



A Structured Teaching Programme On The Knowledge Of Selected Warning Signs In Pregnancy Among Primi-Gravida Women In Selected Hospital Bangalore.

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Abstract: The mother with selected warning signs during pregnancy, the selected warning signs during pregnancy affects the health of the expectant mother as well as development of the fetus. In order to educate and encourage the antenatal mothers a study was conducted to evaluate the effectiveness of Structured Teaching Program on knowledge regarding. **Objective:** i) To assess the knowledge of warning signs among prim gravida women. ii) To evaluate the effectiveness of structured teaching program on selected warning signs among primigravida women. iii) To find the association between the posttest knowledge score with selected demographic variables. **Methodology:** The research design used in the study was pre-experimental one group pre- test and post-test design. Purposive sampling technique was used to draw sample. The data was collected from 60 primigravida women using the structured knowledge questionnaire. Pre-test was conducted followed by implementation of structured Teaching Programme (STP) and post-test was administered after 7 days using the same questionnaire to find out the effectiveness of STP. **Results:** In the present study 10 demographic variables were taken into consideration. The study result shows that, 75% of the Respondents were in the age groups of 21 – 30 years. Based on Religion Majority (65%) of the Respondents belongs to Hindu religion. Most (72%) of the Respondents were attained PUC. 73% of Respondents were Housewife. 53% of respondents were having Annual income of Rs. 5001- 20,000. Majority (38%) Respondents dietary pattern were mixed. Majority 62% of subject's do mild physical activity. Majority (78%) of respondents belongs to nuclear family. Majority 73% of the Respondents were from rural area. All the Respondents (100%) had not received any health information on selected warning signs on primigravida mother. On comparison of pre-test and post-test knowledge scores, the mean percent of pre-test knowledge score was 40.7 percent and posttest knowledge score was 51.3 percent with 17.6 percent knowledge enhancement score. The statistical paired – 't' test indicates enhancement in the mean percentage knowledge score was found significant at 0.05 level for all aspects under study. With regard to association of demographic variables with pre-test knowledge demographic variables i.e. type of family, education, family income, Age group, and there is no significant association with selected demographic variables i.e. age group, residence, religion, Source of information at 0.056 level ($P < 0.05$). **Conclusion:** The overall findings of the study clearly showed that the structured Teaching programme was significantly effective in improving the knowledge regarding selected warning signs in pregnancy among primigravida women.

Keywords: Effectiveness; structured teaching programme; knowledge; selected; regarding warning; signs; primigravida women.

Introduction

World health organization stated that the pregnancy and childbirth are special events in women's lives and indeed in the lives of their families. This can be a time of great hope and joyful anticipation. It can also be a time of fear, suffering and even death. Although pregnancy is not a disease but a normal physiological process. It is associated with certain risks to health and survival both for the women and for the infant she bears. These risks are present in every society and in every setting. In developed countries they have been largely overcome because every pregnant woman has to take special care during pregnancy and childbirth. In developing countries where each pregnancy represents a journey into the unknown from which all too many women never return, due to lack of care provision¹. Gupta N mentioned that nature has bestowed a woman with the capability of producing children, the process that makes her mother. But sad part is that, this normal life furthering the process of procreation can lead to as grim a situation as death. At 40% of all pregnant women will experience some type of complication during their pregnancies. For about 15%. This complication will be potentially life threatening, and will require immediate obstetric care. Maternal death also compromises the health and survival of infant and children they have behind. The death of a woman during pregnancy and childbirth is not only a health issue but also a matter of social injustice². World health organization stated that worldwide, there are 430 maternal deaths for every 100,000 live births. Developing countries, the figure is 480 maternal deaths for every 100,000 live births. In developed countries, there are 27 maternal deaths for every 100,000 live births³. In India, most of the mother have poor knowledge regarding antenatal, intranatal care and 2 postnatal cares. Illiteracy, poverty and lack of communication and transport facility make them vulnerable to serious consequences. Though they are the prominent care providers within the family and key to human development and well-being, the fundamental right health is denied to them in most parts of the world. The death of mother increases the risk to the survival of her young children, as the family cannot substitute a maternal role⁴. According to the park k textbook of preventive and social medicine. India has very high maternal mortality rate. It was 20 per 100 births and declined to per 1000 live births. The maternal mortality rate for India was 407 per 1,00,000 live births. This means more than 100,000 women die each year due to pregnancy related causes. It is mainly due large number of deliveries conducted at home by untrained person, lack of adequate referral facilities to provide emergency obstetric care for complicated cases and contribute to high maternal morbidity and mortality⁴. Maternal Mortality in India is subject of grave concern. The maternal mortality rate in Karnataka has 460 per 1,00,000 live births. Important contributing causes are anemia, poverty, ignorance malnutrition, intercurrent infections, haemoglobinopathies. Hemorrhage [25.6%] rank first as the cause of maternal death, followed by sepsis [13%], toxemia of pregnancy [11.9%] abortion [8%] obstructed labour [6.2%], while other causes in total 35.3%. Though health department create awareness both central and state level through mass media for planned MCH programme. Still most the mother living in remote area are not aware of this due to lack of literacy, ignorance and social cultural factors⁵.

NEED FOR THE STUDY

All human life on the planet is born of women. Women is an important person for her family. She nourishes her fetus and gives birth to a child. Health of mother is tender and wanted component of total care, and cannot be neglected for the fact that the mother is healthy and the children will be healthy which affect the Nation's health. so mental, physical and physiological health affect the health of the family and the nation. Bennet R, Linda B stated that pregnancy is a long and very special journey for a woman. It is a journey of dramatic physical, psychological and social change; of becoming a mother of redefining family relationships and taking on the long term, responsibility for caring and cherishing a new born child. Generations of women have travelled the same route, but each journey is unique⁶. Globally, woman that die each year due to pregnancy and childbirth are Africans (53%), while the rest are Asians (42%) and to a lesser extent Latin Americans (4%). Less than 1% of maternal deaths occur in developed countries. It is estimated that 99% maternal deaths occur in the developing world every year. The World Health Organization estimates that 150 million pregnancies occur annually.

1. Worldwide, every minute of every day, one-woman dies of pregnancy related complications. Nearly 6,00,000 women die each year, of these 99% of death occurs in developing countries.
2. Every single woman who dies, 30 women develop life long illness and injuries related to pregnancy and childbirth.
3. In India, every five minutes, one woman dies from complications related to pregnancy and childbirth. This adds up to a total of 1,21,000 women per year.
4. 15% of women develop life-threatening complications.

Mathai M stated that in India, the maternal mortality ranks at 420 per 100,000 live births. Most maternal deaths in India are caused by complications such as hemorrhage (29%), anemia (19%), sepsis (16%), obstructed labour (10%), unsafe abortion (9%) and (8%) 8 hypertensive disorders of pregnancy. All these are potential avoidable. Maternal death is not a vaccine preventable disease and there is no one short remedy for reducing maternal mortality. Maternal mortality is disease of poverty, affecting women and their children, restricted by national borders and of little interest to anyone else⁷. Ram, Singh A revealed that the studies dealing the knowledge and awareness about the danger signs of pregnancy at the country level are very rare. The available studies show that the knowledge and awareness about the danger signs of pregnancy among men and women is far less universal. Because of this lack of awareness on the part of men and woman, many women fail to seek care for life threatening complications of pregnancy and childbirth. Without universal awareness about danger signs of pregnancy and awareness about what to do in case of a complication, is it realistic to think of reducing fatalities from pregnancy when it is clearly known that many complications during pregnancy are unpredictable. The key interventions included in the safe motherhood programme were immunization for pregnant woman, prevention and treatment of anemia, antenatal care and early identification of maternal complications, delivery by skilled personnel, promotion of institutional delivery, management of obstetric emergencies and birth spacing. Good emergency obstetric care is fundamental to decreasing mortality from complications⁸. Swarna conducted a descriptive study to know the maternal morbidity among selected women at Hyderabad, AP. The study findings revealed that 67.5% of women suffered with pregnancy related problems during antenatal period and pre-eclampsia was the major leading cause⁹. Health Action stated that Safe motherhood is a state of well-being in which a woman approaches childbirth with confidence in her abilities to give birth and nurture her new born¹⁰.

RESEARCH METHODOLOGY

RESEARCH APPROACH

An evaluative approach was considered appropriate for the study to test the effectiveness of Structured Teaching Programme regarding selected warning signs among primigravida women. Evaluative research is an applied form of research that involves finding out how well a programme, practice, procedure or policy is working. The main goal is to assess or evaluate the success of a programme.

RESEARCH DESIGN

A researcher's overall plan for obtaining answers to the research questions or for testing the research hypothesis is referred to as the research design. Quasi experimental one group pre-test post-test design (O1 X O2) was adopted for the study. The study design comprises of two phases, the phase I deals with preparation, validation of tool and STP. Phase II comprises of assessment of knowledge of antenatal mothers on selected warning signs by structured knowledge questionnaire (O1), administration of STP on same day (X), post-test on seventh day using the same questionnaire (O2). Finally, evaluation of effectiveness of STP will be done by descriptive and inferential statistics.

VARIABLES

Independent variable: It is the presumed cause for the resulting effect on the dependent variable. In this study the independent variable is the structured teaching programme on Selected warning signs on primigravida mother.

Dependent variable: it is the outcome variable. In this study dependent variable is knowledge of primigravida women on Selected warning signs during pregnancy.

Extraneous variable: An uncontrolled variable that greatly influences the result of the study is called as extraneous variable. In this study the variables such as age, religion, education, occupation, annual income, residential area and sources of information are treated as extraneous variables.

Target Population: it refers to the entire set of individuals or objects that possess specific characteristics that the researcher is interested in studying. The population of the study consists of all the primigravida women.

SETTING OF THE STUDY

Setting is the physical location and condition in which data collection takes place in the study. This study was conducted in ANC ward and OPD at Anekal government Hospital, Bangalore, which is located within 10 kilometers from Sushrutha College of Nursing, Bangalore. The average antenatal OPD cases are nearly 200 per day.

SAMPLE AND SAMPLE SIZE

The sub set of a population chosen for the study is called as sample. The sample for the present study were primigravida women who are available in ANC ward and OPD at Anekal district Hospital, Bangalore. The sample size for the present study comprised of 60 antenatal mothers.

SAMPLING TECHNIQUE

Sampling is the process of selecting a portion of the population to represent the entire population. Purposive Sampling Technique was found appropriate for the present study. Purpose of sampling derives from the belief that the investigators knowledge about the population and its element can be used to handpick cases to be included in the sample. The researcher might decide to purposely select the widest possible variety of respondents or might choose subjects who are judged to be typical of the population in question. Purposive sampling is a type of non-probability sampling was adopted for the study.

CRITERIA FOR THE SELECTION OF THE SAMPLE

Inclusion Criteria:

- Primigravida women who are present in antenatal OPD in selected hospitals, Bangalore.
- Those who are interested to participate in the study.
- Those who can understand Kannada and English.
- Those who are available during the period of study.

Exclusion Criteria:

- Those who are not willing to participate in the study.
- Those who cannot understand Kannada and English.
- Those who are multigravida women.

DESCRIPTION OF THE TOOL

After a thorough review of literature related to the topic and considering the suggestions of experts a structured knowledge questionnaire was developed. Structured knowledge questionnaire was developed to evaluate the effectiveness of STP on Knowledge of primigravida women regarding selected warning signs during pregnancy.

Structured knowledge questionnaire consists of two sections:

- **Section I:** The first section of the tool is consisted of 7 items of selected socio- demographic variables such as code no., age, religion, educational status, occupation, family, income, dietary pattern, physical activity, type of family, area of residence and source of information.
- **Section II:** It includes the knowledge questionnaire regarding the selected warning signs in pregnancy. It is divided into A, B, C, D, E, F, G, H and I.
 - Section A: Knowledge on concept of pregnancy, which consists of 2 items.
 - Section B: Knowledge on warning signs and which consists of 3 items.
 - Section C: Knowledge on Bleeding per vagina and consists of 5 items.
 - Section D: Knowledge on severe vomiting and consists of 5 items
 - Section E: Knowledge on unusual swelling and consist of 5 items
 - Section F: Knowledge on high fever and consists of 5 items
 - Section G: Knowledge on decreased foetal movements and consists of 1 item
 - Section H: Knowledge on pallor (anemia) and consist of 2 items
 - Section I: Knowledge on rupture of membranes and consist of 2 items.

SCORING OF ITEMS

There were 30 items. Each item has four options with one accurate answer. The score for correct response to each item was- one and incorrect response was-zero. Thus for 30 items maximum obtainable score was 30 and minimum score was zero. To find out the association with the selected demographic variables and knowledge scores, respondents are categorized into 3 groups.

- Adequate knowledge-Above 75%
- Moderate knowledge -51-75%
- Inadequate Knowledge-Below or equal 50

CONTENT VALIDITY

The prepared tool along with objectives of the study was submitted to the experts belonging to different fields for validation. Among 12 experts 10 experts are obstetrics and gynecological Nursing 1 is English expert and 1 is Kannada expert. The tool was modified based on the suggestions received from experts. After consulting with the guide and statistician, the final tool was reframed. The final tool consisted of 10 items related to socio demographic data and 30 items related to knowledge selected warning signs during pregnancy.

RELIABILITY OF TOOL

Reliability of an instrument is the degree of consistency with which it measures the attribute it is supposed to measure. Split Half method with spearman's Brown Prophecy formula was used to test the reliability of the tool.

DEVELOPMENT OF STP

Structure teaching programme on knowledge of primigravida women regarding Selected warning signs in pregnancy was developed based on literature review, consulting with experts and Guide. The steps adopted in the development of Structured teaching programme were:

- Preparation of first draft of structured teaching programme content.
- Content validity of structured teaching programme.
- Preparation of final draft of structured teaching programme.

PROCEDURE FOR DATA COLLECTION:

a) Permission from the concerned authority. Formal administrative permission was obtained from AMO, Anekal government Hospital, Bangalore to conduct main study.

b) Period of data collection: The main study was carried from Anekal Government hospital, Bangalore. The main study was conducted from 21/04/22 to 04/05/22 for a period of 4 weeks.

PRE-TEST(O1):

The need for the study and objectives were explained to the primigravida women and confidentiality was assured and written consent was obtained from the samples before conducting pre-test. The investigator collected data from 60 primigravida women that took 40- 45 minutes to complete the STP.

ADMINISTRATION OF STP:

After pre-test of all the selected primigravida women, the investigator discussed with participants regarding their convenient timings and informed them all the details well in advance. Group teaching was conducted using flash cards and charts for 45 minutes. After the session the samples were informed about the tentative dates for post-test.

POST-TEST (O2):

The same structured knowledge questionnaire was used to collect the post-test data. Post test data was collected after 7 days of STP. All participants cooperated well with the investigator in both pre-test and post-test sessions. The data collection process was terminated by thanking the subjects for their cooperation.

STATISTICAL ANALYSIS OF DATA

- Organization of ungrouped data into grouped data.
- Frequencies and percentages were used for analysis of socio-demographic characteristics.
- Calculation of mean, median, standard deviation, mean percentage of pre-test and post test scores.
 - Paired 't' test was used to ascertain whether there is significant difference in mean knowledge score of pre-test and post-test values.
 - Chi-square test was used to find the association between sociodemographic variables with pretest knowledge score.

IV. RESULTS

Table-4.1: Pre-test knowledge score

Knowledge score	Category	Pre-test	
		Frequency	Percentage
Inadequate knowledge	$\leq 50\%$	17	28.33%
Moderate knowledge	51-75%	43	71.66%
Adequate knowledge	$> 75\%$	0	0
Total		60	100%

The above table shows that 17(28.33%) of respondents had inadequate knowledge ($\leq 50\%$) and 43(71.6%) of respondents had moderate knowledge.

Table-4.2: Post-test knowledge score

Knowledge score	Category	Post-test	
		Frequency	Percentage
Inadequate knowledge	≤50%	05	8.33%
Moderate knowledge	51-75%	48	80%
Adequate knowledge	>75%	07	11.66
Total		60	100%

The above table shows that majority 80% of respondents had moderate knowledge (51-75%) And 11.66% of respondents had moderate knowledge (>75%) regarding selected warning signs in pregnancy.

DISCUSSION & CONCLUSION:

The pre-test knowledge score among majority of primigravida women were inadequate and post-test knowledge score found adequate. There was significant enhancement in knowledge of primigravida women after conducting structured teaching programme on selected warning signs in pregnancy. There was significant association between post-test knowledge scores and selected socio-demographic variables such as residential area at 0.05 level The findings of the study revealed that there was no significant association between post-test knowledge score and selected socio-demographic variables such as age in years, religion, educational status, occupation, family's annual income at 0.05 level.

RECOMMENDATIONS:

1. A replication of present study can be conducted with a larger population.
2. A similar study can be conducted in different hospital settings such as antenatal ward and antenatal clinics in community area.
3. This study can be conducted in different settings in rural and urban areas and then due results can be compared.
4. Manuals and information booklets may be developed to enhance knowledge on effects of caffeinated food on fetus.

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