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Original Research Paper

Nursing

ASSESS KNOWLEDGE REGARDING EMERGENCY OBSTETRIC CARE (EMOC) : PILOT STUDY

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ABSTRACT

Since immemorial, complications arising from pregnancy, childbirth and postpartum is not exceptional. Most health professionals in the hospitals encounter women with obstetric complications or emergencies in their day- to- day delivery of health care services.

AIMS AND OBJECTIVES: The objectives of the study were to assess the knowledge regarding emoc services among nursing students and to determine the association of knowledge scores with selected demographic variables.

MATERIALS AND METHODS: Descriptive research design was used to assess knowledge regarding EmOc among 50 nursing students studying at SGT University, Gurugram who met the inclusion criteria were selected using convenient sampling technique. Structured knowledge questionnaire including 30 items was administerd to nursing students. Reliability of the knowledge questionnaire was tested by Kr20 and it was found to be 0.83

RESULTS: The findings of the study indicated that nearly half (46%) of students were in the age group of 22-24 years, 42% of them were pursuing Post Basic BSc Nursing programme. Nearly half (56%) of the students were in second year, majority (86%) of them were following Hindu religion. Majority (86%) of the students were female, most (70%) of them were residing in urban area and for 42% of them, the source of health information was health professionals. Mean knowledge score regarding EmOc among nursing students was 15.86± 5.53.44% of them hadmoderate knowledge regarding EmOc. Study findings also revealed that the association of knowledge scores with age, educational course, year of study, religion of the student and source of health information was found to be statistically significant at 0.05 level of significance.

CONCLUSION: Demographic variables age, educational course, year of study, religion of the student and source of health information had significant difference on knowledge score regarding EmOc among nursing students.

KEYWORDS :

INTRODUCTION

Maternal mortality remains one of the most intimidating health challenges in our country and reduction in the same has been one of the focus areas of work. National Rural Health Missions (NRHM) goal is to reduce MMR to 100 per 1,00,000 live births by 2012. Sample Registration Systems (SRS) estimates that 9% of all maternal mortality is due to unsafe abortions. One of the key contributing factors for this situation is the lack of knowledge and skills among health care personnelsin primary health care system to provide high quality Emergency Obstetric Care (EmOC) and MTP services.[1] The latest worldwide estimates show that 289 000 maternal deaths occurred across the world in 2013. A 65% decrease in maternal mortality rate (MMR) has recorded in India from 1990 to 2013, it still contributed the major proportion, (17%; 50000 deaths) of maternal deaths in the world in 2013.[2]

The unpredictability of many direct obstetric complications which cause maternal mortality means that they present as emergency situations during the intrapartum period.[3]Access to interventions targeted at this intrapartum period is crucial to saving maternal lives and reducing mortality. The WHO, UNICEF and United Nations Population Fund (UNFPA) have classified these interventions into emergency obstetric care (EmOC) signal functions—seven basic (BEmOC) and two comprehensive (CEmOC).[4,5]Whereas it is recognised that all these EmOC functions may be performed by a physician, nurse or midwife, all of whom are defined as skilled birth attendants, the advanced CEmOC function of caesarean section (CS) generally lies in the domain of obstetricians.5 In India in particular, BEmOC skills have also become largely concentrated in the hands of obstetricians due to the neglect of the midwifery cadre over the past many decades.[6]

Universal Health Coverage (UHC) for all has been set as one of the sustainable development goals the world needs to attain by 2030.8 Universal access to health services, in all its three dimensions, physical accessibility, services accep tability and financial affordability, is a prerequisite for Universal Coverage. Universal Coverage would build on access by ensuring actual receipt of services.[7]

Reduction in the number of maternal deaths requires, besides essential obstetric care, timely access to effective, reasonably priced, and appropriate emergency obstetric care (EmOC) services when complications arise. Universally, EmOC has broadly been categorized into two groups__basic and comprehensivebased on the performance of certain signal functions.[9,11] Basic EmOC includes administration of injectable antibiotics, oxytocics, and sedatives/ anti-convulsants, removal of retained products, performance of manual removal of placenta, and assisted vaginal delivery.[10] In addition to these six signal functions, comprehensive EmOC also includes blood transfusion and caesarean section.

In this context, the present study was conducted in to assess the knowledge regarding EmOC services among nursing students at SGT University, Gurugram.

MATERIAL AND METHODS

A non- experimental descriptive research design was used. Total of 50 nursing studentsstudying in SGT University, Gurugram who met the inclusion criteria were selected using convenient sampling technique. The tools for study consist of demographic variables and structured knowledge questio nnaire which consists of 30 multiple choice questions. Reliability of the knowledge questionnaire was established by kr 20and it was found to be 0.83. Data collection was done in the month of January, 2020. The data was analysed and interpreted in terms of objectives of the study. Descriptive and inferential statistics were utilized for the data analysis. A p-

value ≤ 0.05 was considered as significant for the present study.

INCLUSION CRITERIA

The participants who were meeting the following criteria were included in study.

- Present on the day of data collection.
- Willing to participate in study.

EXCLUSION CRITERIA

- Participants who are not willing to participate in study were excluded from the study.

ETHICAL CONSIDERATION

Ethical permission was obtained from ethical committee Faculty of Nursing, SGT University, Budhera, Gurugram in accordance with the guidelines of ICMR 2006. The written informed consent was obtained from each study participants before conducting the study.

FINDINGS

The findings of the study indicated that nearly half (46%) of students were in the age group of 22-24 years, 42% of them were pursuing Post Basic BSc Nursing programme. Nearly half (56%) of the students were in second year, majority (86%) of them were following Hindu religion. Majority (86%) of the students were female, most (70%) of them were residing in urban area and for 42% of them, the source of health information was health professionals. Mean knowledge score regarding EmOc among nursing students was 15.86± 5.53.

14% of them were having good knowledge regarding EmOc followed by 44% as having moderate knowledge and remaining 42% as having poor knowledge. Study findings also revealed that the association of knowledge scores with age, educational course, year of study, religion of the student and source of health information was found to be statistically significant at 0.05 level of significance.

DISCUSSION

Findings of the present study revealed that 14% of them were having good knowledge regarding EmOc followed by 44% as having moderate knowledge and remaining 42% as having poor knowledge. These findings are consistent with the findings of a study conducted by University of Medical Sciences, Ondo, Nigeria where it was found that only 13% of the respondents scored high in knowledge of EmOc whereas 41% were low in knowledge.

Findings of the present study revealed that most (70%) of them were residing in urban area. These findings are consistent with the findings of a study conducted by Ngoran Grace Bongban in Kenya where it was found that 71.7% of them were residing in urban area and remaining 22.3% in rural area of residence.

CONCLUSION

Demographic variables age, educational course, year of study, religion of the student and source of health information had significant difference on knowledge score regarding EmOc among nursing students.

SOURCE OF FUNDING : Self financed

LIMITATION

The study confined to 50final year nursing students studying at SGT University, Gurugram.

NURSING IMPLICATIONS

NURSING EDUCATION

The study has a significant implication in nursing education and other fields. Staff nurses and nursing students can give teaching programmes regarding better utilization of EmOc services. Nursing Student can also give teaching programmes regarding availability of EmOc services.

NURSING PRACTICE

Nurses are backbone of health care set up of any country.The Nursing knowledge has gone many evolution in recent past .The expanded roles of professional Nurse emphasize the implication which include promotive ,preventive, curative and rehabilitative aspects.

NURSING RESEARCH

A very few interventional studies have been conducted regarding EmOc services. New evidences based information becomes available every level on this subjects. It is vital that student researchers update their knowledge constantly and are always willing to examine and alter their practice in the light of new published evidences.

NURSING ADMINISTRATION

Nursing Administrator may use the study finding to improve the utilisation and availability of EmOc services. The Concept of extended role of nurse offer many opportunities for a nurse administrator to improve the knowledge regardingEmOc services among staff nurses in community setting.

RECOMMENDATIONS

- A similar study can be replicated on a larger sample size to validate the findings and generalisations can be made.
- A similar study can be conducted to assess knowledge and skills regarding EmOc among staff nurses in selected hospital, Gurugram, Haryana.
- Comparative study can be done between staff nurses working in private or Government Hospital.
- Interventional study can be done by planning some sort of training program on EmOc services.

Table No.1 Frequency and percentage distribution of students in terms of selected demographic variables

(N= 50)

S.No.	Demographic variables	Frequency	Percentage
1.	Age in years		
	a) 18-20	5	10
	b) 20-22	15	30
	c) 22 – 24	23	46
	d) >24	07	14
2.	Educational course		
	a) General Nursing Midwifery	10	20
	b) B.Sc. Nursing	09	18
	c) PB.B.Sc. Nursing	21	42
	d) M.ScNursing	10	20
3.	Year of study		
	a) First year	0	0
	b) Second year	28	56
	c) Third year	15	30
	d) Fourth year	07	14
4.	Religion of the student		
	a) Hindu	43	86
	b) Muslim	02	04
	c) Sikh	03	06
	d) Others	02	04
5.	Gender of student		
	a) Male	07	14
	b) Female	43	86
6.	Area of residence		
	a) Rural	15	30
	b) Urban	35	70

7.	Source of health information		
	a) Newspaper/Magazine	13	26
	b) Radio/ Television	09	18
	c) Friends/ Relatives	07	14
	d) Health professionals	21	42

Table 2. Frequency and Percentage distribution of students in terms of knowledge score

Level of knowledge	Score Range	f(%)
Good	24-30	7 (14)
Moderate	15-23	22 (44)
Poor	0-14	21 (42)

Maximum score= 30 Minimum= 0

Figure 1. Frequency and Percentage distribution of students in terms of knowledge score

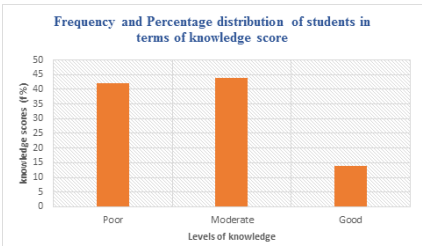

Table No 3. Range Mean, Median, Standard Deviation and Mode of knowledge scores of nursing students

Variable	n	Obtained Range	Mean +_ SD	Median	Mode
Knowledge score	50	7-28	15.86 +_ 5.53	15	15

Table 4. ANOVA and 't' value showing association of knowledge score with selected demographic variables

N= 50

S. No.	Demographic variable	Mean +_ SD	F/t value	df	p-value
1.	Age in years		3.113	3/46	0.035*
	a) 18-20	10.60 ± 4.98			
	b) 20-22	15 ± 2.39			
	c) 22 – 24	16.43 ± 5.80			
	d) >24	19.57 ± 7.39			
2.	Educational course		11.304	3/46	0.000*
	a) General Nursing Midwifery	12.40 ± 2.87			
	b) B.Sc. Nursing	13.78 ± 4.17			
	c) P.B.B.Sc. Nursing	15.14 ± 2.88			
	d) M.ScNursing	22.70 ± 7.33			
3.	Year of study		6.859	2/47	0.002*
	a) First year	0			
	b) Second year	17.89 ± 6.05			
	c) Third year	12 ± 3.02			
	d) Fourth year	16 ± 2.76			
4.	Religion of the student		3.344	3/46	0.027*
	a) Hindu	15.67 ± 5.34			
	b) Muslim	26.50 ± 0.707			
	c) Sikh	12.33 ± 4.16			
	d) Others	14.50 ± 0.707			
5.	Gender of student		0.293	48	0.104NS
	a) Male	15.29 ± 2.87			
	b) Female	15.95 ± 5.87			
6.	Area of residence		0.828	48	0.081NS
	a) Rural	14.87 ± 3.83			
	b) Urban	16.29 ± 6.12			
7.	Source of health information		3.846	3/46	0.015*
	a) Newspaper/Magazine	16 ± 4.61			
	b) Radio/ Television	11.78 ± 3.15			
	c) Friends/ Relatives	13.71 ± 3.72			
	d) Health professionals	18.24 ± 6.25			

TABLE 5. Post-hoc test showing mean difference in association of knowledge score and demographic variable (Age)

N= 50

Variable	Category	Mean difference	p-value
Age	18-20 vs 20-22	-4.40	0.369
	18-20 vs 22-24	-5.83	0.120
	18-20 vs 24 and above	-8.97	0.025*
	20-22 vs 22-24	-1.43	0.840
	20-22 vs 24 and above	-4.57	0.235
	22- 24 vs 24 and above	-3.13	0.509

*The mean difference is significant at the 0.05 level.

TABLE 6. Post-hoc test showing mean difference in association of knowledge score and demographic variable (Educational Course)

N=50

Variable	Category	Mean difference	p-value
Educational Course	General Nursing Midwifery vs BSc Nursing	-1.37	0.900
	General Nursing Midwifery vs PBBSc Nursing	-2.74	0.363
	General Nursing Midwifery vs MSc Nursing	-10.30	0.000*
	BSc Nursing vs PBBSc Nursing	-1.365	0.85
	BSc Nursing vs MSc Nursing	-8.92	0.000*
	PBBSc Nursing vs MSc Nursing	-7.55	0.000*

*The mean difference is significant at the 0.05 level.

TABLE 7. Post-hoc test showing mean difference in association of knowledge score and demographic variable (Year of study)

N=50

Variable	Category	Mean difference	p- value
Year of study	Second year vs third year	5.89	0.002*
	Second year vs fourth year	1.89	0.643
	Third year vs fourth year	-4.00	0.195

*The mean difference is significant at the 0.05 level.

TABLE 8. Post-hoc test showing mean difference in association of knowledge score and demographic variable (Religion of the student)

N=50

Variable	Category	Mean difference	p-value
Religion of the student	Hindu vs Muslim	-10.82	0.029*
	Hindu vs Sikh	3.34	0.703
	Hindu vs others	1.17	0.989
	Muslim vs Sikh	14.16	0.022*
	Muslim vs others	12.0	0.109
	Sikh vs others	-2.16	0.968

*The mean difference is significant at the 0.05 level.

TABLE 9. Post-hoc test showing mean difference in association of knowledge score and demographic variable (Source of health information)

N=50

Variable	Category	Mean difference	p-value

Source of Health Information	Newspaper/Magazine vs Radio/ Television	4.22	0.240
	Newspaper/Magazine vs Friends/ Relatives	2.28	0.776
	Newspaper/Magazine vs Health Professionals	-2.23	0.604
	Radio/ Television vs Friends/ Relatives	-1.93	0.875
	Radio/ Television vs Health Professionals	-6.46	0.014*
	Friends/ Relatives vs Health Professionals	-4.52	0.192

*The mean difference is significant at the 0.05 level.

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