



PRACTICE TOWARDS IDENTIFICATION OF ALARMING SIGNS LEADING TO OBSTETRICAL EMERGENCIES AMONG ANTENATAL WOMEN AT SELECTED HEALTH SET UP OF KASHMIR

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Abstract: The present study aimed to assess the practice of antenatal women towards identification of alarming signs leading to obstetrical emergencies during pregnancy, labour and puerperium. A quasi experimental research design was utilized at Khanam's Hospital and Nursing Home, Hazuri Bagh, Srinagar. The most commonly reported risk factor related to alarming sign was present history of obstetric complications, present medical condition, family history of medical condition. Least found risk factor was nutritional deficiency. The mean post test practice score of Experimental group was 82.22% which was much higher than the mean post test practice score of Control group that was only 48.15%. The Chi-square value showed that in Experimental group, there was no significant association between the pre-test practice score and demographic variables. However, there was significant association between the pre-test practice score with the Obstetric variable (Gestational age). In the Control group, it was found that there was significant association between the pre-test practice score and demographic variable i.e., Age. Also there was no significant association between the pre-test practice score of Control group with the Obstetric variable.

Index Terms- Alarming signs, Obstetrical emergencies, Complications, Puerperium

1. INTRODUCTION Pregnancy danger signs are the major health problems and cause of mortality among women in developing countries. Majority of maternal death occur in developing countries. Knowledge and practice towards identification of alarming signs of obstetric complications is first step in the appropriate and timely referral to essential obstetric care. Although women's knowledge about the obstetric danger signs is important for improving maternal and child health, little is known about the current knowledge and influencing factors in the Kashmir Valley. Due to lack of awareness about the

danger signs of pregnancy, women fail to seek care in the right time for life-threatening complications of pregnancy and child birth.

High levels of perinatal (49 per 1000 births), neonatal (39 per 1000 births) and maternal mortality (301 per 100,000 live births) remain major public health challenges in India.^{1,2} About one-third of neonatal deaths occur on first day of life, and majority of maternal death occur during labor, delivery, and within 24 hours postpartum.³ The common causes of maternal deaths are hemorrhage, postpartum infection, hypertensive disorders, obstructed labor and abortion complications.⁴ With assumption that 'Every pregnancy faces risk'.^{5,6} women should be made aware of danger signs of obstetric complications during pregnancy, delivery and postpartum.^{7,8} The danger signs are not actual obstetric complications but symptoms that are easily identified by nonclinical personnel. Knowledge of danger signs of obstetric complications is an essential first step in the appropriate and timely referral to essential obstetric care.⁹ Knowledge of obstetric sign is the strategy aimed at enhancing utilization of skilled care during low-birth risks and emergency obstetric care in complicated cases.¹⁰

NEED OF THE STUDY Maternal mortality is a grave injury to a family, community, and the entire nation. The obstetric emergency has a profound effect on the mother and fetus resulting in high maternal and perinatal morbidity and mortality. Majority (99%) of all maternal deaths occur in developing countries. Between 1990 and 2015, maternal mortality worldwide dropped by about 44% from 385 to 216 maternal deaths per 100,000 live births. Despite this progress, the world still fell far short of the Millennium Development Goals target of a 75% reduction in the global maternal mortality rate (MMR) by 2015. Between 2016 and 2030, as part of the sustainable development goals, the target is to reduce the global maternal mortality ratio to less than 70 per 100,000 live births.¹¹

It is of utmost importance that women at risk must be identified and managed appropriately. Timely intervention by a dedicated multi-disciplinary team will help to prevent maternal mortality. This experimental study will be conducted in this regard to make the pregnant women understand the alarming signs during pregnancy, labour and postpartum period that may lead to obstetrical emergencies. Knowledge of danger signs of obstetric complications is first step in the appropriate and timely referral to essential obstetric care so that women might succeed to seek care in the right time for life-threatening complications of pregnancy and child birth. The results of the study could help to formulate a policy to improve the maternal and perinatal outcome in the valley.

STATEMENT OF PROBLEM

An experimental study to determine the effectiveness of VATM (Video Assisted Teaching Method) on Practice towards identification of alarming signs leading to obstetrical emergencies among antenatal women at selected health set up of Kashmir.

RESEARCH OBJECTIVES

1. To assess the pre-test practice towards identification of alarming signs leading to obstetrical emergencies among antenatal women in Experimental group and Control group.
2. To assess the post- test practice towards identification of alarming signs leading to obstetrical emergencies among antenatal women in Experimental group and Control group.
3. To determine the effectiveness of VATM on practice towards identification of alarming signs leading to obstetrical emergencies among antenatal women in Experimental group and Control group.
4. To find out the association of pre-test practice score of antenatal women with their demographic variables in Experimental group and Control group.
5. To find out the association of pre-test practice score of antenatal women with their obstetric characteristics in Experimental group and Control group.

HYPOTHESES

H₁ : There will be significant difference in mean pre-test and post-test practice score regarding identification of alarming signs leading to obstetric emergencies among antenatal women in experimental and Control group.

H₂: There will be significant association of pre-test practice of antenatal women regarding identification of alarming signs leading to obstetrical emergencies with their demographic variables in Experimental group.

H₃: There will be significant association of pre-test practice of antenatal women regarding identification of alarming signs leading to obstetrical emergencies with their demographic variables in Control group.

H₄: There will be significant association of pre-test practice regarding identification of alarming signs leading to obstetrical emergencies among antenatal women with their obstetric characteristics in Experimental group.

H₅: There will be significant association of pre-test practice regarding identification of alarming signs leading to obstetrical emergencies among antenatal women with their obstetric characteristics in Control group.

2. LITERATURE REVIEW

Vijay NR, Kumare B, Yerlekar DS (2015)¹² undertook a cross-sectional study to assess the knowledge regarding danger signs among 100 pregnant women attending antenatal outpatient department (OPD). About 6.38% of subjects having good awareness about danger signs were from age group 20 to 25 years and 10.25% of subjects with good awareness were from 25 to 30 years. 20% of subjects had fair knowledge while 73% of subjects had poor knowledge about danger signs. Among which majority, i.e. 46.48% of subjects were from age 20 to 25 years and 93.33% from large family size had poor awareness about danger signs. Majority of subjects having good knowledge about obstetric danger signs had completed their secondary (7.69%) and university (9.52%) education. About 61% of the subjects knew about danger signs of pregnancy. Among which major source of knowledge was health personnel (57.37%) and other source of knowledge was mass media (42.63%). 50% of subjects knew about bleeding. Thus, it was the most common obstetrical danger sign that was known by subject population.

Anaam Ebrahim El-Nagar, Manal Hassan Ahmed, Ghada Abd El-Salam Belal (2017)¹³ conducted an exploratory descriptive study at 4 antenatal clinics (M.C.H centers) on 200 pregnant women to assess the knowledge and practices of pregnant women regarding danger signs of obstetric complications in Tanta City. The results of this study revealed that the most frequently recognized danger signs that may occur during pregnancy were vaginal bleeding, followed by severe abdominal pain and gush of water from the vagina that were mentioned by more than two third, more than half and nearly half of the women, respectively. While, vaginal bleeding was the most commonly known danger sign mentioned by nearly one third and slightly more than one third of the women during labor and puerperium, respectively. Also, the vast majority of the women consulted a doctor when these danger signs appeared.

Gobran, M. , Fatah, M. , Ramadan, M. , Amer, G. , RabeH, M. , Elshafei, R. , Bosilah, A. , Khalil, H. , Hassanine, S. , Mostafa, M. , Bakry, M. , Ibrahim, S. , Fattah, E. and Abdelbary (2021)¹⁴ conducted a study to evaluate the effectiveness of the education program on pregnant women practices and knowledge on obstetric danger signs. A quasi-experimental design was used on 70 women from a population of 372 women in six-month in antenatal clinics (M.C.H centers) affiliated to the available geographical health zones in EL-fayoum rural area. The results revealed that there is an improvement in 63% of pregnant women knowledge and practices after educational program in all aspects. The study concluded that educational program had been effective in improving women knowledge and practice regarding danger

signs for pregnant women in rural areas, with highly statistically significant differences in all the tested items between pre/post program implementation ($P < 0.001$).

Amoura Saad Eldeen Zaki, Shaimaa Fouad, Nahed Fikry Hassan khedr (2021)¹⁵ conducted a descriptive study to assess knowledge and practices of 242 pregnant women toward danger signs of pregnancy at Obstetrics and Gynecology Department and Clinics at Mansoura General Hospital. The findings revealed that knowledge score of danger signs was poor in 57.9% of subjects while fair in 29.3% and good in less than 12.8% of them. During pregnancy the most commonly identified danger signs were vaginal bleeding (69.8%) followed by severe abdominal pain (56.20%) and sever vomiting (55.4%). A significant association was found between women's general characteristics and their knowledge about pregnancy danger signs ($p < 0.001$). More than two thirds (65.3%) of pregnant women had inadequate practices regarding danger signs of pregnancy. The study recommended developing antenatal classes programs for all pregnant women about pregnancy danger signs and about the actual time to seek emergency medical care. In addition, increase the mass media to disseminate correct and relevant information about danger signs of pregnancy to pregnant women, families and communities.

3. RESEARCH METHODOLOGY

3.1 Population and sample: The population included all the antenatal women attending the clinic.

Convenient sampling technique was used to select the required sample which included antenatal women willing to participate and were present at the time of data collection. Sample size was 30 (15 in experimental group and 15 in control group).

Table 1: Schematic representation of research design

| GROUP | Pre-test | Intervention | Post-test |
|---|--|--|---|
| | Day 1 | Day 1 | Day 15 |
| Antenatal women(Experimental Group) N=15 | O ₁ | X | O ₂ |
| Antenatal women(Control Group) N=15 | O ₃ | X | O ₄ |
| | Assessment of practice through Interview Schedule (Pre test) | Intervention by implementation of VATM (Video Assisted Teaching Method) | Assessment of practice through same interview schedule(post test) |

3.2 Data and Sources of data: Structured Interview Schedule was used to evaluate the effectiveness of VATM on practice of antenatal women towards identification of Alarming signs leading to obstetrical emergencies. The tool consisted of following parts: **Part 1:** Socio-Demographic Characteristics of Antenatal Women (7 Items). **Part 2:** Obstetrical Characteristics of Antenatal Women (5 Items). **Part 3:** Assessment of risk factors related to Alarming Signs leading to Obstetrical Emergencies (Interview Schedule and Record

Analysis) (6 Sections consisting of 20 items) **Part 4:** Practice Assessment among antenatal women regarding identification of Alarming Signs leading to Obstetrical Emergencies (9 Items)

Description of VATM: the VATM was entitled as Video Assisted Teaching Method on practice of antenatal women towards identification of Alarming signs leading to obstetrical emergencies. It included Alarming signs during pregnancy (vaginal bleeding swelling of face, hands, feet and legs, continuous severe headache, blurred vision, breathlessness, decreased urine output and high BP, Convulsions, severe backache, high fever, excessive vomiting, premature rupture of membranes, reduced or no fetal movements, epigastric pain), Alarming signs during labour leading to obstetrical emergencies (prolonged labour), retained placenta, continuous severe headache, high fever, cord prolapse) and Alarming signs during puerperium which may lead to obstetrical emergencies (excessive vaginal bleeding, increased heart rate/palpitation, high fever, offensive or foul smelling vaginal discharge/lochia, continuous severe headache, high BP, Convulsions, loss of consciousness, calf pain).

Table 2 : Data Collection Schedule:

| Date | Day | Group | No. of subjects | Action taken per day | Time |
|-------------------------------------|----------------------------|--------------------|-----------------|---|----------------------------|
| 10-01-023 11-01-023 12-01-023 | Day 1 Day 2 Day 3 | Experimental group | 05 05 05 | *Pre test with structured Interview schedule *Implementation of VATM | *9-10 a.m *10-10:45 |
| 15-01-023 16-01-023 17-01-023 | Day 4 Day 5 Day 6 | Control Group | 05 05 05 | *Pre test with structured Interview schedule *Implementation of VATM | 9-10 a.m *10-10:45 |
| 27-01-023 28-01-023 29-01-023 | Day 7 Day 8 Day 9 | Experimental group | 05 05 05 | Post test conducted | 9-10 a.m |
| 01-02-023 02-02-023 03-02-023 | Day 10 Day 11 Day 12 | Control Group | 05 05 05 | Post test conducted | 9-10 .m |

3.3 Variables

Independent Variable: Video Assisted Teaching Method (VATM) on practice of antenatal women towards identification of Alarming signs leading to obstetrical emergencies.

Dependent variable: Practice of antenatal women towards identification of Alarming signs leading to obstetrical emergencies.

Demographic variables: Age (in years), weight, Occupation, Educational status, Place of Residence, Availing use of social media for maternity information, Type of family.

Obstetric variables: Gravida, Parity, Gestational age, Mode of last delivery, if multiparous, number of live children.

3.4 **Statistical tools:** Descriptive statistics has been used to find the maximum and minimum score, range, mean, mode, standard deviation and normal distribution of the data of all variables under the study. Paired and Unpaired t test has been used to find the effectiveness of VATM. Chi square test has been used to find the association between demographic variable and practice score

RESULTS AND DISCUSSION

SECTION I: Description of demographic profile

Table 3: Frequency Distribution Of Socio-Demographic Charactersitics

| S.NO | SOCIO DEMOGRAPHIC PROFORMA | Experimental group (N=15) | Control group (N=15) | Frequency %age (Exp group) | Frequency %age (Control group) | |
|------|---|---------------------------|----------------------|----------------------------|--------------------------------|--------|
| 1. | Age (in Years) | <20 | 1 | 1 | 6.7% | 0.0% |
| | | 20-29 | 9 | 10 | 60.0% | 66.7% |
| | | ≥ 30 | 5 | 5 | 33.3% | 33.3% |
| 2. | Weight (in Kg) | <60 | 4 | 0 | 26.7% | 0.0% |
| | | 60-70 | 6 | 8 | 40.0% | 53.3% |
| | | >70 | 5 | 7 | 33.3% | 46.7% |
| 3. | Occupation | Home maker | 12 | 15 | 80.0% | 100.0% |
| | | Employed | 1 | 0 | 6.7% | 0.0% |
| | | Health Professional | 1 | 0 | 6.7% | 0.0% |
| | | Non-health Professional | 1 | 0 | 6.7% | 0.0% |
| 4. | Educational status | No formal education | 1 | 2 | 6.7% | 13.3% |
| | | Primary | 2 | 4 | 13.3% | 26.7% |
| | | Sr. Secondary | 5 | 8 | 33.3% | 53.3% |
| | | Graduate and above | 7 | 1 | 46.7% | 6.7% |
| 5. | Place of residence | Rural | 8 | 9 | 53.3% | 60.0% |
| | | Urban | 7 | 6 | 46.7% | 40.0% |
| 6. | Availing use of social media for information about maternity care | Yes | 10 | 7 | 66.7% | 46.7% |
| | | No | 5 | 8 | 33.3% | 53.3% |
| 7. | Type of family | Nuclear | 5 | 2 | 33.3% | 13.3% |
| | | Joint | 10 | 13 | 66.7% | 86.7% |

Table 3 reveals that in Experimental group, majority(60%) of the subjects were in the age group of 20-29 yrs, majority (40%) had weight of 60-70kg , majority (80%) were home maker, majority (46.7%) were graduate and above, majority (53.3%) were from rural area, majority(66.7%) availed the use of social media for information about maternity care and majority (66.7%) lived in joint family while as in control group majority(66.7%) of the subjects were in the age group of 20-29 yrs, majority (53.3%) had weight of 60-70kg , 100% were home maker, majority (53.3%) had senior sec qualification,, majority (60%) were from rural area, majority(53.3%) availed the use of social media for information about maternity care and majority (86.7%) lived in joint family

SECTION II: Description of Obstetric characteristics

Table 4: Frequency Distribution Of Obstetric Charactersitics

| OBSTETRICAL CHARACTERISTICS OF ANTENATAL WOMEN | | Experimental (%) | Control (%) | Experimental (N=15) | Control (N=15) |
|--|------------------------------|------------------|-------------|---------------------|----------------|
| 1. Gravida | One | 66.7% | 26.7% | 10 | 4 |
| | ≥Two | 33.3% | 73.3% | 5 | 11 |
| 2. Parity | Zero | 66.7% | 40.0% | 10 | 6 |
| | One | 20.0% | 53.3% | 3 | 8 |
| | ≥Two | 13.3% | 6.7% | 2 | 1 |
| 3. Gestational Age | <12 weeks | 33.3% | 20.0% | 5 | 3 |
| | 12-28 weeks | 40.0% | 40.0% | 6 | 6 |
| | >28 weeks | 26.7% | 40.0% | 4 | 6 |
| 4. Mode of last delivery, if multiparous | Spontaneous vaginal delivery | 0.0% | 0.0% | 0 | 0 |
| | Assisted vaginal delivery | 0.0% | 0.0% | 0 | 0 |
| | Caesarean delivery | 33.3% | 60.0% | 5 | 9 |
| 5. Number of live children | One | 20.0% | 53.3% | 3 | 8 |
| | ≥Two | 13.3% | 6.7% | 2 | 1 |

Table 4 reveals that in Experimental group, majority(66.7%) of the subjects were primigravida, majority (66.7%) were nullipara, majority (40%) were in the gestational age of 12-28 weeks, 33.3 % had previous C-section and majority (20%) have only single live child while as in Control group, majority (73.3%) of the subjects are multigravida, majority (53.3%) are primipara, 40% were in the gestational age of 12-28 weeks and > 28 weeks each and majority (60%)% have previous C-section and majority (53.3%) have only single live child.

SECTION III: Risk Factors Related To Alarming Signs Leading To Obstetrical Emergencies Among Antenatal Women In Experimental Group And Control Group

Table 5: Assessment of risk factors related to alarming signs leading to obstetrical emergencies among antenatal women in experimental group and control group

| RISK FACTORS RELATED TO ALARMING SIGNS LEADING TO OBSTETRICAL EMERGENCIES | | Experimental group(%) | Control group(%) | Experimental group(N=15) | Control group(N=15) |
|---|-----|-----------------------|------------------|--------------------------|---------------------|
| 1. Previous history of Obstetric complications | No | 80.0% | 46.7% | 12 | 7 |
| | Yes | 20.0% | 53.3% | 3 | 8 |
| 2. Present history of Obstetric complications | No | 33.3% | 33.3% | 5 | 5 |
| | Yes | 66.7% | 66.7% | 10 | 10 |
| 3. Any present medical condition | No | 33.3% | 33.3% | 5 | 5 |
| | Yes | 66.7% | 66.7% | 10 | 10 |
| 4. Any family history of Medical condition | No | 33.3% | 40.0% | 5 | 6 |
| | Yes | 66.7% | 60.0% | 10 | 9 |
| 5. Gynaecological Disease | No | 73.3% | 86.7% | 11 | 13 |
| | Yes | 26.7% | 13.3% | 4 | 2 |
| 6. Nutritional Deficiency | No | 93.3% | 100.0% | 14 | 15 |
| | Yes | 6.7% | 0.0% | 1 | 0 |

Table 5 reveals that in Experimental group, 80% of the subjects have no previous history of obstetric complications, 66.7% have present history of obstetric complications, 66.7% have some medical condition presently, 66.7% have family history of medical condition and 73.3% have no gynecological disease while as in Control group majority 53.3% of the subjects have previous history of obstetric complications, 66.7% have present history of obstetric complications, 66.7% have some medical condition presently, 60% have family history of medical condition and 86.7% have no gynecological disease.

SECTION IV : Effectiveness Of VATM On Pre And Post Test Practice Scores

Table 6: Frequency & Percentage distribution of Pre-test Practice scores of Experimental and Control Group

| PRE-TEST PRACTICE SCORE | | |
|--------------------------|--------------------|---------------|
| PRACTICE SCORE | EXPERIMENTAL GROUP | CONTROL GROUP |
| ADEQUATE PRACTICE(5-9) | 6(40%) | 5(33.3%) |
| INADEQUATE PRACTICE(0-4) | 9(60%) | 10(66.7%) |

Maximum=9 Minimum =0

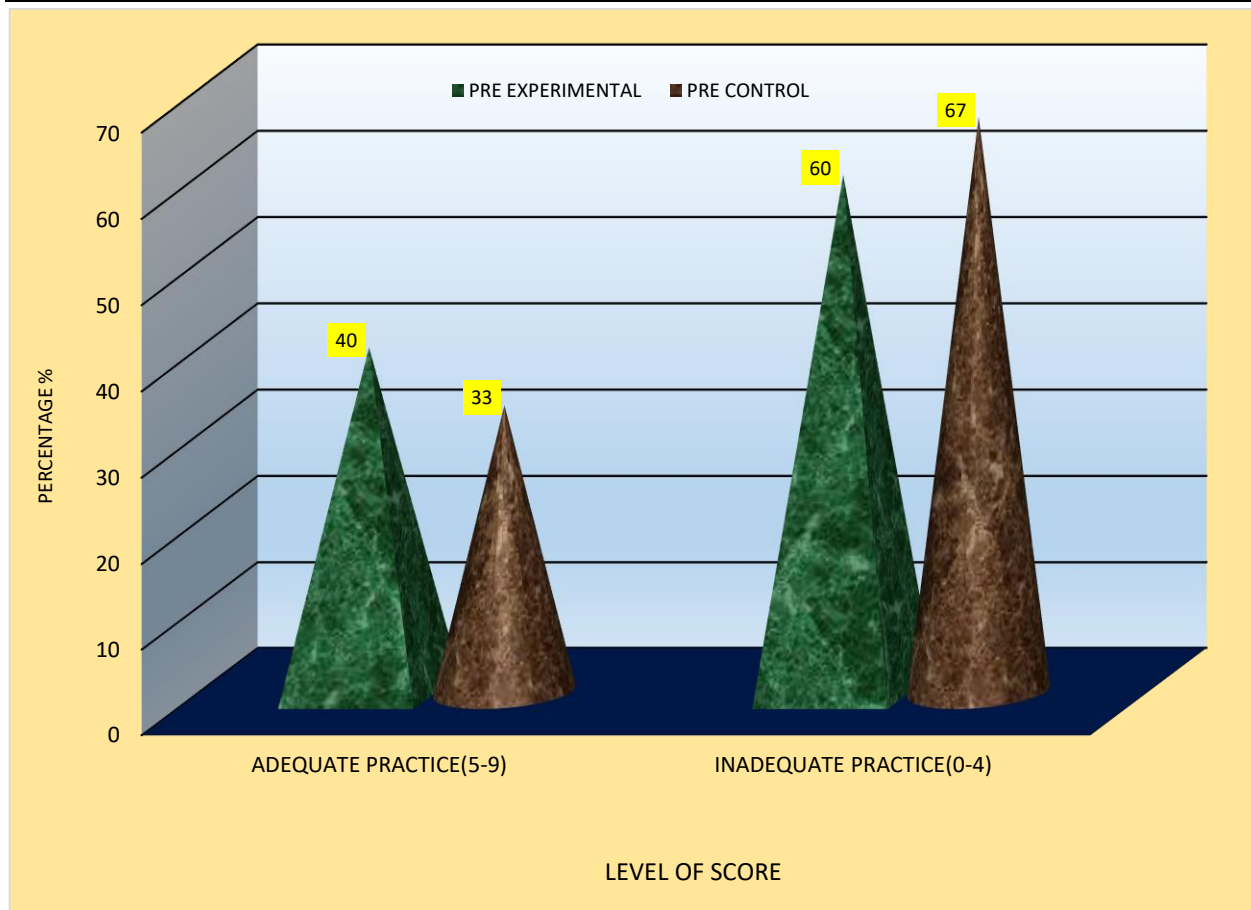


Figure No. 1: Pre-test Practice Scores of Experimental and Control group.

Figure 1 reveals that majority (60%) of the subjects in Experimental Group have inadequate practice and only 40% have adequate practice while as in Control Group also majority (66.7%) of the subjects have inadequate practice and only 33.3% have adequate practice towards identification of alarming signs leading to obstetrical emergencies.

Table 7: Frequency & Percentage distribution of Post-test practice scores of Experimental and Control Group

| POST-TEST PRACTICE SCORE | | |
|--------------------------|--------------------|---------------|
| LEVEL OF SCORE | EXPERIMENTAL GROUP | CONTROL GROUP |
| ADEQUATE PRACTICE(5-9) | 13(86.7%) | 6(40%) |
| INADEQUATE PRACTICE(0-4) | 2(13.3%) | 9(60%) |

Maximum=9 Minimum =0

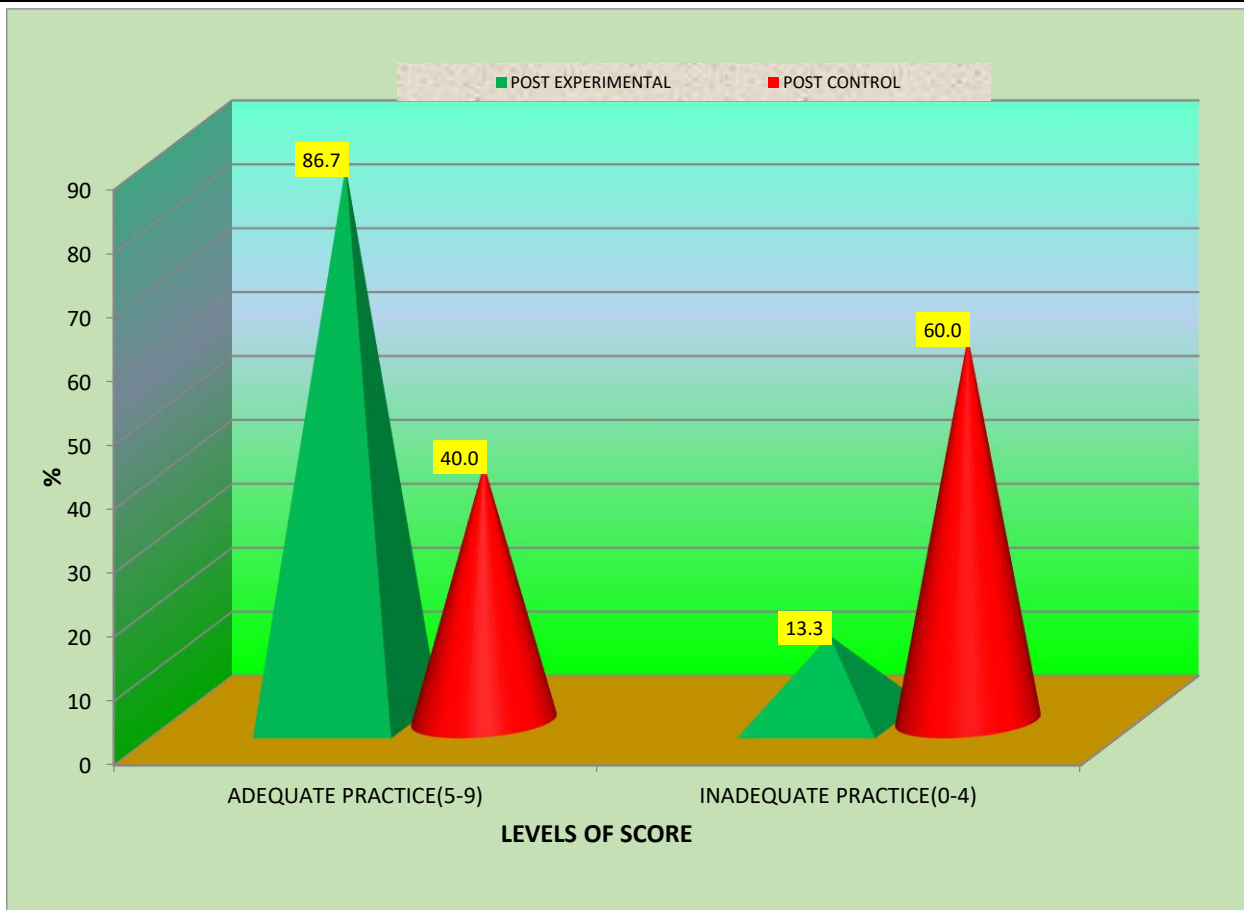


Figure No. 2: Post-test Practice Scores in Experimental and Control group.

Figure 2 reveals that majority (86.7%) of the subjects in Experimental Group have adequate practice and only 13.3% have inadequate practice while as in Control Group, majority (60%) of the subjects have inadequate practice and only 40% have adequate practice towards identification of alarming signs leading to obstetrical emergencies. Thus there is no improvement in the post test practice scores of Control group.

Table No 8: Comparison of descriptive statistics between Post-test practice scores of Experimental & Control Group

N=15+15

| | Descriptive Statistics | Mean Score | S.D. | Median Score | Maximum | Minimum | Range | Mean% |
|-----------|------------------------|------------|-------|--------------|---------|---------|-------|-------|
| Post-test | Experimental | 7.40 | 1.454 | 8 | 9 | 4 | 5 | 82.22 |
| | Control | 4.33 | 1.759 | 4 | 7 | 1 | 6 | 48.15 |

Maximum=9 Minimum=0

Table 8 reveals that the mean post test practice score of Experimental group is 82.22% which is much higher than the mean post test practice score of Control group that is only 48.15%.

Table No 9: Effectiveness of VATM on practice scores of Experimental Group and Control Group

| | | PRACTICE SCORE | | | | Paired T Test | | |
|--------------------|--------|----------------------------------|-------|----------|----------------------------------|---------------|-------|----------------------------------|
| | | Pretest | | Posttest | | | | |
| Group | N | Mean | SD | Mean | SD | df | T | Result |
| Experimental Group | 15 | 4.47 | 1.187 | 7.40 | 1.454 | 14 | 7.192 | P value= <0.001 Significant |
| Control Group | 15 | 3.733 | 1.387 | 4.33 | 1.759 | 14 | 1.500 | P value=0.156 Non Significant |
| Unpaired T Test | df | 28 | | df | 28 | | | |
| | T | 1.556 | | T | 5.204 | | | |
| | Result | P value=0.131 Non Significant | | Result | P value= <0.001 Significant | | | |

Maximum = 9 Minimum = 0

Table 9 reveals that using Paired T test, there is significant difference between post test and pre test practice score at 0.001 level of significance in Experimental Group while as in Control group there is no significant difference between post test and pre test practice score at 0.0156 level of significance.

The above table also reveals that using Unpaired T test, there is no significant difference between pre test practice scores of Experimental Group and Control Group at 0.131 level of significance while as there is significant difference between post test practice scores of Experimental and Control Group at 0.001 level of significance. This proves that VATM has been effective in improving the practice scores of experimental group. However there is no improvement in practice scores of Control group.

SECTION V

This section deals with the findings related to the association of Pre-test Practice score of Experimental and Control groups with the selected demographic variables and Obstetric characteristics.

Table 10: Association of Pre-test Practice Score of Experimental Group with the selected Demographic Variables and Obstetric characteristics

| DEMOGRAPHIC VARIABLES AND OBSTETRIC CHARACTERISTICS | | ASSOCIATION OF PRE-TEST PRACTICE SCORE OF EXPERIMENTAL GROUP WITH DEMOGRAPHIC VARIABLES AND OBSTETRIC CHARACTERISTICS | | | | | |
|---|-------------|---|---------------------|----------|---------|-------------|-----------------|
| Variables | Opts | ADEQUATE PRACTICE | INADEQUATE PRACTICE | Chi Test | P Value | Table Value | Result |
| Demographic variables 1.Age (in Years) | <20 Years | 0 | 1 | 0.741 | 0.6290 | 5.991 | Not Significant |
| | 20-29 Years | 4 | 5 | | | | |
| | ≥ 30 Years | 2 | 3 | | | | |

| | | | | | | | |
|--|------------------------------|---|---|-------|----------------------------|------------|-----------------|
| 2.Weight (in Kg) | <60 Kg | 1 | 3 | 0.625 | 0 . 7 2 3 2 | 5.991 | Not Significant |
| | 60-70 Kg | 3 | 3 | | | | |
| | >70 Kg | 2 | 3 | | | | |
| 3.Occupation | Home maker | 3 | 9 | 5.625 | 0 . 1 3 1 | 7.815 | Not Significant |
| | Employed | 1 | 0 | | | | |
| | Health Professional | 1 | 0 | | | | |
| | Non-health Professional | 1 | 0 | | | | |
| 4. Educational status | No formal education | 0 | 1 | 5.714 | 0 . 1 3 2 6 | 7.815 | Not Significant |
| | Primary | 0 | 2 | | | | |
| | Sr. Secondary | 1 | 4 | | | | |
| | Graduate and above | 5 | 2 | | | | |
| 5. Place of residence | Rural | 3 | 5 | 0.045 | 0 . 8 3 3 | 1 3.841 | Not Significant |
| | Urban | 3 | 4 | | | | |
| 6. Availing use of social media for information about maternity care | Yes | 5 | 5 | 1.250 | 0 . 2 6 4 | 1 3.841 | Not Significant |
| | No | 1 | 4 | | | | |
| 7. Type of family | Nuclear | 1 | 4 | 1.250 | 0 . 2 6 4 | 1 3.841 | Not Significant |
| | Joint | 5 | 5 | | | | |
| Obstetric characteristics 1. Gravida | One | 5 | 5 | 1.250 | 0 . 2 6 4 | 1 3.841 | Not Significant |
| | ≥Two | 1 | 4 | | | | |
| 2. Parity | Zero | 5 | 5 | 2.500 | 0 . 2 8 7 | 2 5.991 | Not Significant |
| | One | 0 | 3 | | | | |
| | ≥Two | 1 | 1 | | | | |
| 3. Gestational Age | <12 weeks | 0 | 5 | 8.403 | 0 . 0 1 5 | 2 5.991 | Significant |
| | 12-28 weeks | 5 | 1 | | | | |
| | >28 weeks | 1 | 3 | | | | |
| 4.Mode of last delivery, if | Spontaneous vaginal delivery | 0 | 0 | | N . | N.A | |

| | | | | | | | | |
|----------------------------|---------------------------|---|---|-------|---|---|-------|-----------------|
| multiparous | Assisted vaginal delivery | 0 | 0 | | A | | | |
| | Caesarean delivery | 1 | 4 | | | | | |
| 5. Number of live children | One | 0 | 3 | 1.875 | 0 | 1 | 3.841 | Not Significant |
| | ≥Two | 1 | 1 | | | | | |

Table 10 shows the association of pre-test practice score of Experimental group with socio- demographic variables and Obstetric characteristics

The Chi-square value shows that there is no significant association between the pre-test practice score and demographic variables (Age, Weight, Occupation, Educational status, Place of residence, Availing use of social media for maternity information, Type of family).

However, there is significant association between the pre-test practice score with the Obstetric variable (Gestational age) but there is no significant association between the pre-test practice scores and other Obstetric variables (Gravida, Parity And Number of live children).

Table 11 : Association of Pre-test Practice Score of Control Group with the selected Demographic Variables and Obstetric characteristics

| DEMOGRAPHIC VARIABLES AND OBSTETRIC CHARACTERISTICS | | ASSOCIATION OF PRE-TEST PRACTICE SCORE OF CONTROL GROUP WITH DEMOGRAPHIC VARIABLES AND OBSTETRIC CHARACTERISTICS | | | | | | |
|---|-------------------------|--|---------------------|----------|---------|----|-------------|-----------------|
| Variables | Opts | ADEQUATE PRACTICE | INADEQUATE PRACTICE | Chi Test | P Value | df | Table Value | Result |
| Demographic variables 1. Age (in Years) | <20 Years | 0 | 0 | 5.000 | 0.025 | 1 | 3.841 | Significant |
| | 20-29 Years | 2 | 8 | | | | | |
| | ≥ 30 Years | 3 | 2 | | | | | |
| 2. Weight (in Kg) | <60 Kg | 0 | 0 | 0.045 | 0.833 | 1 | 3.841 | Not Significant |
| | 60-70 Kg | 2 | 6 | | | | | |
| | >70 Kg | 3 | 4 | | | | | |
| 3. Occupation | Home maker | 5 | 10 | N.A | N.A | | N.A | |
| | Employed | 0 | 0 | | | | | |
| | Health Professional | 0 | 0 | | | | | |
| | Non-health Professional | 0 | 0 | | | | | |
| 4. Educational status | No formal education | 1 | 1 | 7.188 | 0.066 | 3 | 7.815 | Not Significant |
| | Primary | 1 | 3 | | | | | |
| | Sr. | 2 | 6 | | | | | |

| | | | | | | | | |
|--|------------------------------|---|---|-------|-------|---|-------|-----------------|
| | Secondary | | | | | | | |
| | Graduate and above | 1 | 0 | | | | | |
| 5. Place of residence | Rural | 2 | 7 | 0.417 | 0.519 | 1 | 3.841 | Not Significant |
| | Urban | 3 | 3 | | | | | |
| 6. Availing use of social media for information about maternity care | Yes | 3 | 4 | 0.714 | 0.398 | 1 | 3.841 | Not Significant |
| | No | 2 | 6 | | | | | |
| 7. Type of family | Nuclear | 1 | 1 | 0.096 | 0.756 | 1 | 3.841 | Not Significant |
| | Joint | 4 | 9 | | | | | |
| Obstetric characteristics 1. Gravida | One | 1 | 3 | 0.511 | 0.475 | 1 | 3.841 | Not Significant |
| | ≥Two | 4 | 7 | | | | | |
| 2. Parity | Zero | 2 | 4 | 3.715 | 0.156 | 2 | 5.991 | Not Significant |
| | One | 3 | 5 | | | | | |
| | ≥Two | 0 | 1 | | | | | |
| 3. Gestational Age | <12 weeks | 1 | 2 | 0.417 | 0.812 | 2 | 5.991 | Not Significant |
| | 12-28 weeks | 2 | 4 | | | | | |
| | >28 weeks | 2 | 4 | | | | | |
| 4. Mode of last delivery, if multiparous | Spontaneous vaginal delivery | 0 | 0 | | N.A | | N.A | |
| | Assisted vaginal delivery | 0 | 0 | | | | | |
| | Caesarean delivery | 3 | 6 | | | | | |
| 5. Number of live children | One | 3 | 5 | 1.406 | 0.236 | 1 | 3.841 | Not Significant |
| | ≥Two | 0 | 1 | | | | | |
| | Yes | 3 | 5 | | | | | |

Table 11 shows the association of pre-test practice score of Control group with socio- demographic variables and Obstetric characteristics

The Chi-square value reveals that there is significant association between the pre-test practice score and demographic variable i.e., Age. However there is no significant association between the pre-test practice score and other demographic variables i.e., Weight, Occupation, Educational status, Place of residence, Availing use of social media for maternity information and Type of family. The Chi-square value also reveals that there is no significant association between the pre-test practice score with the Obstetric variable i.e., Gravida, Parity, Gestational age And Number of live children.

DISCUSSION

The findings of the study revealed that the mean post test practice score of Experimental group is 82.22% which is much higher than the mean post test practice score of Control group that is only 48.15%. Paired T test shows that there is significant difference between post test and pre test practice score at 0.001 level of significance in Experimental Group while as in Control group there is no significant difference between post test and pre test practice score at 0.0156 level of significance. This proves that VATM has been effective in improving the practice scores of experimental group. However there is no improvement in practice scores of Control group. The findings of the study are supported by the study conducted by Gobran, M. , Fatah, M. , Ramadan, M. , Amer, G. , Rabeh, M. , Elshafei, R., et al in 2021 to evaluate the effectiveness of the education program on pregnant women practices and knowledge on obstetric danger signs in antenatal clinics (M.C.H centers) affiliated to the available geographical health zones in EL-fayoum rural area. The results revealed that there is an improvement in 63% of pregnant women knowledge and practices after educational program in all aspects. The study concluded that educational program had been effective in improving women knowledge and practice regarding danger signs for pregnant women in rural areas.

The results of the present study also reveal that that there is no significant association between the pre-test practice score and demographic variables of Experimental group (Age, Weight, Occupation, Educational status, Place of residence, Availing use of social media for maternity information, Type of family). These findings are supported by a study conducted by Amoura Saad Eldeen Zaki, Shaimaa Fouad, Nahed Fikry Hassan khedr in 2021 to assess knowledge and practices of 242 pregnant women toward danger signs of pregnancy at Obstetrics and Gynecology Department and Clinics at Mansoura General Hospital. The findings revealed that knowledge score of danger signs was poor in 57.9% of subjects while fair in 29.3% and good in less than 12.8% of them. During pregnancy the most commonly identified danger signs were vaginal bleeding (69.8%) followed by severe abdominal pain (56.20%) and sever vomiting (55.4%). No significant association was found between women's general characteristics and their knowledge about pregnancy danger signs ($p < 0.001$). More than two thirds (65.3%) of pregnant women had inadequate practices regarding danger signs of pregnancy.

NURSING IMPLICATIONS:

Nursing practice

Educational programmes conducted by nursing personnel both in the hospital and community areas helps in improving practice of antenatal women towards identification of alarming signs leading to obstetrical emergencies. Health information regarding healthy pregnancy can be imparted through various methods like lectures, mass media, pamphlets, Information booklet, structured teaching programme etc. Hence educational programmes with effective teaching strategies will motivate pregnant women to follow healthy practice during pregnancy to prevent obstetrical emergencies.

Nursing education

The student's teaching experience should emphasize on teaching pregnant women on various preventive and promotive health practices.

Nursing curriculum should provide an opportunity to plan and conduct teaching programmes in variety of settings Viz family, community, industry, hospital, schools etc. Several in-service programme, conferences, workshops and seminars can be conducted to keep nurses updated with newer teaching strategies, and newer research findings which are useful regarding prevention of obstetrical emergencies.

Nursing research : Nurses being the largest groups in the health care delivery system and being more close to the people should take an initiative to conduct further research regarding prevention of obstetrical emergencies. The present study revealed that there was inadequate practice of pregnant women towards identification of alarming signs leading to obstetrical emergencies, so nurses especially who are working in

community should take an initiative in conducting research studies in the community. An educational programme can be conducted in the community to educate the people.

Nursing administration

The nurse administrator should take interest in providing information regarding prevention of obstetrical emergencies to the public or to the community. The nurse as an administrator should plan and organize educational programmes for nursing personnel and motivate them to conduct programmes beneficial to the pregnant women. Planning and organization of such programmes require efficient teamwork, planning for manpower, money, material and methods and minutes to conduct successful educational programmes, both at the hospital & community level. Health education material such as leaflets and pamphlets should be made available to the public. She should also encourage and depute nurses to participate in such programmes conducted by any other voluntary organizations.

Further a nurse administrator should provide horizontal stimulation, as well as vertical enhancement opportunities that produce competent midwives/ nurses. Nurse administrator should grant funds for conducting various educational campaigns. The nurse administrator also in collaboration with various government and nongovernmental organizations encourage nurses to take an active part at primary level of community for prevention of obstetrical emergencies so as to reduce maternal and fetal mortality and morbidity.

LIMITATIONS:

The limitations recognized in the study were:

1. The study was limited to small size (30), which imposes limitation on generalization.
2. Sample was selected only from one hospital at Srinagar district of Jammu and Kashmir; hence generalization can only be made for the sample studied.

RECOMMENDATIONS:

- The study recommended developing antenatal classes for all pregnant women about obstetric danger signs and about the proper time to seek medical care. In addition, the mass media should be utilized and community organizations mobilized to disseminate correct and relevant information about danger signs of obstetric complications to women, families and communities.
- Establishment of in-service training programs and continuous supervision in rural areas to a raise women knowledge and practice regarding obstetric danger signs.
- In addition, increase the mass media to disseminate correct and relevant information about danger signs of pregnancy to pregnant women, families and communities.

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