

A study to assess the level of knowledge regarding Cardio Pulmonary Resuscitation among the 2nd year GNM students in selected Nursing Colleges at Bengaluru

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DOI: <https://doi.org/10.5281/zenodo.10207414>

Published Date: 26-November-2023

Abstract: Back ground: A series of life-saving procedures known as cardiopulmonary resuscitation, or CPR, increase a victim's chances of survival after suffering a cardiac arrest. Patients requiring post-cardiac arrest care should be treated using a complete, organized, integrated multidisciplinary system of care that is applied consistently. The ultimate aim of the resuscitation system of care is the recovery to a previous functional and high-quality state of health.

Aims: To assess the knowledge regarding Cardio Pulmonary Resuscitation among 2nd year GNM students in selected Nursing Colleges at Bangalore **Method:** The study involves a descriptive design; non-probability convenience sampling technique was used. 130 students studying in 2nd year GNM students were selected. A structured knowledge questionnaire was used as a data collection tool. **Result:** The result revealed majority 89 (68%) are 19-20 years, 27 (21%) are 18-19 years and 14 (11%) are 21-22 years of age group. maximum 84 (65%) of students are female and minimum 46 (35%) are male. maximum of 106 (82%) don't have previous knowledge of CPR and a minimum of 24 (18%) have knowledge on Cardio Pulmonary Resuscitation. 16 (12%) got information from Friends, 62 (48%) respondents from mass Media, 37 (28%) respondents from Self-reading and 15 (12%) respondents got knowledge from health personnel. **Interpretation and Conclusion:** The study revealed that students of 2nd year GNM students have moderate knowledge regarding Cardio Pulmonary Resuscitation.

Keywords: Knowledge, Cardio Pulmonary Resuscitation, 2nd year GNM students.

I. INTRODUCTION

As the centre of the circulatory system, the heart is essential to nearly every process that sustains life in the body, from oxygen delivery to the functioning of the immune system. It draws blood from the veins, oxygenates it in the lungs, and then pumps the oxygenated blood into the different arteries, which carry the blood throughout the body and supply nutrients and oxygen to the tissues. Scores of people experience illnesses or accidents that are severe enough to cause respiratory arrest each year. When breathing and heartbeat stop, sudden death happens.

Cardiopulmonary resuscitation is a procedure that can be used to resuscitate a person who has lost consciousness and whose heart has stopped beating. Cardiopulmonary resuscitation is an emergency procedure that often combines chest compressions with artificial ventilation to manually maintain brain function until the person's circulation and breathing are restored.

It is estimated that approximately 5-6 million people die of Sudden Cardiac Death (SCD) in India every year, and a large proportion of them are under the age of 50. According to India Today article 2022, by the second pandemic, people aged 25-44 are 29.9% more likely to have a fatal heart attack, 19.6% more likely for those aged 45-64 and 13, 7% more likely for people aged from 65 and over. 25-44 age group most vulnerable. (Jaiswal. 2023). Out-of-hospital cardiac arrest (OHCA) is a public health burden, accounting for nearly 10% of global mortality and 50% of cardiovascular disease. The global incidence is 55 cases per 100,000 person-years. Bystander CPR rates in India are only 1.3-9.8%. The goal set by the American Heart Association for Emergency Cardiovascular Care (AHA-ECC) is 62%. Chest compression is the first step in fixing and professional rescuers to revive victims of sudden cardiac arrest, the organization announced that the CPR system A-B-C (Airway-Breathing-Compression) must now be changed to C-A-B (Compression-Airway-Breathing).

Nurses are an integral part of the healthcare system and are perceived to be knowledgeable in providing institutional care to the patients. Cardio-pulmonary Resuscitation (CPR) is an important medical procedure which is needed for individuals who face sudden cardiac arrest. (Sita Parajulee and Valarmathi, 2014)

Cross-sectional survey design with a sample of 2250 students, the study results revealed 31% did not have prior cardiopulmonary resuscitation (CPR) information. 12.7% of individual uncounseled a situation that require the use of cardiopulmonary resuscitation (CPR). only 14% of them performed it. 48.2% individual lack of cardiopulmonary resuscitation (CPR) knowledge. The study concluded as the knowledge on topic was insufficient. Thus, more focus should be placed on improvement of cardiopulmonary resuscitation (CPR) skill. (AL-Turki YA, et.al., 2008)

Objectives:

To assess the level of knowledge regarding cardio pulmonary resuscitation among 2nd year GNM students in selected Nursing Colleges.

Material and methods

Source of data

The data will be collected from 2nd year GNM students in selected College of Nursing at Bengaluru.

Research design & approach

Descriptive Design selected to assess the knowledge regarding cardio pulmonary resuscitation among 2nd year GNM students.

Setting

The study will be conducted in 2nd year GNM students.

Methods of data collection

Sampling size & procedure

130 samples of 2nd year GNM students selected by using convenient sampling technique.

II. FIGURES GRAPHS AND TABLES

Table 1: Distribution of respondents based on age

N=130

Characteristics	Category	Respondents	
		Number	%
Age	18-19 years	27	21%
	19-20 years	89	68%
	21-22 years	14	11%
	23 years & above	0	0%

Table 1 shows that, majority 89 (68%) are 19-20 years, 27 (21%) are 18-19 years and 14 (11%) are 21-22 years of age group.

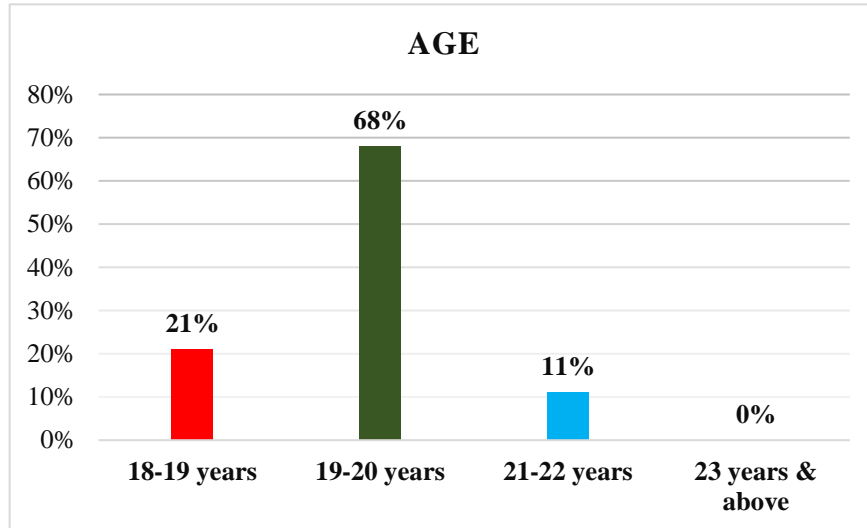


Figure 1: Bar diagram showing percentage of distribution of respondents according to age

Table 2: Distribution of respondents based on gender

N=130

Characteristics	Category	Respondents	
		Number	%
Gender	Male	46	35%
	Female	84	65%

Table 2 shows that, maximum 84 (65%) of students are female and minimum 46 (35%) are male

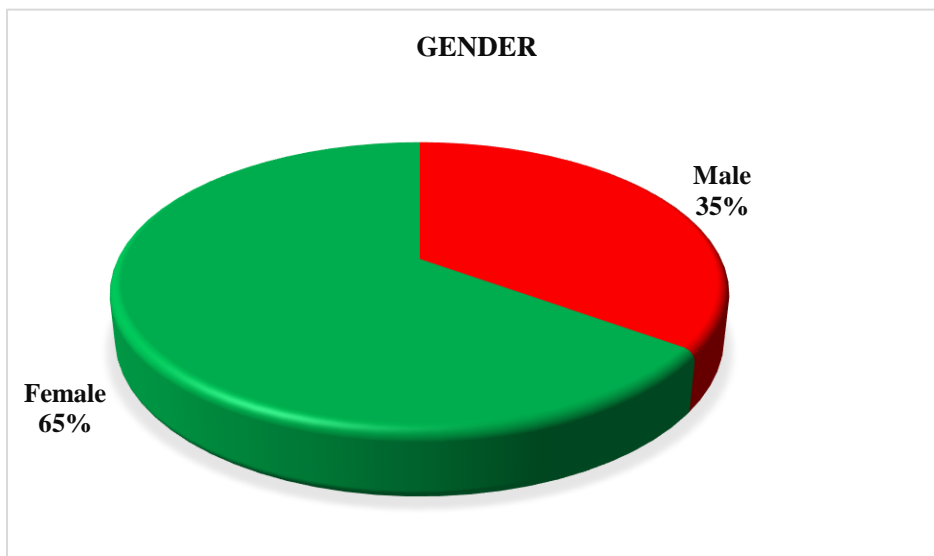


Figure 2: Pie diagram showing percentage of distribution of respondents according to gender

Table 3: Distribution of respondents based on religion

N=130

Characteristics	Category	Respondents	
		Number	%
Religion	Hindu	39	30%
	Christian	70	54%
	Muslim	19	15%
	Others	0	0%

Table 3 shows that, maximum 76 (65%) are Christians and Minimum Hindus are 13 (32.5%)

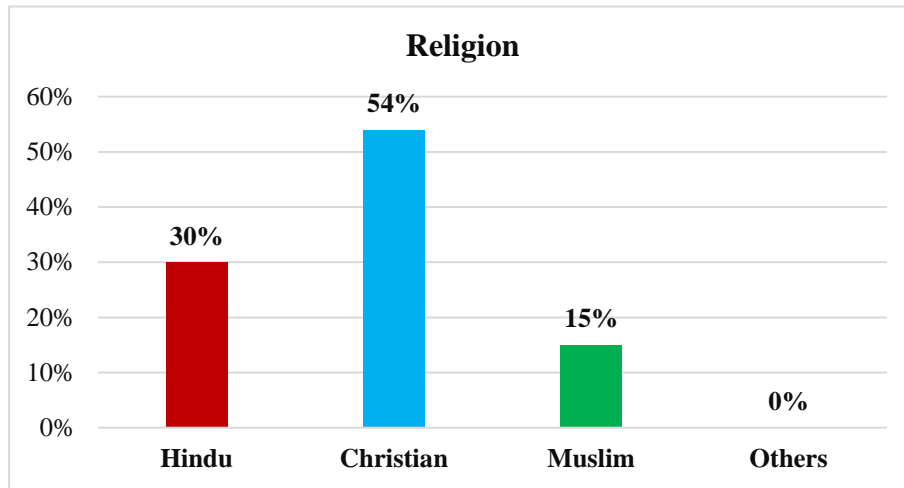


Figure 3: Bar diagram showing percentage of distribution of respondents according to religious

Table 4: Distribution of respondents based on previous knowledge on CPR

N=130

Characteristics	Category	Respondents	
		Number	%
Previous knowledge	Yes	24	18%
	No	106	82%

Table 4 shows that, maximum of 106 (82%) don't have previous knowledge of CPR and a minimum of 24 (18%) have knowledge on CPR.

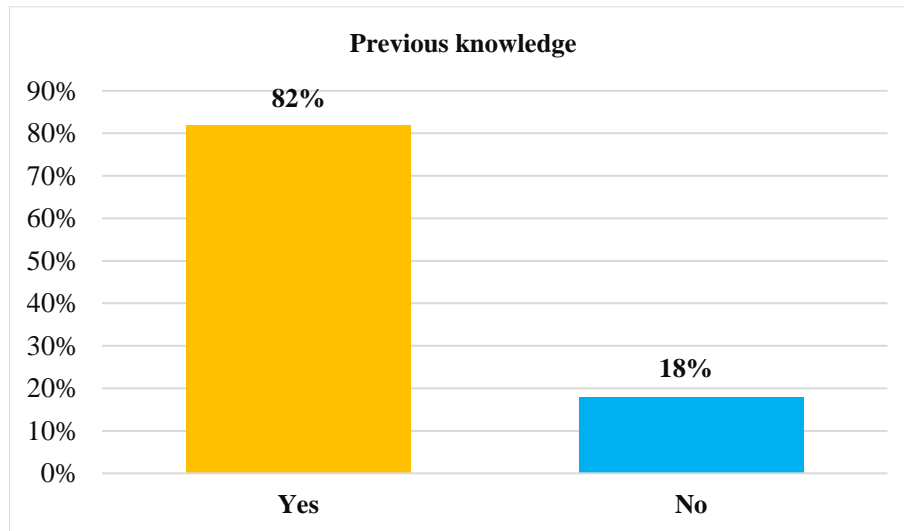


Figure 4: Bar diagram showing percentage of distribution of respondents according to previous knowledge of CPR

Table 5: Distribution of respondents based on Source of Information regarding CPR

N=130

Characteristics	Category	Respondents	
		Number	%
Source of Information	Friends	16	12%
	Mass media	62	48%
	Self-reading	37	28%
	Contact with health personnel	15	12%

Table 5 computes that, in the case of a source of information, 16 (12%) got information from Friends, 62 (48%) respondents from mass Media, 37 (28%) respondents from Self-reading and 15 (12%) respondents got knowledge from health personnel.

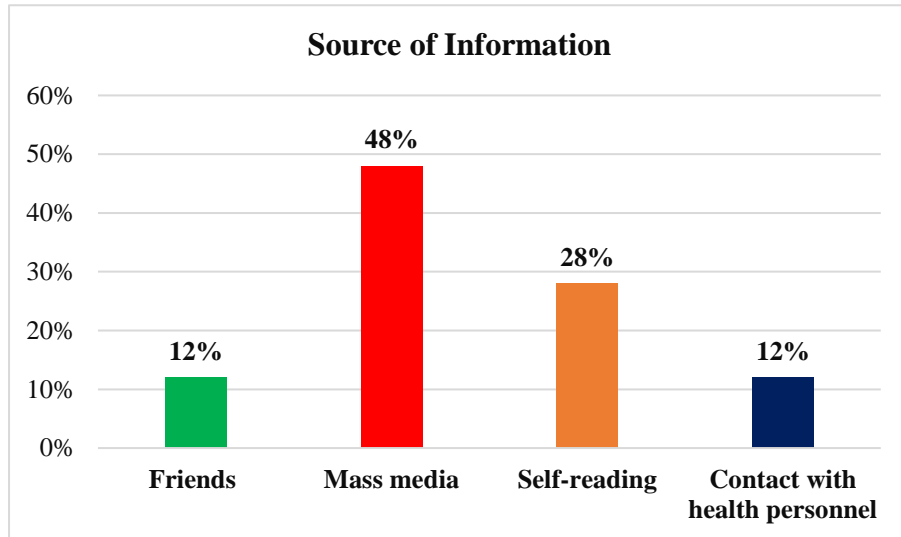


Figure 5: Bar diagram showing percentage of distribution of respondents according to source of information of CPR

Table. 6: Level of knowledge of respondents

N=130

Knowledge Level	Respondents	
	Number	Percentage
Inadequate knowledge	80	62%
Moderate knowledge	43	33%
Adequate knowledge	7	5%

Table 6 depicts level of knowledge of respondents, in which maximum 80 (62%) of respondents have inadequate knowledge, 43 (33%) of respondents have moderate knowledge, and minimum 7 (5%) have adequate knowledge regarding the Cardio Pulmonary Resuscitation.

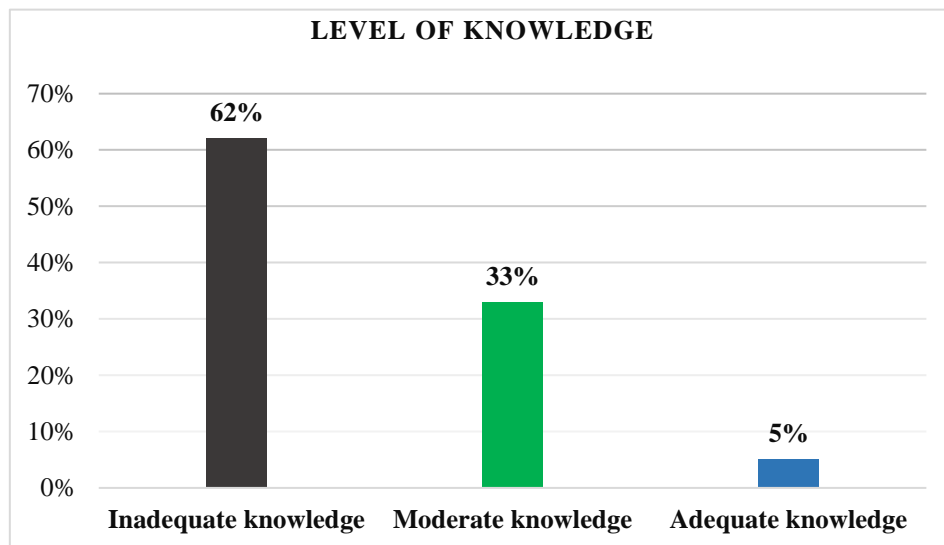


Figure 2: Bar diagram showing percentage of distribution of respondents according to level of knowledge of CPR

III. DISCUSSION

Although present study discussion is focused with the objectives of the study to assess the “A study to assess the level of knowledge regarding Cardio Pulmonary Resuscitation among the 2nd year GNM students in selected Nursing Colleges at Bengaluru”

Demographic Variables:

In the present study, the frequency and percentage distribution of respondents based on their demographic variable revealed that 89 (68%) are 19-20 years, 27 (21%) are 18-19 years and 14 (11%) are 21-22 years of age group. maximum 84 (65%) of students are female and minimum 46 (35%) are male. maximum of 106 (82%) don't have previous knowledge of CPR and a minimum of 24 (18%) have knowledge on CPR. 16 (12%) got information from Friends, 62 (48%) respondents from mass Media, 37 (28%) respondents from Self-reading and 15 (12%) respondents got knowledge from health personnel.

To assess the level of knowledge regarding Cardio Pulmonary Resuscitation among the 2nd year GNM students. The present study revealed that the knowledge of maximum 80 (62%) of respondents have inadequate knowledge, 43 (33%) of respondents have moderate knowledge, and minimum 7 (5%) have adequate knowledge regarding the Cardio Pulmonary Resuscitation.

Limitations

The limitation recognized in the study were

- Study was limited to the students of 2nd year GNM of SJB College of Nursing
- Only one domain ie, knowledge was considered in this study

IV. RECOMMENDATIONS

On the basis of findings of the study, the following recommendations are stated

- The similar study can be replicated in a large sample to generalize the finding
- Similar study can be conducted using larger number of samples selected by probability sampling for wider generalization.
- A similar study can be conducted on a different sample, in different settings with different demographic variable.
- A descriptive study can be done to check the knowledge level on Cardio Pulmonary Resuscitation.

V. CONCLUSIONS

Cardio Pulmonary Resuscitation is a basic life-supporting procedure, by which nurses can guard more individual life. The topic of research study is "A study to assess the level of knowledge regarding Cardio Pulmonary Resuscitation among the 2nd year GNM students in selected Nursing Colleges at Bengaluru". The following conclusion was drawn based on findings of the study which reveal that among 130 respondents, maximum 80 (62%) of respondents have inadequate knowledge, 43 (33%) of respondents have moderate knowledge, and minimum 7 (5%) have adequate knowledge regarding the Cardio Pulmonary Resuscitation.

The study concludes that nursing students have inadequate knowledge on Cardio Pulmonary Resuscitation.

Ethical Clearance

Ethical clearance was obtained from the institutional ethical committee.

Source of funding: Self

Conflict of Interest: Nil

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