

# Effectiveness of Planned Teaching Programme on Physiological Changes during Pregnancy among Primigravida Mother in Selected Rural Area

Kanchan Singh<sup>1</sup>, K. Sridevi<sup>2</sup>, Senthil Thirusangu<sup>3</sup>

<sup>1</sup>Msc Nursing, TD Institute of Professional Studies and Research Center, Rewa Madhya Pradesh India

<sup>2</sup>Lecturer, Government College of Nursing, RIMS, Srikakulam Andhra Pradesh India

<sup>3</sup>TD Institute of Professional Studies and Research Center, Rewa Madhya Pradesh India

**Abstract:** ***Introduction:** Menstrual hygiene refers to the individual hygiene put into practice during menstruation. A girl requirements to practice a high level of individual hygiene during her periods and the individual hygiene starts from the selection of best sanitary products, its proper usage, disposal, body cleanliness, diet, etc. Menstrual hygiene is significant because it is a usual process of hygiene related to put into practice of girls during menstruation as it has an impact in terms of to prevent reproductive tract infections and urinary tract infections. **Aim:** The aim of the study is to assess the effectiveness of structured teaching programme on the knowledge regarding menstrual hygiene among women of child bearing age in selected community of rural area Prayagraj (U. P.) **Methods:** The conceptual framework in this study is based on King's Goal attainment theory, (King Imogene, 1981). The research design selected for the study is the pre-experimental one-group pre-test post-test design. Convenient sampling technique was used to collect the data. Total 50 women of child bearing age were selected for the research study living in Urrahat community rural area Prayagraj (U. P.) Self-structured questionnaire was prepared to assess the knowledge of women of child bearing age regarding menstrual hygiene. In this study independent variable was structured teaching programme prepared by the researcher and dependent variables was knowledge of the sample. **Result:** Mean pre-test score of women of child bearing age was 6.9 and mean post-test score was 25.42 with the mean difference of 19. The computed 't' value (-33.77 P.000) showed that there was a highly significant difference between pre-test and post-test knowledge score. There was no significant association between age, type of family, religion, monthly income of the family, age at your menstruation started and source of information and pre-test score. There was significant association between educational status and pre-test score. **Conclusion:** The findings of the present study showed that the mean post-test knowledge score (25.42) is higher than the mean pre-test knowledge score (6.9). Hence the research hypothesis H2 is accepted. This indicates that an structured teaching programme is effective in increasing the knowledge score among women of child bearing age regarding menstrual hygiene.*

**Keywords:** Menstruation, Menstrual Hygiene, Effectiveness

## Statement of the Problem

“A study to assess the effectiveness of planned teaching programme on physiological changes during pregnancy among primigravida mother in selected rural area Prayagraj (U. P.).”

## 1. Introduction

Pregnancy and child birth is one of life's most important events. It is happy and gratifying as the woman passes from beginning to end a transitional phase, into a new life of motherhood. Every pregnancy with the intention of a woman experiences will be fresh and different. The midwife is in a only one of its kind position to educate and empower women from beginning to end the phases of childbirth, in categorize for them to realize a healthy pregnancy with the most advantageous outcome of a well baby. The health of the mother and the fetus are inextricably connected. During pregnancy, a woman's body undergoes difficult physiological changes of such importance, that many are still not well understood. Every system in a woman's body adapts to the demand of the growing fetus. A great deal of attention during pregnancy is focused on ensuring minimum risk at delivery and maximum health of the woman and her fetus. Antenatal care aims at giving specific attention to the health needs of a woman and her unborn child. However, a mother may need instructions about exactly what constitute a healthy lifestyle for herself and her baby.

The W. H. O. theme for the year 2005 is “Healthy mothers and healthy children”. The slogan, “Make every mother and child count” reflects the reality that, today the Government and the international community need to make the health of the women and the children a higher priority. The well-being of the society is directly linked to the health and survival of the mother and the children. When mothers survive and thrive, their children survive and thrive, when both mothers and children survive and thrive, the societies in which they live prosper.

Pregnancy may be complicated by a variety of disorders and conditions that can profoundly affect the woman and her fetus. When these unexpected deviations or complications from the normal pregnancy occur, it can place severe burden on a woman and her family.

## Objectives

- 1) To assess the knowledge of antenatal women on physiology changes and high-risk conditions in pregnancy, before and after the administration of the structured teaching programme.
- 2) To determine the association of knowledge scores regarding physiology changes and high-risk conditions in pregnancy with selected baseline variables.

**Hypothesis**

H1-The mean post-test knowledge score of antenatal women undergoing teaching programme will be significantly higher than their pre-test knowledge score at 0.05 level of significance.

**Operational Definitions**

- **Effectiveness:** In this study it refers to the extent of use of a structured teaching programme (STP), to bring about changes in the knowledge of antenatal women in terms of significant gain of knowledge in the post-test scores.
- **Structured teaching programme:** It refers to the teaching schedule systematically prepared and conducted by the investigator, on physiology changes and high risk conditions in pregnancy, its signs and symptoms, prevention and management for a group of antenatal mothers in a specified area of antenatal clinic.
- **Antenatal women:** It refers to all pregnant women, irrespective of the number of gravidas, any disease conditions and bad obstetrical history, between 12 to 36 weeks of gestation, who are attending the antenatal clinics Shankargarh dispensary Prayagraj Uttar Pradesh.
- **High risk conditions in pregnancy:** It refers to pregnancy which is complicated by anemia and gestational diabetes mellitus, that adversely affect the pregnancy outcome-maternal, fetal or both.
- **Knowledge:** It refers to the level of understanding of antenatal women regarding physiology changes and high-

risk conditions in pregnancy, as determined by their scores, based on their responses to the items on a structured questionnaire.

- **Antenatal clinics:** It refers to a setting in the outpatient department of Shankargarh dispensary Prayagraj Uttar Pradesh where specialized services are provided to pregnant women.
- **Baseline variables:** In this study it refers to the age, gravida, years of married life, educational status, occupation and income of antenatal women.

**2. Research Methodology**

The research design selected in this study was a one group pre-test-post-test design, in order to assess the knowledge of antenatal women, before and after the structured teaching programme on physiology changes and high risk conditions in pregnancy. The base measure was knowledge test, and the treatment was a structured teaching programme (S. T. P) on selected physiological changes and high-risk conditions in pregnancy. The design adopted for the present study is represented in Figure 3.1. In one group pre-test – post-test design, the dependent variable is measured before the independent variable is applied. After an appropriate period of time has elapsed, the dependent variable is measured again. In the analysis of data, the difference between the initial and terminal measurements represents the effect of independent variable

Group	Pre-Test	Intervention	Post-Test
One group of antenatal women who are attending the antenatal clinics of SPUP	Knowledge of antenatal women regarding physiological changes and high-risk conditions in pregnancy <b>O1</b>	Teaching on physiological changes and high-risk conditions in pregnancy using flash card and flip charts <b>X</b>	Knowledge of antenatal women regarding physiological changes and high-risk conditions in pregnancy <b>O2</b>

**Setting of the study**

The setting selected for the study was obstetric outpatient department (O. P. D) of Shankargarh Uttar Pradesh, which is a tertiary care teaching institution. The antenatal outpatient department (O. P. D) is staff with skilled obstetricians and gynecologists, nurses and para-medical staff. On an average every month 20 – 30 antenatal mothers attend the antenatal outpatient department and undergo routine antenatal examinations and laboratory investigations as per the need of the antenatal mothers. The consultation timings are from 9 a. m. – 1 p. m. and 4 p. m. – 6. p. m. Four to five consultants are available during the morning hours and in the evening only one or two consultants are available. There are 5 consultation rooms, a room for nutritional counselling and another for conducting HIV/AIDS counselling. There are also separate clinics for lactation, infertility and family planning services. The samples were given teaching in the family welfare department, where a room was available with teaching arrangements.

**Sample**

A sample as a small portion of population for observation and analysis. The sample for this selected study consisted of 100 antenatal mothers who attend the Obstetric and Gynaecology Out Patient Department and who meet the inclusion criteria.

**Sampling Technique**

Purposive sampling procedure was used for the study. The investigator waited at the antenatal registration room and identified the clients who met the inclusion criteria and were willing to participate in the study.

**Sampling Criteria****Inclusion criteria**

Antenatal women between 12 – 36 weeks of gestation  
Antenatal women who are able to read and write Hindi or English.

**Exclusion criteria**

Antenatal women who are not willing to participate in the study.

**Data Collection Tools**

The actual collection of data normally proceeds according to pre-established plan to minimize confusion, delay and mistakes. The researcher's plan typically specifies procedures for the actual collection of data. The instruments selected in the research should, as far as possible, be the vehicle that would best elicit data for drawing conclusions pertinent to the study. On the basis of the objectives and the

conceptual framework of the study, the following instruments were developed to collect data:

Section I: Structured questionnaire to elicit baseline data

Section II: A structured questionnaire to assess the knowledge of the antenatal women regarding physiology changes and high-risk conditions in pregnancy.

Section III: Teaching plan on selected physiology changes and high-risk conditions in pregnancy.

**Development of the tool**

The tool was developed based on review of literature, interview with the antenatal women and opinion from experts in the field of obstetrics. The following steps were undertaken to prepare the final tool.

**Preparation of the blue print**

A blue print was prepared prior to the construction of knowledge questionnaire based on which items were developed. The knowledge questionnaire included three domains and items were distributed for each domain as follows:

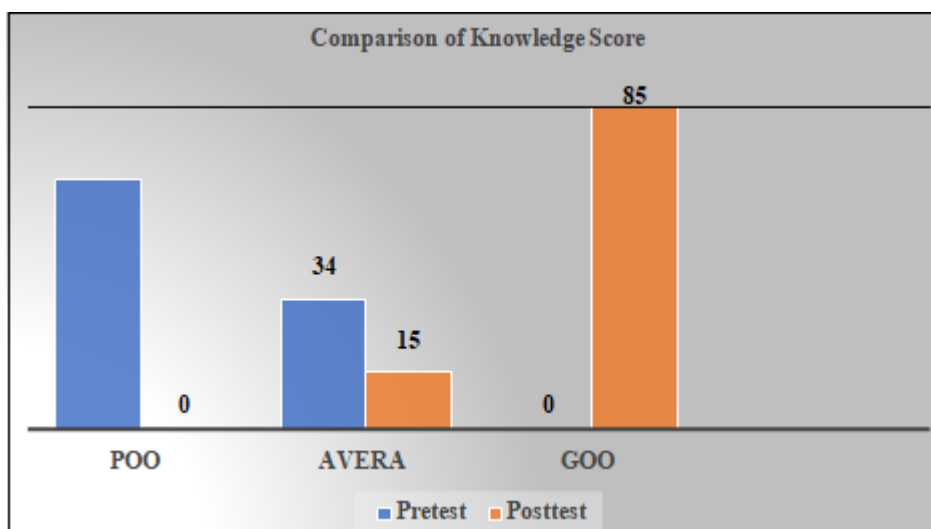
Knowledge (15 items – 60%)

Comprehension (7 items – 28%)

Application (3 items – 12%)

**Analysis**

Comparison Of Knowledge Score Before And After The Teaching Programme And The Effect Of Teaching Programme In Improving The Knowledge Of Antenatal Women Regarding Physiological Changes And High-Risk Conditions In Pregnancy



It is evident from Figure 4.9 that subjects in general, lacked knowledge regarding physiological changes and high-risk conditions in pregnancy. In the pre-test none of them had good knowledge. Most of them (66%) had poor knowledge and a few (34%) had average knowledge. In the post-test none of them had poor knowledge. Majority of the sample 85% had good knowledge, 15% had average knowledge. The result shows that there was difference in knowledge score before and after the teaching programme.

**Mean difference and Paired ‘t’ test to find out the difference of pre-test and post-test knowledge scores, n=100**

	Max Score	Range	Mean	Mean Difference	S. D.	Paired ‘t’
Pre-test	25	4-19	11.4	12.1	3.6	44.04**
Post-test	25	11-25	23.5		3.9	

In order to find out the effectiveness of structured teaching programme, the following null hypothesis was formulated. H0: There is no significant difference between pre-test and post-test knowledge scores of the antenatal women on physiological changes and high-risk conditions in pregnancy before and after the structured teaching programme at 0.05 level of significance. Paired ‘t’ test was used to test the hypothesis.

The overall post-test mean knowledge score (23.5) is higher

than overall mean of pre-test score (11.4). The mean difference of pre-test post-test knowledge score was 12.1. The paired ‘t’ value obtained (44.04) is greater than the table value (‘t’ (99) = 3.39). Therefore, the research hypothesis is accepted and null hypothesis rejected. The result shows that there was statistically significant difference in the knowledge score before and after the teaching intervention at 0.001 level. Therefore, it can be concluded that a structured teaching programme did make an effect in improving the knowledge of antenatal women.

**3. Discussion**

This chapter presents the major findings of the study and discusses them in relation to the similar studies conducted by other researchers. The main aim of the study was to determine the effectiveness of a structured teaching programme on high risk conditions in pregnancy for antenatal women. One group pre-test post-test design was adopted for the study. The population of the study was antenatal women attending the antenatal clinics of SPUP and the sample size was 15. Structured questionnaires to elicit the baseline data and knowledge of antenatal women were the tools used for the study. The findings of the study is discussed and organized under the following headings:

Section I: Baseline variables of antenatal women

Section II: Knowledge of antenatal women before and after

the teaching programme Section III: Comparison of knowledge with selected baseline variables.

#### 4. Conclusion

This chapter deals with the conclusions drawn based on the findings of the study. The findings revealed the following:

- Existing knowledge of antenatal women regarding physiological changes and high-risk conditions in pregnancy was found deficient in varying degrees during the pre-test.
- It was evident from the mean difference of the pre-test and post-test knowledge scores that a structured teaching programme is effective in improving the knowledge of antenatal women. The teaching has made a commendable contribution in increasing the knowledge of antenatal women regarding the physiological changes and high-risk conditions in pregnancy and was much appreciated by them.
- A significant relationship was observed between selected variables and baseline knowledge, about physiological changes and high-risk conditions in pregnancy. Women with higher education and income, and those employed have shown a better knowledge than those with a lower education, income and those unemployed.

#### 5. Implications of the Study

The findings of the study have several implications in the field of nursing

##### Nursing Practice

The midwife is in a unique position to educate and empower women through the phases of childbirth, in order for them to achieve a healthy pregnancy, with the optimum outcome of a healthy baby. The educational role of midwife is integrated into every aspect of her work. Pregnancy may be complicated by a variety of disorders and conditions that can profoundly affect the women and the fetus. The main aims of antenatal care is to maintain the physiology of pregnancy and to prevent or detect at the earliest, and treat any untoward complications that may arise. Knowledge and awareness about risks associated with pregnancy among women can help them to seek maternal care services at the right time and help to reduce maternal mortality and morbidity. Hence dissemination of health information should be regarded as the primary functions of the midwives in promoting health of the antenatal women and attaining their optimum state of wellbeing.

##### Nursing Education

The nursing curriculum is concerned with the preparation of future nurses, who will play a major role in the preventive and promotive aspect of maternal and child birth. Every pregnancy is a unique experience for a woman and each pregnancy that the woman experience will be new and uniquely different. That is why it is very important that, the midwife has knowledge and understanding of the physiological changes and high-risk conditions in pregnancy, in order to advice the women on strategies that will help them to cope with the condition and minimize the ill effects. Nursing education should lay emphasis on

preparing prospective nurses, to impart health information and assist the community in developing their self-care potentials. This can be best done by incorporating, health information dissemination, and client counseling, using advanced educational technology methods into the curriculum. The adoption of strategies like, discussion, brain storming, audio-visual aids such as video, Power Point presentation and distribution of handouts and leaflets should be emphasized. Preparation of printed teaching materials on health requires special knowledge and skill. It is necessary to train personnel to prepare appropriate teaching material for teaching self care abilities. Short-term courses and in-service education programmes should be organized for the nurses, who are working with child bearing women.

##### Nursing Administration

The nurse administrators influence the quality of nursing care through the formulation of policies and protocols. They must motivate and encourage the staff to keep abreast with the current health problems, the preventive and treatment strategies. They can take the initiative to plan and implement staff development programmes, and in-service education programmes on various aspects of antenatal care and parent education on physiological changes and high-risk conditions in pregnancy. Necessary administrative support should be provided for the preparation of educational materials and designing parents' education programmes on various aspects of pregnancy and child birth.

##### Nursing Research

There is a need for extended and intensive nursing research, in the area of maternal education, especially for early detection and prevention of complications during pregnancy. Research should be taken up on preparation of innovative methods of teaching, better practices of nursing care, and development of good and effective teaching material and setting up of multimedia centres for teaching and clients' education.

#### 6. Limitations

- 1) The study was done in antenatal women who attended the antenatal clinic of Shankargarh Prayagraj Uttar Pradesh. which limits its generalization.
- 2) Purposive sampling technique which was used for this study, will not give a true representation of the study population.
- 3) The research design was limited to one group pre-test post-test.

#### 7. Recommendations

- 1) The study can be replicated on a large sample to validate the findings and make generalizations.
- 2) Experimental study can be conducted on diabetes in pregnancy and its management for diabetic women, in terms of gain in knowledge and control of blood sugar.
- 3) A descriptive study can be undertaken to analyse the presence of maternal risk factors among the antenatal mothers who attend spup antenatal clinic.
- 4) A similar study can be conducted using pre-test post-test with control group design.

- 5) A comparative study can be done to evaluate the effectiveness of a structured teaching programme with other methods of teaching like a self-instructional module or video-based method.
- 6) A descriptive study can be done to assess the prenatal health awareness among primigravida's in view of developing a health education material for them.

### Summary

This chapter presents a brief summary of the study. The main aim of the study was to assess the effectiveness of a structured teaching programme for antenatal women on physiology changes and high-risk conditions in pregnancy.

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