

A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge of High School Students Regarding Hazards of Plastic Use At Selected School, Villupuram

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ABSTRACT

Objectives: 1. To assess the knowledge of high school students regarding hazards of plastic use before and after administration of structured teaching programme. 2. To evaluate the effectiveness of Structured Teaching Programme on knowledge of high school students regarding hazards of plastic use in terms of gain in knowledge scores. 3. To associate the knowledge score on hazards of plastic use among high school students with their selected socio demographic variables.

Methodology: Pre- Experimental - one group pre and post test design. 50 school children were selected by using non-probability purposive sampling technique. Pre test was administered by using structured questionnaire followed by STP, after the gap of seven days post test was conducted by using same structured questionnaire for evaluating the effectiveness of STP.

Result: It is observed from the present study that the Mean as well as the Standard deviation of the knowledge on hazards of plastic use during the pretest is 7.08 and 2.71 and during the post test is 15.36 and 2.12 the difference in the mean knowledge score on hazards of plastic use is statistically significant at 0.05 level and the paired 't' test value is 9.88 which shows the STP is more effective in improving the knowledge on hazards of plastic use. The no significant association between knowledge regarding hazards of plastic use among high school students with selected demographic variables.

Conclusion: The following conclusion was drawn on the basis of the findings of the study. This study shows that there was an improvement in the knowledge of high school students

regarding Hazards of plastic use as evidenced by pre-test and post-test score.

Key words: knowledge, high school students, hazards of plastic use, structured teaching programme

INTRODUCTION

Science and Technology is developing very rapidly in the world. These developments cause positive and negative effects on people. A significant negative effect is increasing incidents of illness like cancers, birth defects and many more. Many of these are due to the varieties of chemicals used in industry. The illness due to chemicals may be either a result of direct or indirect consumption into the body.

As a result of increased production and use of chemicals, a myriad of chemical hazards are present at homes, schools, play grounds and communities. Chemical pollutants are released in to the environment by unregulated industries or are emitted from heavy traffic or toxic waste sites. About 50,000 children aged 0-14 years old die every year as a result of unintentional poisoning.

There is a great need to do more tackle environmental risks to children's health. The burden of disease from environmental related diseases is great and falls disproportionately on children. In September 2002, WHO launched the healthy environment for children initiative. It is with different groups around the world to turn their initiative in to vibrant, global alliance which will be capable of mobilizing

local support and intervening to make children's lives healthier where they live, learn and play. Every child has the right to grow up in a healthy home, school and community. The future development of our children and of their world depends on their enjoying good health now.

Children are more vulnerable to the illness. They are also more capable of preventing them. The long lasting ill effects could be brought down through an awareness and modification of the life style at the early age of their life. Use of plastic containers, bottles and other items by children has become common. It leads to many risks in life. However it could be only prevented rather repenting at the following stage. This could be possible through the education given to them in the school days.

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of structured teaching programme on knowledge of high school students regarding hazards of plastic use at selected school, Villupuram

Objectives:

1. To assess the knowledge of high school students regarding hazards of plastic use before and after administration of structured teaching programme.
2. To evaluate the effectiveness of Structured Teaching Programme on knowledge of high school students regarding hazards of plastic use in terms of gain in knowledge scores.
3. To associate the knowledge score on hazards of plastic use among high school students with their selected socio demographic variables.

HYPOTHESIS

Hypotheses will be tested at 0.05 level of statistical significance.

H1: The mean post-test knowledge score of the students on hazards of plastic use will be significantly higher than that of their mean pre-test knowledge scores

H2: There will be a significant association between knowledge score of the high school

students with the selected demographic variables.

MATERIAL AND METHOD

Research Approach: quantitative research approach was selected for this study.

Research Design: Pre-Experimental - one group pretest posttest design.

Setting: The study was conducted in a High school at Villupuram, Tamil Nadu.

Sample and Sample Size: The study originated with a sample of 50 high school students

Sampling Technique: Non probability purposive sampling technique.

Data Collection And Procedure: the data collection procedure was carried out for a period of 1 week. The investigators themselves performed both pre test and post test data collection and also implemented the STP. Pre test was conducted with help of structured questionnaire. Structured Teaching Programme was given. Post test was conducted after a period of one week. The same structured questionnaires were used to assess the effectiveness of Structured Teaching Programme.

Data Analysis: The data obtained would be analyzed in terms of the objective of the study using descriptive and inferential statistics.

RESULTS AND DISCUSSION

Assessment of the level of knowledge regarding hazards of plastic use among high school students before and after STP.

Table 1.1 frequency and percentage distribution of pre and post test level of knowledge among high school children.

S.No.	Level of Knowledge	Pre-test		Post-test	
		N	N%	N	N%
1	Inadequate Knowledge	23	46%	0	0
2	Moderate Knowledge	21	42%	16	32%
3	Adequate Knowledge	6	12%	34	68%

The table 1.1 shows the pre test level of knowledge of high school children among 50 samples 23 (46%) had inadequate knowledge, 21 (42%) had moderate knowledge and 6(12%) had adequate knowledge. In post test level of knowledge none of the in inadequate knowledge,

16(32%) had moderate knowledge and 34 (68%) had adequate knowledge.

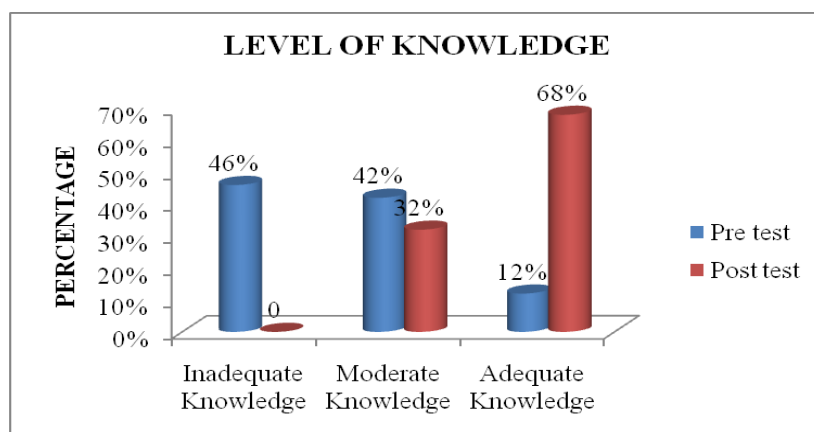


Table 1.2 mean and standard deviation of knowledge score of pretest and posttest result of the high school student's regarding hazards of plastic use.

	Mean	SD	Paired t test
Pre test	10.62	4.51	7.44**
Post test	17.36	1.66	

** Significant at p<0.05 level

Table 1.2 shows that the Mean as well as the Standard deviation of the knowledge on hazards of plastic use during the pretest is 10.62 and 4.51 during the post test is 17.36 and 1.66 the difference in the mean knowledge score on hazards of plastic use is statistically significant at 0.05 level.

Determine the relationship between the levels of knowledge with the selected demographic variable.

Table 1.3 Association between pre test knowledge of high school students on hazards of plastic use with their selected socio demographic variable.

Sl. No	Demographic variables	Level of knowledge			Chi square	P value
		inadequate N	Moderately adequate N	adequate N		
1	Age				0 df=4	1 NS
	a. 13 - 15 Years	0	0	0		
	b. 16-18 Years	23	21	6		
2	Gender				3.259 df=2	0.137 NS
	a. Male	9	17	4		
	b. Female	14	4	2		
3	Religion				5.899 df=6	0.887 NS
	a. Hindu	17	10	3		
	b. Muslim	5	2	2		
	c. Christian	1	9	1		
4	Educational status				4.786 df=4	0.2775 NS
	a. 5 – 6 standard	0	0	0		
	b. 7 – 8 standard	4	10	1		
	c. 9 – 10 standard	19	11	5		
5	The corporation workers how often visits your area				6.453 df=6	0.849 NS
	a. Every day	0	5	1		
	b. Once in a day	2	6	2		
	c. Once in a week	18	9	3		
6	The most common plastic items used in your family				0 df=6	1 NS
	a. Plastic bags	0	0	0		
	b. Plastic bottles	0	0	0		
	c. Plastic cups	0	0	0		
7	Method of waste disposal				2.988 df=6	0.3716 NS
	a. Open land	3	7	2		
	b. Dust bin	16	7	3		
	c. Burning	4	4	0		
	d. Other method	0	3	1		

Table 1.3 shows that there is no significant association between knowledge regarding hazards of plastic use among high school students with selected demographic variables.

DISCUSSION

The first objective of the study is to assess the level of knowledge of high school students on the hazards of plastic use before and after administration of structured teaching programme.

The level of knowledge of high school students in the pretest shows 88% (88) of them had inadequate knowledge on hazards of plastic use and 12% (12) of them had moderately adequate knowledge on hazards of plastic use and none of them had adequate knowledge regarding hazards of plastic use.

The level of knowledge of high school students in the post test shows 51% (51) of them had moderately adequate knowledge on hazards of plastic use and 49% (49) of them had adequate knowledge on hazards of plastic use and none of them had in-adequate knowledge regarding hazards of plastic use among high school students.

The second objective of the study is to evaluate the effectiveness of STP on knowledge of high school students regarding hazards of plastic use in terms of gain in knowledge scores.

The Mean and the Standard deviation of the knowledge on hazards of plastic use during the pretest is 7.08 and 2.71 and during the post test is 15.36 and 2.12 the difference in the mean knowledge score on hazards of plastic use is statistically significant at 0.05 level the paired "t" test value is 9.88 which shows the STP is more effective in improving the knowledge on hazards of plastic use.

The third objective of the study is to associate the knowledge score on hazards of plastic use among high school students with selected demographic variables.

It was found that there was no significant association between knowledge

score with gender, age, religion, educational status, visits of corporation worker, common plastic items using and method of waste disposal.

CONCLUSION

The conclusions were drawn on the basis of the present study topic to assess the effectiveness of structured teaching programme on knowledge towards high school students. This section brings about the limitations of the study into practice. The finding of the study has several implications on nursing practice, nursing administration, nursing education and nursing research. The study shows that high school students are having inadequate knowledge on hazards of plastic use.

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