

## **RESEARCH ARTICLE**

#### EFFECTIVENESS OF LABOUR NURSING STRATEGIES ON FETAL OUTCOME AMONG PRIMI MOTHERS.

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#### Abstract

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#### Key words:-

Labour nursing strategies, Breathing techniques, Therapeutic touch and abdominal effleurage, primi mothers.

Child birth is a natural and normal life process, but it brings about remarkable changes in her normal life and introduces an exposure to a new role within her. Many Non pharmacological pain relief methods, including breathing, massage and relaxation are used frequently during labour. It reduces the pain and discomfort for the mother and reduces need of newborn resuscitation for the newborn. The aim of the study was to assess the effectiveness of Labour Nursing Strategies on fetal outcome among primi mothers.

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Methods: Quantitative research approach was carried out in Government Hospital, Kurinjipadai, Cuddalore District. The 100 sample was selected based on block random design.(50 - Study group and 50- Control group). As an intervention labour nursing strategies like breathing techniques, Therapeutic touch and abdominal effleurage was performed during intranatal period.

Results: After the intervention the outcome was measured and collected data were analyzed by using descriptive and inferential statistics. Results shown that the't' value is 2.96 and 'P' value is <0.001, it's highly significant. Conclusion: The study found that Labour nursing strategies was more effective and it gives better outcome to the mothers.

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#### Introduction:-

Birth is a normal, natural and healthy process. Pain is perceived differently by each woman and her expression of pain is influenced by cultural expectations and norms. Fear of labour pain especially in primigravida woman may affect their option for the type of delivery in subsequent labour and increase mother tendency for caesarean. Women are empowered when they receive sensitive, respectful care. Normal physiological events cause most pain in labour. In the first stage, uterine hypoxia, stretching of the cervix and lower uterine segment, traction cervix, fallopian tubes and uterine segments, Pressure on the bony pelvis and contribute to the pain management.

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Non pharmacological pain management provides a way for the nurse and family members to demonstrate support during the birth process. The breathing techniques and touch helps the labouring woman to relax it is both a distraction technique and tangible proof that she is not alone. Abdominal Effluerage is a safe and effective way to improve the experience of pregnancy and of birth.

#### Literature survey:

Normal physiological events cause most pain in labour. Labour pain is acute pain. Pain is perceived differently by every woman. Expression of pain is influenced by cultural expectation and norms.

Breathing techniques and massage therapy may also have other long term effects such as decreased length of labour, shorter hospital stay and less touch sensitivity.

The complementary therapies for labour and birth protocol based on breathing technique and massage. The result shown that the study group participants has reduced rate of augmentation length of second stage, perinatal trauma and resuscitation of the newborn. (Kate M Levett 2017).

The study conducted on effectiveness of selected nursing intervention on maternal and newborn outcome among primi gravid mothers. It shown that in experimental newborn outcome the mean score was 7.7 (SD = 1.06) and control group Newborn outcome score was 6.8 (SD =0.92). This showed that the selected nursing intervention were effective with good maternal and newborn outcome during labour. (Shenbagavalli.S 2016)

From the experience of the investigator, women in labour struggling to cope up with the stress of labour pain and mother not satisfied with her labour. There fetal outcome also not good and increase newborn resuscitation and birth trauma. Above all the researcher is motivated to find out the effectiveness of labour nursing strategies on fetal outcome among primi mothers.

#### Statement of the problem:

"A study to assess the Effectiveness of Labour Nursing Strategies on Fetal Outcome among Primi mothers at Government hospital, Kurinjipadi".

#### **Objectives:**

- 1. To assess the fetal outcome among Primi mothers in study and control group.
- 2. To determine the effectiveness of labour nursing strategies on fetal outcome among Primi mothers
- 3. To associate the demographic variables with fetal outcome in both groups

#### Methods and materials:-

The research approach accepted for the study was true experimental research design with Block randomized design. The instrument developed and used for the present study consists of two sections. Section A: Background variables Part-I consisted of 8 items related to demographic variables Part-II consisted of Physiological variables it includes FHR monitoring, Amniotic status. Section B: Observation scale to assess the fetal outcome of labour it includes Apgar score, Initiation of breast feeding, Time and need of NICU admission, Resuscitation and Intubation in delivery room.

The content of validity of tool was established on the basis of expert's judgments. The reliability of tool was established by inter rated and inter observer method. The Karl Pearson's correlation formula was used to test reliability of the tool. The reliability of tool was 'r'=0.8. The tool was found to be reliable and feasible.

The study was conducted from July 2016 to September 2016 Government hospital, Kurinjipadi. Labour Nursing strategy was tested for its effectiveness by True experimental research design. Block randomized sampling technique was used to select the 100 Primi mothers.(50 study group and 50 control group) As an intervention of Breathing techniques, touch and abdominal massage given for the 50 study group. Routine care was provided to the control group. After the completion of intervention, the data gathered were analyzed and interpreted in terms of objectives. Descriptive and inferential statistics were used for the data analyzed.

### **Results and discussion:-**

#### Findings related to distribution of demographic variables of Primi mothers among study and control group

Majority (52%) of them for the study group and (48%) control group belongs to the age group of 20-30 years. Most of the study group mothers (30%) were studied higher secondary education whereas in control group 52%. In both groups 8 % of mothers were divorced. Both group of mothers, study (62 %) and control (60 %) preferred non vegetarian as a diet pattern.

Most of them (66%) in study group and control group (70%) experienced regular menstrual cycle pattern. Among them 88.8% of study and 86 % of control group was a registered antenatal mothers. 52% of the study and 50% of the control group mothers registered through the health personnel. Majority of the participants in the study (80%) and control (74%) group mothers belongs to Hindu religion. About the family, 84 % of the study group mothers and 74% of the control group mothers living as a nuclear family and majority (66 %) of the study group and 56 % of the control group mothers were residing in urban area.

**Findings related to distribution of physiological variables of primi mothers among study and control group** The physiological assessment shows that the control group need increased time to complete the childbirth process

comparatively with the study group. The fetal outcome shows especially that the, Apgar score, Time and need of NICU admission and Intubation in delivery room has better outcome than the control group.

| Findings related | l to Asses | sment of | f fetal outcor | ne of primi mothers a | mong study and | control group |
|------------------|------------|----------|----------------|-----------------------|----------------|---------------|
|                  |            |          |                |                       |                |               |

Table 1.1:-Distribution of level of fetal outcome on Primi mothers among study and control group. N = 100

| Level of fetal   | Study group(n=50) |            | Control group(n=50) |            | Chi square test |
|------------------|-------------------|------------|---------------------|------------|-----------------|
| outcome          | Frequency         | Percentage | Frequency           | Percentage |                 |
| Good outcome     | 42                | 84%        | 31                  | 62%        | $\chi^2 = 7.32$ |
| Moderate outcome | 8                 | 16%        | 16                  | 32%        | p = 0.03*       |
| Poor outcome     | 0                 | 0%         | 3                   | 6%         | significant     |

Table 1.1 States that the level of fetal outcome among study and control group. 84% of the study group mothers had good level of fetal outcome comparatively 62% of control group. Only 16% of study group mothers had moderate level of fetal outcome against with control group mothers 32%. Also 6 % of mothers had poor levels of fetal outcome in control group.

# Findings related to effectiveness of labour nursing strategies on fetal outcome of primi mothers among study and control group

 Table 1.2:-Unpaired' test to assess the effectiveness of fetal outcome of primi mothers among study and control group

| N = 100 |  |
|---------|--|
|---------|--|

| Groups      | Numbers | Mean | SD   | Mean<br>difference | 't' value | P value      |
|-------------|---------|------|------|--------------------|-----------|--------------|
| Study group | 50      | 3.11 | 4.17 | 3.61               | t = 2.96  | P = 0.001*** |
| Control     | 50      | 6.72 | 7.56 |                    |           | Significant  |
| group       |         |      |      |                    |           |              |

\*\*\* P value <0.001 is highly significant

The above table 1.2 Reveals the mean score obtained by the study group was 3.11 with SD = 4.17 and the control group the mean score was 6.72 with SD = 7.56. The comparison of two groups shows that t' = 2.96 and P<0.001 which was highly significant.

# Findings related to association between the demographic variables of Primi mothers with fetal outcome among study and control group

In the study group, there is an association between fetal outcome with selected demographic variables like Age, Menstrual cycle, antenatal registration, type of family and habitant **except** education, marital status, diet pattern, source of registration and religion In the control group, there is no association found between fetal outcome with selected demographic variables like age, education, marital, diet pattern, menstrual cycle, antenatal registration, source of registration, religion, type of family and habitant.

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