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A Study to Assess the Effectiveness of Self-Instructional Module (SIM) on Knowledge Regarding Prevention of Puerperal Breast Complications among Antenatal Mother at Selected Hospital, Jaipur

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ABSTRACT

BACKGROUNDOFTHE STUDY

In the Grampian study 33% of all women experienced breast problems in the first 2 weeks post partum, and 28% in the weeks there after. This may be an under estimation, because some of the women may have considered these problems as baby feeding problems. Apart from overt mastitis, a relatively rare condition, these problems may have comprised engorgement, and sore, cracked, bleeding or inverted nipples. Breast problems are often cited as the reason for stopping breastfeeding, and breastfeeding rates might improve if effective care could be given for these problems. The majority of such problems can be prevented by routines and practices which support breastfeeding, and skilled help to establish breastfeeding in the early postpartum period.

STATEMENTOFTHEPROBLEM

"A study to assess the effectiveness of self-instructional module (SIM) on knowledge regarding prevention of puerperal breast complication among antenatal mother at selected hospital, Jaipur".

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INTRODUCTION

The postpartum period or puerperium covers a critical transitional time for a woman, her newborn and her family, on a physiological, emotional and social level. Nonetheless, in both developing and developed countries women's needs during this period and those of their newborns have been all too often eclipsed by the attention given to pregnancy and birth. Such an eclipse ignores the fact that the majority of maternal deaths and disabilities occur during the postpartum period and that early neonatal mortality remains high. Driven frequently by economic considerations the skimpy, or even non-existent care offered to women and their newborns at home or in health facilities makes little contribution to their well-being and provides a frail basis for their future health. Poor quality care reduces opportunities for health promotion and for the early detection and adequate management of problems and disease.

Neither "postpartum period" nor "puerperium' (which are more or less synonymous) are officially defined. WHO has, however, formally designated the first 28 completed days after birth of the infant as the neonatal period. Although not officially sanctioned, traditionally the postpartum period is supposed to end 6 weeks after birth.

The common breast problems in puerperium are

- Breast engorgement.
- Breast tenderness.
- Mastitis and Breast Abscess.
- Lactation Failure
- Sore, Cracked and painful nipple leading to difficulty in breastfeeding.

The above mentioned problems can be prevented effectively if due care is taken by the pregnant women from the beginning of pregnancy. To correct the anatomical defects, physical preparation such as nipple rolling should be taught during antenatal period as a way of making woman's nipples more protuberant. The other breast feeding related complications chances can be reduced by giving proper education in the antenatal periods.

NEED OF THE STUDY

WHO recommends that all pregnant women have a written plan for dealing with birth and any unexpected adverse events, such as complications or emergencies that may occur during pregnancy, childbirth, or the immediate postnatal period. Women should discuss and review this plan with a skilled attendant at every ANC assessment and one month before the expected date of birth. A birth and emergency preparedness plan includes identification of the following elements: the desired place of birth; the preferred birth attendant; the location of the closest appropriate care facility; funds for birth-related and emergency expenses; a birth companion; support in looking after the home and children while the woman is away; transport to a health facility for the birth; transport in the case of an obstetric emergency; and identification of compatible blood donors in case of emergency. Although little evidence exists to show the direct correlation between birth preparedness and reducing morbidity or mortality for mothers and babies, small-scale studies show that there is considerable benefit to be gained from this intervention. For instance, the adoption of new practices associated with planning (such as setting aside money for the birth, transport arrangements, and the use of a birth plan) at family and community levels is encouraging. The presence of a person of the woman's choice to provide social support during childbirth has also been shown to have a positive effect.

It is the major responsibility of the health care member especially nurses to prepare the antenatal mother for facing this situation. Thus educating the antenatal mother and family. The education will be more effective if antenatal mother have very good knowledge regarding prevention of puerperal breast complication among antenatal mother. Hence the investigator would like to undertake the present study to assess the effectiveness of self instructional module on knowledge regarding regarding prevention of puerperial breast complication among antenatal mother at selected hospital, Jaipur.

OBJECTIVES

- To assess the prior knowledge of antenatal mother regarding prevention of puerperal breast complication.
- To assess the post test knowledge of antenatal mother regarding prevention of puerperal breast complication.
- To find out the effectiveness of SIM in terms of gain in post-test knowledge score.
- To associate the pre-test knowledge score with selected demographic variables.

HYPOTHESES

All the following hypotheses will be tested at 0.05 level of significance

- **H_1:** The mean post-test knowledge score of the antenatal mother will be significantly higher than mean pre-test knowledge score.
- **H_2:** There will be significant association between pre-test knowledge score of the antenatal mother regarding prevention of puerperal breast complication with their selected demographic variable.

OPERATIONAL DEFINITIONS

- **Assess:** In the present study, assess means judging the status of pretest and post test knowledge regarding prevention of puerperal breast complication among antenatal mother.
- **Effectiveness:** In the present study, effectiveness refers to the extent to which the SIM has achieved the desired objectives, that means improvement of knowledge regarding prevention of puerperal breast complication among antenatal mother.
- **Self-Instructional Module:** In the present study, SIM is a learning package planned and prepared on knowledge regarding prevention of puerperal breast complication among antenatal mother.
- P**uerperal:** In the present study it means the period of about six weeks after childbirth during which the mother's reproductive organs return to their original non-pregnant condition.
- **Breast complication:** In the present study breast complication Breast engorgement, Breast tenderness, Cracked, retracted nipple, Mastitis, Breast abscess & Lactation failure.
- **Antenatal:** In the present study, antenatal is before birth; during or relating to pregnancy.

ASSUMPTIONS

- Antenatal mother may have some knowledge regarding prevention of puerperal breast complication.
- Knowledge may vary from person to person

RESEARCH APPROACH

In view of the nature of the problem selected for the study and the objectives to be accomplished, an evaluative research approach was used for the present study

RESEARCH DESIGN

For the present study a pre experimental one group pretest post test design adopted.

SETTINGS OF THE STUDY

The CHC Hospital, Bagru, Jaipur was the setting for the present study. Because of the feasibility, the investigator has selected this area to conduct the research study.

SAMPLE SIZE

The samples for this research study are 60 antenatal mothers at CHC hospital, Jaipur.

SAMPLING TECHNIQUE

In this study non- probability convenient sampling technique is used for selecting the samples.

INCLUSION CRITERIA

- Antenatal mothers who are willing to participate in the study.
- Antenatal mothers who are available at the time of data collection.

EXCLUSION CRITERIA

- Antenatal mothers who are not willing to participate.
- Antenatal mothers who are not mentally sound.

RESULT

The knowledge scores of antenatal mother regarding prevention of puerperal breast complication has revealed that, post-test mean knowledge score was found higher 26.72(95.42%) and SD of 3.78 when compared with pre-test mean knowledge score which was 9.53 (34.03%) with SD of 3.02. The mean difference score was 17.19 (61.39%) with SD of 0.76. The results of the study depicts that the self instructional module was very effective in improving the knowledge of the antenatal mother regarding prevention of puerperal breast complication**.**

PART I: DESCRIPTION OF THE DEMOGRAPHIC VARIABLES OF THE ANTENATAL MOTHER.

Table 1: Frequency and percentage distribution of demographic variables of antenatal mother. N=60

S. N0.	Demographic Variables	Frequency	Percentage
1	AGE		
	20-25 Year	14	23.33 %
	26-30 Year	13	21.67 %
	31& Above Year	16	26.67 %
2	Religion		
	Hindu	19	31.67 %
	Muslim	17	28.33 %
	Christian	15	25.00 %
	Other	09	15.00 %
3	Education Status		
	12th class	19	31.67 %
	Diploma	17	28.33 %
	Under Graduate	15	25.00 %
	Post Graduate	09	15.00 %
4	Economic Status		
	Poor	09	15.00 %
	Middle Class	29	48.33 %
	Rich	22	36.67 %
5	Occupation		
	Teacher	13	21.67 %
	Agriculture	17	28.33 %
	Office Work	21	35.00 %
	Other	09	15.00 %

6	Previous Knowledge		
	Yes	10	16.67 %
	No	50	83.33 %

PART II: ANALYSIS OF PRE-TEST AND POST-TEST KNOWLEDGE SCORES OF PREVENTION OF PUERPEARL BREAST COMPLICATION.

In order to find out the level of the knowledge score of the on antenatal mother regarding prevention of puerperal breast complication, a four-point scale was used in the study. The categorization of the knowledge levels were as follows; scores between 0-7 shows poor knowledge level, scores between 8-15 shows average knowledge level, scores between 16-23 shows good knowledge level, scores between 24-30 shows excellent knowledge level.

Table 2: Assessment of Pre-test and Post-test knowledge level on antenatal mother regarding prevention of puerperal breast complication.

Assessment of pre-test knowledge level on antenatal mother regarding prevention of puerperal breast complication (N=60)

Knowledge	Frequency	Percentage
Poor	46	76.67
Average	14	23.33
Good	0	0
Excellent	0	0

Assessment of post-test knowledge regarding prevention of puerperal breast complication among antenatal mother (N=60)

Knowledge	Frequency	Percentage
Poor	0	0
Average	3	5
Good	45	75
Excellent	12	20

PART III: EVALUATION OF EFFECTIVENESS OF THE ANTENATAL MOTHER REGARDING PREVENTION OF PUERPERAL BREAST COMPLICATION.

a) Comparison of pre-test and post-test knowledge scores of antenatal mother regarding prevention puerperal breast complication.

Table 3: Pre-test and post-test knowledge scores regarding prevention of puerperal breast complication. (n=60)

Area	Maximum score	Respondents knowledge			Paired 't' test
		Mean	Mean%	SD	
Pre-test(X)	30	9.53	34.03	3.02	
Post-test(Y)	30	26.72	95.42	3.78	**3.48**
Effectiveness(Y-X)		**17.19**	**61.39**	**0.76**	

't' table value = 0.00001 at p < 0.05, df=59

Table 8: Paired 't' test showing the significance of mean difference between pre-test and post-test knowledge scores of antenatal mother after the administration of SIM. (n=60)

Group	Mean %		Mean % difference	SD difference	't' value
	Pre test	Post test			
Antenal Mother in selected hospital at Jaipur	34.03	95.42	61.39	0.76	3.48

Maximum Score = 30 Table value = 1.6766 at 0.05 level of significance

PART IV: ASSOCIATION OF THE PRE-TEST KNOWLEDGE SCORES WITH THE SELECTED DEMOGRAPHIC VARIABLES

Section A: Overall association of pre–test knowledge scores with the selected demographic variables

Chi-Square test' was done to analyse the significant association of pretest knowledge scores with selected demographic variables.

S. No.	Demographic Variables	Chi- Square Value	Degree of Freedom	Tabulated Value	Level of Significance
1	Age	0.77	6	12.59	Not Significance
2	Religion	1.44	9	16.92	Not Significance
3	Education Qualification	1.44	9	16.92	Not Significance
4	Economical Status	1.49	6	12.59	Not Significance
5	Occupation	4.26	9	16.92	Not Significance
6	Previous Knowledge	5.87	3	11.07	Significance

SUMMARY

The statement of the problem undertaken was, **"**A study to assess the effectiveness of self instructional module on knowledge regarding prevention of pueperal breast complications among antenatal mothers in selected hospitals, jaipur."

The study conducted was based on the following objectives

- To assess the prior knowledge of antenatal mothers regarding prevention of puerperal breast complications.
- To assess the post test knowledge of antenatal mothers regarding prevention of puerperal breast complications.
- To find out the effectiveness of self instructional module on knowledge regarding prevention of puerperal breast complications.
- To find out the association between the pretest knowledge score of antenatal mothers regarding prevention of puerperal breast complications with their selected demographic variable.

The study attempted to test the following research hypothesis at the level of P < 0.05.

The hypotheses will be tested at the 0.05 level of significance.

H1: There will be a significant difference between pre-test and post-test knowledge scores regarding the prevention of puerperal breast complications among antenatal mothers.

H2: There will be a significant association between the pre-test knowledge scores of antenatal mothers regarding the prevention of puerperal breast complications and their selected demographic variables.

- The conceptual framework of the present study was based on the **J.W.KENNY'S OPEN SYSTEM** model.
- This study adopted pre experimental one group pre-test post-test research design. In the present study, a total of 60 antenatal mothers were selected from manipal Hospital, jaipur. Samples were selected by using non probability convenience sampling technique.
- The tool used for data collection consisted of Performa for socio- demographic data and self instructional module.
- Three types of variables were identified in the present study. Independent variable refers to the self instructional module regarding prevention of puerperal breast complications and dependent variables refers to the knowledge of antenatal mothers regarding prevention of puerperal breast complications. Demographic variables selected for this study were age (yrs), educational status, economic status, marital status and occupational status.
- The instrument used for data collection was structured knowledge questionnaire on prevention of puerperal breast complications. Data collection tool contain items on the following aspects;
- **Part I:** It includes items of demographic variables – age (yrs), educational status, economic status, marital status & occupational status.
- **Part II:** Includes 30 structured knowledge questions regarding puerperal breast complications. A SIM was developed on puerperal breast complications.
- The pilot study was conducted in S. S. Mahila hospital, jaipur to find the feasibility of the study. Six antenatal mothers in maternity ward and OPD were selected using convenience sampling technique.
- The main study was conducted from CHC, bagru, Hospital, jaipur. Samples were selected by non probability convenience sampling technique. Pre-test was administered before SIM and post-test was administered after seven days.
- Data gathered were analyzed using descriptive and inferential statistics and was presented in tables and graphs. The significance of the self instructional module was proved in post test score with a mean of 26.72 in comparision to mean pre test score 9.53.it was also evident from the paired

't'test (3.48;P<0.05).this suggested that the self instructional module was highly effective in improving the knowledge level of antenatal mothers regarding puerperal breast complications. No significant association was found between pretest knowledge of antenatal mothers with their demographic variables.

CONCLUSION

The overall experience of conducting the study was satisfying. The constant encouragement and guidance of the guide, cooperation and interest of the authorities and respondents to participate in the study contributed to the successful completion of the study. The respondents were satisfied and happy with the information they received. The study was a new experience for the researcher. The present study identified a great need for the antenatal mothers to update their knowledge regarding prevention of puerperal breast complications. The study revealed that self instructional module can be used as an effective teaching strategy.

NURSING IMPLICATIONS OFTHE STUDY

The findings of the study have implications on the field of nursing education, nursing practice, nursing administration and nursing research.

NURSING EDUCATION:

The findings of the study have lasting implications on nursing education. Education is the key component to update and improve the knowledge of an individual. It is the duty of maternity nurses to educate their antenatal mother. Hence, nurses to excel in this strategy needs to be well equipped with enormous amount of knowledge that will convince clients approaching them. In-service education regarding this topic should beconducted to improve the knowledge of the antennal mother at selected hospital jaipur.

NURSING ADMINISTRATION

Nurse administrators are the key persons to plan, organize and conduct in-service education programmes. Nurse administrator's support should be necessary to conduct and evaluate health education programmes. They can help to improve the knowledge of the antenatal mothers as well as the co-workers by educating each other working among them by providing various AV aids. They are in key position to organize, implement and evaluate educative programmes which will in turn helps to improve the knowledge as well as to meet the future needs and welfare of the family.

NURSING PRACTICE

Nursing is an art and a science. As a science, nursing is based upon a body of knowledge that is always changing with new discoveries and innovations. When nurses integrate the science and art of nursing into their practice, the quality of care provided to clients is at level of excellence that benefits clients in numerous ways. They are the key persons of the health team, who plays a vital role in the promotion and maintenance of health.

They can provide adequate teaching to antenatal mothers so that they can overcome the puerperal breast complications.

The major role and responsibilities can be summarized as;

1. Identifying the problems of the anticipated antenatal mothers.
2. Providing appropriate information regarding the topic puerperal breast complications.
3. Helps the antenatal mothers to ventilate all their doubts by interpersonal interactions.

NURSING RESEARCH

- The main goal of the nursing research is to improve the knowledge of antenatal mothers through the implementation of evidence based practice.
- The study provides a baseline data for conducting other research studies.
- The study will be a motivation for the budding researcher's to conduct similar studies in larger scale.
- The study will be a reference for the research scholars.
- Further research works can be conducted with every medical condition to identify most effective knowledge imparting strategies.

RECOMMENDATIONS:

On the basis of the findings of the study, the following recommendations have been made;

A. A similar study can be replicated on a large scale to generalize the findings.

B. A similar study can be conducted to find the differences in the knowledge level of antenatal mothers on the basis of various institutional settings such as government and private institutions.

C. A similar study can be conducted to find differences the knowledge level of the nursing students as well as the nursing staffs.

D. An experimental study can be under taken with a control group.

LIMITATIONS:

The following points were beyond the control of the investigator.

- Study is limited only those who are willing to participate in the study.
- Study samples were small.
- There were limitations to complete the study.
- The study limited to the experience of theresearcher.
- The study was confirmed to only on selected hospital, which obviously imposed limits to larger generalizations.

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