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A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING FIRST AID MANAGEMENT OF CONVULSION IN STUDENTS AMONG PRE-PRIMARY SCHOOL TEACHERS IN SELECTED SCHOOLS IN AHMEDABAD CITY

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ABSTRACT

Statement of the study

"A study to evaluate the effectiveness of structured teaching programme on knowledge regarding first aid management of convulsion in students among the pre-primary School teachers of the selected schools in Ahmedabad city."

Background of the study

"Epilepsy, also known as convulsion and seizure, originates from the Greek word meaning a state of being prone to weakness, tension, or convulsion. According to the World Health Organization, 3-10 out of every 1000 people worldwide experience convulsions. Nearly 5% of children are at risk of seizures. Approximately 1 in 100 individuals may have this condition, with 70% to 75% of cases developing in childhood. As of September 2020, 5 crore people are affected by epilepsy, and 50% of them reside in developing countries. In these regions, new cases are observed in both children and the elderly. School teachers play a crucial role as first responders to school accidents and health emergencies. They must be equipped to handle situations, particularly those related to convulsive disorders. The prevalence of these disorders is attributed to inadequate services and knowledge about epilepsy among patients, parents, and teachers."

Objectives of the study

1. To assess the pre-test level of knowledge on first aid management of convulsion In students among the pre-primary school teachers.
2. To assess the post-test level of knowledge on convulsion in students among the Pre-primary school teachers.
3. To evaluate the effectiveness of structured teaching programme by comparing Pre-test and post-test knowledge scores after administration of a structured Teaching programme regarding first aid management of convulsion in students Among the pre-primary school teachers.
4. To find out association between pre-test knowledge Score among Selected demographic variables regarding first aid management of convulsion in students among the pre-primary school teachers.

Methodology:
A pre-experimental and post-experimental research design was adopted for collecting the data from 60 Samples using a pre-test and post-test knowledge questionnaire comprising 30 questions.
Results:
According to the findings, the level of Knowledge score of 60 Respondents reveals that 8(13.33%) had poor knowledge and 52(86.67%) had good Knowledge. The mean pre-test score was 11.53 and the mean post test score was 18.30. The mean difference between pre-test and post-test knowledge score was 6.77. The standard deviation of pre-test score of knowledge was 2.57 and Post-test standard deviation was 2.77. The calculated't' value was 18.522 and tabulated't' value was 2 at the 0.05 level of significance.
Conclusion:
In present study, the level of knowledge is improved after administrating structure teaching programme and There was a significant association between pre-test knowledge score and selected demographic variables such as, gender. Hence, hypothesis H_1 and H_2 was aacepted.

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INTRODUCTION

Children are the foundation of our future, but they are also at risk of diseases. Convulsion is a chronic disorder that causes uncontrolled shaking. It is a neurological condition characterized by recurrent, unprovoked, and paroxysmal episodes of brain dysfunction. The WHO estimates that 3-10% of the world population have convulsion, and it is a priority area of the World Health Organization.

Children's frequent attacks of convulsions can lead to impaired growth, hospitalization, absenteeism, and poor school performance. In India, 4-10% of children suffer from at least one convulsion in the first 16 years of life. Teachers play a crucial role in protecting school children and responding to emergencies. Disorders are more common due to lack of services, knowledge, and treatment facilities. Two out of five convulsive children in India have a hereditary or gestational cause, two with fever, and one with malaria, meningitis, or diarrhoea. Educational under achievement is considered to be greater academic for children with convulsion.

Objectives of the studies were

1. To assess the pre-test level of knowledge on first aid management of convulsion In students among the pre-primary school teachers.
2. To assess the post-test level of knowledge on convulsion in students among the Pre-primary school teachers.
3. To evaluate the effectiveness of structured teaching programme by comparing Pre-test and post-test knowledge scores after administration of a structured Teaching programme regarding first aid management of convulsion in students Among the pre-primary school teachers.
4. To find out association between pre-test knowledge Score among Selected demographic variables regarding first aid management of convulsion in students among the pre-primary school teachers.

Methodology for research

A pre-experimental and post-experimental research design was adopted for collecting the data from 60 Samples using a pre-test and post-test knowledge questionnaire comprising 30 questions.

RESULT

ANALYSIS AND INTERPRETATION OF THE DEMOGRAPHIC VARIABLES OF THE SAMPLES

Table - 4.1 Frequency and percentage wise distribution of samples based on Demographic Variables.
(N=60)

SR NO	DEMOGRAPHIC VARIABLES	FREQUENCY	PERCENTAGE %
1	**AGE**		
	a) 25-30 years	19	31.67%
	b) 30-35 years	20	33.33%
	c) 35-40 years	13	21.67%
	d) 40 and above	8	13.33%
2	**GENDER**		
	a) Male	4	6.7%
	b) Female	56	93.3%
3	**RELIGION**		
	a) Hindu	59	98.33%
	b) Muslim	0	0
	c) Christian	1	1.67%
	d) Others	0	0
4	**EDUCATION QUALIFICATION OF TEACHER**		
	a) D.ED/TTC	4	6.67%
	b) Under graduate	40	66.67%
	c) Post graduate	16	26.67%
	d) Ph.D.	0	0
5	**YEARS OF EXPERIENCE**		
	a) Less than 1	14	23.33%
	b) 2-5	26	43.33%
	c) 6-10	12	20.00%
	d) About 10	8	13.33%
6	**PREV. KNOWLEDGE REGARDING THE TOPIC**		

	a) Yes	34	56.67%
	b) No	26	43.33%
7	**TYPES OF FAMILY**		
	a) Nuclear	31	51.67%
	b) Joint	29	48.33%
8	**MARITAL STATUS**		
	a) Married	55	91.67%
	b) Unmarried	5	8.33%

Table 4.1 Shows that out of 60 samples, In Age, maximum 20(33.33%) samples belong to the age group of 30-35 years and minimum 8(13.33%) sample was in 40 and above years. In Gender, maximum 56(93.3%) samples were female and minimum 4(6.7%) samples were male. In religion, maximum 59(98.33) samples were having Hindu as minimum 1(1.67%) sample were having Christian. In qualification, maximum 40(66.67%) samples were having under graduate, 4(6.67%) samples were having D. ED and TTC qualification. In years of experience, maximum 26(43.33%) samples were having 2-5 years of experience, minimum 8(13.33%) samples were having above 10 years' experience. In source of information, maximum 34(56.67%) samples were already having knowledge about convulsion through in- service education whereas minimum 26(43.33%) were not having any previous information regarding convulsion. In types of family: 31 (51.67%) samples were Nuclear & 29(48.33%) samples were joint family. In marital status, maximum 55(91.67%) samples were married and minimum 5(8.33%) samples were unmarCopy bar graph of demographic variables

ANALYSIS AND INTERPRETATION OF THE DATA COLLECTED ON DEMOGRAPHIC VRAILABLE

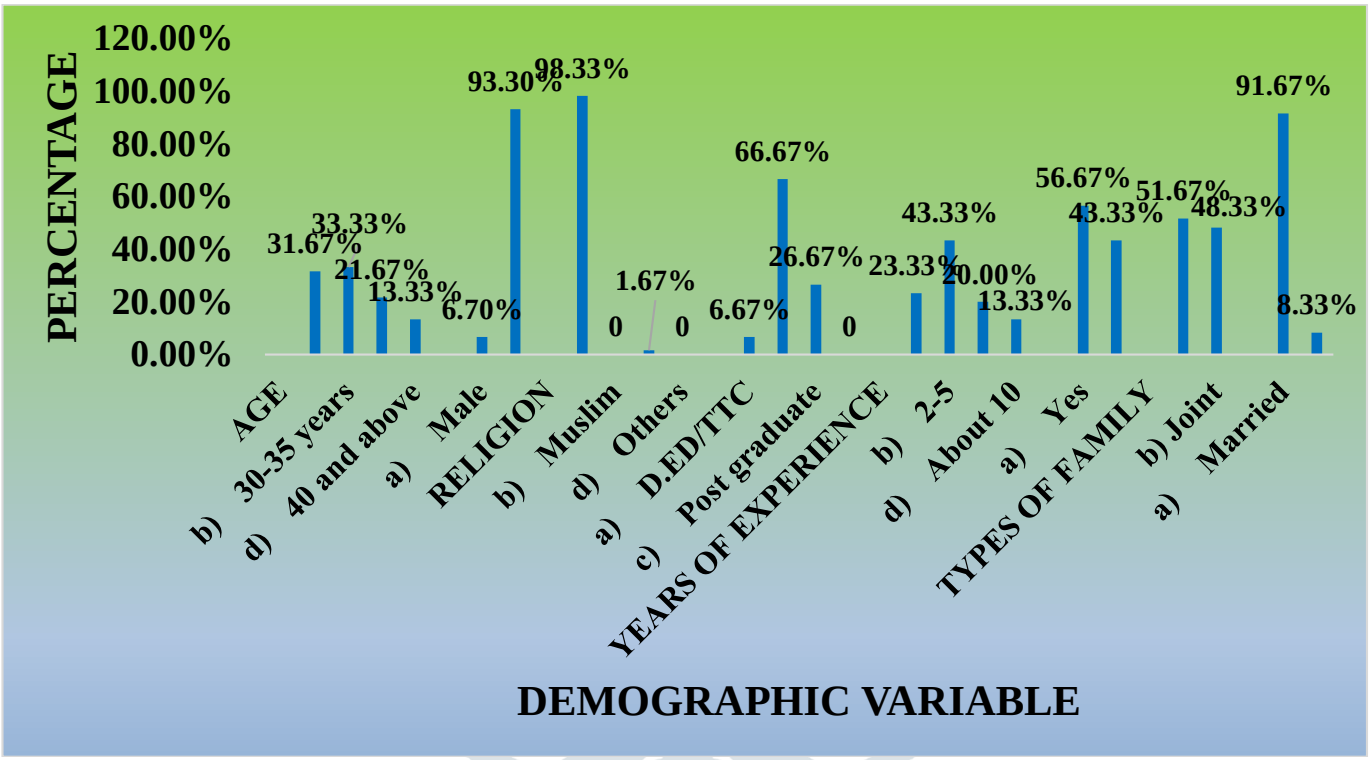

Figure 4.1 a bar graph showing demographic variables of samples

Table: 4.2.2 knowledge score before and after administration of structure teaching program (N=60)

Score of knowledge	Pre-Test		Post Test	
	Frequency	Percent	Frequency	Percent
Poor (1-15)	58	96.67%	8	13.33%
Good (16-30)	2	3.33%	52	86.67%
Total	60	100%	60	100%

Table 4.2.2 shows that among 60 samples test knowledge score of teachers regarding convulsion disease was 58 (96.67%) had poor knowledge, 2 (3.33%) average knowledge and 0 (0%) had good knowledge.

Post test knowledge score of teacher's people was 8 (13.33%) had poor knowledge, 52 (86.67%) had average and 0 (0%) had good knowledge about Convulsion disease.

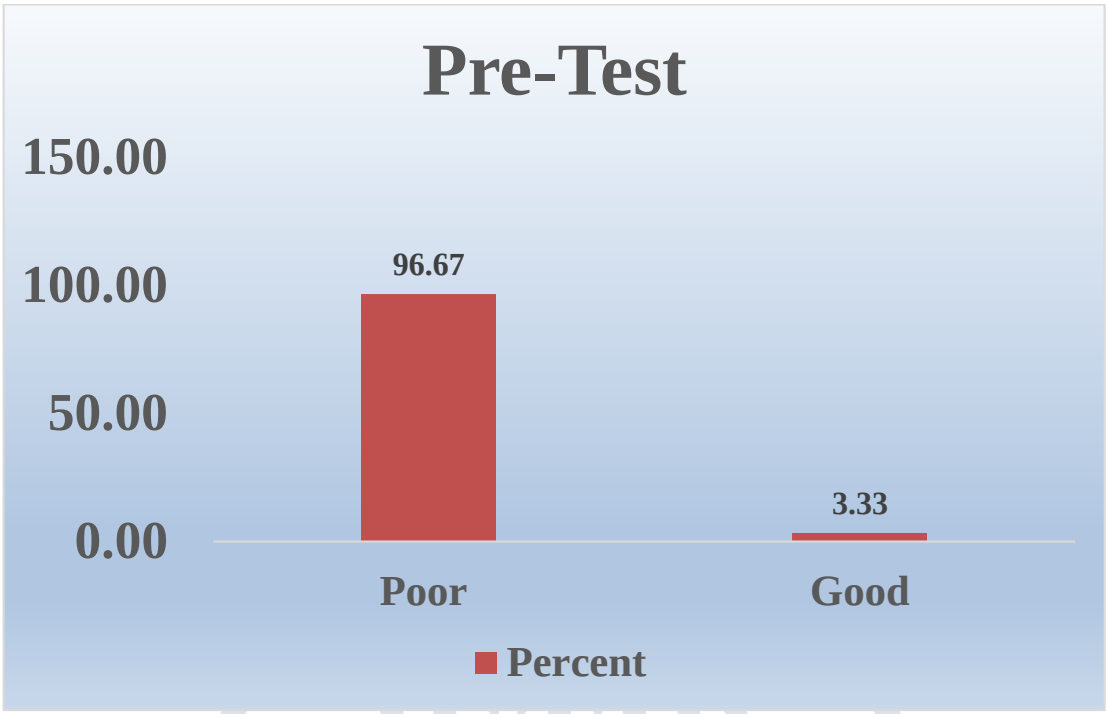

Figure 4.3 a bar graph showing pre-test knowledge score

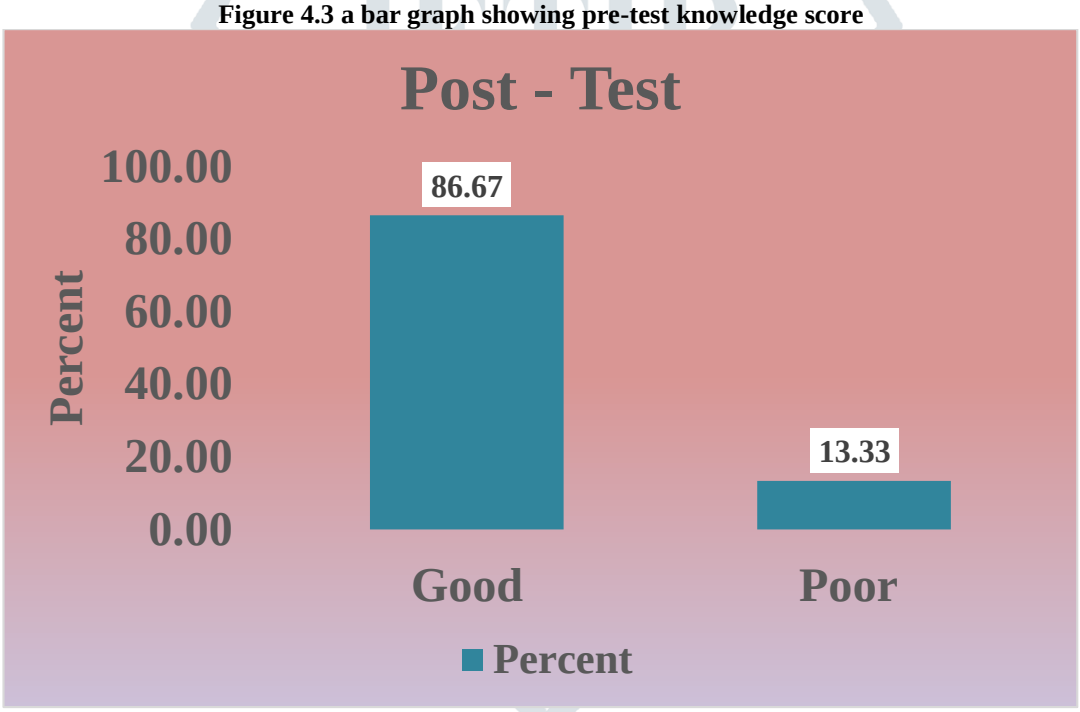

Figure 4.4 a bar graph showing post- test knowledge score

4.2 Analysis and interpretation of the data collected on structured knowledge questionnaire of the samples before and after administration of a Structure Teaching Program regarding first aid management of convulsions.

Area of content	Max score	Pre-test		Post-test		Gain (%)	Mean Difference
		Mean score	Mean percentage (%)	Mean score	Mean percentage (%)		
Introduction	2	1.17	58.34%	1.60	80.00%	21.67 %	0.43
Causes	2	1.10	55.00%	1.42	70.84%	15.84 %	0.32

Classification	7	1.98	28.33%	3.82	54.52%	26.19 %	1.83
Sign and symptoms	3	1.32	43.89%	1.85	61.67%	17.78 %	0.53
Diagnostic test	1	0.45	45.00%	0.73	73.33%	28.33 %	0.28
First aid management	15	5.52	36.78%	8.88	59.22%	22.44 %	3.37
TOTAL	30	11.53	38.44%	18.30	61.00%	6.77%	6.77

Table 4.2.1 shows that the mean pre-test knowledge score of area related to Introduction was 1.17(58.34%) and mean post-test knowledge score was 1.60(80.00%) with mean difference of 0.43 The mean pre-test knowledge score of area related to causes was 1.10(55.00%) and mean post-test knowledge was 1.42(70.84%) with mean difference of.0.32.The mean pre-test knowledge score related to Classification was 1.98(28.33) and mean post-test knowledge score was 3.82 (54.52%) with the mean difference of 1.83. The mean pre-test knowledge score of area related to Sign & Symptoms was 1.32 (43.89%) and mean post-test knowledge was 1.85(61.67%) with mean difference of 0.53. The mean pre-test knowledge score of area related to Diagnostic Evaluation was 0.45 (45.00%) and mean post-test knowledge was 0.73 (73.33%) with mean difference of. 0.28 The mean pre-test knowledge score of area related to First Aid Management was 5.52 (36.78%) and mean post-test knowledge was 8.88 (59.22%) with mean difference of 3.37.

Table 4.2.3. Mean, Mean difference, Standard deviation of pre-test and post-test knowledge scores, paired t' test value of the pre-test post-test knowledge score of samples.
(N=60)

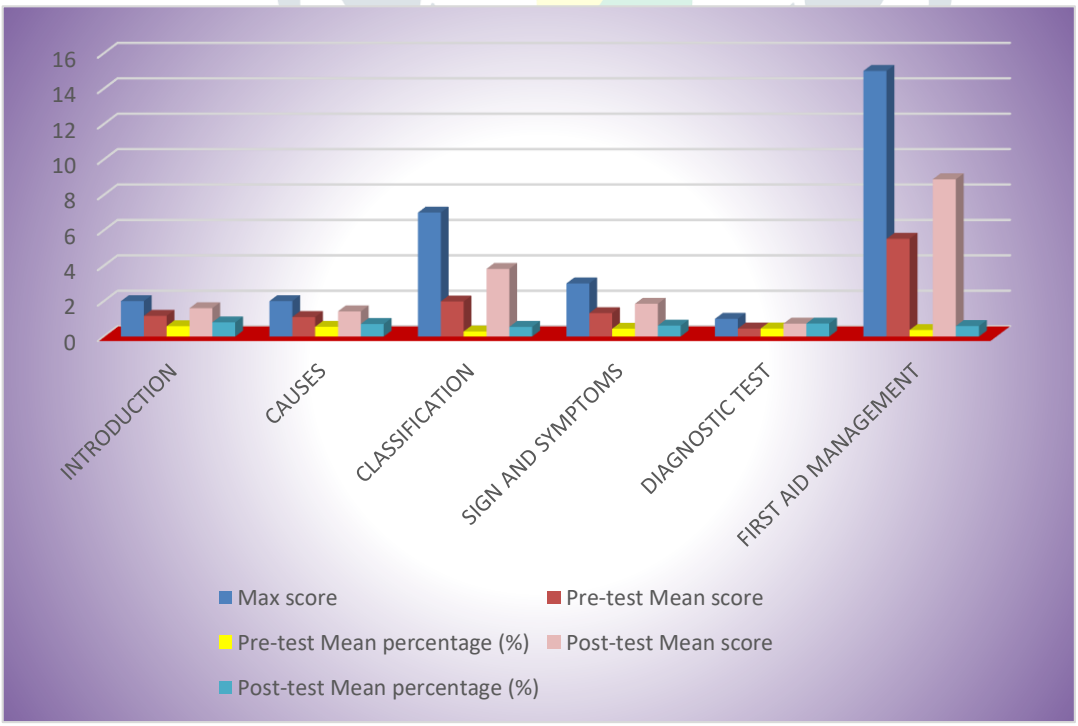

Figure 4.2 a bar graph showing area wise mean score and percentage of pre-test and post-test

		Mean Score	Mean Difference	Standard Deviation	t-test	DF	Table Value	Sig/Non-Sig
Pre-Test		11.53	6.77	2.57	18.522	59	2	Significant
Post-Test		18.30		2.77				

Table 4.2.3 shows pre -test and post-test knowledge scores obtained by the respondents on teachers. The mean pre-test score was 11.53 and the mean post test score was 18.30. The mean difference between pre-test and post-test knowledge score was 6.77. The table shows that the standard deviation of pre-test score of knowledge was 2.57 and post-test standard deviation was 2.77. The calculated 't' value was 18.522 and tabulated 't' value was 2 at the 0.05 level of significance.

Above table revels that the mean post-test knowledge score was significantly higher than mean pre-test knowledge score. The calculated t value is greater than tabulated value so null hypothesis H_0 was rejected. And research hypothesis H_1 is accepted and it reveals that structured teaching programme was effective in gaining the knowledge among the samples.

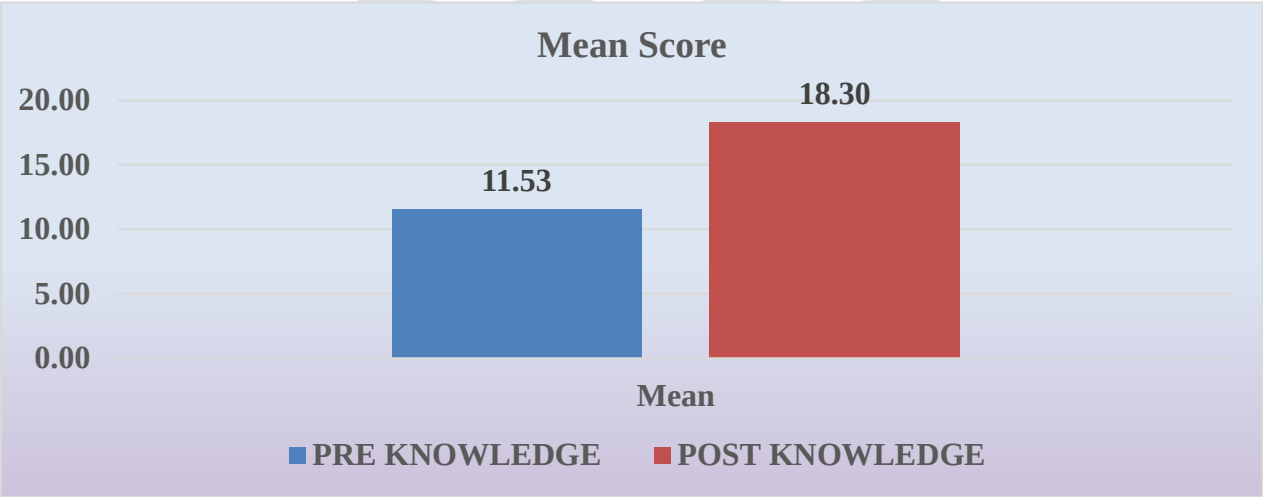

Figure 4.5 a bar graph showing mean pre-test and mean post-test knowledge score

4.3 ANALYSIS AND INTERPRETATION OF THE DATA RELATED TO ASSOCIATION BETWEEN PRE-TEST KNOWLEDGE SCORES WITH SELECTED DEMOGRAPHIC VARIABLES OF THE SAMPLES.

		PRE-TEST		Total	Chi Square	DF	Table value	Sig/Non-Sig
		Good	Poor					
Age in years	25-30	1	18	19	1.116	3	7.82	Non-Sig
	30-35	1	19	20				
	35-40	0	13	13				
	40 and above	0	8	8				
Gender	Male	1	3	4	6.244	1	3.84	Sig
	Female	1	55	56				
Religion	Hindu	2	57	59	0.035	1	3.84	Non-Sig
	Christian	0	1	1				
Educational qualification of Teacher	D.ED /TTC	0	4	4	1.034	2	5.99	Non-Sig
	Under graduate	2	38	40				
	Post graduate	0	16	16				

Years of experience	Less than 1 year	1	13	14	1.341	3	7.82	Non-Sig
	2-5 years	1	25	26				
	6-10 years	0	12	12				
	Above 10 years	0	8	8				
Previous knowledge regarding the topic of convulsion	Yes	1	33	34	0.037	1	3.84	Non-Sig
	No	1	25	26				
Attended any training	Yes	1	30	31	0.002	1	3.84	Non-Sig
	No	1	28	29				
Marital Status	Married	2	53	55	0.188	1	3.84	Non-Sig
	Unmarried	0	5	5				

For age group with pre-test knowledge score, the calculated value of chi square 1.116 was less than 7.82 table value, the table value of chi square at the 3 degree of freedom and 0.05 level of significance. Therefore, age has no significant association with the knowledge among samples.

For **gender** with pre-test knowledge score, the calculated value of chi square 6.244 was greater than table value 3.84, the table value of chi square at the 1 degree of freedom and 0.05 level of **significance**. Therefore, gender has significant association with the knowledge among samples.

For religion with pre-test knowledge scores, the calculated value of chi square 0.035 was less than table value 3.84, the table value of chi square at the 1 degree of freedom and 0.05 level of significance. Therefore, religion has no significant association with the knowledge among samples.

For educational qualification of teacher with pre-test knowledge score, the calculated value of chi square 1.034 was less than table value 5.99, the table value of chi square at the 2 degree of freedom and 0.05 level of significance. Therefore, educational qualification has no significant association with the knowledge among samples.

For years of experience with pre-test knowledge score, the calculated value of chi square 1.341 was less than table value 7.82, the table value of chi square at the 3 degree of freedom and 0.05 level of significance. Therefore, years of experience has no significant association with the knowledge among samples.

For previous knowledge with pre-test knowledge score, the calculated value of chi square 0.037 was less than table value 3.84, the table value of chi square at the 1 degree of freedom and 0.05 level of significance. Therefore, previous knowledge has not significant association with the knowledge among samples.

For attended any training with pre-test knowledge score, the calculated value of chi square 0.002, less than 3.84, the table value of chi square at the 1 degree of freedom and 0.05 level of significance. Therefore, attended any training has no significant association with the knowledge among samples.

For marital status with pre-test knowledge score, the calculated value of chi square 0.188 was less than 3.84, the table value of chi square at the 1 degree of freedom and 0.05 level of significance. Therefore, marital status has not significant association with the knowledge among samples.

Discussion

The study address to evaluate the effectiveness of structured teaching programme on knowledge regarding first aid management of convulsion in students among the Pre-primary school teachers of (The Prakash High School, Shree Jivan Sarita primary school, Shree Swaminarayan Vidhya Mandir, Shreeji Image Public School), Ahmedabad. In this study, 60 sample participated. In relation to finding of the study, it was revealed that put of 60 sample, 58(96.67%) had poor knowledge, 2 (3.33%) had average knowledge score of pre-test. In the column of post-test of knowledge, it so that out of 60 samples 58 (86.67%) had average knowledge and 8 (13.33%) had poor knowledge score on first aid management of convulsion among teachers. Thus, it indicates that the education programme was effective in increase the knowledge of school teachers on first aid management of convulsion in selected school of Ahmedabad city.

Conclusion

There was significant increase in the knowledge score of first aid management of convulsions among pre primary school teachers after administration of the structured teaching program. Hence it was concluded that the structured teaching program was effective in improving the knowledge score of first aid management of convulsions among pre primary school teachers of selected schools in Ahmedabad city

Conflict of interest:

The authors declare that they have no competing interests

Ethics declarations

Ethics approval and consent to participate. JG College of Nursing, Institute Ethics Committee reviewed this study and granted ethical approval. Consents has been obtained from participants.

Consent for publication

Written consent for publication was obtained from each participants.

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