



# EFFECT OF STRUCTURED TEACHING PROGRAM ON KNOWLEDGE AND ATTITUDE AMONG MIDWIVES REGARDING MATERNAL BIRTHING POSITIONS

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**Abstract:** 'Labor refers to chain of physiological events that allows a fetus to undertake its journey from the uterus to the outside world'. The second stage is the period of fetal expulsion. It begins with complete dilation of cervix through complete birth of the baby. The birth position (or maternal position) refers to the position that an expectant mother can adopt during labor. Maternal position and mobility play an important role in the mechanics of labor as they relate to factors such as pelvic type, fetal position and posture, uterine contractions, gravity, female preference, and emotion. Upright position is the beneficial for both mother and the infant for several Physiological reason. The majority of women are not aware about the different birthing positions so the main function of the midwives is to educate the women regarding maternal birthing positions. The objectives of this study are to find out the knowledge among midwives on maternal birthing positions, to find out attitude among midwives on maternal birthing positions & to determine the effect of structured teaching program on maternal birthing positions. The study conclude that maternal birthing positions is a suitable non pharmacological technique that is easy to perform and effective in progress of labor, avoid caesarean birth, reduce perineal tear, reduce rate of fetal distress and improve fetal and maternal outcome. It can be used to in first and second stage of labor.

**Keywords:** Birthing positions, labor, birth, midwives, maternity

## I. INTRODUCTION:

'Labor refers to chain of physiological events that allows a fetus to undertake its journey from the uterus to the outside world'. The second stage is the period of fetal expulsion. It begins with complete dilation of cervix through complete birth of the baby<sup>1</sup>. The World Health Organization gave definition of normal birth as "Spontaneous in onset, low risk at the start of labor and remaining so throughout labor and delivery. Babies are born naturally in the head position between 37 and 42 weeks of gestation. After birth, mother and infant are in good condition<sup>2</sup>. Maternal and child health is important public health issue, especially in developing countries like India. The second stage of labor is more stressful part of child birth process and proper maternal position during this period is very vital for women's safe vaginal birth. Midwives play vital role in managing maternal birthing positions<sup>9</sup>.

Maternal position during labor is helpful to improve the outcome of fetal and maternal health<sup>14</sup>. Side lying position has been known to reduce the risk of tearing because it can open the pelvis more easily<sup>15</sup>. Researchers believe that giving birth in an upright position can benefit to the mother and fetus for several physiological reasons. When the mother give birth in upright position there is less risk of compressing the mother's aorta, which means better oxygen to the fetus, uterus contract more strongly<sup>16</sup>.

The second stage is more stressful part of child birth process. Midwives play a vital role in managing second stage of labor. The majority of women are not aware about the different birthing positions so the main function of the midwives is to educate the women regarding maternal birthing positions. Therefore, most parturient know that the walking position (66.4%) and the lateral position (60.6%) are the delivery positions, and 99.2% know that the supine position is the delivery position. There are only (50%) walked during birthing labor. There are varieties of positions reducing the risk of vaginal tear during childbirth. Upright position plays pivotal role in preventing the perineal tear or the vaginal tear. There is increased risk of perineal tear when the head of baby is too large<sup>17</sup>.

### **Assumption:** Nursing personnel:

- Having basic knowledge regarding maternal birthing positions.
- Knowledge on maternal birthing positions may influence clinical practices.
- Adequate knowledge on birthing positions will help in adopting a positive attitude towards birthing positions.
- Structured teaching program will increase their knowledge and positive attitude towards birthing positions.

**Hypothesis:**

- H<sub>0</sub> –There will be no significant effect of structured teaching program on Knowledge regarding maternal birthing positions at 0.05 significant.
- H<sub>0</sub>— There will be no significant effect of structured teaching program on attitude regarding maternal birthing positions at 0.05 significant.

**Delimitation:**

- The study is confined to midwives
- The study is confined to selected hospitals.

**II. METHODOLOGY:**

“Sample consists of subset of units that compose a population”. Sample is used in research when it is not feasible to study the whole population from which it is drawn. Sampling allows us to accept generalizations about the expected population based on careful observation of variables in a relatively small portion of the population. In present study, the sample selected were the midwives working in selected maternity hospitals.

In this study, the sample selected was 43 midwives working in selected hospitals. According to study conducted by **Odoemene, Martha. I., Sowunmi, etal. (2020)** to know the knowledge of midwives regarding maternal birthing positions and their utilization. Shows prevalence rate was 46% in midwives worked in maternity hospitals. Calculated sample size is 43 at the 95% confidence level.

P = 46% (prevalence and estimation proportion)

q = 54 (probability)

z = 1.96 (confidence level)

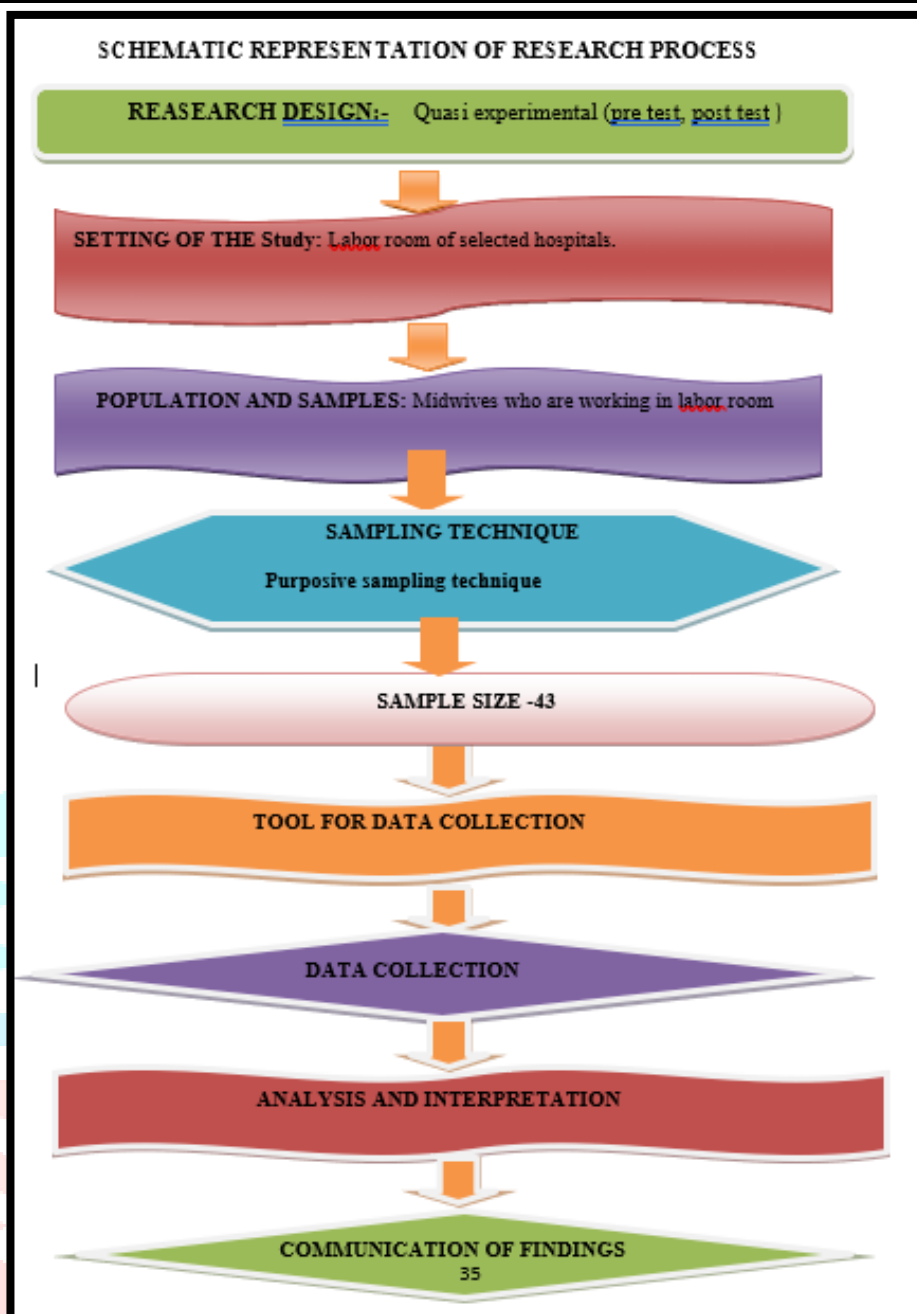
E = 15 % (desired precision)

n = Number of samples

$$n = \frac{Z^2 pq}{E^2}$$

$$n = \frac{(1.96)^2 46 \times 54}{(15)^2}$$

$$n = 43 \text{ Cases}$$



To ensure content validity of the tool, it was given to fifteen experts. The experts were nursing faculties from obstetric and gynaecological nursing, Medical surgical nursing, paediatric nursing, mental health nursing, one doctor from obstetrics and gynaecology and one doctor cum biostatistician. Necessary modification has done in demographic data, knowledge questionnaire, and three-point Likert scale.

Total 43 midwives were participated in the study. Majority 34.9% midwives belongs to 21-30 years of age group followed 30.2% midwives belongs to 31-40 years of age group and 34.9% were in the age group of 41 and above years. Educational status 7.0% midwives were ANM, 79.1% Midwives were GNM while 14.0% midwives were B.SC nursing program. The 41.9% of midwives had 1-5 years of labor room work experience, 14.0% midwives had 6-10 years of experience, and 18.6% midwives had 11-15 years of experience while, remaining 25.6% midwives had 16 and above years of experience.

**Table 1: Assess the knowledge score regarding maternal birthing position among midwives in study group (n=43)**

Knowledge score	<u>Pre test</u>		Post test	
	f	%	F	%
0 – 5 (Poor)	7	16.3	0	0
6 – 10 (Average)	33	76.7	6	14
11 – 15 (Good)	3	7	37	86

Above table describe that 7% midwives had good knowledge in pre-test while 86% midwives had good knowledge in post-test. 76.7% midwives had average knowledge in pre-test while 14% midwives having average knowledge in post-test. 16.3% midwives had Poor knowledge in pre- test while in post- test none of subjects had poor knowledge regarding maternal birthing positions.

#### Analysis of attitude score by frequency and percentage

**Table 2: Assess the attitude score regarding maternal birthing position among midwives in study group (n=43)**

Attitude score	<u>Pre test</u>		Post test	
	f	%	f	%
0 – 10 (Negative)	0	0	0	0
11 – 20 (Neutral)	6	14	0	0
21 – 30 (Positive)	37	86	43	100

Study shows that 86% midwives had positive attitude towards birthing positions in pre-test while 100% midwives had positive attitude towards birthing positions in post-test. 14% midwives had neutral attitude towards birthing positions in pre- test while none of subjects had neutral attitude towards birthing positions in post-test. None of subjects had negative attitude towards birthing positions in pre & post-test.

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The mean and SD of knowledge of midwives on maternal birthing position was  $2.21 \pm 1.15$ . The pre-test mean attitude score was 23.98 while after structured teaching program (7days) it was 27.63. It shows that there is significant difference between mean attitude score before structured teaching program and after structured teaching program as  $p < 0.0001$ . The mean and SD of attitude of midwives on maternal birthing position was  $4.31 \pm 1.38$ .

There was no significant association found between knowledge score according to age group, according to education in the study group, and there is no significant association in pre-test according to labor room work experience demographic variable.

There was significant association found between knowledge score according to labor room work experience and demographic variable. There was no significant association found in attitude score according to age, according to education and according to labor room work experience and demographic variables.

### III. RESULT:

The educational intervention was significantly effective in increasing the knowledge of midwives on maternal birthing positions. The pre-test mean knowledge score was 7.26 while after structured teaching program (7days) it was 11.77. It shows that there was significant difference between mean knowledge score before structured teaching program and after structured teaching program as  $p < 0.0001$ .

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In this study findings shows 41.9% midwives had 1-5 years of experience, 14.0% midwives had 6-10 years of experience, and 18.6% midwives had 11-15 years of experience while 25.6% midwives have 16 and above years of experience. Similar study conducted by **Anita Yadav, Anusha Kamath, et al. (2021)** showed 7.69% midwives age was <25 years, followed by 46.15% were in age group 25-39 years while 34.61% midwives age was 40-54 years, 11.53% midwives were in >55 years. Findings related to education showed that 76.92% midwives completed their GNM diploma while 21.15% midwives completed their B.Sc. followed by 1.92% midwives completed their M.Sc. nursing program. Findings related to labor room work experience that 23.07% midwives had <1 years of experience, 40.38% midwives had 1-2 years of experience followed by 36.53% midwives had 2-5 years of experience.

#### IV. CONCLUSION:

The conclusion drawn from the findings of the study are as follows:

Midwives were had less knowledge regarding maternal birthing positions before intervention, and attitude of midwives towards birthing position were neutral before intervention. The Wilcoxon test was used to find out the effect of structured teaching program on knowledge and attitude of midwives regarding maternal birthing positions. The result revealed that there was a highly significant improvement in knowledge and attitude of midwives after intervention, as  $p < 0.0001$  at all level. Hence, the null hypothesis ( $H_0$ ) has rejected.

**Nursing practice:** In modern era nursing practice has undergone many evolutions. Maternal birthing position is very easy and simple to perform. Hence it can be easily implemented by midwives in the labor room. The management of labor is one of the main objectives of obstetric care. There has been an increase in the understanding and practice of non-pharmacological complementary therapies in recent years. Nurses will be able to give the different maternal birthing positions to reduce rate of episiotomy, reduce back pain, improve fetal and maternal outcome, to get better oxygen to fetus. Maternal birthing positions are non-medical intervention to facilitate the process of labor. Maternal birthing positions for labor could help in reducing frequent use of analgesics and can prevent adverse effect of analgesia. Maternal birthing positions are easy to implement, get adequate co-operation from mothers, and nurse can give different birthing positions to mothers in first and second stage of labor. Now a day's doula is also becoming popular so he

or she can also give different birthing positions to mother, from the present study it is revealed that birthing positions is effective labor process to improve fetal and maternal outcome.

**Nursing education:** Child birth is a special event and exciting situation to the woman and her family. Pain in labor is nearly a universal experience for the child bearing women. This study finding will help the nurse educator to teach nursing student to implement maternal birthing positions in first and second stage of labor. These findings also can be augmenting in to the nursing syllabus as alternative therapies and evidence-based practice. Also, nurses can educate the women who are admitted for delivery.

**Nursing administration:** Nurses have to play a role of efficient administrators and managers. To perform these roles, apart from the knowledge in administration, the nurses also have decision making and reasoning abilities. The study findings of this study will help nurse administrators in hospitals and nursing colleges to conduct the workshop on alternative therapies to reduce the rate of episiotomy, fetal distress, to reduce perineal tear and they can promote maternal birthing positions as evidence based practice in the labor room.

**Nursing research:** -The aim of the nursing research is to contribute the knowledge to the body of nursing, to expand and broaden the scope of nursing. This is possible only if nurses take further research. This type of studies is very less in the Indian set up. This study will be motivation for the Indian nurses to do further research to improve the quality of nursing services provided.

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