables among primi mothers in the experimental and control group. The related literature of this study is organized and presented under following heading.

- Literature related to perception of labour pain.
- Literature related to effect of rose oil back massage on labour pain.
- Literature related to effect of general massage thwerapy on labour pain.

Literature related to perception of labour pain

Weiss, F. (2011) stated that while a few mothers stated that labour was not painful at all and a few more stated that it is the most excruciating pain that they have ever felt. Perry Wong, et al., (2010) revealed that pain assessment during the labour and delivery focuses on the physiological factors. The nurse must assess the maternal vital signs, degree of pain, fetal heart rate, pattern and uterine activity before and after the administration of medication. Abushaikha and Oweis, (2014) stated that the pain assessment during the labour and delivery is important to generate interventions that may possibly decrease the intensity of pain. The Numeric pain intensity scale is ranged from 1 (no pain at all) to 10 (unbearable pain). The NPIS is used by asking the client to choose a number that best represents the intensity of pain experienced during the labour.

Conceptual frame work

The theoretical frame work adopted for this study was Widenbach's helping art ofclinical nursing theory (1970). Person means a human being enclosed with the unique potential to develop internal resources to maintain and sustain the self which strives towards self direction of independence, desire to make the best use of personal abilities and to maintain integrity.

Research approach

A quantitative research approach was used to evaluate the effectiveness of. Lower back massage with rose oil on labour pain among primi mothers during first stage of labour.

Research design

Quasi Experimental post test only with comparision group was chosen for this study.

S NR	X	O 1	X	O 2	X	O3	X	O 4
C NR	-	O1	-	O 2		O3	-	O 4

S – Study group
C – Comparision group

X – Intervention (Rose oil massage)
O1 .O2,O3,O4 – Post test
NR – Non-randomization

Setting of the study

The study was conducted in the labour room at Karpaga Vinayaga Institute of Medical Sciences and Research Centre at chengalpattu District.

Population

Population refers to all the primi mothers in labour pain during the first stage of labour.

Target population

Primi mothers with labour pain during first stage of labour with 3 -4 cm cervical dilatation.

Accessible population

The primi mothers who were admitted in labour room of Karpaga Vinayaga Institute of Medical Sciences and Research Centre in chengalpattu District.

Sample

The primi mothers who were admitted in labour room of Karpaga Vinayaga Institute of Medical Sciences and Research Centre in chengalpattu District who fulfilled the inclusive criteria.

Sample size

The sample size for this study was 60, which includes 30 in each study and comparision group.

Sampling technique

A non-probability type of purposive sampling technique was used.

Sample criteria

Inclusion Criteria

Primi mothers aged between 21 – 30 years who were having labour pain with 3 – 4 cm cervical dilatation during first stage of labour. Primi mothers who were between 38 – 42 weeks of gestation.

Exclusion Criteria

Mothers with co-morbidity such as pregnancy induced hypertension, gestational diabetes mellitus, heart disease, hypo or hyper thyruidism etc. Mothers with high risk pregnancy like obstructed labour, multiple pregnancy and preterm labour. Mothers with intra uterine death.

Development and description of the tool

The tool was developed by the investigator after an executive study of the related literature and with the guidance of experts. The structured instrument included part –I ; demographic variables and obstetrical variables, Part - II modified wong baker facial grimace scale, Part –III -Administration of rose oil massage .

- PART I
  It included demographic variables such as age, education, occupation, dietary pattern, type of family income, locality and Obstetrical variables such as gestational age and antenatal visit.
- PART II
  This section comprised of modified wong backer facial grimace scale .it is a standardized scale used to assess the pain perception of term mothers in labour with th maximum score of 10 points and the minimum of 0.

CATEGORY		SCORES
NO PAIN	-	0
MILD PAIN	-	1-2
MODERATE PAIN	-	3-6
SEVERE PAIN	-	7-9
UN BEARABLE PAIN	-	10

PART III
Description of the intervention

The rose oil massage was done over the soft tissue with the hands placed over the sacroiliac joints in a circular manner and on either side of the sacrum by using finger kneading, deep kneading, stroking and effleurage technique for 16 minutes per hour at every one hour interval during the first stage of labour consecutively for 5 times. The rose oil massage was given in one direction only, with the aim of increasing blood flow, reducing anxiety, increasing endorphin level and providing comfort for mothers in labour. Rose oil massage was given by finger kneading, deep kneading, stroking and effleurage techniques. Each technique was given for 4 minutes for a total of 16 minutes. The movements were carried out very slowly. It was administered hourly for the mothers in the experimental group from the time the mother had 3-4 cm of cervical dilatation consecutively for five hours during first stage of labour.

Data collection procedure

Formal permission was obtained and the data collection was done for a period from 02.05.2019 to 30.05.2019. Every day on an average of 2 – 3 primi mothers

were selected by purposive sampling technique in the labour room for study and comparison group. Mothers who were in the latent phase of labour with normal parameters were selected and the investigator established a good rapport with the mothers and the purpose of the study was explained to ensure their co-operation. Written consent was taken from the study participants. Through interview method, demographic and obstetrical variables were collected and recorded. The researcher administered rose oil massage for 16 minutes to the primi mothers with 3 – 4 cm cervical dilatation and observed the level of labour pain consecutively for five hours. The investigator observed the level of labour pain hourly for the mothers in control group with routine care.

Plan for data analysis

Both descriptive and inferential statistics were planned to be used for analyzing the data.

Distribution of mean and SD of labour pain perception among primi mothers during post test in experimental and control group

S.NO	HOURS	EXPERIMENTAL GROUP		CONTROL GROUP	
1	First	2.46	.50	2.70	1.06
2	Second	2.73	.44	3.36	1.09
3	Third	4.03	.71	4.60	1.03
4	Fourth	4.40	.62	5.60	1.45
5	Fifth	5.03	.85	8.43	1.25

Major findings

There was a significant difference in the labour pain perception between primi mothers in experimental and control group. The pain perception of experimental group was significantly lesser than control group at level of $p<0.05$. The distribution of pain perception among primi mothers in control group in fifth hour assessment 20 (67 %) mothers had unbearable pain and in experimental group in fifth hour assessment 25 (83.3%) mothers had moderate pain. The mean level of pain among primi mothers who received rose oil massage in experimental group on fifth hour assessment was lesser than in control group. The mean score of labour pain perception was lesser in experimental group in comparison to control group.independent t test was applied to assess the effectiveness of rose oil massage between primi mothers of experimental and control group in terms of level of pain.the result indicated that there was a statistically significant difference in the pain perception between experimental and control group at level $p<0.05$. The level of pain at fifth hour assessment had no significant association with the selected demographic variables such as age, occupation, diet, type of family among control group. The level of pain at fifth hour assessment had no significant association with the selected demographic variables such as age, occupation, diet, type of family among experimental group.

Conclusion

The level of labour pain perception was significantly reduced among the mothers who received the rose oil massage during first stage of labour than the mothers in control group who didn't received it.

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