SJIF Impact Factor: 5.464

WORLD JOURNAL OF ADVANCE HEALTHCARE RESEARCH

ISSN: 2457-0400
Volume: 7.
Issue: 3.
Page N. 74-76
Year: 2023

Original Article www.wjahr.com

A STUDY TO ASSESS THE EFFECTIVENESS OF DEMONSTRATION PROGRAM ON CPR AMONG GENERAL POPULATION IN SELECTED RURAL AREA OF MYSURU

Dr. Priyadarshini*

Assistant Professor, JSS College of Nursing, Mysuru, Karnataka, India.

Received date: 04 January 2023 **Revised date:** 25 January 2023 **Accepted date:** 14 February 2023

***Corresponding Author: Dr. Priyadarshini**

Assistant Professor, JSS College of Nursing, Mysuru, Karnataka, India.

BACKGROUND OF THE STUDY

One of the most catastrophic outcomes of coronary heart disease and the most frequent cause of death is sudden cardiac arrest. If cardiac arrest occurs in an out-of-hospital setting. The chance of survival is very slim. The CPR is a lifesaving technique that combines chest compression and artificial ventilation. This technique has evolved over the last 50 years, and has caused an advance in research. The field of CPR continues to be dynamic with the emergence of new therapies and improvements in systems of care. However, despite significant advances in the field of resuscitation science, important knowledge gaps persist. The aim of the study is to asses the effectiveness of demonstration program regarding CPR among rural people. The study adopted quasi experimental control group only design with 120 samples divided equal number of participants into experimental and control group. The study tool were validated and found reliable. The study reveals that majority 65% of rural people were having good knowledge and 35% of them have average knowledge in experimental group and in control group 100 % of them have poor knowledge. The demonstration program was not effective regarding CPR in rural population since the computed `t´ 4.67 was significant at 0.05 level of significance. In experimental group the education, received prior CPR training, performed CPR before variables were found not significant and personal variables viz. age, gender, awareness to provide CPR outside hospital, need of skill training on CPR found to be significant association at 0.05 level of significance. **Conclusion:** The study concluded that the demonstration programme found effective in enhancing knowledge in experimental group. There is a significant association for selected variables viz. age, gender, awareness to provide CPR outside hospital, need of skill training on CPR in experimental group and in control group significant association found only for Age.

KEYWORDS: Effectiveness of demonstration program, Rural population, CPR.

INTRODUCTION

Cardiac arrest is the sudden cessation of cardiac function resulting in compromised respiratory and circulatory function. Most cardiac arrests in adults are sudden, resulting from a primary cardiac cause and hence, circulation produced by chest compression is having higher importance.[1] CPR alone is not only to restart the heart. Its main purpose is to restore partial flow of oxygenated blood to the brain and heart. The main purpose is to prolong the tissue death and to extend the opportunity for a successful resuscitation without permanent brain damage.[2]

Incidence and prevalence

Globally NCDs caused the highest numbers of deaths worldwide with CVD. CVD is the most prevalent cause of death with approximately 17.9 million deaths occurring in 2019, representing 31% of all global deaths. These deaths were caused by heart disease and stroke. It was reported that over a quarter of all deaths in the UK (approximately 160,000 deaths per year) attributed to CVD. More than 42,000 people under the age of 75 died from cardiovascular disease every year in the UK.[3]

In China, around 230 million people are with cardiovascular disease, and 550,000 individuals gets cardiac arrest outside the hospital i.e. 55 persons out of 100000 population and their survival chance is very less than 1 percentage. We can make a gross changes if the victim receive timely, quality CPR along with automated external defibrillator (AED).[4]

In 2013, Indian Ministry Of Road Transport and Highway reports, 380 deaths/per day and approximately 1,37,576 people died before reaching the hospital.

Common people thinks that CPR is a medical procedure and it can be performed only by them, where the country like India has facing the shortage of trained health personnel and particularly in the rural areas, the alternative and better method is to train each and every one with life saving measures like CPR.[5]

METHODOLOGY

A quasi experimental post test only control group design was adopted in the present study. The total 120 samples were chosen by Non probability purposive sampling technique and 60 samples each in control and experimental group. Tool was validated by experts and the pilot study infers the feasibility of conducting the study. Proforma for selected personal variables was used to assess the personal variables, questionnaires was used to assess the knowledge of CPR among rural population.

RESULTS

The study results regarding personal variables reveals that, maximum samples in experimental and control group were in 31 to 40 years old. Majority 56.6% of the experimental group, 51.6% in control group were females. In experimental group 36.7% people were SSLC, 33.3% in control group were educated up to SSLC and PUC. Majority of samples in experimental group (96.7%) and 98.4% in control group have not performed CPR before. Majority samples in experimental group (91.7%) and 95% in control group has not received any prior training regarding CPR. 80% of experimental group and 83.4% samples control group were not aware about providing CPR outside the hospital. 78.4% samples in experimental group and 80% in control groups were not having the felt need of taking skill training regarding CPR.

The post test knowledge score of experimental and control group of rural people indicates that, 100% in control group have poor knowledge. 35% of the samples in experimental group have average knowledge and 65% of them have good knowledge and none of them have poor knowledge.

	Experimental group n=60		**Control group n=60**	
	f	**%**	**f**	**%**
Poor (0-8)	0	0	60	100
Average (9-16)	21	35	0	0
Good (17-20)	39	65	0	0

The experimental group knowledge mean score is 17.4, the SD is +/-2.13, median is 18 and knowledge scores ranged from 12-22. The control group knowledge scores ranged from 3-8, mean is 6.28 and median is 6.5 with a standard deviation is +/- 1.024.

Knowledge Score	**Mean**	**Mean difference**	**SD difference**	**Independent 't' test**
Control group n=60	6.28	11.12	±1.111	4.67*
Experimental group n = 60	17.4			

Df (118) = 0.677 p>0.05

The post test mean knowledge scores between control and experimental group is 11.12 with standard deviation difference is 1.11 and obtained 't' test value is 4.67 and it was found to be significant at 0.05 level. The demonstration program on f rural population found to be effective in improving the knowledge of general public regarding CPR.

The chi square test reveals, the significant association at 0.05 level between post test knowledge scores regarding CPR among rural population in experimental group with their selected variables viz. age, gender, provide CPR outside a hospital setting, need of skill training in CPR. The education, received prior CPR training, performed CPR before variables were found not significant at 0.05 level of significance.

Except Age, non of the variables viz. gender, education, received prior CPR training, performed CPR before, provide CPR outside a hospital setting, necessary skill training in CPR were found no significant association at 0.05 between the level of knowledge score regarding CPR among rural people with their selected personnel variables.

CONCLUSION

The awareness of CPR in general public is very important in country like India since the incidence and prevalence of chronic disorder in higher level. CPR is one of the skill oriented lifesaving procedure to be learned by everyone to act during cardiac arrest. Timely chest compression, ventilation, use of AED and safe transfer were the promising factors for survival of victims with cardiac arrest.

ACKNOWLEDGEMENT

Ms. Miya Theresa Bose, Ms. Namitha Suresh, Ms. Nandana ES, Ms.Nidhila Johny, Ms.ReehaV Shafeek of 3rd year BSc nursing students were conducted the study under the guidance of Dr. Priyadarshini Asst. Professor JSS College of Nursing, Mysuru.

REFERENCE

1. Cardiopulmonary resuscitation (2023) Wikipedia. Wiki media Foundation. Available at: https://en.m.wikipedia.org/wiki/Cardiopulmonary_resuscitation.
2. WHO, Cardiovascular disease (CVDs).11 June 2021 available at; .https://www.who.int/news room/fact-sheets/detail/cardiovascular-diseases-(cvds).
3. Yan S, Gan Y, Jiang N, Wang R, Chen Y, Luo Z, et al. The global survival rate among adult out-of hospital cardiac arrest patients who received cardiopulmonary resuscitation: a systematic review and meta-analysis. Critical Care, 2020 Feb 22; 24(1).
4. Justin ong, francisO'connell, and Ali Pourmand. (2021) An international perspective of out –of-hospital cardiac arrest and cardio pulmonary resuscitation during covid 19 pandemic Am J Emerg Med, 2021 September; 47: 192-19710.
5. Koranga, R., Narayan, P.J. and Bala, K. (2019) "A study on the effectiveness of the structured teaching programme regarding cardiopulmonary resuscitation among undergraduate students at selected College of Dehradun, Uttarakhand," International Journal Of Community Medicine And Public Health, 6(6): 2420. Available at: https://doi.org/10.18203/2394-6040.ijcmph20192301.