ORIGINAL RESEARCH PAPER

Nursing

A COMPARATIVE STUDY TO ASSESS THE PRACTICES OF BASIC LIFE SUPPORT AMONG NATIONAL AND INTERNATIONAL NURSING STUDENTS.

KEY WORDS: Basic life support, Nursing Students

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ABSTRACT

Aim: The present study aim assessing practices regarding BLS among nursing students. In present study Quantitative research approach was used. **Material and Method:** The research approach adopted for the study was Quantitative research. The study was conducted in Maharishi Markandeshwar College of Nursing (MMCON) on 2nd year students. The tools used for the data collection were Semi structured questionnaire aim to assess the practices regarding BLS among nursing students. Total 50 students were observed during data collection i.e. 25 were Indian and 25 were international. The data were analysed using both descriptive and inferential statistics. **Result:** the finding of the study was the mean practice score of Norway students are 11.16 and the mean of Indian students are 9.16. The majority of Norway students were female 96% and the Indian students were female 64%. Only 20% of Norway nursing students and 8% Indian students have attended BLS program. **Conclusion:** The findings of the study revealed that Norway students have more knowledge than Indian students regarding basic life support

INTRODUCTION

The heart is the hub of the circulatory system, and it is responsible for nearly everything that keeps the body alive, from the transfer of oxygen to the immune system's success. The foods we eat and the quantity of activity we choose to engage in, on the other hand, have a significant impact on the general health of the heart and the many other tissues that make up the cardiovascular system. The heart is a muscular organ about the size of a closed fist that functions as the body's circulatory pump. It takes in deoxygenated blood through the veins and delivers it to the lung for oxygenation before pumping it into the various arteries (which provide oxygen and nutrients to body tissues by transporting the blood throughout the body).[1]

Heart disease refers to any condition affecting the heart. There are many types, some of which are preventable. Different cardiovascular disease, which includes problems with the entire circulatory system, heart disease affects only the heart. There are several different types of heart disease, and the affect the heart in different ways such as Myocardial infarction, heart failure. Each year a number of persons suffer with an accident or illness, severe enough to stop their breathing and leads to cardiac arrest. Sudden cardiac arrest is a major cause of death in developed countries. Sudden death occurs when heartbeat and breathing stops.[2]

Various cardiovascular diseases include difficulties with the overall circulatory system, as well as heart disease, which affects only the heart. Heart illness comes in many forms and affects the heart in diverse ways, such as myocardial infarction and heart failure. Every year, a number of people are involved in an accident or sickness that causes their heart to stop beating, resulting in cardiac arrest. In affluent countries, sudden cardiac arrest is a leading cause of death. According to WHO estimates, Indians will account for approximately 60% of all cardiac patient cases worldwide till 2020. Basic life support is taught to the general population and new generations because they may be the only ones there in the critical few minutes until emergency services arrive.[2]

According to the paper, there are more than 356,000 out-of-hospital cardiac arrests (OHCA) in the United States each year, with over 90% of these being deadly. The annual incidence of non-traumatic OHCA as determined by EMS is estimated to be 356,461, or about 1,000 people each day.

METHODS

The current study took place at Maharishi Markandeshwar College of Nursing in Mullana and included 25 students from Maharishi Markandeshwar College of Nursing, Mullana, Ambala, and 25 Norway nursing students of 2nd year.

The open ended interview guide's item content validity ranged from 0.75 to 1, and the scale content validity index was 0.97. The tool's internal consistency was determined using the KR-20 reliability coefficient. The reliability score was 0.72. The study received formal ethical approval from the University ethical committee. The study subjects signed a consent form indicating their desire to engage in the research endeavor. Pilot study was undertaken on 5 MMCON nursing students and 5 Norwegian nursing students. Administrative approval was acquired in writing. The subjects' voluntary consent was obtained. Participants completed the questionnaire and gave their consent.

Description of Tool
Section 1 – Socio-demographic variables
It consisted of nine items that sought background information such as age, education, BLS attendance, and programmed duration.

Section II- Open Ended Interview Guide
Consists of 14 items (dichotomous question) relating to Basic Life Support Practices Procedure for conducting the study, the principle of M. M. College of Nursing, Mullana, Ambala and the coordinator of B.sc Nursing 2nd year of MM College of Nursing, Mullana, Ambala gave their formal clearance. The sample was chosen based on the research study's criteria.

Table 1 Frequency and percentage distribution of practices among Indian nursing students according to demographic variable

S.NO.	Sample characteristics	Frequency (Indian)	Frequency (Norway)	Percentage (Indian)	Percentage (Norway)
1.	AGE	23	19	92%	76%
1.1	19-20 years	02	01	8%	4%
1.2	21-22 years	00	04	0%	16%
1.3	23-24 years	00	01	0%	4%
1.4	25-26 years				

2	GENDER:	09	01	36%	4%
2.1	Male	16	24	64%	96
2.2	Female				
3	YEAR OF	00	00	0%	0%
3.1	STUDY:	25	25	100%	100%
3.2	Bsc. 1st year	00	00	0%	0%
3.3	Bsc. 2nd year	00	00	0%	0%
3.4	Bsc. 3rd year				
	Bsc 4th year				
4	PREVIOUS	16	16	64%	64%
4.1	KNOWLEDGE:	09	09	36%	36%
4.2	YES				
	NO				
5	BLS	02	05	8%	20%
5.1	PROGRAMME	23	20	92%	80%
5.2	ATTENDED?				
	Yes				
	No				
6	IF YES,	02	04	8%	16%
6.1	SPECIFY?	23	21	92%	84%
6.2	Yes				
	No				

Data in table shows frequency and percentage distribution of subjects as per demographic variables.

The data presented shows that among Indian students sample of 25, (92%) belongs to the age group of 19-20 years, 8% belongs to the age group of 21-22years.

In adults majority of sample, 64% were female and 36 % were male and In year of study 100% of the subjects were BSC nursing 2nd year . Regarding Previous knowledge of BLS 64% of the subjects have previous knowledge and 8% attended BLS programmes and 92% didn't attended any BLS programme.

Data in table shows (Norway) frequency and percentage distribution of subjects as per demographic variables.

The data presented shows that among sample of 25, (76%) belongs to the age group of 19-20 years, 4% belongs to the age group of 21-22 years , 16% belongs to age group 23-24 years.

In adults majority of sample, 96% were female and 04 % were male and In year of study 100% of the subjects were BSC nursing 2nd year . Regarding previous knowledge of BLS 64% of the subjects have previous knowledge and 20% attended BLS programmes and 80% didn't attended any BLS programme.

Table 2 Mean, Median, Standard deviation of knowledge of nursing students regarding BLS

Sr.no.	N	Mean	SD	Standard error mean
1 (Norway)	25	11.1600	1.62481	32496
2 (India)	25	9.1600	1.97231	39446

Table 3. T-test Showing Association of Practices Of Nursing Students Regrding Basic Life Support

Table 4.5 shows the association of practices of nursing student regarding BLS

	Levene's Test for Equality of Variances		t- test for Equality of Means					95% Confidence Interval of the Difference	
	F	Sig	t	df	Sig (2-tailed)	Mean difference	Std. Error Difference	Lower	Upper
Equal variances assumed			3.913	48	000	2.00000	51105	97241	3.02759
Equal variances not assumed	1.467	232	3.010	46.303	000	2.00000	51105	97144	3.02856

Major Finding of the study are summarized as follow:- Majority of Indian Nursing Student's were Female (64%) and Norway student's were female (96%), More than half (64%) of the Norway Nursing students and 64% Indian students have previous knowledge, Majority of Indian Nursing students

(92%) and majority of Norway students (80%) have not attended BLS Programme. In the Present study frequency and percentage distribution of practices among nursing student regarding BLS shows that majority of the Indian nursing students were female 64% and Norway students are female 96%. Similarly findings are reported in quasi experimental study to examine the effectiveness of basic life support training on knowledge and practices among nursing students in june2019 at Turkey (laboratory of an undergraduate nursing school) by using questionnaire method with the help of non randomized technique. The results showed after basic life support training, level of knowledge and practical skill scores were higher compared to pre-training scores (t= -12.442, p=0.000; t= -22.899, p=0.000). There was a significant and moderate association between the adult basic life support Knowledge Form scores and the adult basic life support practice assessment form scores obtained after the training (r = 0.39, p<0.01). [6]

RESULT

shows that majority of participants were in 8 group 28/37 years (50.0%) and 18/27 years (35.7%) were female (57.0%); married (58.5%), single (39.9 %); had secondary (31.5%),diploma (27.2%),bachelors (32.4%) education level ; and worked in government (28.6%), private sector (25.4%). Significantly, large proportion of them (62.2%) were aware about BLS. The study concluded that there is need for mandatory training in BLS for all non medics in the country as well as in cooperating basic life support teaching in school curriculum. [7]

REFERENCES
1. Venn, Richard. "Basic life support." *Critical Care*, vol. 2, no. 74, 14 Aug. 2000. *Gale OneFile: Health and Medicine*, link.gale.com/apps/doc/A452718394/HRCA?u=anon~de65bcf0&sid=googleScholar&xid=8e41db0c. Accessed 22 June 2022.
2. Almesned, A., Almeman, A., Alakhtar, A. M., AlAboudi, A. A., Alotaibi, A. Z., Al-Ghasham, Y. A., & Aldamegh, M. S. (2014). Basic life support knowledge of healthcare students and professionals in the Qassim University. *International Journal of Health Sciences*, 8(2). Retrieved from https://ijhs.org.sa/index.php/journal/article/view/638
3. Jindal, A.K & Tiwari, R. 2017. Planned Teaching Programme Regarding Basic Life Support in Terms of Knowledge and Skill of Pre-University College Students in a Selected College of Moodbidri, Dakshina Kannada District. Biomedical Journal of Scientific & Technical Research. 1(7). 1903-1905
4. Reddy CKB, Jaiswa S, Bhardwaj G. A study to assess the effectiveness of video assisted programme on cardio pulmonary resuscitation among nursing students of selected nursing schools. International Journal of Science & Healthcare Research. 2018; 3(2): 15-18
5. Nord, Anette. "Bystander CPR : New aspects of CPR training among students and the importance of bystander education level on survival." (2017).
6. Kose S, Akin S, Mendi O, Goktas S. The effectiveness of basic life support training on nursing students' knowledge and basic life support practices: a non-randomized quasi-experimental study. Afr Health Sci. 2019 Jun;19(2):2252-2262. doi: 10.4314/ahs.v19i2.51. PMID: 31656511; PMCID: PMC6794527.
7. Chilappa R, Waxman MJ. Basic Life Support Awareness and Knowledge in High School Students. *Kans J Med*. 2021;14:38-41. Published 2021 Feb 12. doi:10.17161/kjm.vol1414611