



“STUDY TO ASSESS THE KNOWLEDGE REGARDING CARDIOPULMONARY RESUSCITATION AMONG 4TH YEAR BSC NURSING STUDENTS AT A SELECTED NURSING COLLEGE IN DHAKA”

Medical Surgical Nursing

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ABSTRACT

Background: Cardiopulmonary resuscitation (CPR) is a critical emergency procedure used to save individuals experiencing cardiac arrest. It can be performed both within and outside of medical facilities. This study aims to evaluate the level of CPR knowledge among 4th-year BSc nursing students at a selected nursing college in Dhaka and identify related demographic variables. **Materials and Methods:** A quantitative descriptive research design was employed. The population comprised 4th-year BSc nursing students at a selected nursing college in Dhaka. Using a convenient sampling technique, 30 students who met the inclusion criteria were selected. Participants were single and aged between 21 and 23 years. The tool was validated by experts, and prior permission was obtained. Informed consent was ensured, and a pilot study was conducted. Data were collected using a semi-structured questionnaire and analyzed using descriptive statistics. **Findings:** The findings revealed that the majority of the students possessed adequate knowledge of CPR. Among the 30 participants, 3 were male and 27 were female, all of whom were single and aged between 21 and 23 years. Additionally, 26 participants were Muslim, 3 were Hindu, and 1 was Christian.

KEYWORDS

Cardiopulmonary Resuscitation, Knowledge, Nursing students.

INTRODUCTION

Cardiopulmonary resuscitation (CPR) is a crucial emergency procedure that combines chest compressions with artificial ventilation to manually maintain brain function until further measures can restore spontaneous blood circulation and breathing in individuals experiencing cardiac arrest. Mastery of CPR is essential for healthcare professionals, particularly nurses, who often serve as the first responders in clinical settings. The ability to perform effective CPR can significantly influence patient outcomes, making it a fundamental component of nursing education and practice.

The evolution of CPR techniques since their inception in the 1960s, guided by organizations such as the American Heart Association (AHA), has led to the development of comprehensive guidelines that emphasize high-quality chest compressions, timely defibrillation, and minimal interruptions during resuscitation efforts. These guidelines are regularly updated to incorporate the latest evidence-based practices, highlighting the critical role of immediate recognition of cardiac arrest and prompt initiation of CPR.

In Bangladesh, the rising incidence of cardiovascular diseases has heightened the need for proficient CPR skills among healthcare providers. For nursing students, particularly those in their final year, the transition from academic training to professional practice necessitates a thorough understanding and capability in performing CPR. Assessing the CPR knowledge of 4th-year BSc nursing students at a selected nursing college in Dhaka is essential to ensure they are adequately prepared to handle real-life emergencies.

The study focuses on evaluating various aspects of CPR knowledge, such as recognizing cardiac arrest, performing the correct sequence of actions, and using defibrillators.

The demographic profile of the participants, who are single, aged 21 to 23 years, and predominantly Muslim with some Hindu and Christian students, is also considered to understand the cultural context influencing their training.

By identifying knowledge gaps and areas for improvement, this study aims to enhance CPR training programs, ensuring that nursing students are well-equipped to respond effectively to cardiac emergencies, ultimately improving patient survival rates and health outcomes in Bangladesh.

Need For The Study

Recent studies emphasize the importance of timely and high-quality CPR in improving cardiac arrest outcomes. This study assesses the current knowledge level of nursing students in Dhaka to identify areas for improvement in CPR training.

Objectives Of The Study

- To assess the demographic variables.
- To assess the knowledge level regarding CPR among the 4th-year BSc nursing students.

METHODOLOGY

A quantitative descriptive research design was utilized. The study population included 4th-year BSc nursing students at a selected nursing college in Dhaka. Thirty students were selected using a convenient sampling technique. Inclusion criteria were being single, aged 21 to 23 years, and willingness to participate. The tool was validated, and informed consent was obtained. Data were collected through a semi-structured questionnaire and analyzed using descriptive statistics.

RESULTS

The demographic distribution of participants and their knowledge levels are presented in the following tables:

Table 1: Demographic Characteristics of Nursing Students

Variable	Category	Frequency (%)
Age	21-23 years	30 (100%)
Gender	Male	3 (10%)
	Female	27 (90%)
Marital Status	Single	30 (100%)
Education	BSc Nursing	30 (100%)
Religion	Muslim	26 (86.6%)
	Hindu	3 (10%)
	Christian	1 (3.3%)

Table 2: Knowledge Levels of Nursing Students Regarding CPR

Knowledge Level	Frequency (%)
Inadequate Knowledge	2 (6.6%)
Moderately Adequate	5 (16.6%)
Adequate Knowledge	23 (76.6%)

DISCUSSION

The study reveals that a significant majority of 4th-year BSc nursing students (76.6%) possess adequate knowledge of CPR. All participants were single and aged between 21 and 23 years, with 10% being male. The religious composition included 26 Muslims, 3 Hindus, and 1 Christian. These findings suggest that the CPR training programs at this nursing college are effective, but there remains room for improvement to ensure all students reach an adequate knowledge level.

Recommendations

- Replicate the study with a larger sample size.
- Implement structured teaching programs on CPR to enhance knowledge and practical skills among nursing students.

Limitations

The study was limited to students at a single nursing college.

CONCLUSION

In conclusion, the study calls for a renewed focus on enhancing CPR education within the nursing curriculum, ensuring that all students not only understand the theoretical aspects but are also proficient in the practical application of CPR. This commitment to excellence in training will prepare future nurses to be effective first responders, capable of saving lives and making a significant impact in their professional practice.

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