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Impact of structure tutoring program on knowledge and chop s regarding cardiopulmonary reanimation among non-professional trades scholars in named art sodalities of Dahod (Gujarat)

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Abstract

Cardiopulmonary Resuscitation (CPR) is a critical life-saving intervention during cardiac or respiratory arrest. Despite advancements in CPR techniques and the availability of automated external defibrillators, survival rates for out-of-hospital cardiac arrest (OHCA) remain low. Early intervention with CPR significantly increases survival chances. This study aimed to evaluate the effectiveness of structured tutoring on improving CPR knowledge and skills among non-professional trades scholars. A pre-test and post-test design was employed to assess changes in participants' understanding and ability to perform CPR. Results showed significant improvement in both knowledge and skills following the intervention. The findings underscore the importance of effective CPR training and awareness, highlighting its potential to enhance survival outcomes in emergency situations.

Keywords: Cardiopulmonary resuscitation, CPR, basic life support

Introduction

Cardiopulmonary Reanimation (CPR): A Lifesaving Technique Cardiopulmonary reanimation (CPR) is a critical lifesaving technique used in extremities similar as heart attacks or near- drowning incidents when a person's breathing or twinkle has stopped. In cases of cardiac arrest, survival rates are generally low; still, early intervention, including CPR, defibrillation, and post-arrest care, significantly improves issues.

Each time, numerous individualities witness respiratory or cardiac arrest due to accidents or medical conditions. unforeseen cardiac arrest is a leading cause of death in developed countries and occurs when the heart and breathing suddenly stop. Other common causes include heart attacks, electric shocks, drowning, choking, suffocation, trauma, medicine overdoses, and severe antipathetic responses.

The stylish chance for survival lies in immediate exigency treatment, beginning with introductory life support (BLS). CPR - meaning to revive the heart and lungs - can restore partial inflow of oxygenated blood to the brain and other vital organs, buying pivotal time until more advanced care is available.

Despite advancements in CPR ways, similar as the wide vacuity of automated external defibrillators (AEDS) and curatives like remedial hypothermia, the survival rate for grown-up out- of- sanitarium cardiac arrest (OHCA) remains low; only about 10 survive to sanitarium discharge. likewise, numerous of those survivors suffer moderate to severe cognitive impairments within three monthspost-resuscitation.

Need for the study

Cardiopulmonary Reanimation (CPR) and the Urgency of Prompt Response to Sudden Cardiac Arrest.

Cardiopulmonary reanimation (CPR) is a life- saving exigency procedure performed when the heart and lungs stop performing. Despite its critical significance, the reported prevalence and issues of out- of- sanitarium cardiac arrest (OHCA) vary significantly across regions. These variations stem from differences in the delineations and discovery of cardiac arrest, as

well as in the medical response and treatment handed subsequently.

Multitudinous studies have stressed the issue of shy CPR performance, indeed among trained medical professionals. A common concern is the poor retention of CPR chops following training courses. These findings have driven recent updates to the Basic Life Support (BLS) and Advanced Life Support (ALS) protocols, aimed at perfecting the quality and effectiveness of reanimation sweats.

Unforeseen cardiac arrest (SCA) poses a severe and immediate trouble to life, frequently leading to death within twinkles if left undressed. According to WHO statistics, roughly 4,280 out of every 100,000 individualities in India die annually due to SCA. Following cardiac arrest, there's a critical window of four to six twinkles before unrecoverable brain damage or death occurs. With each passing nanosecond without intervention, the chances of survival drop by 7 - 10.

SCA is frequently appertained to as a "Silent epidemic" due to its unforeseen onset and high mortality rate. Still, it's potentially reversible if the victim receives timely and applicable exigency care. This includes immediate CPR, defibrillation to restore normal heart meter, and advanced life support measures. Enhancing public mindfulness, perfecting CPR training, and icing access to exigency response tools are vital way in combating this life- hanging condition.

Objects of the study

- To assess the pre-test score of knowledge and chops (skills) on cardiopulmonary
- Reanimation (Cpr) among non-professional trades scholars.
- To estimate the effectiveness of structured tutoring programs on the knowledge and chops of cardiopulmonary reanimation (CPR) among non-professional trades scholars.
- To relate the knowledge and chops regarding

cardiopulmonary reanimation (CPR) among the non-professional trades scholars.

- To find out the association between pre-test knowledge and chops regarding
- Cardiopulmonary reanimation (CPR) with their named demographic variables.

Hypothesis

- **H₁:** There will be a significant difference between the pretest and post-test knowledge scores regarding cardiopulmonary reanimation.
- **H₂:** There will be a significant association between the pre-test score of knowledge and their chops with their named demographic variables.
- **H₃:** There will be a significant correlation between the pre-test and post-test knowledge and skill score regarding cardio-pulmonary reanimation.

Methodology

The design named for the present study was a pre-experimental exploration design, specifically a one- group pre-test and post-test design. The sample size comported of 50 actors.

- O₁ represents the assessment of knowledge and chops related to CPR previous to the perpetration of the structured tutoring programme(pre-test).
- X denotes the structured tutoring programme.
- O₂ represents the assessment of knowledge and chops of scholars from Navjeevan Arts College, Dahod, following the intervention (Post-test).

Anon-probability convenience slice fashion was used to elect the actors. Data collection was conducted using a structured questionnaire and a roster. The data were anatomized in relation to the objects of the study using both descriptive and deducible statistics.

Data Analysis

Table 1: Demographic Characteristics of the Participants

Sr. No	Characteristics	Categories	Frequency	Percentage%
1	Age	16-17	20	33.33
		17-18	16	26.66
		18-19	15	25.00
		19-20	8	13.33
2	Sex	Male	29	48.33
		Female	31	51.66
		Transgender	0	0.00
3	Types of family	Joint family	17	55.00
		Nuclear family	33	34.00
4	Family income	1000-15000rs	33	34.00
		16000-20000 rs.	15	25.00
		21000-25000 rs.	16	26.66
		Above 25000 rs.	20	33.33
5	Parent education	Primary school	8	13.33
		Secondary school	10	16.66
		Graduation	29	48.33
		Post-graduation	13	21.66
		Health	9	15.00
6	Occupation of the father	Professional		
		Non health Professional	51	85.00
7	Area of domicile	Urban	30	50.00
		Rural	30	50.00

8	Previous Knowledge on CPR	Yes	32	53.33
		No	28	46.66
9	If yes, source of information through	Media	8	13.33
		Health personal	20	33.33
		Book /internet	20	33.33
		No information	12	20.00
10	Studied which group in xii	English	10	16.66
		Hindi	17	28.33
		Gujarati	15	25.00
		Other	18	30.00

Section: B assessment of pre-test and post-test knowledge and Chops.

Score of arts students

Table 2: Showing pre and post-test knowledge score of arts students.

	Pre-test	Post-test
Good	0.00%	55.00%
Average	3.33%	28.33%
Poor	96.66%	16.66%

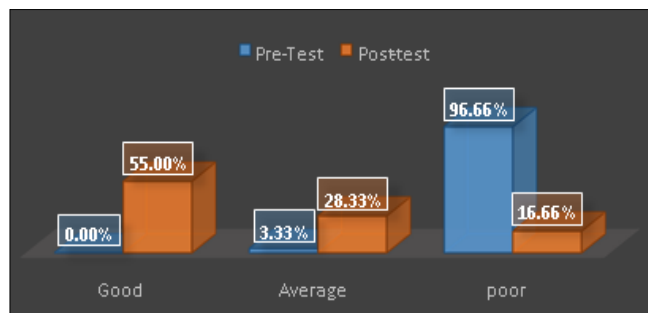


Fig 1: Knowledge score of arts sodalities

Pre and post-test chops score of arts students

Table 3: Showing pre and post-test knowledge score of arts students

	Pre-test	Post-test
Good	26.66%	85.00%
Average	45.00%	8.33%
Poor	28.33%	6.66%

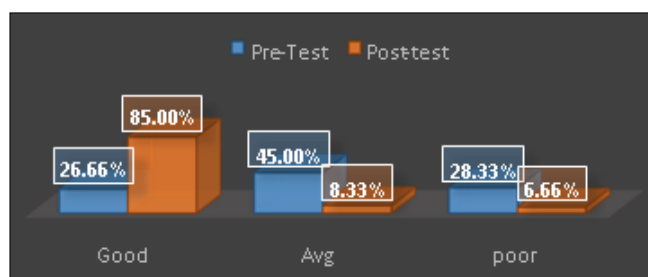


Fig 2: Comparison of pre and post-test chops

Table 4: Showing analysis and interpretation of pre-test and post-test knowledge scores (n=60)

Knowledge test	Mean score	Mean Difference	Sd	Calculated "t" value	Table "t" Value	Df
Pre-test	10.08	16.02	5.08	13.96	2.00	59
Post-test	26.1		6.81			

Significance at the level of 0.05

Table 5: Showing analysis and interpretation of pre-test and post-test skill scores (n=60)

Knowledge test	Mean score	Mean Difference	Sd	Calculated "t" value	Table "t" Value	Df
Pre test	4.43	3.00	2.28	6.9	2.00	59
Post test	7.43		2.23			

Significance at the level of 0.05

Result

Regarding pre-test majority, 96.66% had poor knowledge and in the post-test, 55.00% had good knowledge, 28.33% in the post-test have average knowledge, and 3.33% had average knowledge in the pre-test. Were in pre-test 0.00% had good knowledge.

The pre-test majority 26.33% had poor Chops and in the post-test 85.00% have good knowledge, were 8.33% in post-test have average chops and 45.00% have average chops in pre-test. Where in pre-test 26.66% had good skill.

There was no significant association between the chops score and demographic variables. The post-test chops score of participants is significantly higher than the pre-test knowledge and skills score.

Conclusion

The present study was conducted to assess the impact of structured tutoring program on knowledge and skills regarding cardiopulmonary reanimation among non-professional trades scholars in named art sodalities. The findings show's that student's knowledge and skills was poor regarding this topic after implementing structure teaching and demonstration knowledge and skills score is increased. The study involves 60 samples by the nonprobability convenient sampling. Data obtained was analyzed using descriptive and inferential statistics.

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