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Original Research Article

Evaluate the Effectiveness of Demonstration in Terms of Knowledge and Practice Regarding Basic Life Support among Policemen in Selected Police Station of Moradabad Uttar Pradesh

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Abstract: Basic Life Support (BLS) is the recognition of sudden cardiac arrest and activation of the emergency response system, followed by resuscitation, and rapid defibrillation. Research suggests that policemen have the poorest knowledge and practice regarding basic life support. The study aim is to improve the knowledge and practice of policemen regarding basic life support to save the life of people during Cardiac arrest or any Emergency situation. ***Material and Methods*:** A pre-experimental study, using basic one group pre-test post-test design adopted for the current study. On probability purposive sampling technique methodology was chosen to select 60 policemen participants for the study. ***Results*:** The findings of the study revealed that mean post-test knowledge score (22.95±2.629) was greater than the mean pre-test knowledge score (11.81±3.68) with the mean difference 8.13, hence it shows the effectiveness of demonstration in terms of knowledge regarding basic life support ($p<0.05$). Mean post-test practice score (9.15±1.288) was greater than the mean pre-test practice score (5.2±0.996) with the mean difference 4.20, hence it shows the effectiveness of demonstration in terms of practice regarding basic life support ($p<0.05$).

Keywords: Basic life support, demonstration, purpose, warning sign of cardio pulmonary arrest, chain of survival, position, step of CPR, indication, contraindication, complication, policemen.

INTRODUCTION

I am not the born; how can there be either birth or death for me.

Guru Nanak Dev Ji

When life begins, instincts kick in to work and protect it. Because life seeks to live rather than die. And that is how life works in the natural world. In the meanwhile, there are numerous problems. But instinct seeks and discovers ways to save precious little life once more. Both birth and death are natural occurrences that we must all acknowledge. When a kid is born, we rejoice because a new member of our family has joined our family; yet, when a person dies, we mourn because he has left us and will never return. This death might happen at any time and for any reason. However, careful intervention can save some deaths. Giving cardiopulmonary resuscitation (CPR) in a timely manner, for example, can avert death from cardiac arrest. Cardiovascular diseases are the largest cause of death worldwide, according to the World Health Organization. According to the Center for Disease Control, it causes over 600,000 fatalities in the United States each year. Heart disease claims the lives of about 17 lakh Indians each year. With 2.3 crore deaths projected by 2030, the figure is expected to rise. And quarter of heart attacks occurs before age of 40. Non-communicable diseases (NCDs), which include heart disease and diabetes, account for over 26% of all fatalities in India.

So the researcher wants to educate or demonstrate to the policemen to improve the knowledge, practice or proper basic life support technique to save the life of the person those who have a need of CPR. If the policemen have proper practice and knowledge regarding basic life support they can save life of individual in cardiac arrest or any emergency condition. In this study researcher will teach or demonstrate to the policemen regarding basic life support to improve the knowledge and practical skill.

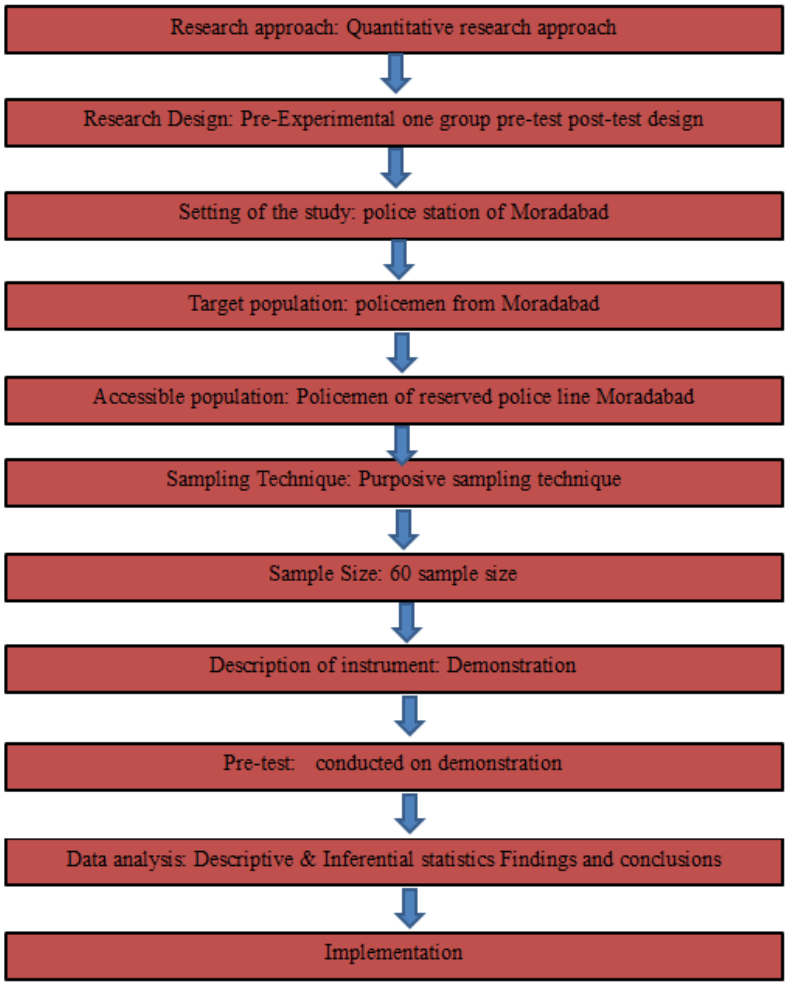
Kaushal P, Ponamalar P in order to develop an information booklet conducted a study to assess traffic police attitudes and knowledge about basic life support in selected Gujarat districts this research was carried out at Bhandu College of Nursing. The sample size 100 traffic police of Ahmedabad District. Quantitative research approach used in the study. The results showed that Knowledge Score is (12.99±2.37) and the attitude score is (18.07±6.61). The major conclusion from this study was found that (59%) of sample had poor knowledge (score: 0–13) regarding Basic life support, (66%) of sample had favourable attitude towards Basic life support.

Problem Statement

Evaluate the effectiveness of demonstration in terms of knowledge and practice regarding basic life support among policemen in selected police station of Moradabad Uttar Pradesh.

OBJECTIVES

- To assess the level of knowledge regarding basic life support among policemen.
- To assess the level of practice regarding basic life support among policemen.
- To evaluate the effectiveness of demonstration in terms of knowledge and practices regarding basic life support among policemen.
- To find out the association between the level of knowledge and practice regarding basic life support among policemen with their selected demographic variables.



DESCRIPTION OF TOOL

The tools used for data collection consists of the following sections.

SECTION A: DEMOGRAPHIC DATA

A demographic Performa consist of seven items. It includes age, gender, education, religion, experience, previous knowledge regarding basic life support.

SECTION B: KNOWLEDGE QUESTIONNAIRE

Knowledge questionnaire consist of 30 items regarding Introduction, definition, purpose, indication, warning signs, chain of survival, positioning, steps of CPR, Steps of defibrillation, five keys aspects of great CPR, Contraindication, Complication, Demonstration. The items were consisting of positive frame statement and negative frame statement with a total scoring of 30.

SECTION C: PRACTICE CHECK LIST

Practice check list consist of 12 items regarding demonstration. The items were consisting of positive frame statement and negative frame statement with a total scoring of 12.

DATA COLLECTION PROCEDURE

The final study was conducted on 60 samples from 17th Jan to 31 Jan 2022 among policemen in reserved police line of Moradabad. After obtaining written permission from the respective Senior Superintendent of police of Moradabad, participant's information sheet was provided and Individuals' written informed consent was obtained. Investigator explained the goal of the research study and reassuring them concerning confidentiality of the participants was maintained by investigator. The sample was chosen using purposive sampling technique. A total of sixty people were chosen as a sample. The test took an average of 40 minutes to complete.

ETHICAL CONSIDERATION

- The Principal of Teerthanker Mahaveer College of Nursing, Teerthanker Mahaveer University Moradabad, has given formal administrative approval.
- Administrative permission was obtained from Senior Superintendent of Police at Moradabad.
- Each participant received a subject information sheet.
- A written information sheet given to all participants.
- The participants' privacy and confidentiality were protected.

RESULTS

The following section contains an analysis of the data:

Section A: Description of the sample characteristics.

Section B: To assess knowledge level regarding basic life support among police men.

Section C: To assess practice level regarding basic life support among policemen.

Section D: To effectiveness of demonstration in terms of knowledge and practices regarding basic life support among policemen.

Section E: Association between the level of knowledge and practice regarding basic life support among policemen with their selected socio - demographic variables.

SECTION A: Description of the sample characteristics

This section dealt with sample characteristics and variable in terms of frequency and percentage.

Table 1: Distribution of sample characteristics in terms of frequency and percentage (N= 60)

Demographic variables	Experimental group	f	%
Age in years	a. 18 – 30 years	48	80.00
	b. 31 – 40 years	7	11.67
	c. 41 – 50years	4	6.67
	d. > 51 years	1	1.67
Total		60	100
Gender	a. Male	53	88.33
	b. Female	7	11.67
	c. Other	0	0.00
Total		60	100
Education	a. High school	4	6.67
	b. Intermediate	16	26.67
	c. Graduation	33	55.00

Demographic variables	Experimental group	f	%
	d. Post – Graduation	7	11.67
Total		60	100
Religion	a. Hindu	54	90.00
	b. Muslim	4	6.67
	c. Christian	2	3.33
	d. Others	0	0.00
Total		60	100
Experience	a. 1 - 5 years	44	73.33
	b. 6 – 10 years	10	16.67
	c. 11- 15 years	5	8.33
	d. >15years	1	1.67
Total		60	100
Previous knowledge about Basic Life Support	a. Yes	9	15.00
	b. No	51	85.00
Total		60	100

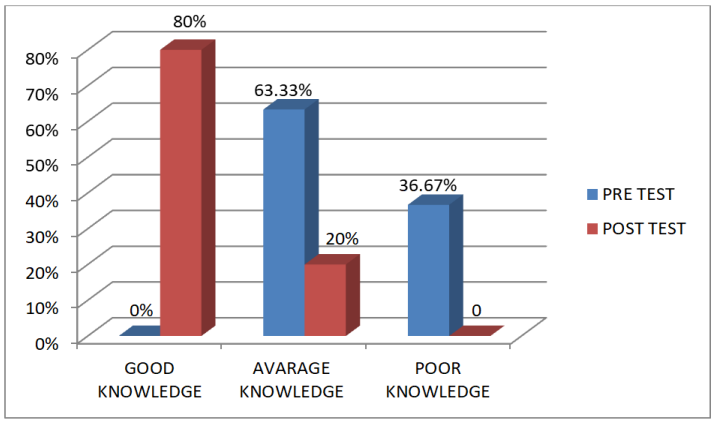
The data presented in table 1 shows that majority of the participants were from 18 – 30 years of age (80%), rest (11.67%) were from 31 – 40 years of age , (6.67%) were from 41 – 50 years of age and remaining (1.67%) were from more than 51 years of age . Majority of the participants were male (88.33%) and female participants were (11.67%). Majority of the participants were (55%) of policemen graduated, (26.67%) of policemen intermediate, (11.67%) policemen are post graduated and (6.67%) of policemen are high school pass. Majority of the policemen were Hindu (90%), Muslim (6.67%), and Christian (3.33%) and other (0%). Majority of policemen were from 1-5 years of experience (73.33%), rest (16.67%) were from 6-10 years of experience, (8.33%) were from 11-15 years of experience and more than 15 years of experience (1.67%). Majority of policemen no previous knowledge regarding basic life support (85%) and (15%) policemen have previous knowledge regarding basic life support.

Section B: To assess the level of knowledge regarding basic life support among police men.

Table 2: The section dealt with the assess the level of knowledge regarding basic life support among police men (N=60)

Pre-test knowledge				
Sr. No	**Criterion**	**Range of score**	**Frequency**	**percentage**
1	Good knowledge	21-30	0	0.00
2	Average knowledge	11 - 20	38	63.33
3	Poor knowledge	0-10	22	36.67
Post-test knowledge				
1	Good knowledge	21-30	48	80
2	Average knowledge	11 - 20	12	20
3	Poor knowledge	0-10	0	0

Table-2 depicted that in pre-test knowledge score 66.33% were belonged to average knowledge and 36.67% belonged to poor knowledge criterion and post-test knowledge score 80% policemen belonged to good knowledge criterion and 20% policemen belonged to average knowledge criterion.



(N=60)

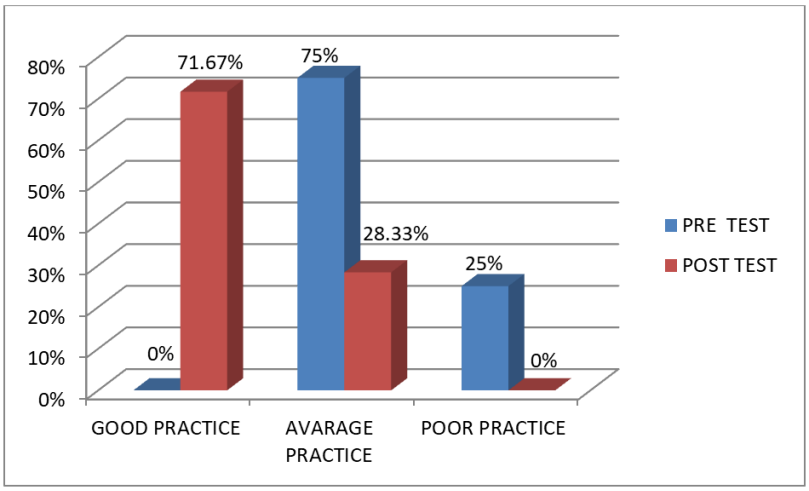
Section C: To assess the level of practice regarding basic life support among policemen.

The section dealt with to assess the level of practice regarding basic life support among policemen.

Table 3, (N=60)

Sr. No	Criterion	Range of score	Pre-test practice	
			Frequency	percentage
1	Good Practice	9 to 12	0	0
2	Average Practice	5 to 8	45	75
3	Poor Practice	0 to 4	15	25
Sr. No	**Criterion**	**Range of score**	**Post-test practice**	
			Frequency	**Percentage**
1	Good Practice	9 to 12	43	71.67
2	Average Practice	5 to 8	17	28.33
3	Poor Practice	0 to 4	0	0.00

Table-3 depicted that in pre-test practice score 75% were belonged to average practice and 25% belonged to poor practice criterion and post-test practice score 71.67% policemen belonged to good practice criterion and 28.33% policemen belonged to average practice criterion.



(N=60)

Section D: To evaluate the effectiveness of demonstration in terms of knowledge and practices regarding basic life support.

This section dealt with the effectiveness of demonstration in terms of knowledge and practice regarding basic life support among policemen

(i) Comparison of mean pre-test post-test knowledge and practice score.

To determine the statistical inference independent 't' test statistic was computed & following null hypothesis (H_{01}) stated.

H_{01}: There is no significant difference between mean pre-test post-test knowledge and practice score.

Table 4: Test; Mean ±SD, Mean %, paired t test value of pre & post-test knowledge and practice regarding basic life support

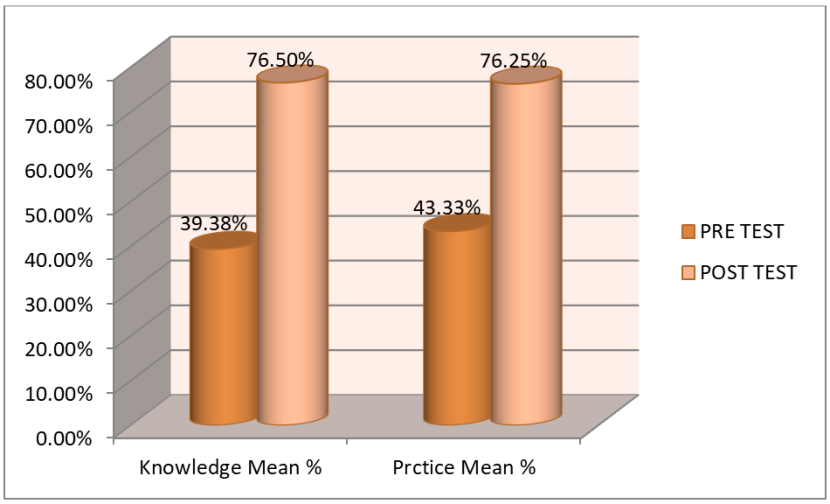
Knowledge score (N=60)					
Sr. No	**Test**	**Mean**	**Standard deviation**	**Mean %**	**paired t test**
1	Pre	11.81	3.68	39.38	18.12*
2	Post	22.95	2.629	76.5	
Practice score					
Sr. No	**Test**	**Mean**	**Standard deviation**	**Mean %**	**paired t test**
1	Pre	5.2	0.996	43.33	18.458*
2	Post	9.15	1.288	76.25	

Table 4 revealed that the effectiveness of demonstration mean post-test knowledge score (22.95±2.629) was greater than the mean pre-test knowledge score (11.81±3.68) with mean difference of 11.14, hence it showed the effectiveness of demonstration programme ($p<0.05$).

The calculated value ($t=18.12$) was greater than the table value ($t_{(60)} =2.00$) at the level of 0.05 significance. Hence H02rejected and inferred that the findings were statistically significant.

Table 4 revealed that the effectiveness of demonstration mean post-test practice score (9.15±1.288) was greater than the mean pre-test practice score (5.2±0.996) with mean difference of 3.95, hence it showed the effectiveness of demonstration programme ($p<0.05$).

The calculated value ($t=18.458$) was greater than the table value ($t_{(60)} =2.00$) at the level of 0.05 significance. Hence H02rejected and inferred that the findings were statistically significant.



SECTION E: Association between the level of knowledge and practice regarding basic life support among policemen with their selected socio demographic characteristics.

This section dealt with association of pre-test knowledge and practice score and selected de demographic variables (Age, Gender, Education, Religion, Experience, Previous knowledge about Basic Life Support).

To determine the association of pre-test level of knowledge and practice with their demographic variables, chi-square test, statistic computed and following null hypothesis (H03) stated.

H_{03}: There is no significant association between level of knowledge and practice regarding basic life support among policemen with their selected socio demographic variables.

Table 5: Association of level of knowledge (pre-test) with their selected socio demographic variables

Socio demographic Variables	Knowledge (F)	Level (F)	Total (N)	Chi-square value	df
	Poor	Average			
Age in years					
18-30	15	33	48	6.21	3
31-40	5	2	7		
41-50	1	3	4		
>51	1	0	1		
Gender					
Male	15	38	53	13.687*	1
Female	7	0	7		
Other	0	0	0		
Education					
High school	3	1	4	5.053	3
Intermediate	6	10	16		
Graduation	9	24	33		

Socio demographic Variables	Knowledge (F)	Level (F)	Total (N)	Chi-square value	df
	Poor	Average			
Post-graduation	4	3	7		
Religion					
Hindu	19	35	54	3.74	2
Muslim	1	3	4		
Christian	2	0	2		
Other	0	0	0		
Experience					
1-5	12	32	44	8.207*	3
6-10	7	3	10		
11-15	2	3	5		
>15	1	0	1		
Previous knowledge about basic life support					
Yes	1	8	9	2.977	1
No	21	30	51		

P=<0.05, *S – Significant, NS- Non significant

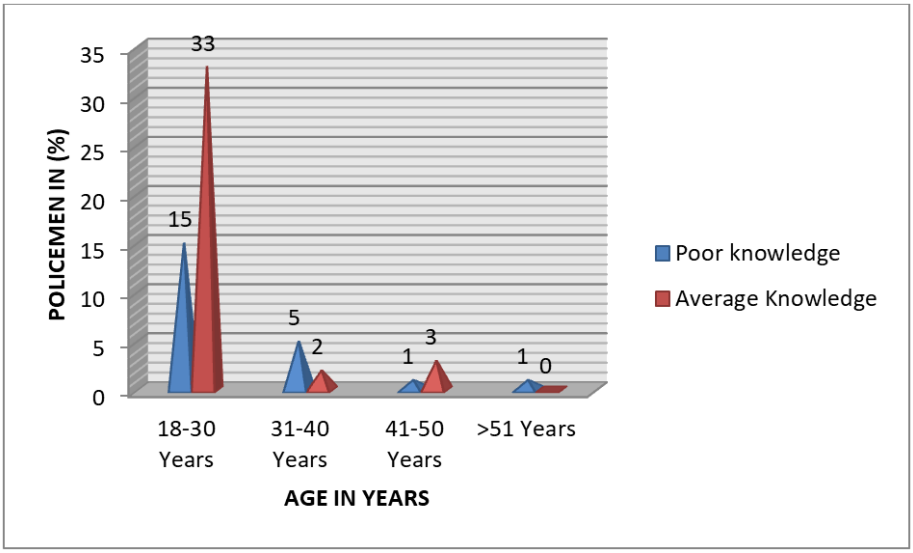


Table 5 association tables described that the data presented in table (5) showed that chi square value was greater than the table value. The questionnaires pre- test score analysis revealed that there was statistically significant association between pre-test score with their socio demographic variables (Gender and Experience).

Hence H03 was rejected and inferred that the finding were statistically significant.

SUMMARY

During the study was observed that, all the subjects were very conscious and interested to learn. The results of pre-test of the study revealed that there is low level of knowledge and practice about basic life support. In post-test there is significant gain in knowledge and practice is seen. The results indicated that equal positive response to the demonstration in terms of knowledge and practice was found really useful to them.

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