Practice Regarding Cardiopulmonary Resuscitation Among Staff Nurses Working In Selected Hospital Aligarh, Uttarpradesh

Mr. Senthil Thirusangu[1*], Dr. Kuldeep Singh Gujar[2]

[1*]Phd Scholar, Mangalayatan University, Uttar Pradesh India.
[2]Phd Guide, Mangalayatan University, Uttar Pradesh India.

*Correspondent Author: Mr. Senthil Thirusangu
*Email id: senthilamma.t@gmail.com

Abstract:
This study aims to compare the mean and standard deviation of pre and post-Practice scores of t-test among staff nurses in relation to specified CPR techniques. This research aims to investigate the potential influence of practise sessions on the proficiency of staff nurses in cardiopulmonary resuscitation (CPR) techniques. This study aims to analyse the mean and standard deviation of pre and post-Practice scores to assess changes and improvements in nurses' CPR skills following practise sessions. This research study aims to investigate and analyse the subject matter in order to gain a deeper understanding of its underlying factors and implications. The study This research study aimed to determine the mean value and standard deviation of a given dataset. The mean value was calculated to be -1.6433, while the corresponding standard deviation was found to be 1.29939. This research abstract examines the common usage of the abbreviation "Std." in statistical analysis to refer to the standard deviation. This study aimed to calculate the error mean, which was found to be 0.07502, at a 95% confidence level. This study employed statistical analysis to calculate the confidence interval for the difference between two variables. This study aimed to determine the lower and upper bounds of the confidence interval, which were found to be -1.79097 and -1.4957, respectively. This study examines the range of values that represents the likely true difference between variables, with a specified level of confidence. This study reports a t-test score of -21.905. This study examines the significance of p-values obtained from t-tests based on a given table value. A p-value is deemed statistically significant if it falls below the threshold of 0.05. This study examines the significance of p-values in determining statistical significance. Specifically, when the p-value surpasses the predetermined threshold of 0.05, the obtained result is deemed to lack statistical significance. This research study aimed to determine the statistical significance of the obtained p-value, which was found to be 0. This study examines the outcome of rejecting the null hypothesis.

Keywords; Cardiopulmonary Resuscitation, Staff Nurse, Practice

Introduction:
The heart, a vital organ in the human body, plays a crucial role in maintaining circulation by serving as a muscular pump. Its primary function is to generate the necessary force required to propel blood throughout all the tissues and organs. By facilitating the continuous flow of blood, the heart ensures the delivery of oxygen, nutrients, and other essential substances to various parts of the body. This research aims to explore the fundamental characteristics and functions of the heart, shedding light on its role in sustaining overall physiological processes. The proper functioning of tissues is essential for the survival of organisms, as it requires a constant delivery of oxygen and nutrients, while simultaneously eliminating metabolic waste products. In the realm of cellular biology, the availability of certain necessities plays a crucial role in the survival and functionality of cells. When deprived of these essential elements, cells undergo a series of irreversible changes that ultimately culminate in their demise.

In a recent article published in "Nursing Times," the importance of providing adequate and regular training in cardiopulmonary resuscitation (CPR) for physicians, dentists, nurses, and other healthcare professionals was highlighted. The article emphasises the significance of ensuring that these individuals possess the necessary skills and knowledge to effectively perform CPR, thereby enhancing patient outcomes and potentially saving lives. This research introduction aims to explore. Hospital resuscitation is a critical intervention that plays a vital role in saving lives. It necessitates careful consideration, comprehensive training, effective coordination, and the availability of appropriate equipment.

Cardiac arrest is a critical medical condition characterised by the sudden cessation of the heart's pumping function, leading to a cessation of blood flow to vital organs. The incidence of death resulting from cardiac arrest is a matter of significant concern worldwide. According to estimates provided by the American Heart Association, the occurrence of cardiac arrest-related deaths among the general population varies between 0.2 to 0.4 percent annually. This statistic underscores the importance of understanding and addressing the factors contributing to cardiac arrest in order to develop effective preventive measures and improve patient outcomes. In this research, we aim to explore the incidence

and potential risk factors associated with cardiac arrest, with the ultimate goal of enhancing public health strategies and reducing the burden of this life-threatening condition.

Aims; This research aims to investigate the process of how staff nurses acquire knowledge and skills in cardiac pulmonary resuscitation (CPR) and subsequently apply them in emergency situations with patients. The ability to effectively perform CPR is crucial in saving lives during cardiac and respiratory emergencies. Understanding the learning process and the subsequent application of CPR skills by staff nurses is essential for improving patient outcomes and enhancing the overall quality of emergency care.

By examining the methods employed in teaching CPR to staff nurses and exploring their experiences in real-life emergency scenarios, this research seeks to contribute to the existing body of knowledge in nursing education and emergency medicine. Ultimately, the findings of this study may inform the development of more effective training programmes and protocols for staff nurses, leading to improved patient care and outcomes in emergency situations.

Settings and Design; The research design serves as a fundamental framework for conducting a study. The organisations of a study, as well as the timing of data collection and implementation of interventions, play crucial roles in determining its overall structure and methodology.
The present study employed a pre-experimental before and after without control research design to assess the efficacy of the structured teaching programme.

Method and materials; This study focuses on the methodology employed, specifically the selection of the research approach and research design. This research introduction provides an overview of the study design, including the description of the study population's setting, the sample and sampling technique employed, the data collection procedure, the tools used to assess content validity and reliability, the pilot study conducted, and the method of analysis chosen. These design elements are aligned with the statement and objectives of the study.

Statistical analysis used:

Table.1. Compare the mean and standard deviation of pre and post-Practice scores of t-test among staff nurses about specified

Paired t Test							
Paired Differences					t	df	P-Value
Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
			Lower	Upper			
-1.6433	1.29939	0.07502	-1.791	-1.4957	-21.905	299	0

CPR techniques.
Note:*-Significant (i.e .P<0.05)

In this study, we aim to compare the mean and standard deviation of pre and post-Practice scores of t-test among staff nurses regarding specified CPR techniques. The purpose of this research is to examine the potential impact of practise sessions on the performance of staff nurses in CPR techniques. By analysing the mean and standard deviation of pre and post-Practice scores, we can gain insights into any changes or improvements in the nurses' CPR skills after the practise sessions. This research The mean value of the dataset was found to be -1.6433, with a corresponding standard deviation of 1.29939. The abbreviation "Std." is commonly used to refer to the standard deviation in statistical analysis.

The error mean, with a value of 0.07502, was calculated with a 95% confidence level. The confidence interval for the difference between two variables was calculated using statistical analysis. The lower bound of the confidence interval was determined to be -1.79097, while the upper bound was found to be -1.4957. These values indicate the range within which the true difference between the variables is likely to fall, with a certain level of confidence. The t-test score obtained in the study was -21.905. According to the table value, a p-value obtained from a t-test is considered statistically significant if it is less than 0.05.

According to research, when the p-value exceeds the threshold of 0.05, the obtained result is considered statistically insignificant. In this research study, the obtained p-value was found to be 0, indicating statistical significance. As a result of Null Hypothesis Rejected

Table .2. Pre-Practice was analysed by using Karl Pearson s correlation coefficient association between demographic variables and Cardio-Pulmonary Resuscitation score analysed using Pearson Chi-square test.

Demographic		Pre-Practice					Mean	Std. Deviation	P- Value
		Very poor	Poor	Average	Good	Excellent			
Age	Below 25 years	69	34	40	13	17	2.2775	1.32218	0.56481378
	26 – 30 years	23	8	22	5	6	2.4219	1.30694	
	31 – 40 years	13	5	10	2	3	2.3030	1.31065	
	Above 40 Years	12	4	4	5	5	2.5667	1.56873	
gender	Female	86	39	59	18	24	2.3584	1.33993	0.95325746
	Male	31	12	17	7	7	2.2838	1.34999	
qualification	GNM	90	35	65	21	23	2.3675	1.33361	.298
	BSN	24	16	9	4	7	2.2333	1.35755	
	MSN	3	0	2	0	1	2.3333	1.63299	
Experience	<1 years	75	27	43	13	18	2.2727	1.34994	0.94189548
	1-5 Years	21	10	18	7	6	2.4677	1.32712	
	6-10 Years	11	6	9	3	4	2.4848	1.37207	
	10 years and Above	10	8	6	2	3	2.3103	1.31213	
Department of Working	General ward	35	19	24	6	8	2.2717	1.27618	0.93593418
	Emergency	21	10	14	5	10	2.5500	1.46629	
	Intensive care unit	27	9	15	5	4	2.1667	1.27780	
	Specialties	25	9	14	5	7	2.3333	1.39814	
	OPD	9	4	9	4	2	2.5000	1.29099	
prior training	in service Training	28	12	23	3	8	2.3378	1.31667	0.76442616
	Work shop	1	0	1	0	0	2.0000	1.41421	
	None	88	39	52	22	23	2.3438	1.35351	
Previous exposure to sudden cardiac arrest patient care	Frequently	60	26	47	15	17	2.4121	1.33429	0.89071775
	Rarely	43	17	22	8	11	2.2772	1.37200	
	Never	14	8	7	2	3	2.1765	1.29030	
Previous CPR performance during revival of cardiac arrest patient care	Many times	43	18	30	8	14	2.3982	1.37931	0.93394635
	Fewer times	60	25	39	15	14	2.3333	1.32784	
	Never	14	8	7	2	3	2.1765	1.29030	

The current investigation examined the statistical significance of various factors including age, gender, qualification, experience, department of working, and prior training. The obtained p-values for these variables were 0.56481378, 0.95325746, 0.298, 0.94189548, 0.93593418, and 0.76442616, respectively. The p-values were computed in order to evaluate the statistical significance of the variables in relation to the research question. In a comprehensive investigation focused on evaluating prior exposure to patient care for sudden cardiac arrest, the statistical analysis yielded a p-value of 0.89071775. In this study, an investigation was conducted to determine the p-value associated with previous cardiopulmonary resuscitation (CPR) performance during the provision of care to patients experiencing cardiac arrest. The obtained p-value was found to be 0.93394635, as evidenced by the data presented in the accompanying table. The present study involved the calculation of a confidence interval with a level of significance set at 95%. According to conventional statistical practise, a confidence interval with a magnitude below 0.05% is generally regarded as statistically significant. In the present investigation, the computed value was observed to exceed the threshold of 0.05%. Based on the analysis conducted, the findings of this study support the acceptance of the Null Hypothesis.

Conclusion

The present study examines the impact of cardio pulmonary resuscitation (CPR) practise on nursing staff working in a hospital setting. The objective of this research is to analyse the statistical data and determine the outcomes of CPR training among the nursing staff. The findings of this study reveal a positive result, indicating the effectiveness of CPR practise in the hospital environment.

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