



# “Effectiveness of structured teaching programme on selected water borne diseases and their prevention among upper primary school children”

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## ABSTRACT

**Background of the study:-**Every year water borne diseases like Diarrhea, cholera and Typhoid claims the lives of millions of children in developing world. Water and sanitation related diseases are one of the major causes of under five mortality in the world. **Objectives:** - To assess the pre-test knowledge scores. To determine the effectiveness of structured teaching programme on knowledge regarding selected water borne diseases and their prevention among upper primary school children in selected schools of Indore city and To Find out the association of pre-test knowledge scores regarding selected water borne diseases and their prevention with their selected socio-demographical variables. **Material and methods :** - 400 upper primary school children, studying in 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> class were selected by non-probability convenient sampling technique for the study. Data was collected through socio-demographic proforma & structured knowledge questionnaire and analyzed by descriptive and inferential statistics. **Result:** -The mean pretest knowledge score was 9.575 and mean posttest knowledge score was 20.845. Calculated t value was 45.16 (df=399) found to be significant at 0.05 Hence research hypothesis HA1 is accepted **Conclusion:-** after the structured teaching programme knowledge of upper primary school children was markedly increased.

## INTRODUCTION

Water-related diseases are the world's leading killer and every year, more than 3.4 people die each year due to waterborne illness. Such types of diseases are acquired by drinking contaminated water or the water that is not filtered and it has the bacterial presence. Impure water might contain chemical poisons like lead, arsenic and heavy metals; this can affect the digestive system. In India, thousands of people die due to common. Waterborne diseases like Typhoid, Cholera, Hepatitis A & E, and Gastroenteritis etc. Since such diseases are deadly, so let us study the diseases in details and what are the symptoms and precautions.

## STATEMENT OF THE PROBLEM

“A pre-experimental study to assess the effectiveness of structured teaching programme on selected water borne diseases and their prevention among upper primary school children in selected schools of Indore city.”

## OBJECTIVES

The objectives of the study are : -

1. To assess the pre-test knowledge scores regarding selected water borne diseases and their prevention among upper primary school children in selected schools of Indore city.
2. To Develop a structured teaching programme on selected water borne diseases and their prevention for upper primary school children in selected schools of Indore city
3. To Determine the effectiveness of structured teaching programme on knowledge regarding selected water borne diseases and their prevention among upper primary school children in selected schools of Indore city.
4. To Find out the association of pre-test knowledge scores regarding selected water borne diseases and their prevention with selected socio- demographical variables of upper primary school children in selected schools of Indore city.

## METHODS

In view of accomplishing the objective, i.e. assess the effectiveness of structured teaching programme on knowledge regarding selected water borne diseases and their prevention among upper primary school children in selected schools of Indore city, a pre-experimental research with one group pre and post-test research design was used. The Conceptual framework in this study was based on King's Goal attainment theory. 400 upper primary school children, studying in 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> class were selected by non-probability convenient sampling technique

for the study. Data was collected through socio-demographic proforma & structured knowledge questionnaire on selected water borne diseases and their preventions and that was analyzed by descriptive and inferential statistics.

## RESULTS

Socio-demographic revealed that Majority of upper primary school children 159 (39.75%) were belonged to >13 years of age group, 281(70.25%) upper primary school children were females, 301 (75.25%) were Hind, 183(45.75%) were studying in 8th class, 145(36%) were having 3 members in their family, 159(40%) were living in posh areas, 348(87%) were getting water through tap water, 205 (51%) were using water filters for water purification, 316 (79) were disposed waste by biological methods, 235(58%) were using soap and water for hand washing.

The finding of the study revealed that considering the subjects distribution according to their level of knowledge 68.5% of upper primary school children have inadequate knowledge regarding selected water borne diseases and their prevention and only 3.5% has adequate knowledge in pretest.

The mean pretest knowledge score was 9.575 and mean posttest knowledge score was 20.845. Calculated t value was 45.16 (df=399) found to be significant at 0.05 Hence research hypothesis HA1 is accepted i.e. The mean posttest knowledge score is significantly higher than mean pretest knowledge score regarding selected water borne diseases and their prevention among upper primary school children in selected schools of Indore city and null hypothesis H01 is rejected.

The calculated chi square values  $\chi^2$  show the significant association of pretest knowledge scores with gender ( $\chi^2 = 6.48$  ; df=2), religion ( $\chi^2 = 15.04$  ; df=6) , no. of persons in family ( $\chi^2 = 27.37$  ; df=6), area of living ( $\chi^2 = 19.67$ ; df=6), water purification method ( $\chi^2 = 20.52$ ; df=6) and hand washing done by upper primary school children ( $\chi^2 = 19.4$ ; df=6) at the level of 0.05 hence the research hypotheses HA2II, HA2III HA2V HA2VI, HA2VIII & HA2X is accepted and null hypotheses H02II, H02III, H02V H02VI, H02VIII & H02X is rejected.

The calculated chi square values  $\chi^2$  show the not significant association of pretest knowledge scores with age ( $\chi^2 = 4.59$ ; df=4), education ( $\chi^2 = 4.59$ ; df=4), source of water ( $\chi^2 = 5.87$ ; df=6), methods of waste disposal ( $\chi^2 = 3.24$ ; df=4) at the level of 0.05 hence the null hypotheses H02I , H02IV, H02VII & H02IX is retained and research hypotheses HA2I, HA2IV, HA2VII & HA2IX is rejected. In order to find the association between pretest

knowledge scores with selected socio- demographic variables of upper primary school children chi-square test was used.

## CONCLUSION

Upper primary school children have little knowledge regarding selected water borne diseases and their prevention, after the structured teaching programme knowledge of upper primary school children was markedly increased. Further, awareness programmes are necessary for upper primary school children for maximizing knowledge.

## RECOMENDATION

- A similar study may be replicated on a large sample, there by findings can be generalized for a large population.
- A comparative study can be carried out in private or government schools.
- A similar study can be studied in more depth.
- Action research on small project regarding single components of water sanitation or facilities available can be studied.

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