



EFFECT OF CHILD TO CHILD APPROACH ON KNOWLEDGE AND EXPRESSED PRACTICE REGARDING DENGUE FEVER AMONG SCHOOL GOING CHILDREN

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ABSTRACT

Child to Child approach helps to improve knowledge of families and communities which leads to bring out changes in practice it also improves the environment and community conditions. Aedes aegypti is a day time feeder, its peak biting periods are early in the morning and in the evening before dusk. Female Aedes Aegypti bites multiple people during each feeding period. The large dengue outbreaks in recent decades were seen especially after heavy rains. The result of the study showed that the pretest level of knowledge in control group and experimental group was inadequate among school children. In this study the post test level of knowledge and expressed practice was higher than the pre test level of knowledge and expressed practice score in experimental group after child to child approach. In this present study, there was a significant positive correlation between the post-test level of knowledge and post-test expressed practice. significant at $p < 0.01$. Conclusion The following is the conclusion based on study findings Lack of awareness and unhealthy practices create a serious public health threat among school children. The school health is an important intervention as a great deal of research tells us that schools can have a major effect on children's health by teaching them about health and promoting healthy behaviour. Promotion of healthy practices in school health service through innovative methods of teaching such as play way method, child to child method, kindergarten learning could be effective means of communication regarding health issues among children.

INTRODUCTION

World Health Organization stated that an effective school health programme can be one of the most cost effective investments a nation can make to simultaneously improve education and health and also promote school health programmes as a strategic means to prevent important health risk among children and to engage the educational sector in efforts to change the educational, social, economic and political conditions that affect risk.

Child to Child approach was launched in 1978 during the International year of children. Teaching materials were prepared covering developmental needs, nutrition, illnesses and aspects of the environment. Child to child program enhances the quality of primary school education by promoting creativity in children. It enhances to improve the health conditions in the schools by strengthen school health education curriculum.

The mosquito breeds mostly in manmade containers like earthenware jars, metal drums, concrete cisterns used for domestic water storage, discarded plastic food containers, used automobile tyres, coconut shells and other items that collect rainwater. Dengue shock syndrome is usually found after 2 to 7 days of fever. The patient present with cold congested blotchy skin, rapid and weak pulse, lethargy, restlessness may occur before onset of shock. Hypotension, reduced pulse pressures are found. Good prognosis is indicated by good appetite and adequate urine output.

Severe dengue is potentially deadly with complication due to plasma leaking, fluid accumulation, respiratory distress, severe bleeding or organ impairment warning signs occurs with a decrease in temperature (below 104 Degree Fahrenheit) severe abdominal pain persistent vomiting, rapid breathing, bleeding gums, fatigue restlessness and blood in vomit, the next 24-48 hours of the critical stage can be lethal, proper medical care is needed to avoid complications and risk of death.

There is no specific treatment for dengue fever. Symptomatic treatment should be done. The patient needs hospitalization for proper treatment in order to reduce mortality rate. Supportive treatment like intravenous fluid replacement and anti ± biotic therapy is required. Patients are asked to drink plenty of water and juices in order to prevent dehydration. Monitoring of vital signs, intake and output chart that are essential. Salicylates should be avoided because it may precipitate bleeding tendency and metabolic acidosis.

NEED FOR THE STUDY

Globally climate change is getting reflected in unusual rainfall pattern leading to surplus rains in some locations, deficient rains elsewhere and untimely burst of rainfall. Studies indicate that the South Indian states are facing perceptible fluctuations in climatic conditions, and possibly the health of people is directly or indirectly affected because of these fluctuations^{1:2}. Rise in average temperature, an element of climate change, favors higher breeding and spread of the vectors such as *Aedes aegypti*, and consequently spread of dengue virus³. In general, incidences of dengue fever, a mosquito-borne tropical disease, are increasing fast resulting in higher

morbidity and mortality in humans worldwide, particularly in tropical and subtropical countries

In India the risk of dengue has shown an increase in recent years due to urbanization, lifestyle changes and deficient water management including improper water storage practices in urban, peri-urban and rural areas leading to proliferation of mosquito breeding sites. During the clinical experience, the researcher considered the number of school children admitted with dengue fever. Keeping all these facts in view, a need was felt by the researcher to carry out study on dengue fever among school going children.

Statement Of The Problem

A study to evaluate the effectiveness of child to child approach on knowledge and expressed practice regarding dengue fever among school going children at selected schools,.

Objectives

1. To evaluate the existing level of knowledge and expressed practice regarding dengue fever among school going children in control group and experimental group.
2. To evaluate the effectiveness of child to child approach on knowledge and expressed practice regarding dengue fever among school going children in experimental group.
3. To compare the mean post-test level of knowledge and expressed practice regarding dengue fever among school going children in control group and experimental group.
4. To correlate the post-test level of knowledge with expressed practice regarding dengue fever among school going children in control group and experimental group.
5. To determine the association between selected demographic variables with pre test level of knowledge regarding dengue fever among school going children in control group and experimental group.
6. To determine the association between selected demographic variables with pre test level of expressed practice regarding dengue fever among school going children in control group and experimental group.

Hypothesis

H1 - There will be a significant difference in the level of knowledge and expressed practice regarding dengue fever after child to child approach among school going children in experimental group.

H2 - There will be a significant difference in post-test level of knowledge and expressed practice regarding dengue fever among school going children in experimental and control group.

H3 - There will be a significant relationship between post-test level of knowledge and expressed practice regarding dengue fever among school going children in control group and experimental group.

H4 - There will be a significant association between selected demographic variables with pre-test level of

knowledge regarding dengue fever among school going children in control group and experimental group.

H5 - There will be a significant association between selected demographic variables with pre-test level of knowledge and expressed practice regarding dengue fever among school going children in control group and experimental group.

Assumptions

1. Child to child approach teaching programme may be effective method to increase awareness about dengue fever and its prevention.
2. Increasing knowledge related to prevention of dengue fever helps thus in preventing the disease.
3. Researcher plays an important role as an educator to motivate change agents to bring awareness to their peer groups on prevention of dengue fever.

Delimitation

The study is delimited to

1. To those who are willing and able to learn and transmit the message to their peer group.
2. Only 60 samples.
3. Study period was 6 weeks.

Research Approach

In this study evaluative approach used.

Research Design

The research design for this study was quasi-experimental non-equivalent control group pre test post test design.

Setting Of The Study

The experimental group of students was selected from Government Middle School, Bhopal.

population

The study population was school going children studying 7th standard.

Sample

The sample of the study consisted of school children who were studying in 7th standard at Government Middle School,.

Sample Size

The sample size was 60 school children, 30 students in experimental group and 30 students in control group.

Sampling Technique

Non-probability convenience sampling technique was used for selection of samples.

Criteria For Sample Selection

Inclusion Criteria

1. School children who were studying in the 7th standard from selected school
2. School children who were present during data collection.
3. Peer groups were the students available in that section, other than change agents.

Exclusion Criteria

1. Children who were absent during data collection.
2. Children who were sick during data collection.

Organization Of Findings

The analysis of data has been organized and presented under the following headings.

SECTION-I : Frequency and percentage distribution of samples according to their demographic variables

SECTION-II : Percentage distribution of knowledge scores of school going children in control group and experimental group.

SECTION-III: Percentage distribution of Expressed practice scores of school going children in control group and experimental group.

SECTION-IV: Comparison of mean scores between pre-test and post-test level of knowledge and expressed practice in control group and experimental group.

SECTION-V : Comparison of mean post-test level of knowledge and expressed practice in control group and experimental group.

SECTION-VI: Correlation between the post-test level of knowledge and expressed practice in control group and experimental group.

SECTION-VII: Association between selected demographic variables with pre- test level of knowledge in control group and experimental group.

SECTION-VIII: Association between selected demographic variables with pre- test level of expressed practice in control group and experimental group.

SECTION I

This section deals with demographic variables of the sample Frequency and percentage distribution of sample according to demographic variables

N = 60

S. No	Demographic characteristics	Control Group(n = 30)		Experimental Group(n = 30)	
		Frequency	Percentage	Frequency	Percentage
		(n)	%	(n)	%
1.	Age				
	a.11years	10	33.3	6	20.0
	b.12years	20	66.7	24	80.0
2.	Sex				
	a. Male	13	43.3	14	46.7
	b. Female	17	56.7	16	53.3
3.	Occupation of the parents				
	a.Government job	2	6.7	1	3.3
	b.Private sector	2	6.7	5	16.7
	c.Coolie	25	83.3	20	66.7
	d.Self employment	1	3.3	4	13.3
4.	Family income				
	a.Rs.5000-10000	23	76.7	25	83.3
	b.Rs.10,001-15,000	7	23.3	4	13.3
	c. Rs.15,000and above	0	0	1	3.3
5.	Education of the parents				
	a.Illiterate	6	20.0	11	36.7
	b.Up to higher secondary	23	76.7	19	63.3
	c.Graduate	1	3.3	0	0

6.	Religion				
	a.Hindu	22	73.3	14	46.7
	b.Christian	8	26.7	16	53.3
	c.Muslim	0	0	0	0
7.	Place of residence				
	a.Rural	28	93.3	28	93.3
	b.Urban	2	6.7	2	6.7
8.	Source of drinking water				
	a. Corporation water	8	26.7	19	63.3
	b. Bore water	15	50.0	11	36.7
	c. Well water	7	23.3	0	0
9.	Whether your Family members affected with dengue fever?				
	a. Yes	0	0	0	0
	b. No	30	100.0	30	100.0
10.	Previous source of information about dengue				
	a.Health professionals	3	10.0	3	10
	b.Radio/T.V/posters	8	26.7	5	16.6
	c.Friends	1	3.3	6	20.0
	d.Unknown	18	60.0	16	53.3

SECTION - II

This section deals with the knowledge scores of school going children in control group and experimental group.

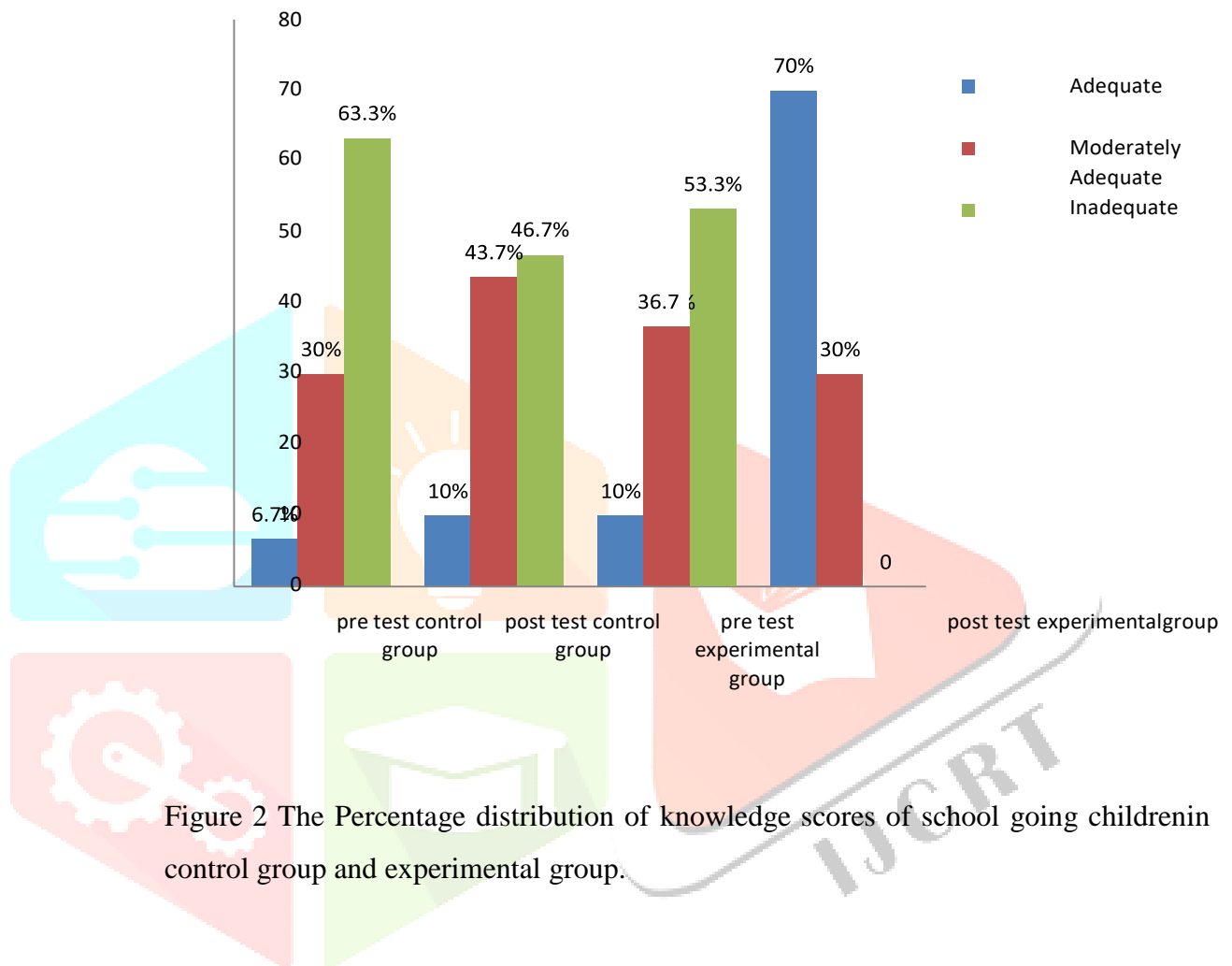


Figure 2 The Percentage distribution of knowledge scores of school going children in control group and experimental group.

SECTION ± III

This section deals with the expressed Practice scores of school going children in control group and experimental group

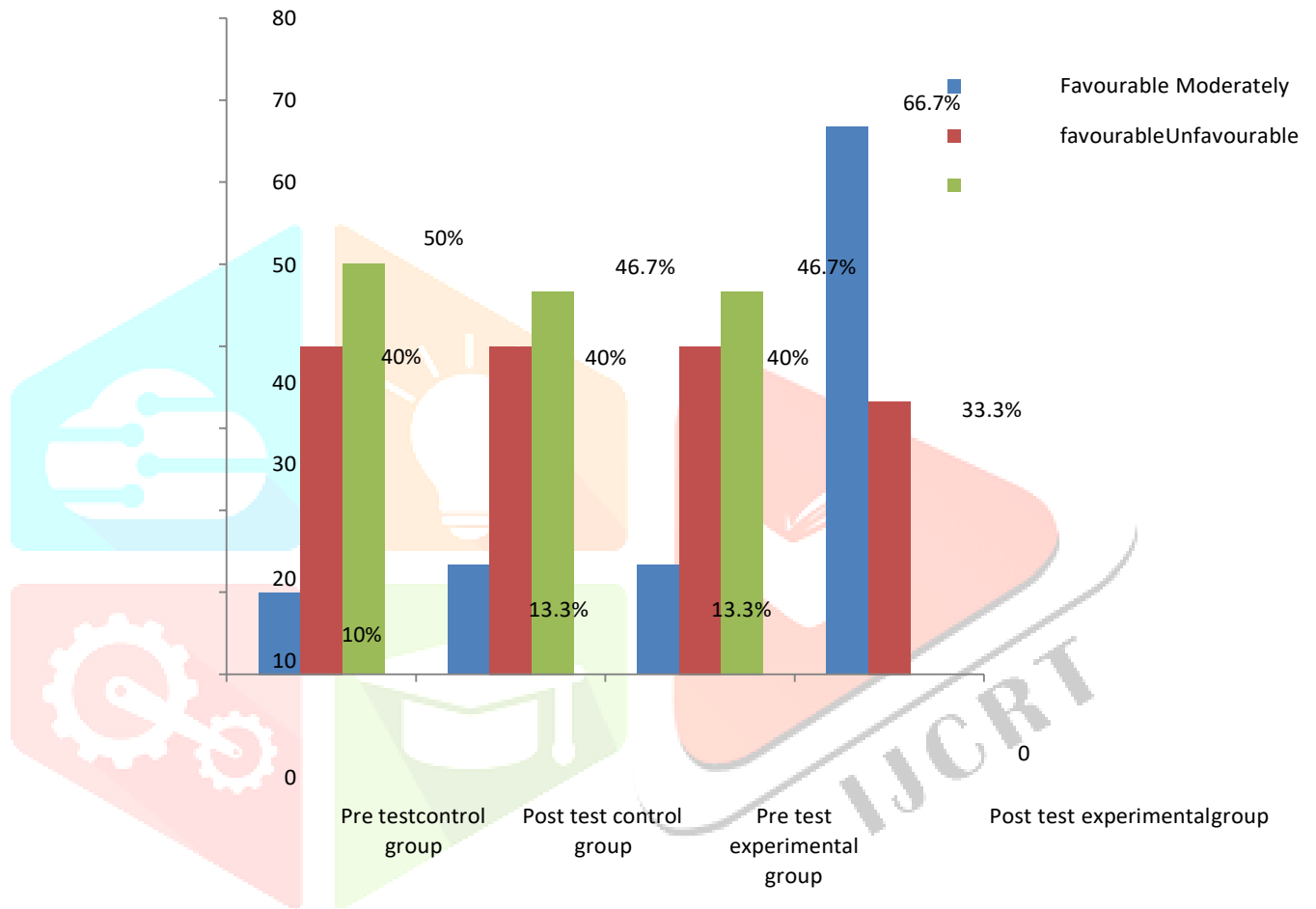


Figure ± 3 The Percentage distributions of expressed practice scores of schoolgoing children in control group and experimental group

SECTION - IV

This section deals with the comparison of mean scores between pre-test and post-test among control group and experimental group.

Table -2

Comparison of mean scores between pre test and post test level of knowledge and expressed practice regarding dengue fever among school going children in control and experimental group.

Group	Pre-test		Post-test		Mean Difference	Paired t W μ WHVW
	Mean	SD	Mean	SD		
Control Group						
Knowledge	10.97	4.183	13.36	4.020	2.4	2.971
Expressed Practice	4.90	1.995	9.60	2.283	1.03	1.000
Experimental Group						
Knowledge	10.43	3.363	19.53	3.383	9.1	10.846**
Expressed Practice	9.00	2.084	12.50	2.255	3.50	9.290**

** at $p < 0.01$

SECTION V

This section deals with the comparison of mean scores between post test Knowledge and Expressed Practice in control and experimental group.

Table - 3

Comparison of mean post test level of knowledge and Expressed Practicescore between control group and experimental group.

Group	Sample (n)	Posttest mean	Posttest SD	Independent μ WV WHVW
Knowledge				
Control Group	30	13.36	4.020	6.998**
Experimental Group	30	19.53	3.383	
Expressed Practice				
Control Group	30	9.60	2.283	5.949**
Experimental Group	30	12.50	2.255	

** at $P < 0.01$

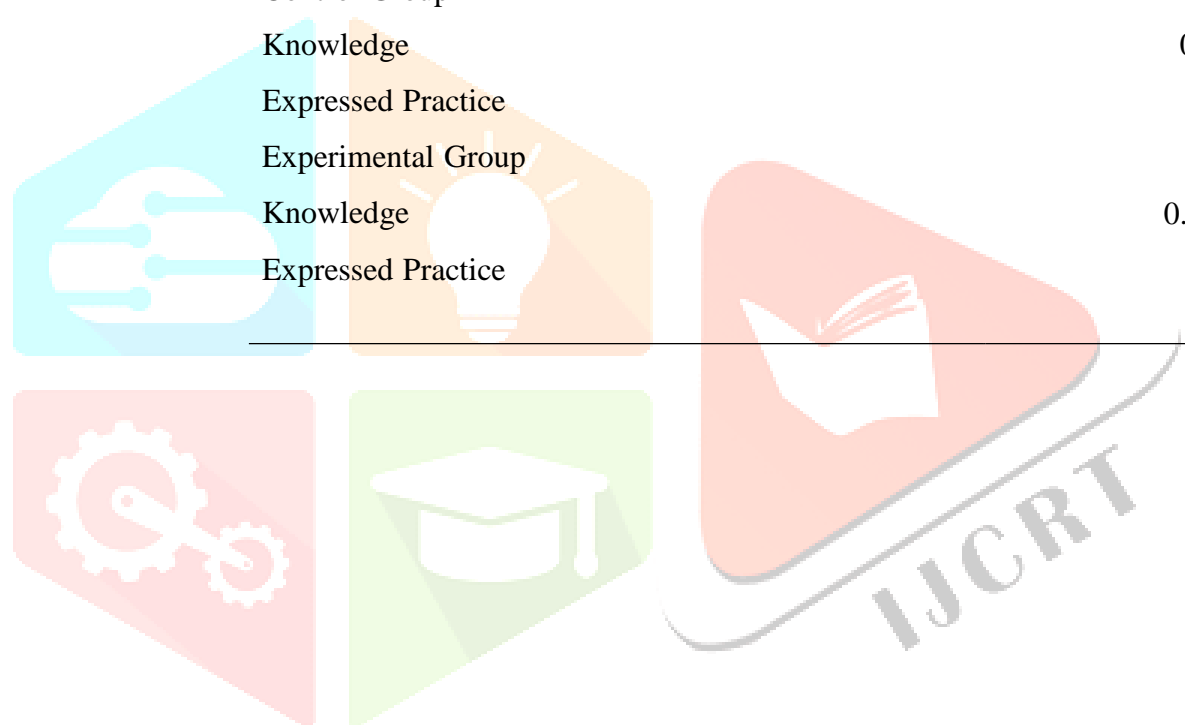
SECTION VI

This section deals with correlation between the post test level of knowledge and expressed practice in control group and experimental group.

Table - 4

Correlation between post-test knowledge and expressed practice.

Post-test	Correlation
Control Group	
Knowledge	0.269
Expressed Practice	
Experimental Group	
Knowledge	0.956**
Expressed Practice	



SECTION VII

This section deals Association between selected demographic variables with pre test level of knowledge in control group and experimental group

Table-5

Demographic Variables	Control Group (n = 30)				Experimental Group (n = 30)			
	Adequate	Moderately adequate	Inadequate	Chi-square	Adequate	Moderately adequate	Inadequate	Chi-square
1. Age								
a. 11 years	1	3	6	0.2761	2	2	2	4.669
b. 12 years	6	13	6		9	14	6	
2. Sex								
a. Male	1	2	10	2.339	1	5	8	0.292
b. Female	1	7	9		2	6	8	
3. Occupation of the parents								
a. government job	0	0	2	2.337	1	0	0	12.812*
b. Private sector	0	1	1		0	1	4	
c. Collie	2	8	15		1	8	11	
d. self employment	0	0	1		1	2	1	
4. Family income								
a. 5000-10000	1	7	15	0.856	2	8	15	12.062*
b. 10001-15000	1	2	4		0	3	1	
c. above 15000	0	0	0		1	0	0	
5. Education of the parent								
a. Illiterate	0	2	4	3.038	0	6	5	3.453
b. Upto higher secondary	2	6	15		3	5	11	
c. Graduate	0	1	0		0	0	0	
6. Religion								
a. Hindu	1	7	14	0.649	2	5	7	0.543
b. Christian	1	2	5		1	6	9	
c. Muslim	0	0	0		0	0	0	

7. Place of residence								
a. Rural	2	8	18	0.489	3	11	14	1.875
b. Urban	0	1	1		0	0	2	
8. Source of drinking water								
a. Corporation water	1	2	5	1.452	3	6	10	2.107
b. Bore water	1	4	10	0	5	6		
c. Well water	0	3	4	0	0	0		
Is your Family members affected with dengue fever?								
9.								
a. Yes	0	0	0	0	0	0	0	0
b. No	2	9	19	0	3	11	16	0
10. Source of information about dengue								
a. Health professionals	0	2		0	3	0		
b. TV / Radio / Posters	0	4	4	6.603	0	1	7	9.771*
c. Friends	0	0	1		0	0	0	
d. Unknown	1	5	12		3	7	9	

* at p< 0.05 level

SECTION- VIII

This section deals association between selected demographic variables with pretest level of expressed practice in control group and experimental group.

Table-6

Demographic Variables	Control Group (n = 30)				Experimental Group (n = 30)			
	favourable practice	moderately favourable	Unfavourable practice	Chi-square	favourable practice	moderately favourable	Unfavourable practice	Chi-square
1. Age								
a. 11 years	0	4	6	1.8004	0	6	0	11.250*
b. 12 years	3	8	9		6	14		
2. Sex								
a. Male	0	5	8	2.919	2	6	6	0.153
b. Female	0	7	7		2	6	8	
3. Occupation of the parents								
a. government	0	0	1	4.2	0	0	1	214
b. Private	1	1	3		1	1	3	
c. Collisector	3	8	9	4	8	9	4	
d. Self employment	0	3	1	0	3	1	0	
4. Family income								
a. 5000-10000	2	10	11	0.59	4	9	12	386
b. 10001-15000	1	2	4		0	2	2	
c. above 15000	0	0	0	0	1	0	0	
5. Education of the parent								
a. Illitarte	0	4	2	4.435	0	4	2	2.368
b. Upto higher secondary	3	7	13		3	8	12	
c. Graduate	0	1	0		0	1	0	
6. Religion								
a. Hindu	2	10	10	1.03	1	5	8	1.492
b. Christian	1	2	5		3	7	6	
c. Muslim	0	0	0		0	0	0	
7. Place of residence								
a. rural	3	11	14	3.268	3	12	13	3.023
b. urban	0	1	1		1	0	1	

8. Source of drinking water								
a. Corporation water		0	3	5		4	8	7
b. Bore water	3	5	7		4.048	4	7	
c. Well water	0	4	3		0	0	0	3.445
9. Is your Family members affected with dengue fever?								
a. Yes	0	0	0	0	0	0	0	
b. No	3	12	15		4	12	14	0
10. Source of information about dengue								
a. Health professionals	1	1	1			0	3	0
b. TV / Radio / Posters	0	4	4	3.861	1	2	5	5.519
c. Friends	0	0	1		0	0	0	
d. Unknown	2	7	9		3	7	9	

* at p< 0.05 levels



Conclusion

Lack of awareness and unhealthy practices create a serious public health threat to school children. School health is an important intervention as a great deal of research tells us that schools can have a major effect on children's health by teaching them about health and promoting healthy behaviours. Promotion of healthy practices in schools by health service through innovative method of teaching such as play way method, child to child method, and kinder garden learning could be an effective means of communication regarding health issues among children. Imparting the concepts of child to child approach to nursing students and its utilization to give health education in the schools, hospitals, and community could be used for disseminating the health messages among children. Therefore, awareness regarding the disease prevention and promotion of health through healthy practices can be promoted today and for the future generations.

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