Effectiveness of Planned Teaching Programme (PTP) on Knowledge Regarding Management of Selected Obstetric Emergencies among the Final Year GNM Students of Selected School of Nursing, Belgaum, Karnataka- One Group Pretest Post Test Pre Experimental Study

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Abstract: *Background: Obstetric emergencies are responsible for 70.6% of the maternal mortality and 86% of the perinatal mortality. Management can be done by the utilization of antenatal care services, family planning, access to skilled labour and emergency care. Proper prenatal care is the best way to prevent from obstetrical emergencies. So, the need for education and awareness among the student nurses remains evident. Objectives: To assess the existing level of knowledge regarding obstetric emergencies by using structured knowledge questionnaire, to evaluate the effectiveness of PTP on knowledge regarding obstetrical emergencies and to associate the pre test level of knowledge on obstetric emergencies with selected demographic variables. Material and methods: Data were collected by using structured knowledge questionnaire. The demographic variables analyzed in the study were age, sex, religion and marital status. The study sample was selected using Purposive sampling technique. Data obtained were tabulated and analyzed in terms of objectives of the study using descriptive and inferential statistics. Results: The study revealed that 33(66%) had good knowledge, 16(32%) had average knowledge and 1(2%) had poor knowledge. The overall mean pre test knowledge score was 21 with SD 4.86 and in post test, mean score was 28 with SD 5.85. There was a significant difference between the pre test and post test knowledge scores of the Final year GNM students after the planned teaching programme. There was a significant increase in post test knowledge scores at P<0.05 level and calculated paired 't' value was 10.17. There was no association between the knowledge and age, sex, religion, marital status of the Final year GNM students. Conclusion: The findings of the study revealed that educating the students would be effective in updating the knowledge and skills regarding management of Obstetric emergencies.*

Keywords: Effectiveness, Obstetric emergencies, Planned teaching programme, Final Year GNM students.

1. Introduction

Obstetrical emergencies are the life threatening medical conditions that occur during pregnancy or after labor and delivery. Many illnesses and disorders of pregnancy can threaten the well-being of both the mother and the child.[1]

Approximately 529,000 women dies from pregnancy related causes annually and this mostly occurs in developing nation due to lack of adequate health care, family planning, access to skilled labour and emergency care. Emergency obstetric interventions like antibiotics, oxytoxics, anticonvulsants, manual removal of placenta and instrumental vaginal delivery are important to improve the survival.[2]

As stated by the WHO in 2005 World Health Report "Make Every Mother and Child Count", the major causes of maternal deaths are severe bleeding/ haemorrhage (25%), infections (13%), unsafe abortions (13%), eclampsia (12%), obstructed labour (8%), other direct causes (8%) and indirect causes (20%).[3]

The most common obstetric emergencies are prolonged or obstructed labour, postpartum haemorrhage, fetal distress, severe pregnancy-induced hypertension/ eclampsia and antepartum haemorrhage. Obstetric emergencies are responsible for 70.6% of the maternal mortality and 86% of the perinatal mortality within the period. Maternal and perinatal mortality due to obstetric emergencies can be reduced through the utilization of antenatal care services, making budget for pregnancies and childbirth at family level, adequate funding of social welfare services to assist indigent patients, liberal blood donation and regular training of doctors and nurses.

2. Material and Methods

The present study was conducted to assess the effectiveness of planned teaching programme on knowledge regarding management of selected obstetric emergencies among 50 Final year GNM students of selected School of Nursing, Belgaum, Karnataka by using one group pre test post test pre-experimental design with an evaluative approach. Non-probability purposive sampling technique was used to select

the subjects. Structured knowledge questionnaire was used to collect the data. The tool used in the study consists of two parts:

Part-I: Information on demographic variables of the respondents containing 4 items.

Part-II: Structured knowledge questionnaire of 45 items related to obstetric emergencies which was divided into 3 aspects:
1. Knowledge items on antepartum haemorrhage: 25(55.5%)
2. Knowledge items on postpartum haemorrhage: 9(20%)
3. Knowledge items on pregnancy induced hypertension: 11(24.5%)

For the 45 items related to management of selected obstetric emergencies, each correct answer was awarded with a score of '1' and a score of '0' was awarded for the wrong answer. The data obtained was analyzed in terms of descriptive and inferential statistics.

3. Results

1) Findings related to socio-demographic variables of Final year GNM students:

Table 1: Frequency and percentage distribution of Final year GNM students according to socio-demographic variables: n=50

Sl. No.	Socio Demographic Variables	Frequency (F)	Percentage (%)
1.	**Age in years**		
	a. 19-21	30	60 (%)
	b. 22-24	17	34 (%)
	c. 25-27	3	6 (%)
2.	**Sex**		
	a. Male	14	28 (%)
	b. Female	36	72 (%)
3.	**Religion**		
	a. Hindu	41	82 (%)
	b. Christian	2	4 (%)
	c. Muslim	4	8 (%)
	d. Others	3	6 (%)
4.	**Marital status**		
	a. Married	9	18 (%)
	b. Unmarried	41	82 (%)

The result of the study showed that maximum, 30 (60%) of the Final year GNM students were in the age group of 19-21 years; most of the Final year GNM students, 36 (72%) were female; majority of the Final year GNM students, 41 (82%) were Hindu and majority of the Final year GNM students, 41 (82%) were unmarried.
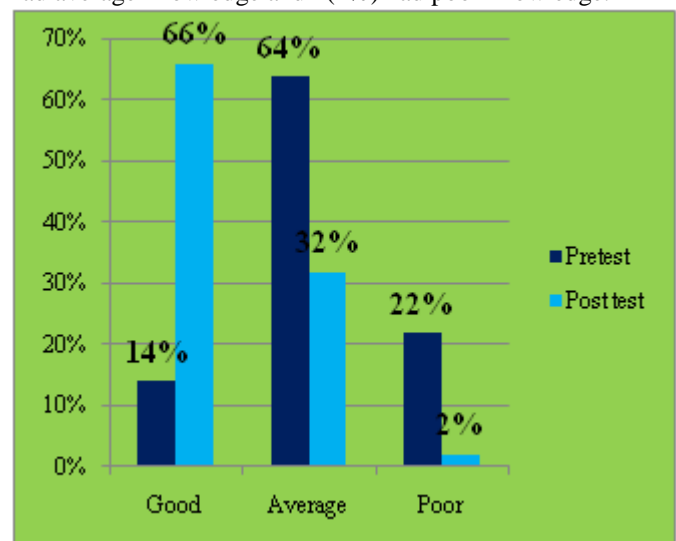
2) Findings related to the pre test knowledge score levels of the Final year GNM students:

The present study revealed that in pre test, majority of the subjects, 32(64%) had average knowledge, 11(22%) had poor knowledge and 7(14%) had good knowledge regarding management of selected Obstetric emergencies.

Table 2: Frequency and percentage distribution of knowledge scores of the Final year GNM students regarding management of Obstetric emergencies during the pre test and post test

Sl. No.	Knowledge score	Pre-test f	Pre-test %	Post test f	Post test %
1.	Good ($\overline{X}$+SD)	7	14%	33	66%
2.	Average ($\overline{X}$-SD) ($\overline{X}$+SD)	32	64%	16	32%
3.	Poor ($\overline{X}$-SD)	11	22%	1	2%

Table 2 revealed that in pre test majority of the subjects 32(64%) had average knowledge, 11(22%) had poor knowledge and 7(14%) had good knowledge. In post test, majority 33(66%) of them had good knowledge, 16(32%) had average knowledge and 1(2%) had poor knowledge.

Graph 1: A column graph showing percentage distribution of pretest and post test knowledge scores of subjects regarding management of Obstetric emergencies among the Final year GNM students.

3) Findings related to effectiveness of Planned teaching programme in terms of gain in knowledge:

The post test mean value of knowledge was 28 with SD of 5.85 which was higher than the pretest mean value of knowledge 21 with SD of 4.86. The mean difference between pre test and post test knowledge was 7 and the obtained 't' value was 10.17 which was calculated at 0.05 level of significance. The calculated 't' value was more than the table value, which was significant at 0.05 level. Hence, the planned teaching programme was found to be effective in improving the knowledge regarding management of selected Obstetric emergencies.

Table 3: Mean difference, standard error and paired 't' test of knowledge scores of the Final year GNM students, n=50

Mean difference	Standard error	Paired 't' test Calculated	Paired 't' test Tabulated
6.92	.68144	10.17*	1.960

The value of p was <0.00001. The result was significant at p≤ 0.05.

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Table 3 revealed that the calculated paired 't' test value (10.17) was higher than the tabulated 't' value (1.960). So, H_1 was accepted.

4) Findings related to the association between the pre test knowledge scores of Final year GNM students and selected demographic variables:
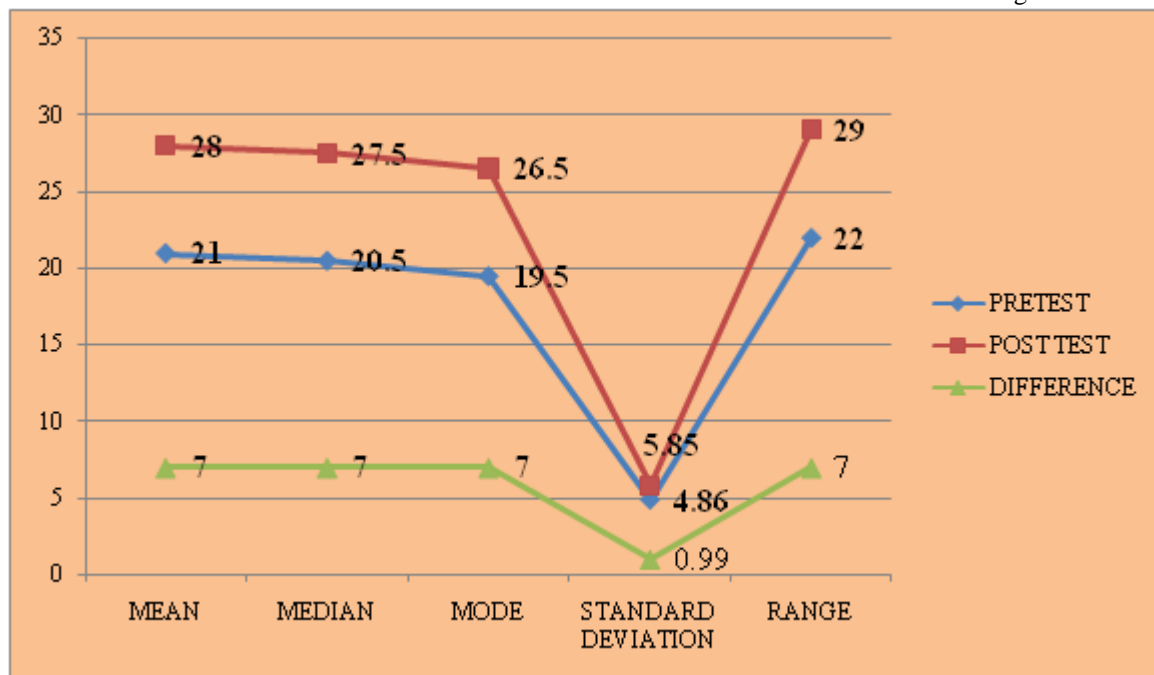
The association between pretest knowledge scores and socio-demographic variables was computed by using chi-square (χ^2). The obtained chi-square value for all the selected demographic variables such as age (χ^2=3.77, df=4), sex (χ^2=4.65, df=2), religion (χ^2=9.526, df=6) and marital status (χ^2=0.07, df=2) was less than the table value which showed that there was no significant association between the pre test knowledge scores of Final year GNM students and selected demographic variables.

5) Findings related to Mean, Median, Mode, Standard Deviation And Range Of Knowledge Scores Of Subjects Regarding Management Of Obstetric Emergencies

Table 4: Mean, Median, Mode, Standard Deviation And Range Of Knowledge Scores Of Subjects Regarding Management Of Obstetric Emergencies Among The Final Year GNM Students, n=50

Area of analysis	Mean	Median	Mode	Standard Deviation	Range
Pretest	21	20.5	19.5	4.86	22
Post test	28	27.5	26.5	5.85	29
Difference	7	7	7	0.99	7

Table 4 revealed differences between pretest score and post test score showing that overall difference between pretest and post test in Mean was 7, Median was 7, Mode was 7, Standard Deviation was 0.99 and Range was 7.

Graph 2: A Line graph showing Mean, Median, Mode, Standard Deviation and Range of knowledge scores of subjects regarding management of Obstetric emergencies among the Final Year GNM students.

4. Discussion

The findings of the study have been discussed under the following headings:

1. Findings related to socio-demographic variables of Final year GNM students.

Age:
The present study revealed that more than half, 30 (60%) of the Final year GNM students were in the age group of 19-21 years, 17 (34%) of them were in the age group of 22-24 years and 3 (6%) of them were in the age group of 25-27 years. The above result was supported by the study conducted by Garika M to assess the effectiveness of planned teaching programme among Female Health Assistants regarding obstetric emergencies at selected health centres, Gulbarga district, Karnataka where most of them 16(53.33%) of them were in the age group of 21-30years.[5]

Sex:
The present study revealed that most of the Final year GNM students, 36 (72%) were female while 14 (28%) were male.

Religion:
The present study revealed that majority of the Final year GNM students, 41 (82%) were Hindu, 4 (8%) of them were Muslim, 3 (6%) of them belonged to other groups and 2 (4%) of them were Christian. The above result was supported by a study which was conducted by Garika M to assess the effectiveness of planned teaching programme among Female Health Assistants regarding obstetric emergencies at selected health centres, Gulbarga district, Karnataka where most of them 14(46.66%) of them belonged to Hindu Religion.[5]

Marital Status

The present study revealed that majority of the Final year GNM students, 41 (82%) were unmarried and 9 (18%) were married.

2. Findings related to the pre test knowledge score levels of the Final year GNM students:

The present study revealed that in pre test, majority of the subjects, 32(64%) had average knowledge, 11(22%) had poor knowledge and 7(14%) had good knowledge regarding management of selected Obstetric emergencies among the Final year GNM students of selected School of Nursing, Belgaum, Karnataka.

The findings of the present study were supported by a study conducted by Jijimole M to assess the effectiveness of a structured teaching programme, for antenatal women, on high risk conditions in pregnancy, at the antenatal clinics of St, John's Medical College Hospital. Bangalore. The study findings showed that majority of the mothers 43% had average knowledge, 23% had good knowledge and 34% had poor knowledge.[6]

3. Findings related to effectiveness of Planned teaching programme in terms of gain in knowledge:

The post test mean value of knowledge was 28 with SD of 5.85 which was higher than the pretest mean value of knowledge (21) with SD of 4.86. The mean difference between pre test and post test knowledge was 7 and the obtained 't' value was 10.17 which was calculated at 0.05 level of significance. The calculated 't' value was more than the table value, which was significant at 0.05 level. Hence, the study concluded that the hypothesis was accepted.

The findings of the study were supported by a study conducted by Jijimole M to assess the effectiveness of a structured teaching programme, for antenatal women, on high risk conditions in pregnancy, at the antenatal clinics of St, John's Medical College Hospital. Bangalore. The findings showed that the overall post test mean knowledge score (19.5) was higher than overall mean pre test score (11.4). The mean difference of pre test and post test knowledge score was 8.1. The paired 't' value obtained (44.04) was greater than the table value. So, the research hypothesis was accepted.[6]

4. Findings related to the association between the pre test knowledge scores of Final year GNM students and selected demographic variables:

The obtained chi-square value for all the selected demographic variables such as age (χ^2=3.77, df=4), sex (χ^2=4.65, df=2), religion (χ^2=9.526, df=6) and marital status (χ^2=0.07, df=2) was less than the table value which showed that there was no significant association between the pre test knowledge scores of Final year GNM students and selected demographic variables.

The above result was supported by the study conducted by Garika M to assess the effectiveness of planned teaching programme among Female Health Assistants regarding obstetric emergencies at selected health centres, Gulbarga

district, Karnataka where no significant relationship was observed between the post test knowledge score of the sample with their age (χ^2=2.13), religion (χ^2=2.13) and marital status (χ^2=0.01).[5]

5. Conclusion

Based on the findings of the study, the following conclusions were drawn:
1) Maximum, 30 (60%) of the Final year GNM students were in the age group of 19-21 years; most of the Final year GNM students, 36 (72%) were female; majority of the Final year GNM students, 41 (82%) were Hindu and majority of the Final year GNM students, 41 (82%) were unmarried.
2) The result of the mean pre test knowledge score (21) showed that there is need for the planned teaching programme to update the knowledge regarding management of Obstetric emergencies among the Final year GNM students.
3) The mean post test knowledge score (28) revealed that the planned teaching programme was effective in improving the knowledge of the Final year GNM students. There was a significant difference between the pre test and post test knowledge scores of the Final year GNM students.
4) There was no association between the knowledge and age, sex, religion, marital status of the Final year GNM students.

6. Acknowledgement

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