



**"A STUDY TO EVALUATE THE EFFECTIVENESS OF SKILL COMPETENCY PROGRAMME ON ANTENATAL RISK ASSESSMENT SCORING SYSTEM IN TERMS OF KNOWLEDGE AMONG STAFF NURSES WORKING IN MATERNITY UNIT OF SELECTED HEALTH CENTRE AT MEERUT"**

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**ABSTRACT**

Pregnancy is the feeling of carrying a little soul within the womb. In pregnancies, there are two bodies, one inside the other. The period from conception to birth is called pregnancy. A woman carries a fertilized egg by a sperm and then is implanted in the lining of the uterus inside her body. Pregnancy itself is a normal physiological condition and not a high-risk condition. However, most pregnancies have a healthy, happy outcome. All pregnant women, by their pregnancy status, face some level of maternal risk. Some pregnancies are complicated due to problems with the mother's health, the health of the foetus, or complications unique to pregnancy. These pregnancies are at "high risk" for developing problems and having a poor outcome. Most maternal morbidities could be prevented if the mother had access to appropriate and timely health care during pregnancy. **THE OBJECTIVES OF THIS STUDY WERE** (1) To evaluate the effectiveness of the Skill Competency Program on Antenatal Risk Assessment Scoring System in terms of knowledge in the experimental group. (2) To compare the post-test knowledge scores on the Antenatal Risk Assessment Scoring System between experimental and control groups. **METHOD:-** The research approach adopted for the study was evaluative with one group pre-test post-test design was used to assess the effectiveness of skill competency programme on knowledge and skill regarding antenatal risk assessment. The sample consisted of 100 staff nurses, who are available at the time of the study. The non-probability purposive sampling method was used for the selection of samples. The instrument for the data collection was a structured knowledge questionnaire. Part A: Consists of socio-demographic data. Part B: Consists of 20 items (structured knowledge questionnaire) to assess the knowledge regarding antenatal risk assessment. The data obtained were analyzed by using descriptive and inferential statistics in terms of frequency, percentage, mean, standard deviation paired T-test. **RESULTS:-** The result of major findings indicated that staff nurses had inadequate knowledge in various aspects of antenatal risk assessment and an ineffective Skill competency programme was found to be a very effective method of providing information regarding antenatal risk assessment. The Mean post-test score was 10.28 control group and the mean post-test 17.44 experimental group and the Standard deviation error score of the experimental and control group was 0.453 respectively. The Mean difference was 7.16 and the unpaired "t" test score was 15.81 that is more than the table value so that shows results were significant and the skill competency programme helps to increase the level of knowledge of staff nurses. Hence the research hypothesis H1 was accepted and null hypothesis H01 was rejected at 0.05 level of significance. **CONCLUSION-** Thus the skill competency programme through safe delivery app virtual training programme was found to be effective in enhancing the knowledge of staff nurses regarding antenatal risk assessment based on the study finding the recommendation for future research were also made.

**KEYWORDS :****INTRODUCTION:**

Pregnancy is the feeling of carrying a little soul within the womb. In pregnancies, there are two bodies, one inside the other. The period from conception to birth is called pregnancy. A woman carries a fertilized egg by a sperm and then is implanted in the lining of the uterus inside her body. Pregnancy itself is a normal physiological condition and not a high-risk condition. However, most pregnancies have a healthy, happy outcome. All pregnant women, by their pregnancy status, face some level of maternal risk. Some pregnancies are complicated due to problems with the mother's health, the health of the foetus, or complications unique to pregnancy. These pregnancies are at "high risk" for developing problems and having a poor outcome. Most maternal morbidities could be prevented if the mother had access to appropriate and timely health care during pregnancy.

**NEED FOR THE STUDY**

All pregnancies and deliveries are potentially at risk. However, there are certain categories of pregnancies where the mother, the foetus, or the neonate is in a state of increased jeopardy. About 40-50%, pregnancies belong to the categories of high-risk. A high-risk pregnancy is one of greater risk to the mother of her foetus than an uncomplicated pregnancy. Pregnancy placed additional physical or emotional stress on

a woman's body. Health problems that occur before a woman becomes pregnant or during pregnancy may also increase the likelihood of a high-risk pregnancy. High-risk pregnancy contributes to 80% of maternal mortality due to severe bleeding/haemorrhage (25%), infections (15%), unsafe abortions (13%), eclampsia (12%), obstructed labour (8%), and other direct causes (8%). Indirect causes such as malaria, HIV/AIDS, and cardiovascular diseases account for 20%. 213 million pregnancies occurred worldwide in 2014, with almost 40 % women pregnant per year. Moreover, 50% Of women suffering from high-risk pregnancies.

In India, 480% million pregnancies were at high risk in 2015, or 52% of pregnancies where high-risk leads to miscarriage, induced abortion, or intended birth. A longitudinal study was conducted in 1993 by Mishap PK. all in a rural area of U.P. India, in which 30000 pregnant woman's population 1065 women were selected as a sample. This study estimated that the stillbirth rate in UP was 26.1 per thousand, the perinatal mortality rate was 121.1 per thousand and the neonatal mortality rate was 97.8 per thousand.

A risk-oriented approach using colour codes (red, yellow, green, and white) was adopted in Malaysia in 1989. Using this approach, a woman's risk status is assessed throughout her ANC visits, and the allocated colour code may change at each

visit. The colour-coded function is used as a managerial tool to determine the appropriate care providers and the location of further ANC visits and childbirth. This approach is routinely practised in Malaysia and is included in the country's checklist guideline for the health care of mother and baby following the colour code system.

### STATEMENT OF THE PROBLEMS

"A study to evaluate the effectiveness of Skill Competency Program on Antenatal Risk Assessment Scoring System in terms of Knowledge among staff nurses working in the maternity unit of selected Health Centre at Meerut".

### OBJECTIVES OF THE STUDY

1. To evaluate the effectiveness of the Skill Competency Program on Antenatal Risk Assessment Scoring System in terms of knowledge in the experimental group.
2. To compare the post-test knowledge scores on the Antenatal Risk Assessment Scoring System between experimental and control groups.

### RESEARCH HYPOTHESIS

**H1-** The mean post-test knowledge score will be significantly higher after administering the skill competency program on the antenatal risk assessment scoring system in the experimental group compared to the control group.

### DELIMITATIONS OF THE STUDY

**The study is delimited to:**

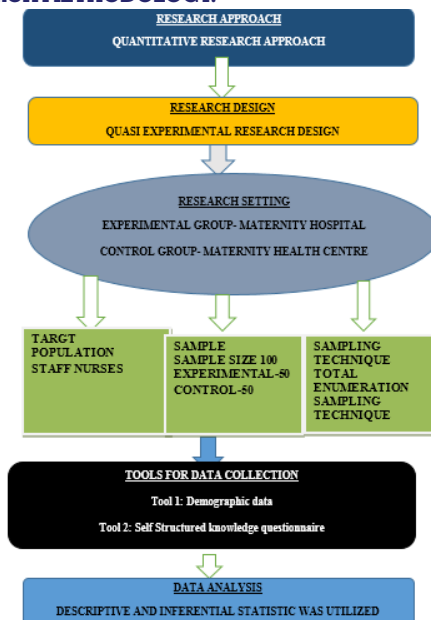
1. The staff nurses who are working in the maternity ward in the selected health centre at Meerut.
2. Assessment of knowledge of the staff nurses is done only once after administration of safe delivery app through the virtual training programme.

### REVIEW OF LITERATURE

The major goal of the review of literature is to ascertain what is already known about a problem of interest, to develop a broad conceptual context into which a problem will fit. The investigator to gain insight into the selection problem will do an extensive review of the literature and for the present study; it is organized and presented under the following heading.

1. Studies related to pregnancy outcome.
2. Studies related to the educational interventional program.

### RESEARCH METHODOLOGY:-



**RESEARCH DESIGN:** Quasi-experimental & control group post-test design

**SETTING OF THE STUDY:** The study was conducted in the maternity wards of LalaLajpat Rai Medical College and Kila Prastik Garh health centre, Meerut.

### VARIABLES OF THE STUDY:-

#### SCHEMATIC PRESENTATION OF RESEARCH

**a) INDEPENDENT VARIABLES:** According to (Polit and Hungler) the independent variables are believed to care or influence the behaviour and ideas. In this study, the independent variable is the skill competency programme through a safe delivery app with a virtual training programme regarding the antenatal assessment risk scoring system.

**b) DEPENDENT VARIABLES:** Dependent variables are the variables the researcher is interested in understanding explaining and preceding. (Polit and Hungler) In this study, the dependent variables are the knowledge of staff nurses working in the maternity ward of a selected hospital at Meerut.

**c) EXTRANEIOUS VARIABLES:** In this study, it refers to demographic variables like Professional education, year of working experience, place of work experience, previous knowledge regarding antenatal risk assessment scoring system.

**POPULATION:** In this study population were staff nurses working in a selected health centre at Meerut.

**SAMPLE:** In this study, the sample was the staff nurses working in the maternity ward.

### SAMPLE TECHNIQUE:-

Non- probability purposive sampling technique was used in the study

### SAMPLE SIZE:

The sample size in the study consists of 100 samples which include 50 samples in the experimental group and 50 samples in the control group.

### CRITERIA FOR SAMPLE SELECTION:

#### INCLUSION CRITERIA:

1. Staff nurses who are willing to participate in the study.
2. Staff nurses who can read & write English or Hindi.

#### EXCLUSION CRITERIA:

1. Staff nurses who are not having an android phone.
2. Staff nurses who are not available at the time of data collection.

### DATA COLLECTION TOOLS AND TECHNIQUES:

#### DEVELOPMENT OF THE TOOLS:

1. An extensive review of related literature.
2. Preparation of blueprint of the tools in consultation with research guide and expert from clinical field.
3. Content validation from the clinical and nursing expert.
4. The desired modification was incorporated in the tools as per the suggestions of the experts and guidance of the research guide.
5. Reliability of tools was established.

### DESCRIPTION OF THE TOOLS:

**PART -A:** Socio-demographic variable

**PART-B:** It includes a structured knowledge questionnaire for collecting information regarding the knowledge of staff nurses about the antenatal risk assessment scoring system.

### PART-A

#### SOCIO-DEMOGRAPHIC PROFILE:

Part A consists of a structured questionnaire to collect baseline

data, regarding sociodemographic variables of the staff nurses such as Professional education, year of working experience, place of working experience, previous knowledge regarding antenatal assessment risk scoring system.

#### **PART-B:**

It includes a structured questionnaire for collecting information regarding the knowledge of staff nurses about the antenatal risk assessment scoring system. It includes 20 multiple-choice questions. These tools, which were in English was approved by an English professor.

#### **ANALYSIS AND INTERPRETATION OF THE DATA**

##### **1. Findings related to demographic characteristics of samples**

##### **DATA PRESENTED IN TABLE OF EXPERIMENTAL GROUP DEPICTS:**

As per professional education majority of the sample were ANM 11 (22%), GNM 9 (18%), Post B.sc Nursing 11 (22%) and BSc Nursing 19 (38%).

Regarding Year of working experience, most of the sample i.e. 80 % were having working experience between 1year -3year, 14% were having working experience above 7 years, whereas 6% between were having 5year - 7year of experience, and none of them i.e. 0% were having between 3year-5 years of working experience.

As per any previous course attends regarding antenatal risk scoring system among staff nurses, most of the samples 35 (70%) said yes and 15 (30%) said no.

As per the place of work, most of the samples were working in maternity OPD 16 (32%), Labour room 15(30%), maternity ward/ Gynaecology ward 12 (24%), operation theatre critical unit (maternity) 7 (14%)

##### **DATA PRESENTED IN TABLE OF CONTROL GROUP DEPICTS:**

As per professional education differences majority of the sample were equally distributed 9 (18%) samples were ANM, 21(41%) is GNM, 21 (41%), Post Basic B.Sc. Nursing 8 (16%), and B.sc Nursing 12 (24%).

Regarding Year of working experience, most of the sample i.e. 58 % were having working experience between 1year -3year, 24% were having working experience above 7 years, whereas 16% between were having 3year - 5year of experience, and only 4% were having between 5 year-7 years of working experience.

As per any previous course attends regarding risk scoring system among staff nurses, most of the samples 33 (66%) said Yes and 17 (34%) said No.

As per place of work, most of the samples in maternity OPD 9 (18%), Labour room 13(26%), maternity ward/ Gynaecology ward 14 (28%), operation theatre critical unit (maternity) 14 (28%).

##### **2.FINDING RELATED TO KNOWLEDGE OF EXPERIMENTAL GROUP AND CONTROL AFTER ADMINISTRATION OF SKILL COMPETENCY PROGRAMME ON THE ANTENATAL RISK ASSESSMENT SCORING SYSTEM AMONG STAFF NURSES**

Data represented in table 2 shows that in the experimental group posttest all of the samples 50(100%) i.e. had good knowledge whereas none of the samples (0%) had average or below-average knowledge regarding the Antenatal risk Assessment scoring system.

In the control group posttest majority of the samples i.e. 40(80%) had average knowledge whereas 5 (10%) had Good knowledge and i.e. 5(10%) has below average knowledge regarding the Antenatal risk Assessment scoring system.

##### **3. FINDINGS RELATED TO COMPARISON OF KNOWLEDGE SCORES AMONG STAFF NURSES REGARDING ANTENATAL RISK ASSESSMENT SCORING SYSTEM BETWEEN EXPERIMENTAL AND CONTROL GROUP**

Data represented in the table show - The Mean post-test score was 10.28 control group and the mean post-test 17.44experimental group and the Standard deviation error score of the experimental and control group was 0.453 respectively. The Meandifference was 7.16 and the unpaired "t" test score was 15.81 that is more than the table value so that shows results were significant and the skill competency programme helps to increase the level of knowledge of staff nurses. Hence the research hypothesis H1 was accepted and null hypothesis H1 was rejected at 0.05 level of significance

**IMPLICATIONS OF THE STUDY :-** The findings of the present study have certain implications for nursing practice, nursing education, nursing administration, and nursing research

##### **NURSING PRACTICE:**

The findings of the study reveal that there is a need for understanding that nurses require a continuous antenatal risk assessment scoring system as it helps nurses to learn about the antenatal risk assessment and it also helps to improve their skills to treat patients and give them the needed treatment immediately. The findings of the study reveal that the skill competency programme regarding antenatal risk assessment scoring system among staff nurses can improve their knowledge level which will help them a lot in improving the patient care as those first few minutes are vital in some cases as they will be the difference life and death.

##### **NURSING EDUCATION:**

The findings of the study reveal that there is a need for understanding that the nurses should be provided with an opportunity to plan antenatal risk assessment scoring system among staff nurses working in health centre as to improve skill practical field it is far important to acquire knowledge in theoretical aspect. The staff nurse should be trained to use or implement the recent updates in antenatal risk assessment scoring system knowledge.

##### **NURSING ADMINISTRATION:**

- Under the NRHM and JSY have contributed positively in improving the reach of healthcare to women by many Policies and programmes for reproductive health.
- Nursing administrators should formulate health policies that will include all married women to be actively involved in health education programs with video in their respective hospital areas.
- Nursing administrators should concentrate on workshop and in-service education of staff nurses who play a vital role in the identification, antenatal risk assessment scoring system Nursing administrators should awareness or training programme can be conducted for staff nurses living in hospital by nursing professionals.

##### **NURSING RESEARCH:**

1. Nursing research is an essential aspect of nursing norms and a body of knowledge. There is a need to conduct further research regarding preventive measures of antenatal risk assessment scoring system.
2. Nursing research should be directed towards further exploration and update knowledge of staff nurses about the antenatal risk assessment scoring system. This can further enhance the maternal health status.
3. The finding of the study can be used to further justify the need for education of the people in the awareness and preventive aspects of health.

**LIMITATIONS:**

- This study was confined to a limited of staff nurses i.e. 100 (50 each in the experimental and control group) which limits the generalization of the findings.
- The study sample was selected non- purposive sampling technique which limits the generalization of the findings.

**RECOMMENDATIONS:**

- This study can be replicated in large samples so that findings can be generalized.
- A comparative study can be done to see the difference in the effect of the skill competency programme regarding antenatal risk assessment scoring system in the maternity unit at selected health centre Meerut.
- A study to assess the knowledge and barriers of health-seeking behaviour on antenatal risk assessment scoring system among staff nurses.
- A follow-up study can be conducted to assess the knowledge antenatal risk assessment scoring system among staff nurses.

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