To Assess the Effectiveness of Self Instructional Module on Knowledge Regarding Selected Obstetric Danger Sign in Pregnancy Among Primi-Gravida Women

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ABSTRACT

Background Motherhood is the greatest blessing for all women. Motherhood is the symbol of love, kindness and forgiveness. Mother's touch is the first human touch for a child. Mother showers love and affection on her children eternally throughout her life. She devotes her life only for the welfare of her children. Objectives of study: 1. To Assess the existing knowledge on selected Obstetric Danger sign in pregnancy among primigravida women. 2. To Assess the Effectiveness of Self Instructional module on knowledge regarding selected Obstetric danger sign in pregnancy among primigravida women. 3. To find the association between selected demographic variables among primigravida women. Method- Present study is descriptive study conducted among 100 Primigravida women in selected hospitals by Non probability convenient sampling. Research design one group pre and post test without control group design was used. Result: findings shows that in pre test majority of antenatal mothers 23(23%) had good knowledge and mean knowledge score was 10.17 ± 3.18 and in post test majority of antenatal mothers 74(74%) had very good knowledge. mean knowledge score was 22.71 ± 2.51 . Education found to be associated with knowledge of antenatal mothers and none of the other variable were found significantly related with the knowledge of mothers. Conclusion: The pre test findings showed that knowledge of primigravida women regarding danger sign was inadequate. The administration of self instructional module helped the primigravida women to understand more about obstetric danger sign's in pregnancy.

KEY WORDS: EFFECTIVENESS, SELF-INSTRUCTIONAL MODULE, PREGNANCY, PRIMIGRAVIDA, OBSTETRIC DANGER SIGN.

INTRODUCTION

According to World Health Organization stated that the gestation and childbearing are the important events in the mother life. There is a risk in each different areas in developing countries. These risks are present in each areas of living and in every location. In developing countries they have been mostly overcome because all charged female has to take particular care during pregnancy and childbirth. In budding countries where

each pregnancy represents a crossing into the strange from which all too many female never return, due to lack of care provision.

Objectives Of Study:

1. To Assess the existing knowledge on selected Obstetric Danger sign in pregnancy among primigravida women
2. To Assess the Effectiveness of Self Instructional module on knowledge regarding selected Obstetric danger sign in pregnancy among primigravida women
3. To find the association between selected demographic variables among primigravida women.

RESEARCH METHODOLOGY

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Article Information

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Research design: Pre-experimental one group pretest posttest design.

Research Approach: Evaluative approach

Setting of the study: Selected hospital of Wardha

Sampling technique: Non probability convenient sampling

Sample: Primigravida women

Sample size: 100

Independent variable: Self instructional module on knowledge regarding selected obstetric danger signs in pregnancy.

Dependent variable: Primigravida women

Sampling Criteria:-

Inclusion criteria:

1. Who are attending antenatal O.P.D in selected hospital, Wardha.
2. Those who are ready to participate in the study.
3. Those who can understand Marathi Hindi,English.

Exclusion Criteria:

1. Those who are not willing to participate.

RESULTS

SECTION A- Distribution of primi-gravida women with regards to demographic variables.

SECTION B: Assessment of level of knowledge regarding selected obstetric danger sign in pregnancy among primigravida women

SECTION C- Evaluation of effectiveness of self instructional module on knowledge regarding selected obstetric danger signs in pregnancy among primigravida women.

SECTION D- Association of level of post test knowledge score regarding selected obstetric danger signs in pregnancy in relation to demographic variables

This above table shows the association of knowledge score with age in years of primigravida women regarding selected obstetric danger signs in pregnancy. The tabulated 'F' value was 2.68(df=3.96) which is much higher than the calculated 'F' i.e 1.33 at 5% level of significance. Also the calculated $p=0.26$ which was much higher than the acceptable level of significance i.e. $p=0.05$. Hence it is interpreted that age in year of primigravida women is statistically not associated with their post test knowledge score. This above table shows the association of knowledge score with religion primigravida women regarding selected obstetric danger signs in pregnancy.

Table 1. Assessment with demographic variables n=100

Demographic Variables	no. of primigravida women	Percentage (%)
Age(yrs)		
20-25 yrs	74	74
26-30 yrs	22	22
31-35 yrs	3	3
≥36 yrs	1	1
Religion		
Hindu	93	93
Muslim	1	1
Christian	0	0
Others	6	6
Educational Level		
Primary	36	36
Higher Secondary	40	40
Graduate	23	23
Post Graduation	1	1
Occupation		
Private Sector	16	16
Govt. Sector	7	7
Labourer	17	17
Housewife	60	60
Business	0	0
Marital Status		
Married	99	99
Unmarried	1	1
Widowed	0	0
Divorced	0	0
Duration of marriage (yrs)		
1-5 yrs	88	88
6-10 yrs	12	12
11-15 yrs	0	0
≥16 yrs	0	0
Area of residence		
Rural	70	70
Urban	30	30
Habits		
Smoking	0	0
Tobacco Chewing	0	0
Alcohol Consumption	0	0
Others	100	100
ANC visits attended		
One	12	12
Two	31	31
Three	30	30
Four	16	16
Five and above	11	11

The tabulated 'F' value was 3.07 (df=2.97) which is much higher than the calculated 'F' i.e 1.21 at 5% level of significance. Also the calculated $p=0.30$ which was

much higher than the acceptable level of significance i.e. $p=0.05$. Hence it is interpreted that religion of

primigravida women is statistically not associated with their post test knowledge score.

Table 2. Assessment with level of knowledge n=100

Level of knowledge	Score Range	Level of knowledge score	
		Pre Test	Post Test
Poor	0-20%	10(10%)	0(0%)
Average	21-40%	67(67%)	1(1%)
Good	41-60%	23(23%)	2(2%)
Very Good	61-80%	0(0%)	74(74%)
Excellent	81-100%	0(0%)	23(23%)
Minimum score		5	8
Maximum score		18	27
Mean knowledge score		10.17±3.18	22.71±2.51
Mean % Knowledge Score		33.90±10.62	75.70±8.39

Table 3. Significance of difference between knowledge score in pre test and post test of Primigravida Women n=100

Overall	Mean	SD	Mean Difference	t-value	p-value
Pre Test	10.17	3.18	12.72±3.31	38.39	0.0001
Post Test	22.89	2.07			S.p<0.05

Table 4. Association of post test knowledge score regarding selected obstetric danger signs in pregnancy in relation to age n=100

Age (year)	No.of primigravida women	Mean posttest knowledge score	F-value	p-value
20-25 yrs	74	22.83±2.13	1.33	0.26 NS,p>0.05
26-30 yrs	22	23.40±1.84		
31-35 yrs	3	21.33±1.52		
≥36 yrs	1	21±0		

Table 5. Association of post test knowledge score regarding selected obstetric danger signs in pregnancy in relation to religion n=100

Religion	No.of primigravida women	Mean posttest knowledge score	F-value	p-value
Hindu	93	22.81±2.09	1.21	0.30 NS,p>0.05
Muslim	1	25±0		
Christian	0	0±0		
Others	6	23.83±1.32		

This table shows the association of knowledge score with educational level of primigravida women regarding selected obstetric danger signs in pregnancy. The

tabulated 'F' values was 2.68 (df=3.96) which is much higher than the calculated 'F' i.e. 1.87 at 5% level of significance. Also the calculated $p=0.13$ which was

much higher than the acceptable level of significance i.e. p associated with their post test knowledge score. $=0.05$. Hence it is interpreted that educational level of primigravida women is statistically not This table shows

the association of knowledge score with occupation of primigravida women regarding selected obstetric danger signs in pregnancy. The tabulated 'F' value was 2.68(df=3.96) which is much higher than the calculated 'F' i.e. 0.93 at 5% level of significance.

Table 6. Association of post test knowledge score regarding selected obstetric danger signs in pregnancy in relation to education n=100

Education	No.of primigravida women	Mean posttest knowledge score	F-value	p-value
Primary	36	22.77 $\pm$ 2.08	1.87	0.13 NS, $p>0.05$
Higher Secondary	40	23.35 $\pm$ 2.01		
Graduate	23	22.21 $\pm$ 1.90		
Post Graduation	1	21 $\pm$ 0		

Table 7. Association of post test knowledge score regarding selected obstetric danger signs in pregnancy in relation to occupation n=100

Age (year)	No.of primigravida women	Mean posttest knowledge score	F-value	p-value
Private Sector	16	23.12 $\pm$ 1.54	0.93	0.42 NS, $p>0.05$
Govt. Sector	7	23.14 $\pm$ 1.95		
Labourer	17	22.11 $\pm$ 2.20		
Housewife	60	22.96 $\pm$ 2.12		
Business	0	0 $\pm$ 0		

Table 8. Association of post test knowledge score regarding selected obstetric danger signs in pregnancy in relation to marital status n=100

Education	No.of primigravida women	Mean posttest knowledge score	t-value	p-value
Married	99	22.88 $\pm$ 2.03	1.41	0.16 NS, $p>0.05$
Unmarried	1	20 $\pm$ 0		
Widowed	0	0 $\pm$ 0		
Divorced	0	0 $\pm$ 0		

Table 9. Association of post test knowledge score regarding selected obstetric danger signs in pregnancy in relation to duration of marriage n=100

Duration of marriage(years)	No.of primigravida women	Mean posttest knowledge score	t-value	p-value
1-5 yrs	88	22.85 $\pm$ 2.05	0.10	0.91 NS, $p>0.05$
6-10 yrs	12	22.91 $\pm$ 2.06		
11-15 yrs	0	0 $\pm$ 0		
≥ 16 yrs	0	0 $\pm$ 0		

Table 10: Association of post test knowledge score regarding selected obstetric danger signs in pregnancy in relation to resident n=100

Residence	No.of primigravida women	Mean posttest knowledge score	t-value	p-value
Rural	70	22.98±2.19	0.93	0.35 NS,p>0.05
Urban	30	22.56±1.63		

Table 11. Association of post test knowledge score regarding selected obstetric danger signs in pregnancy in relation to ANC visits n=100

No of ANC visits	No.of primigravida women	Mean posttest knowledge score	F-value	p-value
One	12	22.08±2.31	1.73	0.15 NS,p>0.05
Two	31	22.32±2.00		
Three	30	23.31±1.81		
Four	16	23.31±1.66		
Five and above	11	23.36±2.61		

Also the calculated $p=0.42$ which was much higher than the acceptable level of significance i.e. $p=0.05$. Hence it is interpreted that occupation of primigravida women is statistically not associated with their post test knowledge score.

This table shows the association of knowledge score with marital status of primigravida women regarding selected obstetric danger signs in pregnancy. The tabulated 't' value was 2.00(df=98) which is much higher than the calculated 't' i.e. 1.41 at 5% level of significance. Also the calculated $p=0.16$ which was much higher than the acceptable level of significance i.e. $p=0.05$. Hence it is interpreted that marital status of primigravida women is statistically not associated with their post test knowledge score. This table shows the association of knowledge score with duration of marriage (years) of primigravida women regarding selected obstetric danger signs in pregnancy. The tabulated 't' value was 2.00(df=98) which is much higher than the calculated 't' i.e. 0.10 at 5% level of significance. Also calculated $p=0.91$ which higher than the acceptable level of significance i.e. $p=0.05$. Hence it is interpreted that duration of marriage (years) of primigravida women is statistically not associated with their post test knowledge score.

This table shows the association of knowledge score with area of residence of primigravida women regarding selected obstetric danger signs in pregnancy. The tabulated 't' value was 2.00 (df=98) which is much higher than the calculated 't' i.e. 0.93 at 5% level of significance. Also the calculated 'p'=0.35 which was much higher than the acceptable level of significance i.e. 'p'=0.05. Hence it is interpreted that area of resident of

primigravida women is statistically not associated with their post test knowledge score.

DISCUSSION

A study was conducted to explore primigravida knowledge of obstetric difficulties among 33 primigravida in rural healthcare center in the Blantyre district, Malwai city in 2002. Findings showed that members had inadequate knowledge of complication that may need instant management, 82% of primigravida had particular knowledge and could make an up-to-date decision to go to a health care facilities with pregnancy complications. And in that 61% of primigravida had knowledge and could make an up to date decision to go to a health care facilities with complication after delivery. And this studies results have critical inferences for the providing of information on obstetric complications.

The study was on institutional based cross sectional study and it is conducted in 2014, on "Knowledge About Danger Signs of Pregnancy and Related Factors Among Pregnant Women in Debra Birhan Town, Central Ethiopia." On the 355 pregnant women. The data was used to collect by pre-tested and structured questionnaires. The result revealed that 355 pregnant ladies participated in the study by making a response rate of 100%. In this study, 137(38.6%) of the respondents were knowledgeable about danger signs during pregnancy. Being urban resident, educational level of grade 9-10, having attended diploma and above and having previous antenatal care follow up were meaningfully associated with knowledge about danger signs during pregnancy. Ministry of health should be strengthening reproductive health services in

rural areas to get quality antenatal care follow up by manipulating an proper approaches including providing of targeted material, learning and statement. The above studies supported to the present study.

Implication: The conclusions of the education have inferences on the ground of nursing training, nursing teaching, nursing administration and nursing research.

Nursing practice: The staff and student nurses can use the self instructional module for imparting the knowledge of selected obstetrical danger sign in primigravida women in the hospital and community. The tool prepared for this study can be used to assess the knowledge of primigravida women regarding selected obstetrical danger signs in pregnancy. The staff nurses in obstetrics and gynecology wards can use this tool for the same.

The major role and responsibilities can be summarized as:

- Identify the problem of the primigravida women.
- Providing appropriate information regarding selected obstetrical danger sign in pregnancy.
- Help the primigravda women to ventilate all their doubts by interpersonal interactions.
- Help the mother in their problemss regarding danger signand support them.

Nursing education: The lesson on obstetrical danger sign in pregnancy can be used for teaching the student nurses and the questionnaire prepared for this study can be used for testing its effectiveness among student nurses and patients. The tool for data collections prepared for this study can be used on a routine to test the knowledge of mother regarding selected obstetrical danger sign in pregnancy in general. In-service education regarding this topic should be conducted to improve the knowledge of staff nurses who are employed in obstetrics & gynecology department.

Nursing administration: The administrators of the hospital, primary health centers and sub centers can formulate the policy of educating community member regarding selected obstetrical danger sign to advance the well-being of the mother and prevent complication of danger sign's in pregnancy. Nurse administrators are the key persons to plan, organize and conduct in-service education programme. Nurse administrator support should be necessary to conduct and evaluate health education programme. They can help to improve the knowledge of the staff nurses working in obstetrics and gynecology department by providing various teaching programmes with the help of various AV aids. They are in a key position to organize, implement and evaluate educative programmes which will in turn help to improve the knowledge as well as to meet the future needs and accelerate the standards of health services.

Nursing research: The main goal of the nursing research is to improve the knowledge of staff nurses 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 researchers to conduct similar studies in large scale. The study will be a reference for the research scholars. Further research work can be conducted with every medical condition to identify most effective knowledge imparting strategies.

Recommendations:

1. A similar study can be directed by using video assisted teaching
2. A related study can be directed to find out the difference in the knowledge level of the staff nurses on the basis of various institutional setting such as government and private setting.
3. A same study can be focused to discovery the knowledge level of the treatment work.
4. A similar study can be directed to assess the effectiveness of planned teaching regarding selected obstetrical danger signs in pregnancy among primigravida women.
5. A similar study can be conducted in community area

REFERENCES

- Anandalakshmy, P.N. and Buckshee, K., 1997. Maternal mortality in a referral hospital of northern India-A sixteen-year review. *Journal of Family Welfare*, 43, pp.1-4.
- Bennett, V.R. and Brown, L.K. eds., 1999. *Myles textbook for midwives*. Churchill Livingstone
- Department of Family Welfare, Ministry of Health and Family Welfare, Government of India, New Delhi, 2000. *National Population Policy*.
- Gupta, N., 2004. Maternal mortality: magnitude, causes and concerns. *J Obstet Gynecol Today*, 9, pp.555-558.
- Islam, M.M., Islam, Mazharul M; Yadava, RC: Estimation of Fecundability: Levels and Trends in Bangladesh. *The Journal of family Welfare*. sept 1997. 43 (3). p. 13-20.
- Kumari, J.S., Revathi, V. and Reddy, K.S., 2018. A study of maternal mortality in Government Maternity Hospital, Sri Venkateswara Medical College, Tirupati. *age*, 20(5), pp.23-8.
- Noronha, J.A., 1998. Teaching primigravid women about warning signs in pregnancy using a specially designed information booklet. *The Indian Journal of Nursing & Midwifery*, 1(3), pp.27-34.
- Wagh, L., Gaikwad, K., Gardade, P. and Ghare, P., 2018. A descriptive study to assess the knowledge regarding warning signs during pregnancy among the antenatal mothers in selected hospitals of Pune city. *IJAR*, 4(7), pp.77-79.