STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING EARLY IDENTIFICATION OF HIGH-RISK PREGNANCY AMONG ANTENATAL MOTHERS ATTENDING AT GOVERNMENT HOSPITAL, VELLORE

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ABSTRACT:

This study aimed to assess the impact of a structured teaching program on the knowledge of antenatal mothers regarding the early identification of high-risk pregnancies at a government hospital in Vellore. The research employed a pre-test/post-test design with a sample of antenatal mothers attending the hospital. The structured teaching program focused on educating participants about the signs and symptoms of high-risk pregnancies, emphasizing the importance of early detection and appropriate healthcare interventions. Data analysis revealed a significant improvement in the knowledge levels of the participants following the structured teaching program. The findings suggest that structured educational interventions can enhance the awareness and understanding of antenatal mothers regarding high-risk pregnancies, potentially leading to improved maternal and fetal health outcomes.

Keywords – *Knowledge, Primigravida Mothers, high risk pregnancy, Out-Patient Department, Information Booklet.*

INTRODUCTION

Antenatal period is amazing experience of each and every woman. Even though this period is going smooth for many mothers some of them may suffer with some high-risk during pregnancy may endanger the life of the mother and fetus. The main aim of the study particularly this group of antenatal mothers is early identification of high-risk pregnancy, prevention of complications , and management of these conditions.

Pregnancy is a unique experience in every woman's life. The thought of growing fetus in the mother's womb indeed is nature's way of expressing the attributes of motherhood. Most of the pregnant mothers suffer with many high-risk conditions in their journey towards motherhood.

Identification of risk factors related to pregnancy is important because "A pregnant woman is like a ship on stormy sea, out of balance" seeking a new equilibrium in waves of physical and physiological change. Therefore nurses as women, midwives and health care providers have special responsibility to reduce the annual loss of life through early identification of high-risk pregnancy related to maternal mortality and morbidity.

NEED FOR THE STUDY

"Prevention is better than cure"

All pregnant women by virtue of their pregnant status face some level of maternal risk. Data suggest that amount all pregnant women around 40% of them have some complications. About 15% of the pregnant women need obstetric care to manage complications, which is potentially the threatening to mother and fetus. **(Samiya M, Samina M, 2015)**[5]

Approximately 10-20 % of all pregnancies in the United states are labeled as high risk. High risk pregnancies are account for more than half of all fetal and prenatal deaths. Nurses are in unique position to educate and empower women, through the phases of child birth, for them to achieve a healthy pregnancy with optimum outcome of a healthy baby. Despite various measures taken to reduce maternal mortality rate and morbidity rate, it remains very high in India.

OBJECTIVES OF THE STUDY

1. The assess the knowledge regarding high-risk pregnancy among antenatal women
2. To assess the effectiveness of structured teaching programme on knowledge regarding high-risk pregnancy among antenatal women.
3. To associate the findings with selected demographic variables and obstetrical variables.

ASSUMPTIONS

1. Antenatal mothers have lack of knowledge regarding high-risk pregnancy.
2. Structured teaching programme on high-riskpregnancy will improve their knowledge and they can prevent further complications.

RESEARCH HYPOTHESIS

Antenatal women who receive structured teaching programme on high-risk pregnancy will show a significant increase in the level of knowledge in post- test than that in pre-test.

DELIMITATIONS

1. Mother who come for antenatal checkup in antenatal outpatient department at Government Hospital, Vellore.
2. Study period is limited to 4 weeks.
3. Antenatal mothers with gestational age of 8-28 weeks.

CONCEPTUAL FRAMEWORK

The study was aimed at determining the effectiveness of structured teaching programme on knowledge regarding early identification of high-risk pregnancy among antenatal women.

The investigator adopted "Modified Pender's Health Promotion Model (1984)

The model focuses on aspects of individuals configuration to perceptional factors, modifying factors and participation on health promoting behavior. The model also identifies factors that influence health promotion activities.

The Model focuses on the following areas :

1. Cognitive perceptual factors
2. Perceived health status
3. Health promoting services
4. Perceived benefits of health promotions
5. Barriers to health promoting behavior Review of Literature

Literature review related to study This part is divided into two sections.

Section-A

✓ Studies related to identification of high-risk pregnancy.

Section -B

✓ Studies related to Anemia.
✓ Studies related to Pregnancy Induced Hypertension.
✓ Studies related to Gestational Diabetes Mellitus.
✓ Studies related to Multiple Pregnancy.

METHODOLOGY

Table .1

Research approach	Quantitative research approach
Duration of the study	Four weeks (20.11.2016 to 18.12.2016)
Study setting	Antenatal OPD at IOG
Research design	Pre- experimental design
Study Population	Antenatal mothers with gestational age 8-28 weeks.
Sampling Technique	Purposive Sampling Technique
Sample size	60

Data collection procedure

After obtaining informed and written consent, approximately three to five samples were selected every day and pretest questionnaire was assessed by means of interview method. Structured Teaching Programme was given to the participants for 30 minutes. After pre-test, post -test was conducted after one week to assess the knowledge of women regarding early identification of high-risk pregnancy.

Data analysis

The data were tabulated and analyzed using descriptive statistics like mean, standard deviation, frequency distribution and percentage.

Research variables

Independent variable

Structured Teaching Programme on knowledge regarding high-risk pregnancy is the independent variable of the study.

Dependent variable

Knowledge of antenatal mother is the dependent variable of the study.

Influencing variable

Age, education, occupation, type of family, age at marriage, and obstetrical score of antenatal mothers is the influencing variable.

DEVELOPMENT AND DESCRIPTION OF TOOL

Development of tool

A structured questionnaire was developed on the basis of objectives of the study. Tool was developed after extensive review of literature from various text books, journals, internet search and discussion and guidance from the experts in the field of Nursing, and medical experts.

Description of the tool

The tool consists of three sections.

Section-A

It consists of demographic variables of the sample such as age, religion, type of family, education, occupation and family monthly income.

Section-B

It consists of obstetrical variables of the sample such as age at marriage, last menstrual period, expected date of delivery, obstetrical score, age during first child birth and pre- pregnant health status.

Section-C

Structured questionnaire is to assess the knowledge of antenatal women regarding high-risk pregnancy. It consists of 30 multiple choice questions regarding high pregnancy. It consists of Part A, B, C and D. Part A and B each consists of 8 questions and part C and D each consists of 7 questions.

Part A : Questions related to anemia

Part B : Questions related to Pre-eclampsia

Part C : Questions related to gestational diabetes mellitus

Part D : Questions related to multiple pregnancy

Scoring key

Each correct answer carries - One Mark Each

wrong answer carries - Zero Mark

<50% - Inadequate knowledge

51-75%- Moderately adequate knowledge

76-100% - Adequate knowledge

Validity and reliability

Validity of the tool was assessed using content validity. Content validity was determined by experts from Nursing and Medical. They suggested certain modifications in tool. After the modifications, they agreed this tool to evaluate the effectiveness of Structured Teaching Programme on knowledge regarding early identification of High- risk pregnancy among antenatal mothers attending at Government Hospital, Vellore. Reliability of the tool was assessed by using Test-retest method and its correlation coefficient r value was 0.84. This correlation coefficient is very high and it is a good tool to evaluate the effectiveness of Structured Teaching Programme on knowledge regarding early identification of High-risk pregnancy among antenatal mothers attending at outpatient department.

Data collection Procedure

The study was conducted in Antenatal outpatient department, explained the purpose of the study to the OPD staff nurse and antenatal mothers between the 8-28 weeks of gestational age. Data collection was done using questionnaire method. In pretest the researcher administered structured questionnaire to each participant to assess the knowledge of antenatal women on high-risk pregnancy. The subjects took 20-30 minutes to answer the questionnaire by interview method. After that a structured teaching programme was conducted on the same day approximately for 30 minutes per subject and booklets were provided. After that the

researcher clarified many doubts asked by the participants regarding my study and also in general, according to the need of each participant.

RESULTS

Organization of data

Section-A : Demographic and Obstetric information of antenatal mothers those who participated in the study.

Section-B : Assess the pre-test knowledge regarding high-risk pregnancy in the study group.

Section-C: Assess the post-test knowledge regarding high-risk pregnancy in the study group.

Section-D: Evaluating the effectiveness of structured teaching programme on knowledge regarding high-risk pregnancy in the study group.

Section-E: Association of findings with selected demographic and Obstetric variables. Evaluating the effectiveness of structured teaching programme on knowledge regarding high-risk pregnancy in the study group.

Table-2: Comparison of pre and post-test knowledge score on high-risk pregnancy:

	Knowledge score				Mean Difference	Student's paired t-test
	Pre-test		Post-test			
	Mean	SD	Mean	SD		
Anemia	3.35	1.89	6.78	1.01	3.43	t=12.41, P=0.001*** significant
Pre-eclampsia	3.10	1.66	6.52	.97	3.42	t=16.05, P=0.001*** significant
onal Diabetes Mellitus	2.57	1.81	5.93	.86	3.37	t=15.01 P=0.001*** significant
Multiple pregnancy	2.45	1.73	5.80	.88	3.35	t=14.25, P=0.001*** significant

* significant at P≤0.05

** highly significant at P≤0.01

*** very highly significant at P≤0.001.

Table 2 shows comparison of Pretest and Posttest mean knowledge score. Considering anemia aspects, in pretest antenatal mothers are having 3.45 score where as in posttest they are having 6.78 score, so the difference is 3.43. This difference between pretest and posttest is large and is statistically significant.

Table .3 Effectiveness of structured teaching programme on high-risk pregnancy:

Domains	Pre-test Knowledge	Post-test Knowledge	owledge Gain
Anemia	41.9%	84.8%	42.9%
Pre-eclampsia	38.8%	81.5%	42.7%
Gestational Diabetes Mellitus	36.7%	84.7%	48.0%
Multiple pregnancy	35.0%	82.9%	47.9%
Overall	38.2%	83.4%	45.2%

Table 3 represents each domain wise percentage of knowledge gain. 42.9% of knowledge gain anemia aspects, 42.7% knowledge gain in preeclampsia aspects, and 48% knowledge gain in Gestational diabetes mellitus and 47.9% of knowledge gain in Multiple pregnancy aspect. Overall they gained 45.2% of knowledge score when comparing pretest and posttest after having STP. This shows the effectiveness of STP on knowledge regarding high-risk pregnancy among antenatal women.

The findings of the study revealed that the Structured Teaching Programme had improved the knowledge of women regarding early identification with paired t –test P value is

0.001. There is statistical significance in knowledge attainment on early identification of high-risk pregnancy which shows the effectiveness of Structured teaching programme.

DISCUSSION

Hypothesis was proved by the great statistically significance occurs after Structured Teaching Programme. The chi square test shows that there is a statistically significant association between the post- test level of knowledge and demographic variables among women.

CONCLUSION

Nursing personnel must have holistic knowledge regarding the different aspects of high-risk pregnancy among antenatal mothers. Nurses play a vital role in the teaching aspects of high-risk pregnancy. The present study had been supported by a series of other studies which confirmed that the knowledge on high-risk pregnancy among antenatal women is important to get healthy baby and healthy mother. From the analysis and results, it was found that Structured teaching programme on high-risk pregnancy is an essential intervention to identify the high-risk pregnancy in the earlier stage and prevent from complications of high-risk pregnancy.

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