

**EFFECTIVENESS OF POWER POINT ASSISTED TEACHING ON ENVIRONMENTAL
HEALTH AMONG CHILDREN IN SELECTED UPPER PRIMARY SCHOOLS IN
GUNTUR, ANDHRA PRADESH**

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ABSTRACT

Introduction: Environment is one of the determinants of health which predisposes children to various agents and may cause health problems. According to WHO 24% of the global disease burden and mortality in children were attributable to preventable environmental causes. **Objectives:** This study was conducted to assess the level of knowledge on Environmental Health among children in upper primary schools at Guntur. **Material & Methods:** A Pre-experimental research design was adopted. Simple Random sampling technique was used to select 60 upper primary school children in Guntur. Data was collected through structures knowledge questionnaire. **Results:** Majority (70%) of upper primary school children had moderately adequate knowledge, while (17%) had Inadequate Knowledge and (13%) were with Adequate Knowledge on Environmental Health. There was a significant increase in post-test mean score and paired 't' test was found to be highly significant at 0.01 level. **Conclusion:** The researcher has concluded that there was a great need for awareness on Environmental Health among school children to enhance their knowledge. Health education through Power Point Assisted Teaching can be an effective way to enhance the knowledge among upper primary school children. This reveals that majority of upper primary school children need to be educated and informed about Environmental Health and its significance.

KEYWORDS: Effectiveness, Environmental health, Children, Upper primary schools.

Back ground of the study

Environment is one of the determinants of health which predisposes children to various agents and may cause health problems. According to WHO 24% of the global disease burden and mortality in children were attributable to preventable environmental causes.

Environmental health addresses all the physical, chemical, and biological factors external to a person especially in children and the related factors impacting behaviors. It encompasses the assessment and control of environmental factors that can potentially affect health. It is targeted towards preventing diseases and creating healthy environment.

Need for the study

According to National Institute of Environmental Health Sciences, children are particularly vulnerable to air pollution, inadequate water, sanitation and hygiene, hazardous chemicals and wastes, radiation and climate change. In 2017, 1.7 million deaths in children were attributable to the environment.

Improving children environmental health by addressing the health issues, creating safe and healthy environment that presents an essential contribution towards the achievement of the millennium development Goals (MDGs). It is evident that need to stress upon alternatives that can strengthen, can bring desired change and increase the awareness in the community about environmental health.

Statement of the Problem

“Effectiveness of Power Point Assisted Teaching on Environmental Health among Children at Selected Upper Primary Schools In Guntur, Andhra Pradesh.”

Objectives of the Study

1. To assess the level of knowledge on Environmental Health among children in upper primary schools before and after administering PPT.
2. To evaluate the effectiveness of PPT on Environmental Health by comparing pre-test and post-test level of knowledge scores among upper primary school children.

3. To find out the association between the pre-test level of knowledge scores on Environmental Health with selected demographic variables.

Hypotheses

H₁: There will be significant increase in post-test level of knowledge scores than pre-test scores among school children regarding Environmental health.

H₂: There will be significant association between pre-test level of knowledge scores with selected demographic variables on Environmental health among school children.

METHODOLOGY

Research approach: Quantitative research approach was adopted.

Research design: Pre-Experimental one group Pre- test and Post-test research design was adopted.

Research variables

Independent Variable: Power Point Assisted Teaching on Environmental health.

Dependent Variable: knowledge regarding Environmental health among upper primary school children.

Target Population: It included the Upper primary school going children in Guntur.

Setting of the study: This study was conducted in C.R English Medium School and SIMS My School, in Guntur, AP.

Sampling Technique: Simple random sampling technique was used.

Sample and Sample size: 60 Upper primary school going children were selected.

Inclusion criteria

Upper primary school children who were

- At the age group of 12-18 years

Section B: Table-I: Percentage distribution of pre-test and post-test Knowledge scores of school children on Environmental Health. n=60

Knowledge Scores	Pre-Test		Post-Test	
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Inadequate (<33.33%)				
Moderate	10	17%	00	00
(33.33 – 66.66%)	42	70%	17	28%
Adequate	08	13%	43	72%
(> 66.66 %)				
Total	60	100	60	100

Table-I reveals that majority 70% of sample had moderate knowledge, while 17% had in-adequate

- Available at the time of data collection
- Willing to participate in the study
- Able to understand English and Telugu language

Development and Description of the tool

The tool consisted of three sections.

Section-A: Socio-demographic variables of the sample.

Section-B: Structured knowledge questionnaire on Environmental health.

Section-C: Power point assisted teaching regarding factors, toxicity, hazards, benefits, resources and justice on Environmental health.

Data Collection Procedure

The main study was conducted after receiving the formal prior permission from the schools. The investigators established rapport with students and explained the purpose of study. The tool was distributed to 60 samples and pre test was conducted. Power point Assisted teaching was administered immediately after Pre-test. After seven days post test was conducted. The data was collected for a period of 14 days.

Plan for data Analysis: The data was analyzed by using both descriptive and inferential statistics.

Major findings of the study

Section A: Findings related to Demographic Variables

Majority 50% of children were belonged to the age group of 10-12 years, 42% of the houses were belonged to pucca house, 68% of the children belonged to nuclear family, 33% of the samples had Rs. 5,001/- to 10,000/- income per month, 62% of the samples had open drainage system, 59% of subjects were having municipality collection of waste, 65% of the respondents were using sanitary type of latrines, 63% of subjects were using bore well water and 58% of children were having TV/Electronic media as source of information.

knowledge and 13% had adequate knowledge on environmental health in the pre-test. Whereas in the post

test majority 72% of the children had adequate knowledge and 28% of them had moderate knowledge.

Section C: Table-II: Mean, Standard deviation, Standard error and Paired the “t” test value on level of Knowledge of subjects on Environmental health. n=60

Knowledge scores	Mean	SD	SE	t- value		df	Inference
				Cal value	Tab value		
Pre-Test	11.71	3.89	0.62	20.87	2.58	49	S**
Post-Test	17.1	2.80					

(S**Significance at 0.01 level)

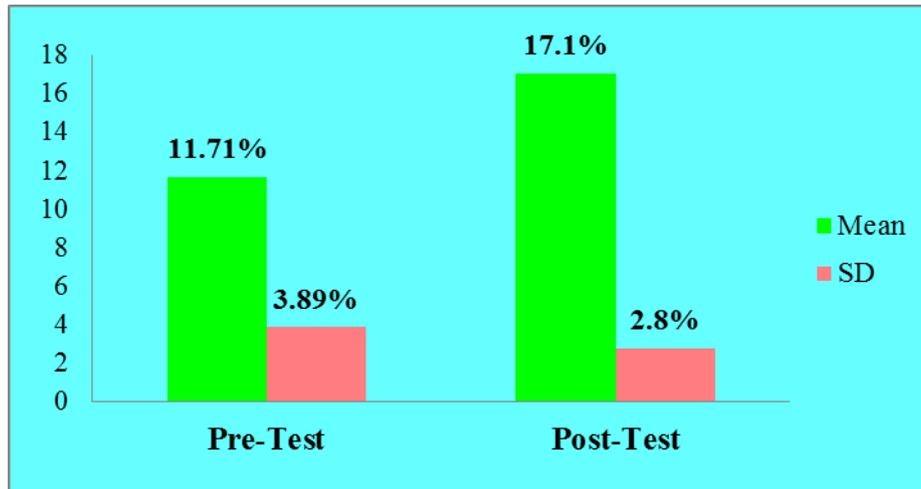


Table-II reveals that the mean post-test knowledge score 17.12% was higher than the mean pre-test knowledge score 11.71%. The mean difference value was 5.39 and the calculated paired ‘t’ test value was 20.87 which is greater than the tabulated ‘t’ value 2.58 and found to be

significant at 0.01 level. Hence, research hypothesis H_1 was accepted and it indicated that the power point assisted teaching was effective in improving the knowledge of children regarding environmental health.

Section D: Table-III: Analysis of association between pre-test knowledge scores and selected demographic variables. n=60

Demographic variable	Chi-Square value (χ^2)	Tab value	df	Inference	Level of significance
Age In Years	0.016	12.5	6	NS	p<0.05
Gender	0.026	5.99	2	NS	p<0.05
Type Of House	6.62	12.5	6	NS	p<0.05
Drainage System	9.7	9.49	6	S*	p<0.05
Type Of Family	3.34	9.49	4	NS	p<0.05
Waste Disposal	13.0	12.5	4	S*	p<0.05
Income per month	0.78	12.5	6	NS	p<0.05
Type Of Latrines	10.83	9.49	6	S*	p<0.05
Drinking Water	13.9	12.5	6	S*	p<0.05
Source of Information	13.8	12.5	6	S*	p<0.05

(**p<0.05), df = degree of freedom, S*= Significant, NS= Nonsignificant)

Table-3 shows that significant association exist among Drainage system, Waste disposal, Type of latrines, Drinking water, Source of information with their knowledge regarding environmental health. Hence, research hypothesis H_2 was accepted for these variables. There was no significant association with demographic variables such as Age in years, Gender, Type of house, Type of family and Income per month. Hence research hypothesis H_2 was rejected for these variables.

CONCLUSION

On the basis of the study findings researcher has concluded that there was a great need for awareness on Environmental Health among school children to enhance their knowledge. Health education through Power Point Assisted Teaching can be an effective way to enhance the knowledge among upper primary school children. This reveals that majority of upper primary school

children need to be educated and informed about Environmental Health and its significance.

Recommendations

- A similar study can be done on large population with the intension that generalization might be possible.
- A similar study can be under taken with a control group design.
- A comparative study can be carried out between urban and rural study settings.

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