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# Effect of STM on Prevention of Obstetric Emergencies among PRIMI Gravida Mothers Admitted in Selected Hospitals, Maharashtra

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**Abstract:** ***Aim of the study: the aim of study to find out effect of STM on prevention of obstetric emergencies among primi gravida mothers admitted in selected hospitals, Maharashtra. Problem statement: What is the effect of STM on prevention of obstetric emergencies among primi gravida mothers admitted in selected Hospitals, Maharashtra? Primary objective: The primary objective was used to find out the effect of STM on prevention of obstetric emergencies among primi gravida mothers. Secondary objectives: 1) To assess the knowledge of primi gravida mothers regarding prevention of obstetric emergencies in experimental and control group before intervention. 2) To find out the effect of STM on prevention of obstetric emergencies among primi gravida mothers in experimental and control group after intervention. 3) To find out the association between post-test knowledge scores and selected demographic variables of primi gravida mothers in experimental group. Method: A quasi-experiment with non-randomized control group research design used for the study. It was conducted over 100 Primi gravida mothers by using purposive sampling technique. Result: In this study the findings, it was observed that the pre-intervention demographic variables of primi gravida mothers in control and experimental group were more or less similar revealing both the groups had similar characteristics. It was observed that the percentages of knowledge (control group; 84% poor & experimental group; 98 % poor ) on prevention of obstetric emergencies among primi gravida mothers were more or less similar before intervention. However, after an intervention, the percentage of knowledge on prevention of obstetric emergencies among primi gravida mothers was significantly increased from 98% poor to 76% excellent in experimental group whereas it was almost remained unchanged in control group. These was a significant difference (p0.05) was found between knowledge on prevention of obstetric emergencies and age, religion, qualification, occupation, monthly family income, & type of diet of primi gravida mothers. Findings of study revealed that the STM on prevention of obstetric emergencies as a method of teaching was effective among primi gravida mothers admitted in selected hospitals, Maharashtra. Interpretation and conclusion: The findings of present study, it was concluded that the pre-intervention demographic variables of primi gravida mothers in control and experimental group were more or less similar revealing both the groups had similar characteristics. Percentage of knowledge and the mean scores of primi gravida mothers were more or less similar in both the groups before intervention. However, after an intervention, the percentage of knowledge and the mean scores of primi gravida mothers were significantly increased in experimental group whereas it was remained unchanged in control group. There was a significant difference between pre-test and post-test knowledge scores in experimental group. And, there was also a significant difference between the post-tests of control and experimental group. Thus, it was concluded that the STM on prevention of obstetric emergencies as a method of teaching was effective among primi gravida mothers admitted in selected hospitals, Maharashtra.***

**Keywords**: effectiveness, Structure Teaching Module (STM), prevention of obstetric emergencies, primi gravida mothers, selected hospitals

## 1. Introduction

An emergency can be defined as an unforeseen situation of serious or combination of circumstances and often dangerous nature, developing suddenly and unexpectedly and demanding immediate action in order to save life. {1} As obstetrics is unique because it considered two patients and care for, a mother and a baby. The improvements in prenatal care and advancements in medical technology in obstetrics will always provide the clinician with "life-or-death" situations that call for immediate response.{2} Obstetric emergencies are life threatening health problems for pregnant women and their babies. A suddenly developing pathologic condition in a women, due to accident or disease, which requires urgent medical or surgical therapeutic intervention.{3} Obstetric emergencies are the leading cause of maternal mortality and morbidity worldwide and particularly in developing countries where literacy, poverty, lack of antenatal care & poor transport facilities are the main problem. {3,4}For the prevention and early detection of obstetric emergencies the World health organization recommends that mothers must receive essential antenatal Care (ANC) on the first day of conception minimum of three ANC visits must be made within the time periods of 48-72 h postdelivery and 1-2 months postdelivery. The WHO also provides recommendations for postpartum care, including nutritional care and medical care for the mother and her new-born, the timely conduction of laboratory tests for assess the status of the mother and her new-born to detect any complications, and provide psychological support.{7}

## 2. Need of the Study

One of the most important components of prevention of obstetric emergencies is to offer information and advice to women about pregnancy related complication and possible curative measures for early detection and management of complications. So, there is further need of improvement in Obstetric emergencies in India including Emergency obstetric care, which is a key factor towards determining MMR. The main aim of this study is to find out the areas of concern regarding obstetric emergency that need immediate attention

to improve the obstetric care outcomes and ultimately to reduce the maternal mortality. Hence, Hence, with above facts & figures, it was felt need of the research scholar to find out the knowledge in prevention of obstetric emergency and improve the knowledge of primi gravida mothers regarding obstetric emergencies and their early detection & the techniques to improve the quality of care.

## 3. Review of Literature

Review of literature was carried out on recent and ongoing research relevant to the present study. The review of literature is done under following areas of prevention of obstetric emergencies

1) Health & illness of primi gravida mothers
2) Obstetric emergencies among primi gravida mothers
3) Preventive services among primi gravida mothers
4) Knowledge of primi gravida mothers on obstetric emergencies and its preventive services
5) Effect of STM on prevention of obstetric emergencies among primi gravida mothers
6) STM as method of health education.

**Limitations**

The study was limited to -

- Assessment of knowledge
- 100 primi gravida mothers
- Admitted in selected hospitals, Maharashtra
- Study was limited to private hospitals.

**Hypothesis:**

**H1**: There is a significant difference between pre-test and post-test knowledge scores on prevention of obstetric emergencies among primi gravida mothers in experimental and control group.

**H2**: There is a significant difference between post-test knowledge scores of primi gravida mothers in experimental and control group regarding prevention of obstetric emergencies.

**H3**: There is significant association between post test knowledge scores and demographic variables of primi gravida mothers in experimental group

## 4. Methodology

**a) Research approach**: Quantitative research approach

**b) Research design**: A quasi-experiment with non-randomized control group research design

**c) Variables under study:**

- **Independent variable**: Structure Teaching Module.
- **Dependent variable**: Knowledge of primi gravida mothers

**d) Accessible population:** Primi gravida mothers who were available for research studies were considered as accessible population

- **Sample and sampling technique Sample:** Primi gravida mothers
- **Sample size:** 100 Primi gravida mothers
- **Sampling technique:** Non probability purposive sampling technique

**Inclusion criteria:**

- Primi gravida mothers who shall give consent to participate in the study.
- Primi gravida mothers available at the time of data collection

**Exclusion criteria**

- Primi gravida mothers who don't understand Marathi

**e) Tool Preparation**

**Description of Tools:**

- Section I - Semi structured questionnaire of demographic variables
- Section II –MCQ on prevention of obstetrics emergencies

**Tool Validity**

Content validity of SIS and STM were established in consultation with 8 experts from the field of Nursing Expert (5), Gynaecologist (1), Statistician (1) Language expert (1). The suggestions of subject experts were taken into consideration and reframed the same.

**Tool Reliability**

In this study, Karl Pearson's correlation coefficient was calculated and MCQ was found to be reliable r = 0.9. Hence, the MCQ was considered reliable.

**Pilot Study**

The pilot study was conducted among conveniently selected primi gravida mothers (10) to find out the effect of STM on prevention of obstetric emergencies at two selected hospitals, after prior permission from the authorities concerned. Informed consent was obtained from primi gravida mothers and data was collected during the month of January 2024.

## 5. Result

**Section I**

**Distribution of primi gravida mothers according to their demographic variables in experimental and control group**

| S. No. | Demographic Variables | Control Group | | Experimental Group | |
|---|---|---|---|---|---|
| | | Frequency | Percentage | Frequency | Percentage |
| 1. | **Age (years)** | | | | |
| | 21 – 30 yr. | 38 | 76.0% | 42 | 84.0% |
| | 30 – 40 yr. | 12 | 24.0% | 8 | 16.0% |
| | 40 – 50 yr. | **0** | 0% | 0 | 0% |
| | 50 years & above | 0 | 0% | 0 | 0% |
| 2. | **Religion** | | | | |
| | Hindu | 27 | 54.0% | 31 | 62.0% |
| | Muslim | 11 | 22.0% | 5 | 10.0% |
| | Buddhist | 6 | 12.0% | 7 | 14.0% |
| | Others | 6 | 12.0% | 7 | 14.0% |
| 3. | **Qualification** | | | | |
| | Illiterate | 2 | 4.0% | 0 | 0% |
| | Primary education | 28 | 56.0% | 24 | 48.0% |
| | Secondary education | 12 | 24.0% | 18 | 36.0% |
| | Graduate & above | 8 | 16.0% | 8 | 16.0% |
| 4. | **Family Income Monthly** | | | | |
| | Rs. 200001/- & above | 8 | 16.0% | 5 | 10.0% |
| | Rs.150001/ -to Rs. 20000 | 23 | 46.0% | 18 | 36.0% |
| | Rs. 15000/-/ to Rs.10001 | 13 | 26.0% | 20 | 40.0% |
| | Rs.10000/ - & below | 6 | 12.0% | 7 | 14.0% |
| 5. | Area of Residence | | | | |
| | Urban area | 18 | 36.0% | 31 | 62.0% |
| | Rural area | 32 | 64.0% | 19 | 38.0% |
| 6. | Occupation | | | | |
| | Government | 1 | 2.0% | 0 | 0% |
| | Self employed | 10 | 20.0% | 8 | 16.0% |
| | Private | 7 | 14.0% | 9 | 18.0% |
| | House wife | 32 | 64.0% | 33 | 66.0% |
| 7 | Type of diet | | | | |
| | Vegetarian | 22 | 44.0% | 25 | 50.0% |
| | Non-vegetarian | 28 | 56.0% | 25 | 50.0% |

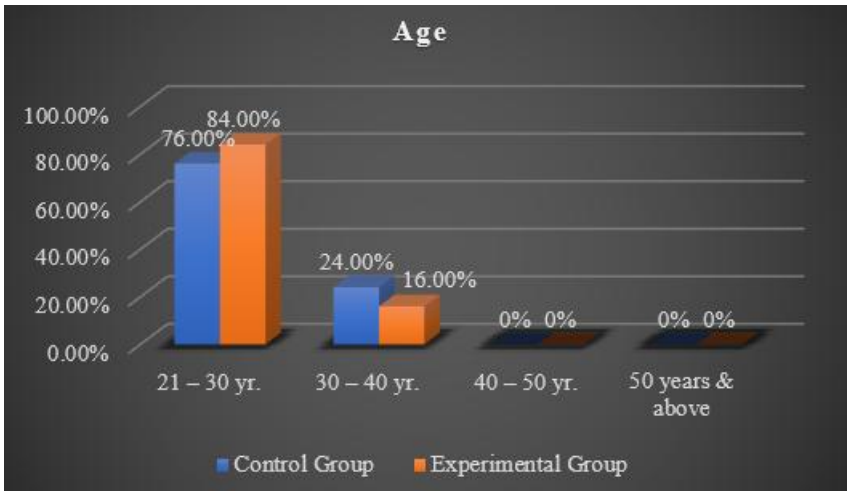



**Figure 4.1.1** Distribution of primi gravida mothers according to age

Distribution of primi gravida mothers according to their age reveals that the highest percentage (76.00% & 84.00%) were belonged to the age group of 21–30 years in control & experimental group. In addition, more or less similar percentages (24.00% & 16.00%) were in the age group of 31–40 years in control & experimental group respectively. Further, none of primi gravida mothers were in the age group of 41-50 & above years in experimental group & control group Hence, it was interpreted that the age distribution of primi gravida mothers in both the groups were more or less similar. In addition, it was also concluded that almost all the primi gravida mothers were below the age of 40.

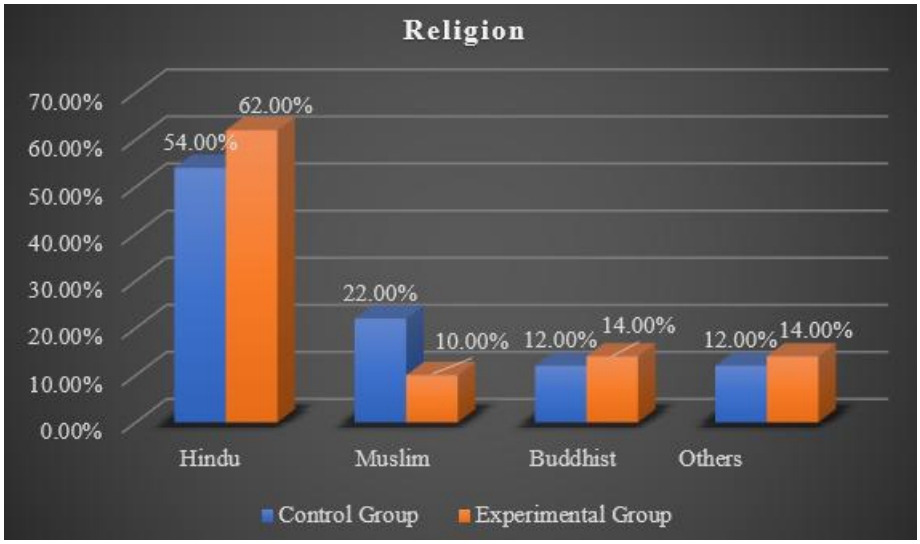



**Figure 4.1.2** Distribution of primi gravida mothers according to religion

Distribution of primi gravida mothers according to religion depicts that around one third (54.00% & 62.00%) were Hindus in control & experimental group whereas the primi gravida mothers belonged to other than Muslim religion were 22.00%&10.00%. On the other hand, the primi mothers belonged to religion of, buddhist, and other was more or less similar (12.00%, 14.00% respectively) in control group and experimental group. (fig – 4.1.2).

Hence, it can be interpreted that the place of study was slightly dominated by muslim and other religion when compared to the latest census of India. It was also concluded that religion wise distribution of primi gravida mothers in both groups was not so similar.

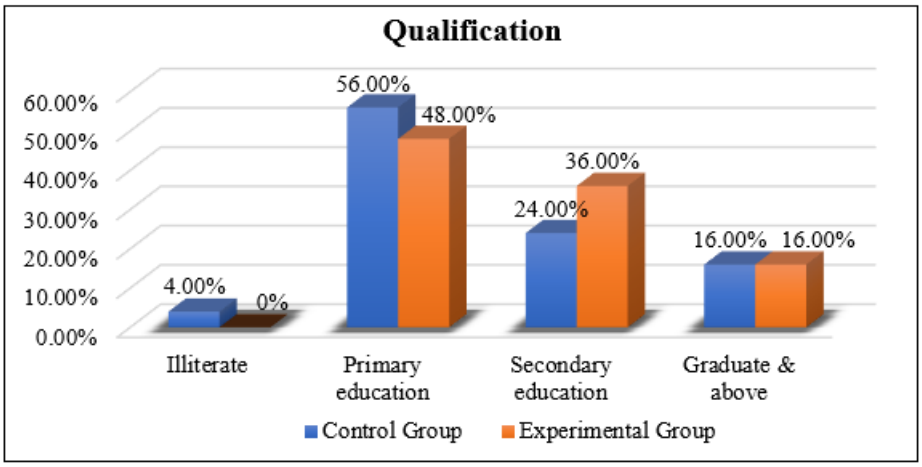



**Figure 4.1.3:** Percentage distribution of primi gravida mothers according to their qualification

Distribution of primi gravida mothers according to qualification shows that majority (56.00% & 48.00%) were with primary education qualification in experimental & control group respectively whereas the (24.00% to 36.00%) with secondary qualifications were (16.00% to 16.00%) Graduate and above in both control & experimental group and only 4.00% mothers are illiterate in control group (fig – 4.1.4).

Therefore, it can be interpreted that the place of study was dominated by primary and secondary qualification. It was also concluded that the distribution of primi mothers according qualification were more or less similar in both the groups.


**Figure 4.1.4:** Percentage distribution of primi gravida mothers according to their family Income

Distribution according to income reveals that the primi gravida mothers belonged to the income group Rs. 20000/- & above, 10001–15000/-, Rs, 15001–20000/-. and Rs. Rs. 10000/- & below, had more or less similar income i.e., 16.00%, 46.00%, 26.00% & 12.00% respectively in control group. Primi gravida mothers belonged to the income group of (fig – 4.1.6).

Primi gravida mothers belonged to the income group of Rs. 20000/- & above, 10001–15000/-, Rs, 15001–20000/-. and Rs. Rs. 10000/- & below, had more or less similar income i.e., 10.00%, 36.00%, 40.00% & 14.00% respectively in experimental group. (fig – 4.1.6).

Hence, it was interpreted that the income distribution of primi gravida mothers was not so similar.

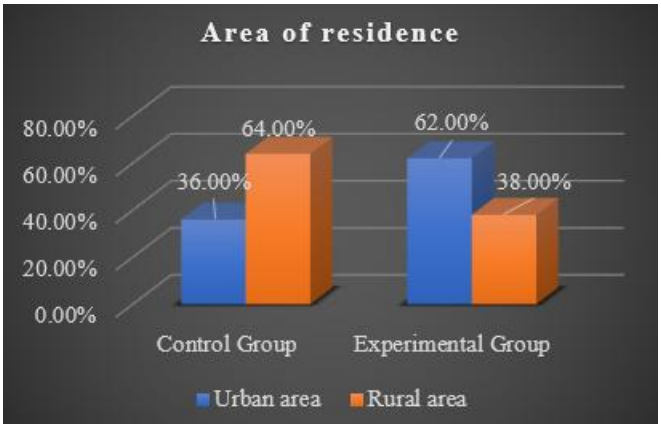



**Figure 4.1.5:** Percentage distribution of primi gravida mothers according to their area of residence

Distribution of primi gravida mothers according to area of residence depicts that around (64.00% & 38.00%) were residence in rular area in control & experimental group whereas the primi gravida mothers belonged to urban area were 36.00% & 38%. in control group and experimental group (fig – 4.1.5). Hence, it can be interpreted that the place of study was slightly dominated by rural area. It was also concluded that area of residence wise distribution of primi gravida mothers in both area was slightly similar.

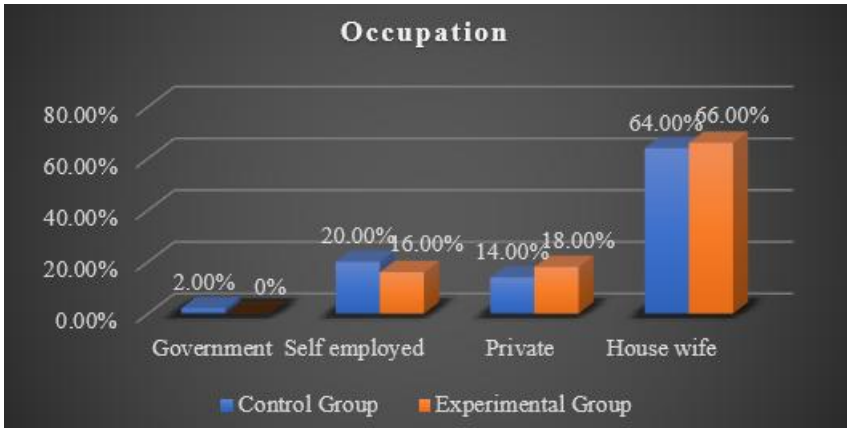



**Figure 4.1.6:** Percentage Distribution of Primi Gravida Mothers according to their Occupation

Distribution of primi gravida mothers according to occupation depicts that around (64.00% & 66.00%) were housewife in both experimental & control group where as 20.00% to 16.00 % are self-employed in control & experimental group other primi gravida mothers were 14.00% & 18.00%. Belongs to private sector in control group and experimental group and 2% were government in control group (fig – 4.1.6).

Hence, it can be interpreted that the place of study was slightly dominated by Housewife. It was also concluded that

occupation wise distribution of primi gravida mothers in both area was slightly similar.

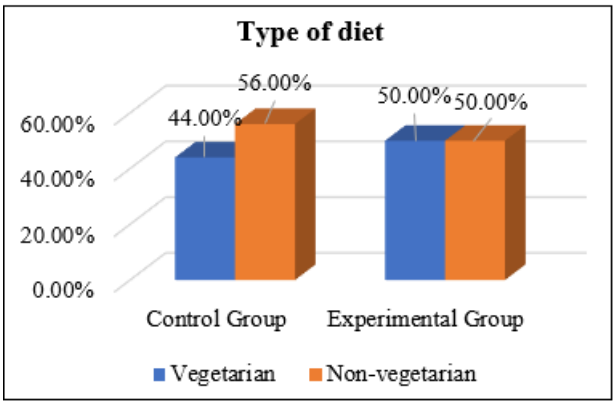



**Figure 4.1.7:** Percentage distribution of primi gravida mothers according to their area of type of diet

Distribution of primi gravida mothers according to type of diet depicts that around (44.00% & 50.00%) were vegetarian in control & experimental group whereas the primi gravida mothers belonged to non- vegetarian were 56.00% & 50.00%. in control group and experimental group (fig – 4.1.7).

Hence, it can be interpreted that the place of study was slightly dominated by vegetarian. It was also concluded that type of diet wise distribution of primi gravida mothers in type of diet was similar.

**Section- II**

**Assessment of knowledge on prevention of obstetric emergencies among primigravida mothers before intervention in experimental group and control group**

**4.2.1** Percentage distribution of knowledge scores on prevention of obstetric emergencies among primigravida mothers in experimental and control group before intervention

| S. No | Level of knowledge | Control Group | | Experimental Group | |
|---|---|---|---|---|---|
| | | *f* | % | *f* | % |
| 1 | Very good | 0 | 0% | 0 | 0% |
| 2 | Good | 0 | 0% | 0 | 0% |
| 3 | Average | 1 | 2.0% | 1 | 2.0% |
| 4 | Poor | 42 | 84.0% | 49 | 98.0% |
| 5 | Very poor | 7 | 14.0% | 0 | 0% |
| | Total | 50 | 100% | 50 | 100% |

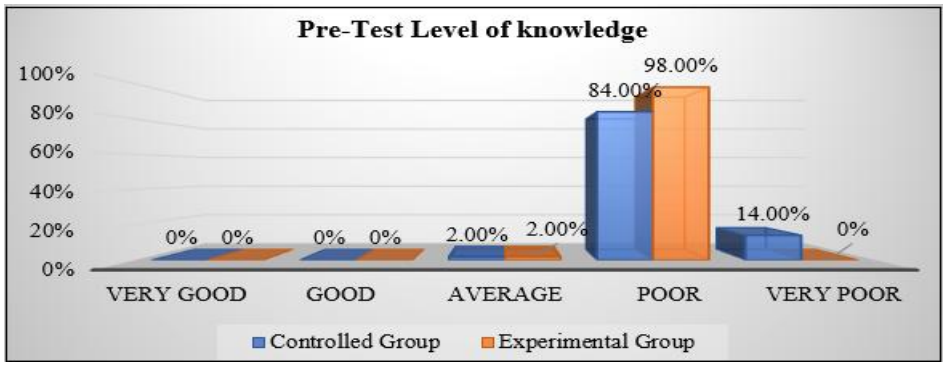



**Figure 4.2.1:** Percentage distribution of knowledge scores on prevention of obstetric emergencies among primigravida mothers in experimental and control group before intervention

Distribution of knowledge scores of primi gravida mothers before intervention reveals that around 84% primi gravida mothers were had poor knowledge in control group whereas none of them had good, very good or excellent knowledge. However, the 2.00% had average knowledge before intervention in control group (table - 4.2.1).

With regard to experimental group, highest 98% had poor knowledge whereas none of them had very good or excellent knowledge. However, the primi gravida mothers with average knowledge were 2%.

Altogether, the primi gravida mothers knowledge before intervention was 20% in experimental group. Hence, it was interpreted that the primi gravida mothers in experimental group had similar knowledge on prevention of obstetric emergencies when compared to control group before intervention. Overall, the primi gravida mothers had a poor knowledge on prevention of obstetric emergencies in both the groups.

**4.2.2** Mean &SD of knowledge scores on prevention of obstetric emergencies among primi gravida mothers in experimental and control group before intervention.

| S. No | Level of knowledge | Score range | Level of Pre-test knowledge score | |
|---|---|---|---|---|
| | | | Control Group | Experimental Group |
| 1. | Very good | 25- 30 | (0)0% | (0) 0% |
| 2. | Good | 19-24 | (0)0% | (0)0% |
| 3. | Average | 13-18 | (1)2.0% | (1)2.0% |
| 4. | Poor | 07-12 | (42)84.0% | (49)98.0% |
| 5. | Very poor | 06 & below | (7)14.0% | (0)0% |
| 6. | Overall standard deviation | | 1.718 | 1.39 |
| Minimum score | | | 5 | 7 |
| Maximum score | | | 13 | 13 |
| Mean knowledge score | | | 8.22 | 9.26 |

Distribution of Mean & SD knowledge scores on prevention of obstetric emergencies before intervention shows the higher mean score (9.26 ± 1.39) for experimental when compared to control group with a Mean & SD knowledge score of (8.22 ± 1.718). (table - 4.2.2). Hence, it was interpreted that the primi gravida mothers in experimental group had better mean score on prevention of obstetric emergencies when compared to control group before intervention

**Section III**

**Percentage distribution of knowledge scores on prevention of obstetric emergencies among primigravida mothers in experimental and control group after intervention**

**4.3.1** Percentage distribution of knowledge scores on prevention of obstetric emergencies among primigravida mothers in experimental and control group after intervention

| Sr.no | Level of knowledge | Control Group | | Experimental Group | |
|---|---|---|---|---|---|
| | | *f* | % | *f* | % |
| 1 | Very good | 0 | 0% | 38 | 76.0% |
| 2 | Good | 0 | 0% | 10 | 20.0% |
| 3 | Average | 0 | 0% | 2 | 4.0% |
| 4 | Poor | 47 | 94.0% | 0 | 0% |
| 5 | Very poor | 3 | 6.0% | 0 | 0% |
| | Total | 50 | 100% | 50 | 100% |

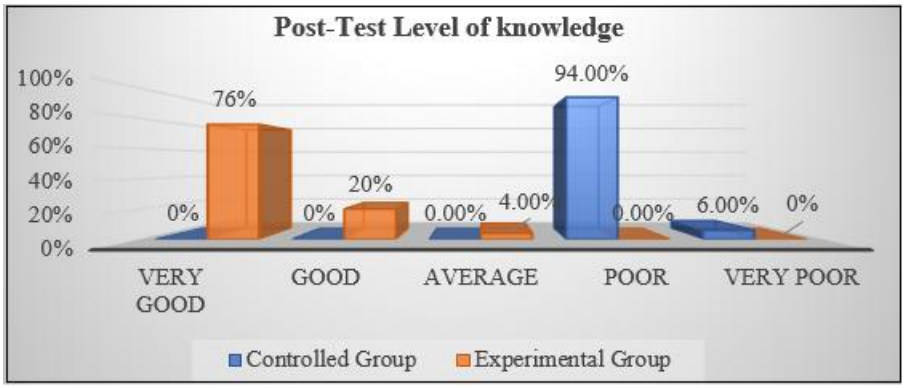



**Figure 4.2.3:** Percentage distribution of knowledge scores on prevention of obstetric emergencies among primigravida mothers in experimental and control group after intervention.

Distribution of knowledge scores of primi gravida mothers before intervention reveals that around 94% primi gravida mothers were had poor knowledge in control group whereas none of them had good, very good or excellent knowledge. However, the 6.00% had very poor knowledge after intervention in control group (table - 4.2.1).

With regard to experimental group, highest 76% had very good knowledge whereas none of them had Poor and very poor. However, the primi gravida mothers with good is 20% and average knowledge were 4.00%.

Hence, it was interpreted that the primi gravida mothers in experimental group had more knowledge on prevention of obstetric emergencies when compared to control group after intervention. Overall, the primi gravida mothers had a good knowledge on prevention of obstetric emergencies in experimental group

| Sr.No | Level of knowledge | Score range | Level of Pre-test knowledge score | |
|---|---|---|---|---|
| | | | Control Group | Experimental Group |
| 1 | Very good | 25- 30 | 0% | (38)76.0% |
| 2 | Good | 19-24 | 0% | (10)20.0% |
| 3 | Average | 13-18 | 0% | (2)4.0% |
| 4 | Poor | 07-12 | (47)94.0% | 0% |
| 5 | Very poor | 06 & below | (3)6.0% | 0% |
| | Overall standard deviation | | 1.526 | 3.48 |
| Minimum score | | | 6 | 17 |
| Maximum score | | | 12 | 29 |
| Mean knowledge score | | | 8.72 | 25.72 |

4.3.2 Mean &SD of knowledge scores on prevention of obstetric emergencies among primi gravida mothers in experimental and control group after intervention

Distribution of Mean & SD knowledge scores on prevention of obstetric emergencies after intervention shows the higher mean score (25.72 ± 3.48) for experimental when compared to control group with a Mean & SD knowledge score of (8.72 ± 1.526) (table - 4.2.2). Hence, it was interpreted that the primi gravida mothers in experimental group had better mean score on prevention of obstetric emergencies when compared to control group after intervention.

**Section -IV**

**Significant difference in the post-test knowledge scores on prevention of obstetric emergencies among primigravida mothers in control and experimental group.**

4.4.1 Overall Mean & Standard deviation of between pre-test and post-test knowledge score on prevention of obstetric

emergencies among primigravida mothers in control and experimental group.

| Paired Samples Statistics | | | | | |
|---|---|---|---|---|---|
| | | Mean | N | Std. Deviation | Std. Error Mean |
| Pair 1 | Pre-test Control Group knowledge score | 8.22 | 50 | 1.718 | 0.243 |
| | Post-test Control Group knowledge score | 8.72 | 50 | 1.526 | 0.216 |
| Pair 2 | Pre-test Experimental Group knowledge score | 9.26 | 50 | 1.397 | 0.198 |
| | Post-test Experimental Group knowledge score | 25.72 | 50 | 3.482 | 0.492 |

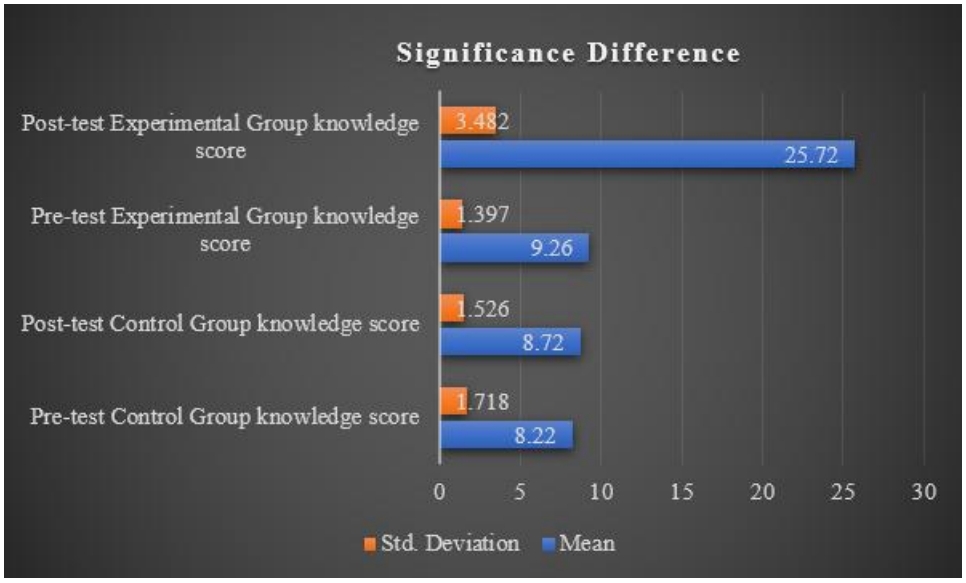



**Figure 4.4.1:** Overall Mean & Standard deviation of between pre-test and post-test knowledge score on prevention of obstetric emergencies among primigravida mothers in control and experimental group.

Mean, standard deviation and mean difference values are compared and student paired t test is applied at 5 % level of significance.

Post test controlled group and post test experimental group was compared and it is interpreted that mean and standard deviation 25.72±3.482 in post-test of experimental group, 9.26±1.397 in pre-test experimental group and 8.72±1.526 in post test control group and 8.22±1.718 in pre-test control group respectively.

4.4.2 Significant difference between pre-test and post-test knowledge score on prevention of obstetric emergencies among primigravida mothers in control and experimental group

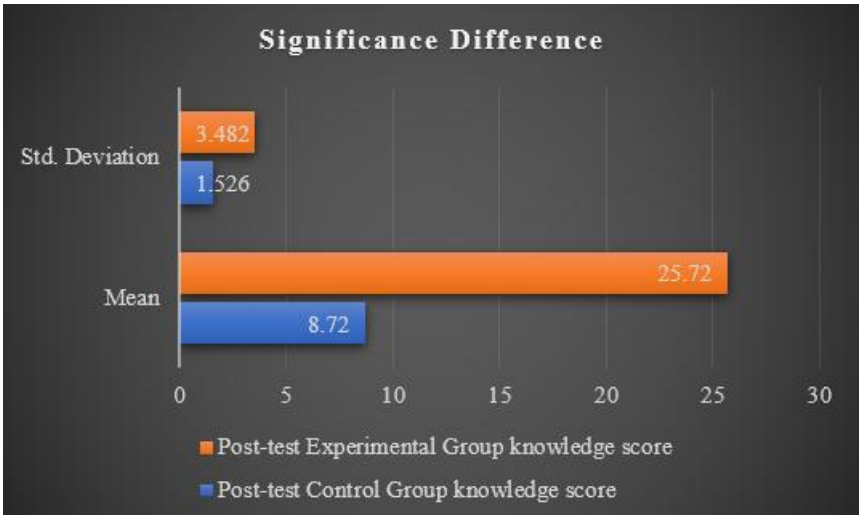
| Paired Samples Test | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Paired Differences | | | | | t | DF | Sig. (2-tailed) |
| | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | Lower | Upper | | | |
| Pre-test & Post-test knowledge score of Control Group | -.500 | 0.814 | 0.115 | -0.731 | -.269 | -4.341 | 49 | 0.000 P<0.05 |
| Pre-test & post test knowledge score of Experimental Group | -16.460 | 3.512 | .497 | -17.45 | -15.46 | -33.13 | 49 | 0.000 P<0.05 |

P value<0.0001 ***highly significant, p value<0.001 **moderately significant, p value<0.05 *significant Paired 't' test was computed to find out the significant difference between pre-test and post- test knowledge score in experimental and controlled group respectively, whereas the calculated 't' value of -4.314; p<0.05 i.e. 0.0001 between pre-test and post-test knowledge of controlled group shows highly significant. And whereas the calculated 't' value of -33.13; p<0.05 i.e. 0.000 between pre-test and post-test knowledge of experimental group shows significant. (Table 4.4.2). Hence it is interpreted that, there is a significant difference between pre-test and post-test knowledge score on selected knowledge score on prevention of obstetric emergencies among primigravida mothers in control and experimental group , Hence the hypothesis was accepted.

4.4.3 Overall Mean & Standard deviation of between post-test knowledge score on selected knowledge score on prevention of obstetric emergencies among primigravida mothers in control and experimental group

| Paired Samples Statistics | | | | | |
|---|---|---|---|---|---|
| | | Mean | N | Std. Deviation | Std. Error Mean |
| Pair 1 | Post-test Control Group knowledge score | 8.72 | 50 | 1.526 | 0.216 |
| | Post-test Experimental Group knowledge score | 25.72 | 50 | 3.482 | 0.492 |

Fig.4.4.3 Overall Mean & Standard deviation of between post-test knowledge score on selected knowledge score on prevention of obstetric emergencies among primigravida mothers in control and experimental group




Mean, standard deviation and mean difference values are compared and student paired t test is applied at 5 % level of significance.

Post test control group and post test experimental group was compared and it is interpreted that mean and standard deviation 25.72±3.482 and 8.72±1.526 respectively

4.4.4 Significant difference between post-test knowledge score on prevention of obstetric emergencies among primigravida mothers in control and experimental group

| Paired Samples Test | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Paired Differences | | | | | t | df | Sig. (2-tailed) |
| | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | Lower | Upper | | | |
| Post-test knowledge score of Control & Experimental Group | -17.00 | 3.714 | 0.525 | -18.056 | -15.944 | -32.364 | 49 | 0.0001 P<0.05 |

P value<0.0001 ***highly significant, p value<0.001 **moderately significant, p value<0.05 *significant

Paired sample T test was computed to find out the significant difference between the post-test knowledge score of controlled and experimental group. Highly significant difference($p<0.0001$) was found between post test of controlled and experimental group with calculated t value of -32.364. (Table- 4.3.3). Hence, it is interpreted that highly significant difference between the post-test knowledge score was due to effect of structured teaching module about prevention of obstetric emergencies among primigravida mothers in control and experimental group. Therefore, STM as a teaching tool on prevention of obstetric emergencies among primigravida mothers is considered as effective. However, a difference observed between the post-test knowledge score value in comparison group and experimental group was true difference: hence a research hypothesis is accepted.

**Section- V**

**4.5.1 Association between post-test knowledge scores on prevention of obstetric emergencies and demographic variables of primigravida mothers in experimental group**

| ANOVA | | | | | | |
|---|---|---|---|---|---|---|
| | | Sum of Squares | df | Mean Square | F | Sig. |
| Age | Between Groups | 1.611 | 10 | 0.161 | 1.230 | 0.303 p>0.05 not significant |
| | Within Groups | 5.109 | 39 | 0.131 | | |
| | Total | 6.720 | 49 | | | |
| Religion | Between Groups | 10.438 | 10 | 1.044 | 0.760 | 0.665 p>0.05 not significant |
| | Within Groups | 53.562 | 39 | 1.373 | | |
| | Total | 64.000 | 49 | | | |
| Qualification | Between Groups | 5.015 | 10 | 0.501 | 0.894 | 0.547 p>0.05 |
| | Within Groups | 21.865 | 39 | 0.561 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Total | 26.880 | 49 | | | not significant |
| Family income | Between Groups | 10.377 | 10 | 1.038 | 1.568 | 0.153 |
| | Within Groups | 25.803 | 39 | 0.662 | | p>0.05 |
| | Total | 36.180 | 49 | | | not significant |
| Area Of Residence | Between Groups | 3.836 | 10 | 0.384 | 1.883 | 0.041 |
| | Within Groups | 7.944 | 39 | 0.204 | | P<0.05 |
| | Total | 11.780 | 49 | | | significant |
| Occupation | Between Groups | 6.930 | 10 | 0.693 | 1.253 | 0.290 |
| | Within Groups | 21.570 | 39 | 0.553 | | p>0.05 |
| | Total | 28.500 | 49 | | | not significant |
| Type Of Diet | Between Groups | 2.289 | 10 | 0.229 | 0.874 | 0.564 |
| | Within Groups | 10.211 | 39 | 0.262 | | p>0.05 |
| | Total | 12.500 | 49 | | | not significant |

Analysis of one way ANOVA was computed to find out the significant association between the post test knowledge score and the Demographic variables of mothers. The finding of F value shows that there is significant association ($p<0.05$) between post test experimental group and Area of residence. (Table 4.5.1).

Hence, it was interpreted that Area of residence is associated with the knowledge scores on prevention of obstetric emergencies and demographic variables of primigravida mothers in experimental group. However, the F value was true difference and by chance. Therefore, research Hypothesis was Accepted for the area of residence. The finding of F value shows that there is no significant association ($p>0.05$) between post test experimental group and Age, Religion, Qualification, Family Income, Occupation and type of diet. (Table 4.5.1). Hence, it was interpreted that Age, Religion, Qualification, Family Income, Occupation and type of diet. is not associated with the knowledge scores on prevention of obstetric emergencies and demographic variables of primigravida mothers in experimental group However, the F value was true difference and not by chance. Therefore, research Hypothesis was rejected for the Age, Religion, Qualification, Family Income, Occupation and type of diet.

## 6. Conclusion

From the findings of present study, it was concluded that the pre-intervention demographic variables of primi gravida mothers in control and experimental group were more or less similar revealing both the groups had similar characteristics. Percentage of knowledge and the mean scores of primi gravida mothers were more or less similar in both the groups before intervention. However, after an intervention, the percentage of knowledge and the mean scores of primi gravida mothers were significantly increased in experimental group whereas it was remained unchanged in control group. There was a significant difference between pre-test and post-test knowledge scores in experimental group. And, there was also a significant difference between the post-tests of control and experimental group. Thus, it was concluded that the STM on prevention of obstetric emergencies as a method of structure teaching was effective among primi gravida mothers admitted in selected hospitals at Vidarbha region, Maharashtra.

## 7. Recommendation

1) Similar study with large sample can be undertaken to bring out more generalization of findings.
2) comparative study can be undertaken to find out the difference in knowledge among primi gravida mothers attending urban and rural hospitals / government or private hospital.
3) A similar study can be conducted by using STM on obstetric emergencies
4) A similar study can be conducted including attitude and practice on prevention of obstetric emergencies.
5) Recommended to conduct true experimental design.

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