Effectiveness of Structured Teaching Programme on Knowledge of Preparation and Management of Labour among Primigravida Women in Selected Hospital, Salem

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Introduction

According to WHO criteria normal hibith is defined as spontaneous onset of labour, low risk at the start of labour and meaning so throughout labour and delivery. The infant is born spontaneously in the vertex position between 37 and 42 completed weeks of pregnancy. After the birth the mother and infant are in good condition.

Gaps in care during labour, delivery and the early neonatal period are well recognized, yet few simple and scalable strategies have proven to be effective to support health worker adherence to clinical, essential childbirth related practices (EBPs). Poor quality of care is of particular concern in low and middle income countries where the majority of avoidable maternal, fetal and newborn morbidity and mortality occurs. The largest burden of both overall neonatal and more specifically preterm mortality occurs within the first 24 hours of life. Similarly a large proportion of stillbirths are intrapartum deaths, occurring less than 12 hours before delivery and thus resulting in infants without any signs of maceration or skin deterioration. Thus the intrapartum and immediate postnatal periods represent critical windows of opportunity to improve neonatal outcomes in these settings. Estimates suggest that improved facility based care during labour and birth and immediate newborn care can avert 0.8 million newborn deaths by 2025. These estimates reflect the potential of packages of interventions, rather than a single intervention, to make significant improvement in outcomes.

Conducted a cross sectional study to evaluate the effect of attending a prenatal childbirth preparation course on labour duration and outcomes with 53 primiparous women who attended 54 women who did not attend a CPC. The State- Trait Anxiety Inventory (STAI) score was significantly lower in the study group compared with controls. The first stage and the entire duration of labour were significantly shorter in women who attended the CPC. Women in the study group rated their labour experience significantly higher and exhibited significantly higher rates of breast feeding than controls.

Conducted a quazi experimental study on effectiveness of breathing exercise during the second stage of labour pain, duration and first minute APGAR score shows the mean Visual Analogue Scale scores of intervention group (88.2±6.3) and control group were (90.5±7) respectively. The duration of the second stage of labour was (369.6±92) for intervention group and (440.7±142.5) for control group. The mean first minute APGAR scores were (8.84±0.5) for intervention group and (8.73±0.89) for control group. Based on this study breathing exercises with deep inhalation and exhalation in pregnant women are effective in reducing the perception of labour pain and shortening the duration of the second stage of delivery.

Statement of the problem

A study to assess the Effectiveness of Structured Teaching Programme (STP) on Knowledge of Preparation and Management about Labour among Primigravida Women in selected hospital, Salem.

Objectives

1. To assess the knowledge on preparation and management of labour among primigravida women before implementation of structured teaching programme.
To evaluate the effectiveness of structured teaching programme on knowledge of preparation and management about labour.

3. To associate the pre test knowledge scores of primigravida women with their selected demographic variables.

**Hypothesis**

**H1:** There is a significant difference between pre and post test knowledge scores on preparation and management of labour among primigravida women at $p \leq 0.05$ level.

**H2:** There is a significant association between the pre test knowledge scores with the selected demographic variables of primigravida women at $p \leq 0.05$ level.

**Conceptual framework**

The investigator adopted Rosenstock’s and Becker Health Belief Model theory as a basis of conceptual framework, which is aimed to assess the effectiveness of structured teaching programme on knowledge of preparation and management of labour among primigravida women.

**Materials and methods**

Pre experimental one group pretest and posttest research design was used for this study. Purposive sampling technique was adopted to recruit the samples. The present study was conducted in Sri Gokulam Hospital, Salem. The samples selected for the study were 30 primigravida women who have 36 & 37 weeks of gestation visited in OPD of Sri Gokulam Hospital. Tools like Semi Structured Interview schedule on demographic variables, Structured Interview Schedule and Structured Teaching Programme on preparation and management of labour pain. On the first day pretest was conducted and Structured Teaching Programme on preparation and management of labour pain is administered for 20 minutes in a group (4-5 mothers) of primigravida mothers. At the seventh day post test was conducted by same tool to assess the effectiveness of structured teaching programme on preparation and management of labour pain. Data analysis was done, the descriptive statistics like mean, standard deviation and mean percentage was used to assess the knowledge on preparation and management of labour pain. Inferential statistics like paired ‘t’ test was used to assess the difference between pre and posttest knowledge scores. Chi square was used to assess the association between pretest knowledge scores with selected demographic variables.

**Results and discussion**

Majority (50%) of women were in the age group of 21-25 years. Highest percentage (70) were had higher education. Most of them (67%) belong to Hindus and half of the percentage (54%) were housewife. Maximum (53.3%) women were having family monthly income of Rs. 5001-10,000 and nearly 53.3 percentage of women belongs to nuclear family. Half of the (53%) percentage of women had labour support through her mother and all of them had regular antenatal checkup.

**Table No.1:** Distribution of pre and posttest level of knowledge scores on preparation and management of labour among primigravida women.

| Level of Knowledge                        | Pre - test | Post - test |
|-------------------------------------------|------------|-------------|
|                                           | F          | %           | F          | %           |
| Inadequate knowledge (1 - 33)            | 18         | 56          | -          | -           |
| Moderately adequate knowledge (34 - 66)  | 12         | 44          | 6          | 12          |
| Adequate knowledge (67 – 100)            | -          | -           | 24         | 88          |

Distribution of pre and posttest level of knowledge scores of preparation and management of labour among primigravida women shows that in pretest, 56 percentage of women had inadequate knowledge where as in posttest none of them had inadequate knowledge. In pretest 44 percentage of them had moderately adequate knowledge and in posttest only 12 percentage of them had moderately adequate knowledge. In posttest majority (88%) of them had adequate knowledge and in pretest whereas none of them were had adequate knowledge. Hence it shows that after implementation of Structured Teaching Programme on preparation and management of labour. It shows that the Structured Teaching Programme was highly effective.

**Table No.2:** Area wise distribution of mean, standard deviation and mean percentage on knowledge regarding preparation and management of labour among primigravida women.

| S. No | Areas of preparation and management of labour | Max Score | Pre test | Post test | Diff. in Mean % |
|-------|-----------------------------------------------|-----------|----------|-----------|-----------------|
|       |                                               |           | Mean | SD | Mean | % | Mean | SD | Mean | % | Mean | % |
| 1.    | Introduction                                  | 5         | 1.1 | 2.6 | 22 | 2.3 | 4.9 | 46 | 24 |
| 2.    | 1st stage of labour symptoms & management    | 10        | 4.2 | 5.2 | 42 | 5.3 | 6.3 | 53 | 11 |
| 3.    | 2nd stage of labour symptoms and management  | 6         | 2.5 | 4.3 | 41 | 3.2 | 5.9 | 53 | 12 |
| 4.    | 3rd stage of labour symptoms and management  | 6         | 2.7 | 5.1 | 45 | 3.2 | 5.9 | 53 | 8  |
| 5.    | 4th stage of labour symptoms and management  | 3         | 1.5 | 4.3 | 50 | 1.9 | 5.4 | 63 | 13 |
|       | Total                                        | 30        | 12  | 21.5 | 40 | 15.9 | 28.4 | 53 | 14 |

Area wise distribution of pre and post test knowledge scores of preparation and management of labour shows that the highest mean score was on the 4th stage of labour symptoms and management in both pre and post test which was 1.5±4.3 and 1.9±5.4, the mean percentage was 50% and 63% respectively. The lowest mean score was on introduction for both pre and post test which was 1.1±2.6 and 2.3±4.9, the mean percentage was 22% and 24% respectively. Hence it shows that after implementation of Structured Teaching Programme on preparation and management of labour was very much effective.
Table No.3: Assess the difference between mean, SD and 't' value of pre and posttest knowledge scores on preparation and management of labour
df = 29; P<0.05 - Significant*

| S.No | Demographic variables | df  | χ²      | Table value |
|------|-----------------------|-----|---------|-------------|
| 1    | Age in years          | 6   | 4.204   | 12.59       |
| 2    | Education             | 8   | 1.518   | 15.51       |
| 3    | Occupation            | 6   | 1.081   | 12.59       |
| 4    | Religion              | 6   | 3.965   | 12.59       |
| 5    | Type of family        | 6   | 0.566   | 12.59       |
| 6    | Monthly Income        | 6   | 0.529   | 12.59       |
| 7    | Weeks of gestation    | 4   | 0.529   | 8.79        |
| 8    | Labour support given by others | 6 | 3.309 | 12.59 |
| 9    | Residence             | 2   | 1.428   | 5.99        |
| 10   | Antenatal checkup     | 2   | 0       | 5.99        |
| 11   | Previous hospitalization | 2 | 0.017 | 5.99 |

Table No. 4: Association between pre test knowledge scores of preparation and management of labour with their selected demographic variables
df = 29; P<0.05 - Not Significant

| S.No | Knowledge                | Max. Score | Mean | SD  | Mean % | ‘t’ Value |
|------|--------------------------|------------|------|-----|--------|-----------|
| 1    | Pre -test                |            | 12.16| 4.4 | 40.53  |           |
| 2    | Post-test                | 30         | 22.76| 7.26| 75.87  | 10.18*    |

There was no significant association between age, education, occupation, religion, type of family, weeks of gestation, monthly income, labour support given by others, residence, antenatal checkup, previous hospitalization with the pre test scores on preparation and management of labour. Hence the difference observed mean score values were not true difference thus the research hypothesis was rejected.

**Conclusion**

Majority of the women in the age group of 21-25 years. In both pre and post test, highest mean was obtained in the area of 4th stage of labour symptoms and management is 1.5±4.3 & 1.9±5.4 and mean percentage was 50 & 63 respectively. The overall mean score in pre test was 12.16±4.4 and the mean percentage was 40.53. In post test the overall mean score was 22.76±7.26 and the mean percentage was 75.87. The calculated ‘t’ value is 10.18 at p<0.05 level of significance, which shows it is highly significant. Hence it is interpreted that implementation of structured teaching programme on preparation and management of labour was highly effective in improving the knowledge of primigravida women.

**Nursing research**

Nursing research can be conducted to find out the effectiveness of newer modalities of preparation and management of labour, which would help in updation of the clinical practice with evidence based approach.

**Recommendation**

- A comparative study can be done to determine the effectiveness of structured teaching programme on management of labour between primigravida and multigravida women.
- A study can be conducted to assess the knowledge regarding preparation and management of labour among students and staff nurses.

**Conflict of Interest:** Nil

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**Ethical Clearance:** Obtained from Institutional Ethical Board.

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