International Journal of Nursing and Health Research
www.nursingjournal.in
Online ISSN: 2664-6420; Print ISSN: 2664-6412
Received Date: 02-11-2019; Accepted Date: 03-12-2019; Published: 03-01-2020
Volume 2; Issue 1; 2020; Page No. 07-10

Effectiveness of video-led teaching programme on knowledge regarding selected obstetrical emergencies among G.N.M. Students

Manisha Jain[1], Dolly John Shiju[2]
[1] Second year M.Sc. Nursing student, R.D. Memorial College of Nursing, Bhopal, Madhya Pradesh, India
[2] Professor & H.O.D. (Obstetric and Gynaecological Nursing), R.D. Memorial College of Nursing, Bhopal, Madhya Pradesh, India

Abstract
A study carried out to assess the effectiveness of video-led teaching programme on knowledge regarding selected obstetrical emergencies among G.N.M. 3rd year students in selected school of nursing at Bhopal M.P." A pre experimental study one group pre-test post-test design with evaluative approach non-probability purposive sampling techniques was used to select sample. Total 80 samples selected and data collection tool include Socio demographic variables and structured questionnaire. Video assisted teaching programme consisting of information on selected obstetrical emergencies used to enhance the knowledge of the samples. The statistical evaluation of present study shows that there is a significant difference between pre-test and post test score of knowledge questionnaire as "t" value was 25.94 at df 79 which was more than table value 2.086 and was very highly significant at $p<0.001$. The mean score of knowledge questionnaire was 8.63 in Pretest which had a markedly improved in Posttest to 23.33 which clearly signifies the improvement in knowledge score. The mean difference was 14.70, standard deviation for pretest is 6.1 and posttest is 4.9, standard error for pretest is 0.69 and posttest is 0.55, degree of freedom is 79 and "t" value was 25.94 which was significant at the level $p<0.001$. Hence, H1 was accepted. It suggest that there is no association between age, sex, religion and family with knowledge questionnaire as the chi-square vale is less than $p<0.05$. The data in the table indicate that a significant relationship exist between the knowledge score, type of family, residence, faculty of subjects and source of knowledge has association with knowledge questionnaire as their chi-square value is 0.03, 0.04, 0.05 ($p<0.05$).

Keywords: effectiveness, teaching, G.N.M, obstetrical, emergencies

1. Introduction
As per the definition of American Physician association, Obstetrical emergencies are defined as life threatening conditions that usually occur during pregnancy, labor or post-delivery causing women a relative degree of discomfort or if left untreated may result in death [1]. There are a number of illnesses and disorders of pregnancy that can threaten the well-being of both mother and child. About 830 women die from pregnancy or childbirth-related complications around the world every day [2]. 52% of maternal deaths are attributable to three leading preventable causes-hemorrhage, sepsis, and hypertensive disorders [3].

WHO statistics suggest that 25% of maternal deaths are due to PPH. Postpartum bleeding is the quickest of maternal killers; can kill even a healthy woman within two hours, if not treated India contributes to 15% of the global maternal deaths. As per the data of the sample registration system, the maternal mortality ratio in India was 178/100,000 live births in 2012. Although there has been a decrease of 16% in maternal mortality in the last two decades; however, maternal deaths in India still remain significantly high [4].

Since most of the maternal deaths occur during labor, delivery, and first 24-h postpartum, an effective teaching program has been identified as a priority to enhance the knowledge of obstetrical emergencies among nurses to reduce maternal mortality, near misses, and maternal morbidity [5]. Obstetric complications are unpredictable and may prove fatal if appropriate nursing care is not provided within a short window of time. Various studies conducted in India and other parts of the world have reported that the incidence of obstetric complications varies from 4.8% to 25% in different settings and mostly depends on the lack of availability of proper knowledge regarding the same [6].

2. Material and Methods
Research approach:-A quantitative research approach was used in the study.

Research design:-A pre-experimental one group pretest-posttest design was used.

Variables under the study
Independent variable: In this study, Independent variable is video-led teaching programme on knowledge regarding selected obstetrical emergencies.

Dependent variable: In this study, dependent variable is knowledge of G.N.M. 3rd Year Students.

Setting of the study:-The present study was conducted at two different schools of nursing namely Government Hamidiya College of nursing Bhopal and Rajeev Gandhi Proudyogiki Mahavidyalaya of nursing situated at Bhopal MP.

Population:-In the present study, population consisted of G.N.M. 3rd Year Students

Sample:-In this study, the sample comprised of total 80 G.N.M. 3rd year students studying in the selected nursing schools at Bhopal M.P.

Sample selection criteria

Inclusion Criteria

- Students of G.N.M. who are currently studying in 3rd year.
- G.N.M. 3rd year students who passed in second year of GNM course and promoted to third year.
- G.N.M. 3rd year students who are the residents of Bhopal.
- G.N.M. 3rd year students who are willing to participate in the research.

Exclusion criteria

- Students of G.N.M. who are not currently studying in 3rd year.
- G.N.M. 3rd year students who do not passed in second year of GNM course and promoted to third year with supplementary.
- G.N.M. 3rd year students who are not the residents of Bhopal.
- G.N.M. 3rd year students who are not willing to participate in the research

Description of the tool:-The tools used in the study by the researcher were:

Section A: Socio-demographic variable

Section B: Self- Structured questionnaire to assess the knowledge regarding selected obstetrical emergencies

Development of the tool:-The following steps were taken prior to the development of the tool

- Review of literature to provide adequate content for the tool preparation.
- Personal experience of the investigator was an added advantage in the construction of the tool
- Prior to the development of the tool, the investigator consulted the experts in the field of obstetrics and gynecology, discussed the guide, co-guide and gathered the opinion from friends too.

Section A: socio demographic variable:-This part was comprised of 7 items to get the baseline data of selected factors like age, sex, and religion, source of knowledge, type of family, place of residence, faulty subjects.

Section B: This section contained the 30 knowledge questionnaires to assess the knowledge regarding selected obstetrical emergencies among G.N.M. 3rd year students at present. The questionnaire was framed in order to get the correct responses from the subjects regarding the selected obstetrical emergencies.

3. Result

This chapter deals with the analysis and interpretation of data collected using structured multiple questionnaires. Data was collected about the socio demographic profile and pre-test knowledge was assessed and after video-led teaching, post-test knowledge was assessed. The sample size was 80 G.N.M. 3rd Year Students. The data has been processed and analysed in a systematic fashion. The data was analysed according to the objective of the study using descriptive and inferential statistics

The findings were organized and presented under the following sections:

Section I: Socio Demographic Variables of the G.N.M. 3rd Year Students

Section II: Assessment of the pretest score of knowledge regarding selected obstetrical emergency among G.N.M. 3rd year students.

Section III: Assessment of The Effectiveness of Video-Led Teaching Program on Knowledge Regarding Obstetrical Emergencies Among G.N.M. 3rd Year Students.

Section IV: Association of Pretest Score of Knowledge Questionnaire and Selected Socio Demographic Variables.

Section I: Socio Demographic Variables of the G.N.M. 3rd Year Students

- The present study shows that among 80 G.N.M. 3rd Year students 42(52.5%) have age of 17-19 years 23(28.75%) has 21-22 years 13(16.25%) students had 22-30 years and only 2(2.5%) has 30-35 years of age.
- Males were 20(25%) and female were 60(80%) among 3rd year GNM students.
- Viewing religion, maximum 39(48.75%) followed Christianity, 33(41.25%) were Hindus, 6(7.50%) were Muslims and 2(2.50%) and one belongs to Sikh and other religions.
- Considering Family, majority 51(63.75%) have nuclear families, 24(30%) have joint families and only 5(6.5%) had extended families.
- As far as the residential status is concerned, 57 (71.25%) students were hostellers, and 23 (28.75%) were day scholars.
- Based on the Faculty of subjects, majority 48(60%) has chosen biology followed by 18(22.4%) who chose art and commerce 11(13.75%) and very less home science.
- In Source of knowledge, Classroom teaching has the highest frequency and percentage of 42(52.5%) followed by Clinical practice with 21(26.25%) and lastly Books and journals with 17(21.25%) respectively.
- On evaluating the Pre-test knowledge regarding selected obstetrical emergencies among 3rd year nursing students, majority 53(66.25%) G.N.M. 3rd Year Students scored (1-10 marks) which was graded as "Poor", 24 (30%) scored (11-20 marks) graded as "Average" and only 3 (3.75%) off them scored between (21-30 marks) hence graded as "Good"

Section ii: Assessment of the Pretest Scores of Knowledge Regarding Selected Obstetrical Emergencies among g.n.m. 3rd year Students.

- **Figure 1- Bar Graph Distribution showing Pretest Score of Knowledge Questionnaire of G.N.M. 3rd Year Students**

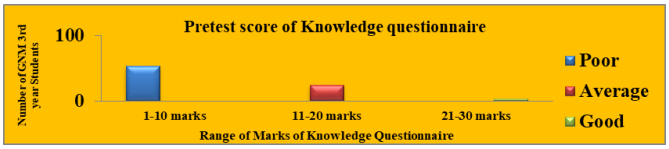

Fig 1: Line Diagram Showing the Pre-Test Score of Knowledge questionnaire of G.N.M. 3rd Year Students

- In present figure shows that in pre-test majority 53(66.25%) G.N.M. 3rd Year Students scored (1-10 marks) which was graded as "Poor", 24 (30%) scored (11-20 marks) graded as "Average" and only 3 (3.75%)off them scored between (21-30 marks) hence graded as "Good"

Section III: Assessment of the Effectiveness of Video-Led Teaching Program on Knowledge Regarding Obstetrical Emergencies among G.N.M. 3rd Year Students

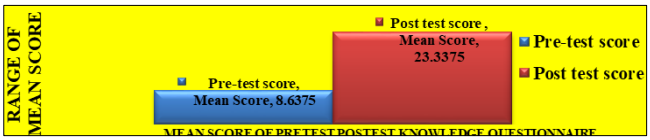

Fig 2: Column diagram showing Mean Pretest Posttest Score of knowledge questionnaire

Figure 2 shows the significant difference between pre-test and post test score of knowledge questionnaire as "t" value was 25.94 at df 79 which was more than table value 2.086 and was very highly significant at *p<0.001*. The mean score of knowledge questionnaire was 8.63 in Pretest which had a markedly improved in Posttest to 23.33 which clearly signifies the improvement in knowledge score. The mean difference was 14.70, standard deviation for pretest is 6.1 and posttest is 4.9, standard error for pretest is 0.69 and posttest is 0.55, degree of freedom is 79 and "t" value was 25.94 which was significant at the level *p<0.001*. Hence, H_1 was accepted.

Section IV: Association of Pretest Score of Knowledge Questionnaire and Selected Socio Demographic Variables.

Table 1: Chi-Square value of knowledge questionnaire score and Selected Socio-Demographic Variable.N=80

S. No.	Variables	Poor	Average	Good	*df*	$\chi 2$	Table value p<0.05
1.	Age						
A	17-19 years	28	13	01	6	0.6	0.99
B	20-21 years	17	07	02			
C	22-30 years	06	03	00			
D	30-35 years	02	01	00			
2	Sex						
A	Female	33	26	1	2	0.5	0.7
B	Male	10	8	2			
3.	Religion						
A	Hindu	18	9	2	8	3.7	0.8
B	Muslim	5	1	0			
C	Sikh	1	0	0			
D	Christian	30	8	1			
E	Others						

p<0.05 NS- Non Significant, S- Significant

Table 12 suggest that there is no association between age, sex, religion and Family with knowledge questionnaire as the chi-square vale is less than p<0.05.

Section IV: Association of Pretest Score of Knowledge Questionnaire and Selected Socio Demographic Variables

Table 13: Chi-Square value of knowledge questionnaire score and Selected Socio-Demographic Variable. N=80

S. No.	Variables	Poor	Average	Good	*df*	$\chi 2$	Table value p<0.05
4	Type of Family						
A	Nuclear	22	28	1	4	8.2	0.4
B	Joint	16	7	1			
C	Extended	2	2	1			
5	Residence						
A	Hostler	27	28	2	2	6.9	0.03
B	Day Scholars	18	4	1			
6	Faculty of Subjects						
A	Biology	24	23	1	6	12.8	0.04
B	Home-science	1	1	1			
C	Art	9	7	1			
D	Commerce	2	9	0			
7	Source of Knowledge						
A	Clinical Practice	17	3	1	4	9.2	0.05
B	Classroom Teaching	20	20	2			
C	Books and Journals	13	4	0			

p<0.05 NS- Non Significant, S- Significant

Table 13 depicts that residence, faculty of subjects and source of knowledge has association with knowledge questionnaire as their chi-square value is p<0.05. Hence they are marked as "Significant".

4. Discussion

Section I- Assessment of Socio-Demographic Variables

The present study shows that among 80 nursing students 42(52.5%) have age of 17-19 years 23(28.75%) has 21-22 years 13(16.25%) students had 22-30 years and only 2(2.5%) has 30-35 years of age. Males were 56(70%) and female were 24(30%) GNM 3rd Year Students. Viewing religion, maximum 39(48.75%) followed Christianity, 33(41.25%) were Hindus, 6(7.50%) were Muslims and 2(2.50%) and one belongs to Sikh and other religions. Considering Family, majority 51(63.75%) have nuclear families, 24(30%) have joint families and only 5(6.5%) had extended families. As far as the residential status is concerned, 57 (71.25%) students were hostellers, and 23 (28.75%) were day scholars. Based on the Faculty of subjects, majority 48(60%) has chosen biology followed by 18(22.4%) who chose art and commerce 11 (13.75%) and very less home science.

In Source of knowledge, Classroom teaching has the highest frequency and percentage of 42(52.5%) followed by Clinical practice with 21(26.25%) and lastly Books and journals with 17(21.25%) respectively.

Section II- Assessment of the Knowledge Regarding Selected Obstetrical Emergencies among G.N.M. 3rd Year Students.

On evaluating the Pre-test knowledge regarding selected obstetrical emergencies among 3rd year nursing students, majority 53(66.25%) G.N.M. 3rd Year Students scored (1-10 marks) which was graded as "Poor", 24 (30%) scored (11-20 marks) graded as "Average" and only 3 (3.75%) off them scored between (21-30 marks) hence graded as "Good.

Above findings were supported by a study conducted by V Bansal, (2012)[24] at Punjab in the Academic Year of 2017 on implementation of knowledge questionnaire regarding selected obstetrical emergencies among nursing students, Method to improve Students' knowledge in this subject through conducting two experiments with them. He investigated the effectiveness of the video-led strategy for learning from educational videos. Video-led strategy was compared with rereading and note-taking study strategies using free-recall, multiple-choice, and short-answer inference tests immediately after study and after a 1-week delay. In Experiments 1 and 2, video-led improved immediate and delayed free recall of fact-based passages, relative to the rereading and note-taking strategies. In Experiment 2, which used longer, more complex passages on engineering topics, performance on multiple-choice and problem-solving items was better in the video-led teaching than in the rereading condition, and was equivalent in the video-led and note-taking conditions, though it took less study time than note taking. An inherent advantage of 3R relative to other testing methods for improving learning is that video-led teaching is under the learner's control. These results indicate that it is also an efficacious study technique that capitalizes on the mnemonic potency of retrieval and feedback.

Section III: Assess the Effectiveness of Video-Led Teaching Program on Knowledge Regarding Selected Obstetrical Emergencies on Knowledge Scores of G.N.M. 3rd Year Students.

The statistical evaluation shows the significant difference between pre-test and post test score of knowledge questionnaire as "t" value was 25.94 at df 79 which was more than table value 2.086 and was very highly significant at $p<0.001$. The mean score of knowledge questionnaire was 8.63 in Pretest which had a markedly improved in Posttest to 23.33 which clearly signifies the improvement in knowledge score. The mean difference was 14.70, standard deviation for pretest is 6.1 and posttest is 4.9, standard error for pretest is 0.69 and posttest is 0.55, degree of freedom is 79 and "t" value was 25.94 which was significant at the level $p<0.001$. Hence, H_1 was accepted.

The above findings were consistent with an another study carried by Dharma Jairam Kenneth A. Kiewra (2016) which stated that 73% of college students report difficulties preparing for midwifery exams, and this percentage of reported study problems and employ weak strategies in the classroom and while studying. Those weak strategies include poor note taking, organizing ideas linearly, learning in a piecemeal fashion, and employing redundant strategies. The implementation of video-led teaching program was done to improved 98% students' learning ability at the 3rd year nursing students of Shri Vinayaka College of Nursing in the academic year of 2016 in Maharashtra.

Section IV: Association of Pretest Score of Knowledge Questionnaire with Selected Socio Demographic Variables.

It suggest that there is no association between age, sex, religion and family with knowledge questionnaire as the chi-square vale is less than $p<0.05$. The data in the table indicate that a significant relationship exist between the knowledge score, residence, faculty of subjects and source of knowledge has association with knowledge questionnaire as their chi-square value is 0.03, 0.04, 0.05 ($p<0.05$). Hence they are marked as level of "Significant".

5. Conclusion

The statistical evaluation of present study shows that there is a significant difference between pre-test and post test score of knowledge questionnaire as "t" value was 25.94 at df 79 which was more than table value 2.086 and was very highly significant at $p<0.001$. The mean score of knowledge questionnaire was 8.63 in Pretest which had a markedly improved in Posttest to 23.33 which clearly signifies the improvement in knowledge score. The mean difference was 14.70, standard deviation for pretest is 6.1 and posttest is 4.9, standard error for pretest is 0.69 and posttest is 0.55, degree of freedom is 79 and "t" value was 25.94 which was significant at the level $p<0.001$. Hence, H_1 was accepted.

6. References

1. UNFPA, ICoM, WHO. The State of the World′s Midwifery 2014. A Universal Pathway. A Woman′s Right to Health, 2014. http://www. unfpa.org/sites/default/files/pub-pdf/EN_SoWMy2014_complete.pdf (accessed 13 July 2019).
2. Graham WJ, Varghese B. Quality, quality, quality: gaps in the continuum of care. Lancet, 2012; 379:e5-6.
3. Pittrof R, Campbell OM, Filippi VG. What is quality in maternity care? An international perspective. Acta Obstet Gynecol Scand, 2002; 81:277-83.
4. Raven JH, Tolhurst RJ, Tang S, *et al*. What is quality in maternal and neonatal health care? Midwifery, 2012; 28:e676-83.
5. WHO. UNFPA, UNICEF, AMDD. Monitoring emergency obstetric care. A handbook. Secondary Monitoring emergency obstetric care. A handbook, 2009. http://whqlibdoc.who.int/publications/2009/ 9789241547734_eng.pdf? Ua=1 (accessed 13 Jun 2019).
6. Souza JP, Gülmezoglu AM, Vogel J, *et al*. moving beyond essential interventions for reduction of maternal mortality (the WHO Multicountry Survey on Maternal and Newborn Health): a cross-sectional study. Lancet, 2013; 381:1747-55.