A Study to Assess the Level of Student Satisfaction and Self-Confidence on Cardio Pulmonary Resuscitation Learning among Undergraduate Nursing Students at Selected College Of Nursing in Chennai

Kavitha.K1¹, Manjula.A2², Tamiloli.S, Rosina Jhoney, Anushya.B, Sredha Elizabeth Chacko, Priya.R, Jayalakshmi.M, Olympaprabu.P, Giridharan.G, and Prasiely Devapriya.A3³

^{1,2} Lecturer, Department of Medical-Surgical Nursing ,Sri Ramachandra Faculty of Nursing ,Sri RamachandraInstitute of Higher Education and Research, Chennai-116, Tamil Nadu, India
³ B.Sc Nursing(Basic) Students , Sri Ramachandra Faculty of Nursing , Sri Ramachandra Institute of Higher Education and Research, Chennai-116, Tamil Nadu, India

¹Kavitha. K@ <u>kavithamsc76@gmail.com</u>

Abstract

The aim of the study was to assess the level of student Satisfaction and Self-confidence on CPR learning among undergraduate nursing students at selected college of Nursing in Chennai. Methodology: The research approach was quantitative in nature and a descriptive, cross sectional design was adopted for this study. The study was conducted among 80 B.Sc. Nursing II students who fulfilled the inclusion criteria through online atSriRamachandra Faculty of Nursing with the non -probability purposive sampling technique. The tool consists of two sections; Section A on demographic variables, Section B on Students Satisfaction and Self Confidence in Learning scale (SSSCL) Questionnaire. **Findings of the study:** The study reveals that only 3 (3.75) of B.Sc. Nursing II year students belong to the age of more than 20 years, majority of them 77(96.25%) belong to less than 20 years. With regard to gender 27(33.75%) were male 53(66.25%) were female. Regarding Level of satisfaction 29(36.35%) belong satisfaction and 28(35%) belongs to high satisfaction and Level of confidence 30(37.5%) were moderately and highly confident. Conclusion: The study concludes that the simulation based training and hands on skill in performance of CPR procedure have perceived higher level of satisfaction and self -confidence among nursing students.

Key words:

Satisfaction, Self-confidence, CPR and Nursing students

Introduction

Coronary heart disease is now the leading cause of death worldwide. An estimated 3.8 million men and 3.4 million women die each year from CHD. In developed countries heart disease is the leading cause of death in men and women. In Europe CHD accounts for an estimated 1.95 million deaths each year. The risk factors include smoking, being overweight, little exercise, high cholesterol, high blood pressure, and poorly controlled diabetes, among others. Cardiovascular diseases frequently do not have symptoms or may cause chest pain or shortness of breath.

Cardiopulmonary resuscitation is an emergency procedure that combines chest compressions often with artificial ventilation in an effort to manually preserve intact brain function until further

measures are taken to restore spontaneous blood circulation and breathing in a person who is in cardiac arrest. Its main purpose is to restore partial flow of oxygenated blood to the brain and heart. The objective is to delay tissue death and to extend the brief window of opportunity for a successful resuscitation without permanent brain damage.(*Melba Sheila D'Souza et al. 2017*).

Simulation has been recognized as a valuable teaching method in nursing curriculum which influences the learning, improvement of competencies, self-confidence, and safety. With simulation, learners are afforded with the opportunity to improve cognitive, affective and psychomotor skills. Satisfaction and self-confidence of nursing students with simulation teaching with various clinical scenarios in a safe and supportive environment. Through simulation methods, students can apply their theoretical knowledge, learn from errors without harming the patients, learn from their peers, and bridge the gaps between knowledge and clinical practice. (RajiKaliyaperumal et.al. 2020).

Use of simulation affects student learning outcome (cognitive,psychomotor, and behavioral) in critical settings is an important aspect of the critical care nursing curriculum for undergraduate students. Cardiopulmonary resuscitation, commonly known as CPR, is an Emergency procedure performed in an effort to manually preserve intact Heart function until further measures are taken to restore spontaneous Blood circulation and breathing.(Andrea &Ackermann, 2016).

Objectives

Assess the level of student satisfaction and self-confidence on CPR learning among undergraduate nursing students.

Methodology

The research approach adopted for this study was quantitative method. A descriptive, cross sectional design was adopted for this study. The study was conducted through online at Ramachandra Faculty of Nursing. The B.Sc. Nursing II year students studying in Sri Ramachandra Faculty of Nursing, SRIHER (DU), Porur, Chennai were the accessible population of the study. The sample size was 80 Undergraduate students who fulfilled the inclusion criteria and studying B.Sc. Nursing (Basic) II year at SRFON, SRIHER, (DU) . Non Probability purposive sampling technique was adopted .The tool consists of three sections; Section A on demographic variables, Section B onStudents Satisfaction and Self Confidence in Learning scale (SSSCL) Questionnaire was used by the researcher to assess the Students Satisfaction and Self Confidence on CPR Learning .The developed by Jeffries &Rizzolo (2006). SSSCL is a 5- point Likert Scale with questionnaire was values ranging from 1 (strongly disagree) to 5 (strongly agree). Students Satisfaction and Self Confidence in Learning scale (SSSCL) Questionnaire consists of two components - Satisfaction with current learning -5questions and Self-Confidence in learning consists of 8 questions. The total score on the satisfaction with current learning was about 25, and the total score for the selfconfidence in learning scale was 40. The minimum scoring was13 and maximum was 65. The Scoring interpretation were Higher score indicates higher level of student self- satisfaction and selfconfidence in learning.

Ethical considerations and Data collection procedure

The permission was obtained from the Principal, Ethical Committee and HOD of Medical Surgical Nursing. The CPR procedure was demonstrated by the faculty for all the B.Sc. Nursing II year students, in the skill lab with 10 students per batch. After demonstration the students practiced

Received 08 November 2021; Accepted 15 December 2021.

CPR on the CPR Simulation mannequins under the supervision of the faculty. In order to assess the CPR learning informed Consent was obtained from the students to participate in the study. Students Satisfaction and Self Confidence in Learning scale (SSSCL) Questionnaire was sent through google form to 100 B.Sc. Nursing II year students who attended the simulation training. Totally 80 students responded to the questionnaire.

Limitations of the study

- B.Sc. Nursing (Basic) II Year students were only included.
- Students who had practiced CPR on the CPR Simulation mannequins under the supervision of the faculty.
- Data were collected through online Google form.

RESULTS AND DISCUSSION

The major findings of the study are depicted below in tables and graphs

Table 1: Frequency and percentage distribution of Demographic variables of among undergraduate nursing students (N=80)

S.No	Demographic variables	N	%
1	Age in years		
	a.< 20	77	96.25
	b.> 20	03	3.75
2	Gender		
	a. Male	27	33.75
	b. Female	53	66.25

Table1; depicts that 3 (3.75) of undergraduate nursing students belong to the age of more than 20 years, majority of them 77(96.25%) belong to less than 20 years. With regard to gender 27(33.75%) were male and 53 (66.25%) were female.

Table 2: Frequency and Percentage of the level of Student satisfaction in CPR Learning among undergraduate nursing students (N=80)

S.No	Level of Satisfaction	Range	N	%
1	Very low Satisfaction	5	15	18.75
2	Low Satisfaction	6-10	4	5
3	Average Satisfaction	11-15	4	5
4	Moderate Satisfaction	16-20	29	36.25
5	High Satisfaction	21-25	28	35

Table 2: revealed that29(36.35%) students had moderate satisfaction,28(35%) students had high satisfaction and 15 (18.75%) students had very low satisfaction

Received 08 November 2021; Accepted 15 December 2021.

Table 3: Frequency and Percentage of the level of self-confidence in CPR learning among undergraduate nursing students (N=80)

S.No	Level of confidence	Range	N	%
1	Very less confidence	8	10	12.5
2	Low confidence	9-16	7	8.75
3	Average confidence	17-24	3	3.75
4	Moderate Confidence	25-32	30	37.5
5	Higher confidence	33-40	30	37.5

Table 3: revealed that 30(37.5%) students had moderate confidence and higher confidence respectively whereas 10(12.5%) students had very less confidence.

Table 4: Mean and standard deviation of Student satisfaction and Self- Confidence in CPR Learning among undergraduate nursing students (N=80)

Variables	Maximum Score	Minimum score	Mean	SD
Student satisfaction	25	5	16	3.76
Self- Confidence	40	8	15.96	3.65

Table 4 shows that the mean value of student satisfaction and self- confidence on CPR learning is 16 (3.76) and 15.96 (3.65) respectively.

DISCUSSION

The demographic data reveals out of 100 students only 80 students were responded, only 3 (3.75) of B.Sc. Nursing II year students belong to the age group of more than 20 years, majority of them 77(96.25%) belong to less than 20 years. With regard to gender 27(33.75%) were male and 53(66.25%) were female.

Regarding the level of student satisfaction and self-confidence among undergraduate nursing students reveals that 15 (18.75%) belonged to very low satisfaction, 4(5%) belonged to average satisfaction ,29(36.35%) belonged satisfaction, 4(5%) belonged to moderate satisfaction, 28(35%) belonged to high satisfaction and reveals that 30(37.5%) were confident and highly confident whereas 10 (12.5%) was very less confident and 7(8.75%) had low confidence and only of them confidence. 3(3.75%) had average level of Montgomeryet.al,(2012)conducted a study on Student satisfaction and self -report of CPR competency. The study results found that students who practiced CPR monthly were more confident than students who did not practice. Monthly practice improved CPR confidence, but initial course type did not. Students were most satisfied when they participated in the an instructor-led courses and frequent practice of CPR skills.

RECOMMENDATIONS

- Same study can be replicated with larger samples
- Comparative study can be done to rule out satisfaction and self -confidence among staff nurses.
- Clinical nurses skill and assessment could be done using simulation

CONCLUSION

The simulation training and hands on skill in performance of CPR procedure has perceived higher level of satisfaction and self -confidence among nursing students.

Financial support and sponsorship: Nil.

Conflicts of interest: There are no conflicts of interest.

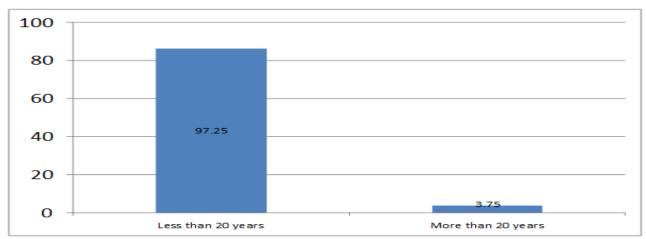


Figure 1: Percentage Distribution of age in years among undergraduate nursing students

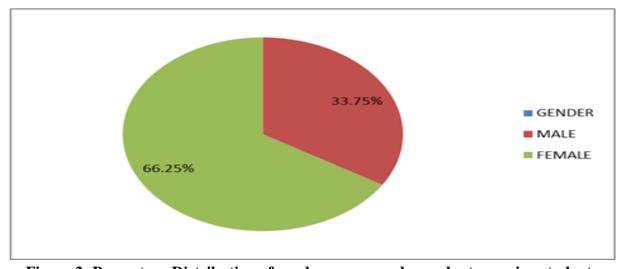


Figure 2: Percentage Distribution of gender among undergraduate nursing students

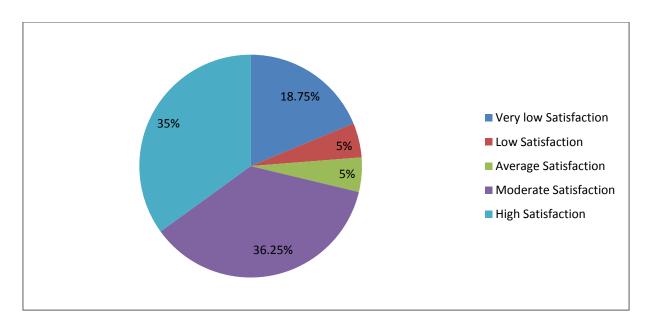


Figure 3: Percentage distribution of Satisfaction on CPR learning among undergraduate nursing students (N=80)

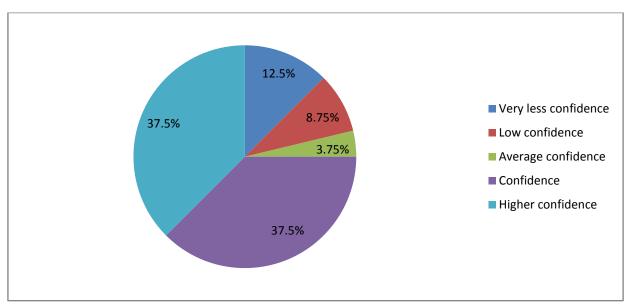


Figure 4: Percentage distribution of Self- Confidence in CPR Learning among undergraduate nursing students

References:

- 1) Alexander M, Durham CF, Hooper JI, Jeffries PR, Goldman N, et al. (2015) NCSBN Simulation Guidelines for Prelicensure Nursing Programs. Journal of Nursing Regulation 6: 39-42.
- 2) Beckford DMHM (2013) Utilizing simulation curriculum to decentralize mental health concepts. Open Journal of Nursing 3: 227-229.
- 3) Chapelain P, Morineau T, Gautier C (2015) Effects of communication on the performance of nursing students during the simulation of an emergency situation. J AdvNurs 71: 2650-2660.
- 4) Deborah D Garbee, John T Paige, Laura S Bonanno, Vadym V Rusnak, Kendra M Barrier, et al. (2013) Effectiveness of teamwork and communication education using an interprofessional high-

- fidelity human patient simulation critical care code. Journal of Nursing Education and Practice 3: 1-12.
- 5) D'Souza MS, Venkatesaperumal R, Radhakrishnan J, Balachandran S (2013) Engagement in clinical learning environment among nursing students: Role of nurse educators. Open Journal of Nursing 3: 25-32.
- 6) Elfrink VL, Kirkpatrick B, Nininger J, Schubert C (2010) Using learning outcomes to inform teaching practices in human patient simulation. NursEducPerspect 31: 97-100.
- 7) Fisher D, King L (2013) An integrative literature review on preparing nursing students through simulation to recognize and respond to the deteriorating patient. J AdvNurs 69: 2375-2388.
- 8) Franklin AE, Burns P, Lee CS (2014) Psychometric testing on the NLN Student Satisfaction and Self-Confidence in Learning, Simulation Design Scale, and Educational Practices Questionnaire using a sample of pre-licensure novice nurses. Nurse Educ Today 34: 1298-1304.
- 9) Garrett BM, MacPhee M, Jackson C (2011) Implementing high-fidelity simulation in Canada: Reflections on 3 years of practice. Nurse Educ Today 31: 671-676.
- 10) Groom JA, Henderson D, Sittner BJ (2014) NLN/Jeffries simulation framework state of the science project: Simulation design characteristics. Clinical Simulation in Nursing 10: 337-344.
- 11) Hallin K, Backstrom B, Haggstrom M, Kristiansen L (2016) High-fidelity simulation: Assessment of student nurses' team achievements of clinical judgment. Nurse Education in Practice 19: 12-18.
- 12) Harder BN (2010) Use of simulation in teaching and learning in health sciences: A systematic review. J NursEduc 49: 23-28.