



EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING HEALTH HAZARDS OF PLASTIC USE

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ABSTRACT

The study assessed the knowledge before and after planned teaching programme on health hazards of plastic use among high school students using a quasi-experimental design. Fifty samples were selected by non-probability convenience sampling technique. The study instrument used was as follows: demographic data and structured knowledge questionnaire. The tools were administered after obtaining the administrative and informed consent. The collected data were analyzed using descriptive and inferential statistics. It was inferred that after the post-test 11(22%) of them gained moderate level of knowledge and the remaining 39(78%) showed adequate level of knowledge regarding health hazards of plastic use.

Key words:

Effectiveness, Health Hazards, Knowledge, Planned Teaching, Plastic

MAIN TEXT

1. INTRODUCTION

More than a 100million ton of plastic is produced world- wide each year. Though plastics have opened the way for a plethora of new inventions and devices it has also ended up clogging the drains and becoming a health hazard. Many countries, including India, are trying to increase the amount of plastic that is recycled. But commercial interests create hindrance for effective legislation to remove plastics from goods where they can threaten public health. India is the fourth highest Asian importer of plastic waste behind Hong Kong, Philippines, Indonesia.

1.1. NEED FOR THE STUDY

Children constitute a major proportion of the global population today. They are not only large in number but vulnerable to various health problems and considered as special risk groups. So, children need special care to survive with good health. In present day times, the usage of plastics amongst school going children in India had increased remarkably in the form of plastic school bags, water bottles, cans, plastic food containers etc and is exposed to many dangers. Therefore, the research investigator strongly felt that this study will go a long way in exposing the hazards of plastic use by children and help them to overcome them.

1.2. STATEMENT OF THE PROBLEM

A study to evaluate the effectiveness of Planned Teaching Program on knowledge regarding health hazards of plastic use among high school students

1.3. OBJECTIVES OF THE STUDY

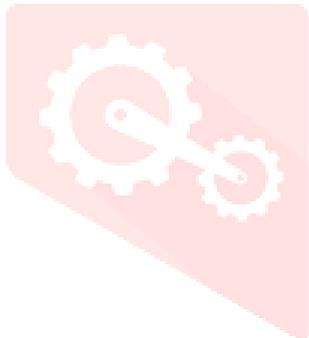
1. To assess the pre-test and post-test level of knowledge regarding health hazards of plastic use among high school students
2. To assess the effectiveness of the planned teaching program on knowledge regarding health hazards of plastic use among high school students
3. To associate the post-test level of knowledge with selected demographic variables on knowledge regarding health hazards of plastic use among high school students

1.4. HYPOTHESES

- **H₁:** There will be significant difference between the pre- and post-test knowledge on health hazards of plastic use among high school students
- **H₂:** There will be significant association of post-test level of knowledge on health hazards of plastic use with selected demographic variables among high school students

2. RESEARCH METHODOLOGY

Research approach	Quantitative approach
Research design	Quasi experimental design
Research setting	Sumangali Seva high school, Bangalore
Population	High school students
Sample and sample size	50 high school students
Sampling technique	Convenience sampling technique
Study Instruments used	Tool-1: Demographic data Tool-2: Structured knowledge questionnaire
Procedure for data collection	After obtaining the permission from concerned authorities and informed consent from the samples, the investigator will collect the baseline demographic data.
Plan for data analysis	Descriptive and inferential statistics with the help of SPSS version 20.0 was used for analysis of data



3. RESULTS

3.1. Demographic data of high school students

- With respect to the age, 10 (20%) students belong to the age group between 13-14yrs, 8 (16%) of them belong to the age group of 14 – 15yrs, 14 (28%) of them belong to the age group of 15 – 16yrs and 18 (36%) of them were belong to age group of 16-17yrs.
- Considering the gender, 21 (42%) of them were males and 29 (58%) were females.
- Regard to class of study 10 (20%) of the students were studying in VIII standard whereas 8 (16%), 13 (26%) and 19 (38%) of them belongs to IX, X and XI standards respectively.
- Twenty-seven (54%) students were Hindus, 10 (20%) were Christians and 13 (26%) were Muslims.
- With regard to educational status of mother, 3 (6%) mothers were illiterate. Only one (2%) mother completed primary school, 2 (4%) mothers studied secondary school level, 20 (40%) of them were completed PUC. Nineteen (38%), and 5 (10%) of them were graduates and professionals respectively.

3.2. Assessment of Pre-test and Post-test level of knowledge regarding health hazards of plastic use among high school students

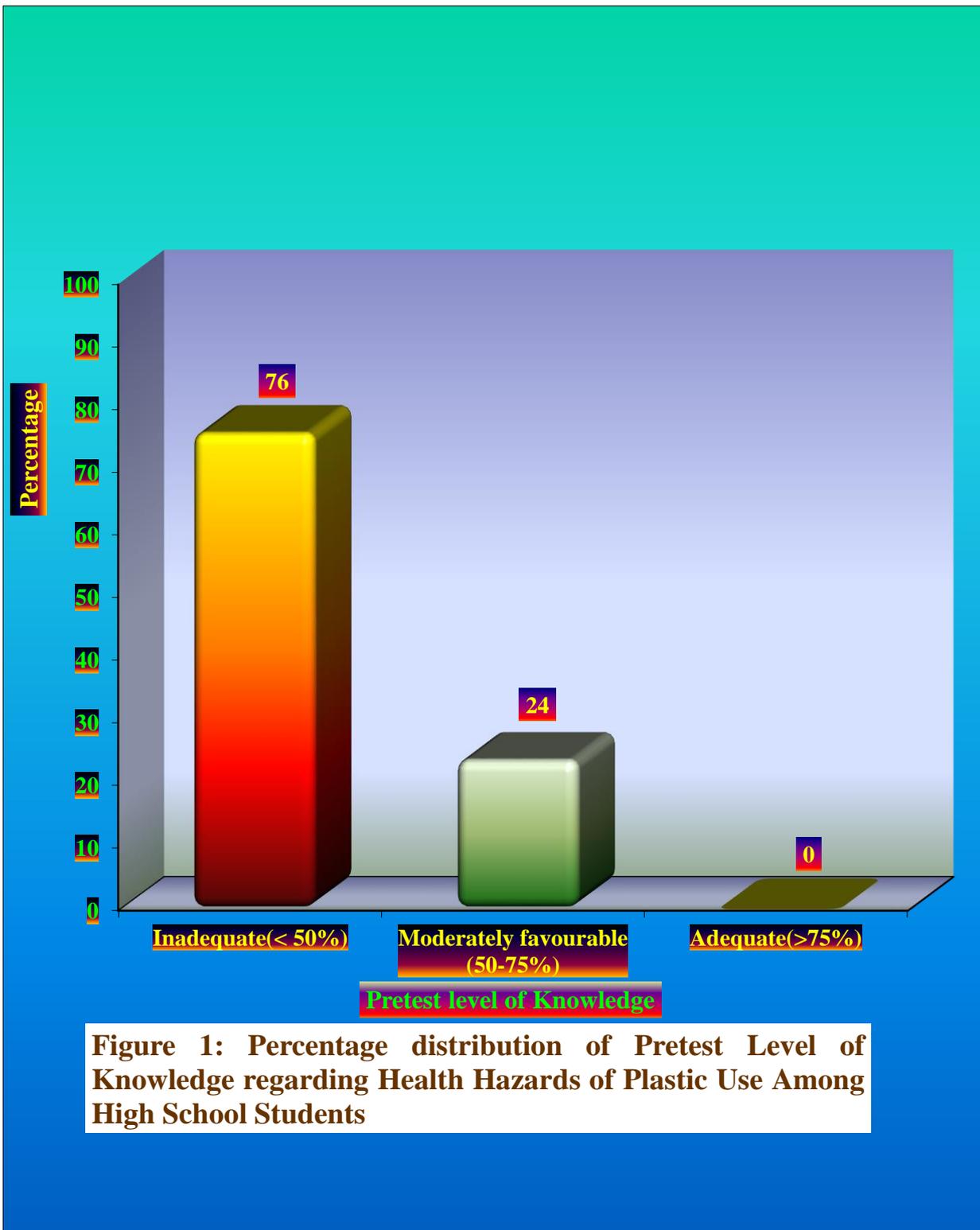
Frequency and percentage distribution of pre-test level of knowledge regarding health hazards of plastic use among High School students

N=50

Domain	In adequate		Moderate		Adequate	
	<50		50-75%		>75	
	No	%	N	%	N	%
Pre-test level of knowledge	38	76	12	24	0	0

Table 1 depicting pre-test level of knowledge among high school students on health hazards of plastic use

Among High School students, 38 (76%) of them had inadequate and 12 (24%) had moderate level of knowledge; none of them were having adequate level of knowledge on health hazards of plastic use.

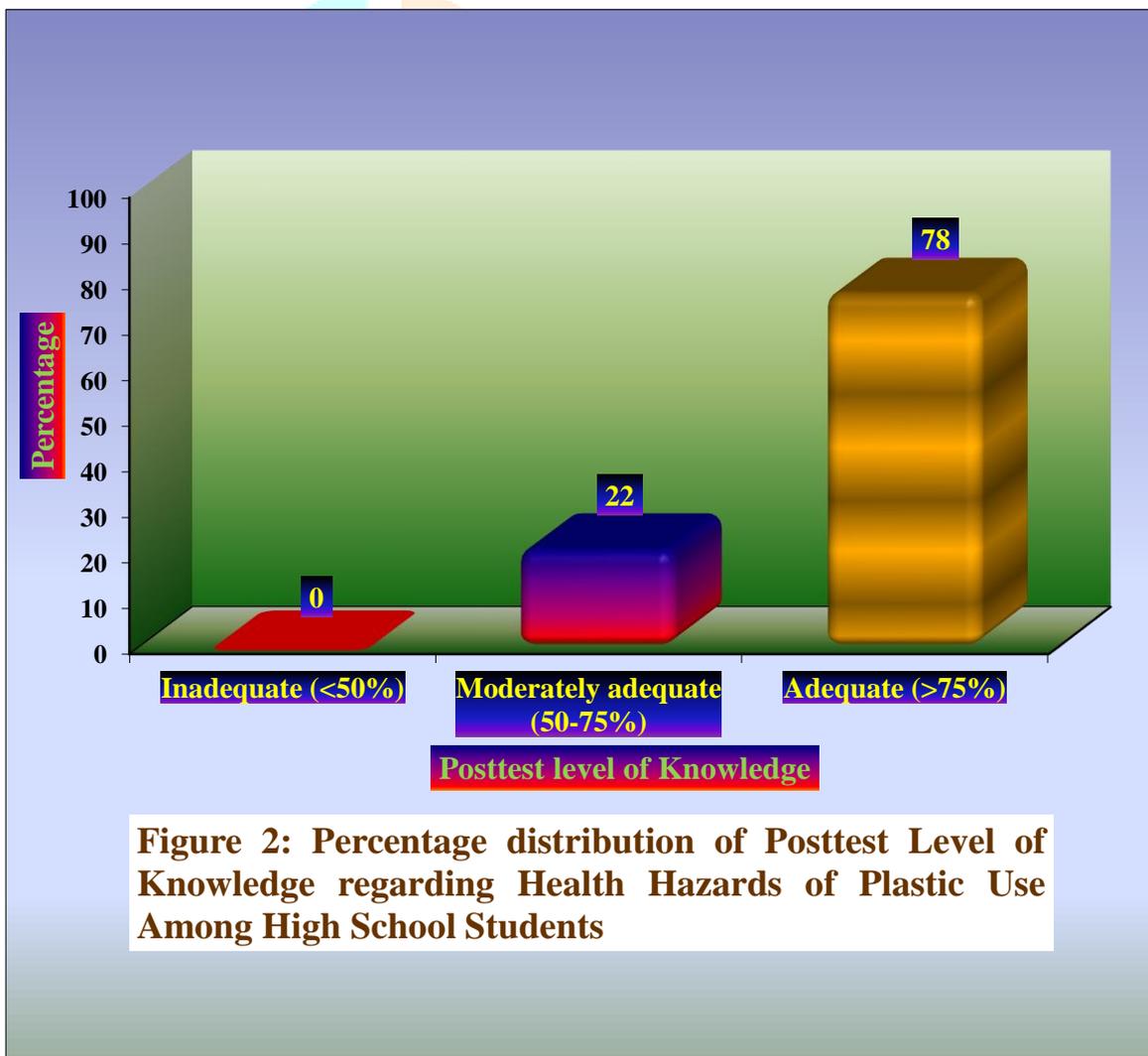


3.3. Frequency and percentage distribution of post-test level of knowledge regarding health hazards of plastic use among High School students

N=50

Domain	In adequate		Moderate		Adequate	
	<50		50-75%		>75	
	No	%	No	%	No	%
Post-test level of knowledge	0	0	11	22	39	78

Table 2 depicting post-test level of knowledge among high school students on health hazards of plastic use



3.4. Effectiveness of the planned teaching programme by comparing pre and post-test level of knowledge regarding health hazards of plastic use among high school students

Comparison of pre and post-test level of knowledge regarding health hazards of plastic use among High School students

N = 50

Domain	Pretest		Post-test		't' value	'p' value
	Mean	S.D	Mean	S.D		
Knowledge	16	4.97	21.5	3.11	3.151***	P<0.001

***p<0.001, **p<0.01, *p<0.05, S - Significant

The overall mean difference was 5.5; calculated 't' value was 3.151. This showed statistically high significant difference at p<0.001 level. Hence the research hypothesis **H₁** stated that **“There will be significant difference between the pre and posttest knowledge on health hazards of plastic use among high school students “**was accepted and retained.

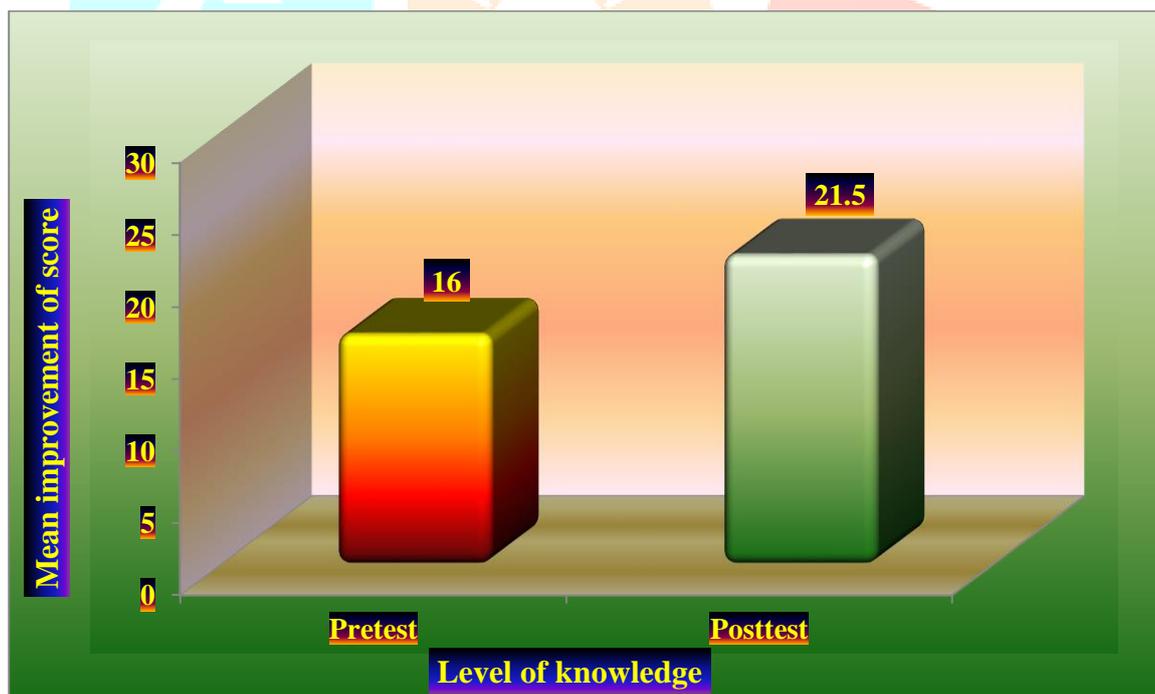


Figure 3: Depicting the effectiveness of planned teaching program on health hazards of plastic use by comparing pre and post-test level of knowledge

3.5. Association of post-test level of Knowledge with class, occupational status of parents, residence and source of information

N=50

Demographic variables	Inadequate		Moderate		Adequate		Chi-Square value
	<50%		50-75%		>75%		
	No.	%	No.	%	No.	%	
Class							
a) VIII standard	0	0	6	12	4	8	$\chi^2=8.12$
b) IX standard	0	0	2	4	6	12	df = 3
c) X standard	0	0	1	2	12	24	S*
d) XI standard	0	0	2	4	17	34	
Occupational status of parents							
a) Only father is employed	0	0	6	12	25	50	$\chi^2=6.231$
b) Only mother is employed	0	0	2	4	0	0	df = 2
c) Both are employed	0	0	3	6	14	28	S*
Residence							
a) Rural	0	0	7	14	16	32	$\chi^2=4.322$
b) Urban	0	0	4	8	23	46	df =1 S*
Source of information by							
a) Family members/ Relatives	0	0	8	16	0	0	$\chi^2=12.123$
b) Mass media	0	0	2	4	0	0	df = 3
c) Newspaper	0	0	1	2	0	0	S**
d) Health personnel	0	0	0	0	0	0	

***p<0.001, **p<0.01, *p<0.05, S – Significant

- The above table shows the association of post-test level of Knowledge with class, occupational status of parents, residence and source of information.
- The analysis revealed that statistically there was significant association of Knowledge with class, occupational status of parents, residence and source of information which was significant with the $\chi^2=8.12$ at p<0.05, $\chi^2=6.231$ at p<0.05, $\chi^2=4.322$ at p<0.05 and 12.123 at p<0.01 level respectively.

4. CONCLUSION

The study findings revealed that the knowledge on health hazards of plastic use among high school students has increased after administration of planned teaching programme. Thus, Planned

Teaching Programme was an effective educational tool to improve the knowledge of high school students on health hazards of plastic use.

4.1 RECOMMENDATIONS

1. A similar study can be conducted for long duration.
2. A similar study can be conducted on a large sample to generalize the study findings.
3. A study can be undertaken to find out the role of nurses in the prevention of health hazards of plastic use.
4. A similar study which includes attitude and practice can be undertaken.

5. REFERENCES

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