Original Research Paper

Volume - 12 | Issue - 04 | April - 2022 | PRINT ISSN No. 2249 - 555X | DOI : 10.36106/ijar

Nursing

# A STUDY TO ASSESS THE EFFECTIVENESS OF PLAN TEACHING PROGRAMME ON CPR AMONG THE NURSING STUDENT IN AZAMGARH, UTTAR PREDESH, INDIA.


| | |
|---|---|
| **Miss. Sana Kamei** | Principal. M.sc nursing (Medical Surgical Nursing), Maa Kaushilya school of nursing Azamgarh U.P. |
| **Miss. Achun Rongmei*** | Vice-Principal. M.sc nursing (Child Health Nursing), Maa Kaushilya school of nursing Azamgarh U.P.*Corresponding Author |
| **Miss.Annu yadav** | Students of B.Sc. Nursing 4th year, Maa kaushilya school of nursing Azamgarh U.P. |
| **Miss Mayawati** | Students of B.Sc. Nursing 4th year, Maa kaushilya school of nursing Azamgarh U.P. |
| **Miss.Pooja Vishwakarma** | Students of B.Sc. Nursing 4th year, Maa kaushilya school of nursing Azamgarh U.P. |
| **Miss.Pritee yadav** | Students of B.Sc. Nursing 4th year, Maa kaushilya school of nursing Azamgarh U.P. |
| **Mr.Hemant kumar** | Students of B.Sc. Nursing 4th year, Maa kaushilya school of nursing Azamgarh U.P. |
| **Mr.Ujjwal tripathi** | Students of B.Sc. Nursing 4th year, Maa kaushilya school of nursing Azamgarh U.P. |



**ABSTRACT** **Introduction:** Immediate initiation of basic life support with cardiopulmonary resuscitation is an important factor in the survival of cardiac arrest. Cardiac arrests are more common than we think, and they can happen to anyone at any time. Nurses are an integral part of the health care system and are perceived knowledgeable in providing, institutional care to the patients. Therefore this study is taken to train the nursing student regarding cardiopulmonary resuscitation using planned teaching programme. **Material and method:** Experimental research design (one group pre test and post test) was chosen for this study planned teaching progromme was administered to the group, purposive sampling technique was used for the study. A total of 30 subjects was taken for the study. **Result:** In pre test knowledge level 5 (16.67%) had good knowledge 15 (50%) had average knowledge and 10 (33.33%) had poor knowledge but no one had excellent in planned teaching progromme. The mean of pre test score is 12.066 with standard deviation 3.522. In post knowledge level 9(30%) had excellent knowledge 15 (50%) had good knowledge 6 (20% had average knowledge while no one had poor knowledge after the implementation of plan. The mean of post test score is 22.366 with standard deviation 3.576. There was significant association was found in relation with previous knowledge of the subject but there was no relationship associated with age, sex , religion etc. **Conclusion:** The nursing students had a good knowledge after implementation of plan teaching programme about CPR. The plan teaching programme was effective to improve the level of knowledge.


**KEYWORDS :** Effectiveness, Planed teaching program, CPR, Knowledge, Nursing student

## 1. INTRODUCTION:

Cardiac arrest is an important public health concern. Cardiac arrest is the leading cause of death worldwide generally develops between the age of 45 to 75 year. Successful cardio pulmonary resuscitation (CPR) application is the first step for cardiac patients to continue their normal life [1,2].

CPR was introduced in 1960. Cardio means "of the heart" and pulmonary means " of the lungs" resuscitation is a medical word that means " to revive" or bring back to life. Effective CPR enables enough oxygen to reach the brain to delay brain death, and allows the heart to remain responsive to defibrillation attempts. The first 10 minute immediately after an arrest are crucial and consider as the "Golden minutes" or the "Golden 10" because if nothing is done within that time, the patient is not likely to survive [3]. According to American Heart Association, CPR should start within 10 seconds of recognition of cardiac arrest [4]. Resuscitation is the art of restoring life or consciousness of one apparently dead [5]. Nurses are an integral part of the health care system and are perceived knowledgeable in providing, institutional care to the patients. Assessments of knowledge regarding CPR technique among degree students and teaching them about CPR techniques were the main concept of the study. This will help students to gain knowledge and skills regarding CPR technique. Structured health teaching of the masses is one of the most effective means of health promotion; hence the present study was chosen.

## 2. Material and methods:

It was an evaluative research study with one group pre- test and post –test design, The sample size of the study was 30 nursing student (able to understand English and Hindi language), studing in Maa Kaushilya School of nursing Azamgarh, Uttar Pradesh, India. The design did not include any control group. The purposive sampling technique was used for selection of subjects for the study. The investigator developed a structured questionnaire to assess the level of knowledge regarding CPR.

Tool consists of 2 parts.

Part-I: Deals with demographic variables consist of age, sex, type of family, previous knowledge on CPR, professional course in which they studied.

Part-II: Consist of 30 multiple choice questions on selected CPR to assess the knowledge.

Formal permission was obtained from concerned authority. The purpose and benefits of the study was explained to subjects and consent was obtained from nursing student to participate in the study. Data collection procedure was carried out for a period of one week. The time duration taken for each sample was 30 minutes. The collected data was analyzed by using descriptive statistics such as percentage, mean, & Standard Deviation. The collected data was presented in the form of tables and figures.

## Result:

### Section - A. Demographic variable:

Majority of the nursing student were female (90%), of these 83.3 % were between 18 – 20 year and remaining 16.7% were between 21 to 25 year age group. There was 96.7% subjects belonging to Hindu religion only 3.3% were of Muslim religion no were found to be any other religion. Subjects belonging to joint family were 60% and from nuclear family it was 40%. There was 27 (90%) students are getting professional qualification of GNM, 3(10%) having B.Sc.(N) while no one of Post Basic Nursing out of 30 subjects. Within those nursing student 27 (90%) having previous knowledge about CPR while 3 (10%) no idea about CPR. (Table-1).

**Table N0. 1. Representing the demographic data of subject**

| Variables | | Frequency | Percentage |
|---|---|---|---|
| Age (in years) | 18 - 20 | 25 | 83.3 |
| | 21- 25 | 5 | 16.7 |
| | 26 - 30 | 0 | 0 |
| | 31 - 35 | 0 | 0 |
| Sex | Male | 3 | 10 |
| | Female | 27 | 90 |
| Type of family | Joint | 18 | 60 |
| | Nuclear | 12 | 40 |
| Religion | Hindu | 29 | 96.7 |
| | Muslim | 1 | 3.3 |
| Previous knowledge | Yes | 27 | 90 |
| | No | 3 | 10 |
| Professional qualification | GNM | 27 | 90 |
| | Post Basic | 0 | 0 |
| | B.Sc. (N) | 3 | 10 |

**Section - B**. Effectiveness of plan teaching programme

In pre-test analysis we found that 10 (33.33%) were poor, 15(50%) were average, and 5 (16.67%) were good in knowledge score but no were found to be excellent. The mean of the knowledge score was 12.066 with standard deviation of 3.522.

There was 6 (20%) with average, 15 (50%) were good, and 9 (30%) were found to be excellent after post-test knowledge score. No were found to be poor. The mean of the post test knowledge score was 22.366 with standard deviation of 3.576.

In comparative analysis of pre-test and post test we found that there was significant increment in knowledge score with significant value (P) was <0.001 and the t test was 11.24 at confidence interval (CI) 95 the difference was 8.4657 to 12.1343. (Figure No. 1.)

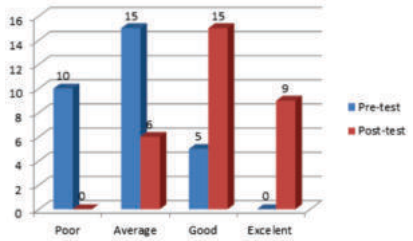


**Figure No.1. Diagram representing correlation between pre test and post test**

## DISCUSSION:

In pre-test analysis we found that 10 (33.33%) were poor, 15(50%) were average, and 5 (16.67%) were good in knowledge score but no were found to be excellent. The mean of the knowledge score was 12.066 with standard deviation of 3.522. The above findings were supported by the study conducted by Hassan Zaheer studied the knowledge of CPR in 60 Students. They demonstrated about the CPR using Manikins. After 7 days the knowledge level of the student was assessed and it was improved [6]. The study conducted by Mata Deen et al. revealed that 3.30% of students had poor knowledge, 70% of students had average knowledge and 26.70% had good knowledge while no one had excellent knowledge in pre test [7].

In our study there was 6 (20%) with average, 15 (50%) were good, and 9 (30%) were found to be excellent after post-test knowledge score. No were found to be poor. The mean of the post test knowledge score was 22.366 with standard deviation of 3.576. A study conducted by Anbu Epsij et al. stated that comparison of overall mean, SD and mean percentage of pre and post test knowledge scores shows that over all pre test mean score was 18.6+_4.14 which is 41.33%whereas in post test the mean score was 35.8+- 3.5 which is 79.5% revealing the difference of 38.17% shows the effectiveness of STP [8]. The above findings were also supported by the study conducted by Larsen P et al. studied about the Cardiopulmonary Resuscitation. Here the sample received the knowledge about CPR.So the researcher concluded that the STP gives better result [9].

In comparative analysis of pre-test and post test we found that there was significant increment in knowledge score with significant value (P) was <0.001, was found between knowledge scores of nursing students regarding Cardiopulmonary Resuscitation. A similar study conducted by M. M. Parnell et al. to assess the knowledge and practice among medical students regarding cardio pulmonary resuscitation. The subjects were provided with repeated teaching sessions about cardio pulmonary resuscitation steps. After the intervention, it was found that the knowledge and practice of students on cardio pulmonary resuscitation technique was improved significantly [10].

Tarika Sharma and Urvashi Sharma showed in their study that the difference between pre-test and post-test knowledge scores of study participants on CPR was found to be very highly significant. The planned teaching program on cardio pulmonary resuscitation was found to be effective in improving knowledge of the CPR in nursing students [11].

In our study we found that there was significant association with previous knowledge, educational qualification but there was no any relationship was assumed between age, sex , and type of family etc. C.J Locke et al. reported that Cardiopulmonary Resuscitation knowledge among degree students was important. There was no significant association between the level of knowledge and their selected demographic variables like age, sex, and residential area, type of family and education of parents [12]. Meena interpreted that there was significant association found between knowledge scores of degree students regarding Cardiopulmonary Resuscitation with their demographic variables such as Source of information (P<0.05). No significant association was found between knowledge scores of degree students regarding Cardiopulmonary Resuscitation with their other demographic variables such as age, sex, father's education, mother's education, residential area, type of family, previous knowledge, group studied in XII(P>0.05) [13]. The stated hypothesis was accepted.

## CONCLUSION:

The nursing students had a good knowledge after plan teaching programme about CPR. The plan teaching programme was effective to improve the level of knowledge.

## REFERENCES:

1. Uslu Y, Korkmaz FD. Kardiyopulmoner resüsitasyon sonrası hasta yönetimi [Patient management after cardiopulmonary resuscitation]. Turkish Journal of Cardiovascular Nursing. 2015; 6(10):99-111.
2. Rajashekar S, Nagendra Gowda MR, Anthony A. Knowledge of basic life support among health care professionals in a tertiary care hospital in Chitradurga. Int JCommunity Med Public Health. 2018; 5:3969-75.
3. Mani G, Annadurai K, Danasekaran R, Ramasamy JD. A cross-sectional study to assess knowledge and attitudes related to basic life support among undergraduate medical students in Tamil Nadu. Prog Health Sci. 2014;4:47-52.
4. American Heart Association- BLS for Health care Providers-Students manual. Part one; 3. Accessed on 12/12/2013.
5. Sasson C, Rogers MA, Dahl J, Kellermann AL. Predictors of survival from out-of hospital cardiac arrest: A systematic review and meta-analysis. Circ Cardiovasc Qual Outcomes. 2010;3(1):63-81.
6. Hassan Zaheer, Zeba Haque. Awareness about BLS (CPR) among medical students: Status and requirements. Journal of the Pakistan Medical Association, January 2009 ;59(1):57-59.
7. Mata Deen, Godhuli Ghosh. A Study to Assess the Effectiveness of Planned Teaching Programme on Knowledge and Skill regarding Cardiopulmonary Resuscitation among the Staff Nurses Working in Era Hospital Lucknow. International Journal of Science and Research .2020. Vol 9(8):497-499.
8. http://repository-tnmgrmu.ac.in/337/1/3001320anbuepsij.pdf.
9. Larsen, J. Pearson, D. Galletly. Knowledge and attitudes towards cardiopulmonary resuscitation in the community. The New Zealand medical journal. 2004.Vol. 117: 1193-1198.
10. M M Parnell, J Pearson, D C Galletly, and P D Larsen. Knowledge of and attitudes towards resuscitation in New Zealand high-school students. Emerg Med J. 2006 Dec; 23(12): 899–902.
11. Tarika Sharma and Urvashi Sharma. Effectiveness of planned teaching program on knowledge regarding cardio pulmonary resuscitation among first year nursing students. IJAR 2017; 3(4): 383-385.
12. C.J. Locke, R.A. Berg, A.B. Sanders, M.F. Davis, M.M. Milander, K.B. Kern, et al. Bystander cardiopulmonary resuscitation. Concerns about mouth-to-mouth contact Arch Intern Med, 155 (1995), pp. 938-943.
13. Meena. A Study to Evaluate the Effectiveness of Structured Teaching Programme on Knowledge Regarding Cardiopulmonary Resuscitation in Adult among Student Nurses (GNM 3rd Year) in a Selected School of Nursing, Dehradun, Uttrakhand. 2008.IJSR.Vol.8 (4) 611-614.