



TO ASSESS THE KNOWLEDGE REGARDING WATER BORN DISEASES AMONG SCHOOL GOING CHILDREN.

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ABSTRACT

Cholera, typhoid fever and hepatitis A are caused by bacteria, and are among the most common diarrheal diseases.

Objectives: 1.To assess the knowledge regarding water born diseases among school going children. 2. To associate the knowledge score with selected demographic variables.

Materials and methods: Survey approach is used in this study. Descriptive study design used in present study. The study conducted at Wardha. 100 School going children selected for the study.

Result: Half of the sample 16% age 9-10 years, 5% age 11-12 years, 50% age 13-14 years, and 29% 15-16 years. 55% Male and 45 % female. 58% Hindu, 24% Buddhist, 10% Muslim and 8% others religion. Majority of types of family 33% nuclear, 58% joint, 5% extended and 4% others. Majority of residential area 73% urban and 27% rural. Majority of numbers of children 13% to 1 child, 48% to 2 children, 27% to 3 children and 12 % to 4 and above. Distribution of school children on water born disease, the poor knowledge (1%), average knowledge (28%), good knowledge (49%), very good knowledge (19) and excellent knowledge (3%). The minimum score 4 and maximum score 23, mean score 12.78 ± 0.387 and mean percentage of knowledge 12.78.

Conclusion: Analysis of data most of school children 13-14 years of age and majority of gender 55% Male. Majority of Hindu religion and Majority of nuclear family, majority of urban area and majority of number in 2 children. Overall knowledge water born disease of school going children was very good.

KEYWORDS : knowledge, children, school, water born disease

1. Introduction

The term waterborne disease is reserved largely for infections that predominantly are transmitted through contact with or consumption of infected water. Trivially, many infections may be transmitted by microbes or parasites that accidentally, possibly as a result of exceptional circumstances, have entered the water, but the fact that there might be an occasional freak infection need not mean that it is useful to categories the resulting disease as "waterborne". Nor is it common practice to refer to diseases such as malaria as "waterborne" just because mosquitoes have aquatic phases in their life cycles, or because treating the water they inhabit happens to be an effective strategy in control of the mosquitoes that are the vectors.¹

Another class of waterborne metazoan pathogens are certain members of the Schistosomatidae, a family of blood flukes. They usually infect victims that make skin contact with the water. Blood flukes are pathogens that cause Schistosomiasis of various forms, more or less seriously affecting hundreds of millions of people worldwide. traditional beliefs had cautioned against the consumption of water, rather favoring processed beverages such as beer, wine and tea. For example, in the camel caravans that crossed Central Asia along the Silk Road, the explorer Owen Lattimore noted, "The reason we drank so much tea was because of the bad water. Water alone, unboiled, is never drunk. There is a superstition that it causes blisters on the feet."²

Waterborne diseases can have a significant impact on the economy, locally as well as internationally. People who are infected by a waterborne disease are usually confronted with related costs and seldom with a huge financial burden. Many families must even sell their land to pay for treatment in a proper hospital. On average, a family spends about 10% of the monthly household's income per person infected.³

Water borne diseases occurrence was observed to follow a seasonal pattern with peaks occurring between the months of January and May followed by drops between June and October and rose again in November. Using prospectively collected symptom diaries we

studied all individuals in the household and used both non-specific (total coliform counts) and specific (*E. coli* counts) measures of fecal contamination.⁴

Infectious enteric (gastrointestinal) diseases are caused by the ingestion of pathogens, and these usually originate from the faeces of infected humans and animals. Eating contaminated food, drinking contaminated water or making contact with infected people or animals can cause infection in humans.⁵

2. Problem statement

To assess the knowledge regarding water born diseases among school going children

3. Objectives

1. To assess the knowledge regarding water born diseases among school going children.
2. To associate the knowledge score with selected demographic variables.

4. Methodology

Research approach- survey approach

Research design- descriptive study design

Setting of study- Selected schools of wardha

Sample- School going children.

Sample size- 100

Sampling techniques- Non probability convenient sampling

Tool-

Section A: demographic data includes baseline information such as age, sex, family income, occupation, educational status.

Section B: Structured knowledge questionnaire regarding water born diseases

SAMPLING CRITERIA

INCLUSION CRITERIA: School going children

1. Who is willing to participate in the study.
2. Who is available at

the time of study.

EXCLUSION CRITERIA: School going children: 1. Who are sick. 2. Who have attended programmes on the same topic

5. Result

Section I: Description of the samples according to their demographic variables.

Distribution of subjects according to their demographic variables

Distribution of children according to their age in years shows that 16% of them were belonging to the age of 9-10 years, 5% were in the age of 11-12 years, 50% were in the age group of 13-14 years and remaining 29% were belonging to the age of 15-16 years respectively. According to children to their gender shows that all of them 55% of them were belonging to male of 55 and 45% of them were belonging to female of 45.

Distribution of children according to their religion shows that 58% of them were belonging to the Hindu religion of 58, 24% were in the belonging to Buddhist religion of 24, 10% were in the belonging to Muslim religion of 10 and remaining 8% were belong to Others religion of 8 respectively.

According to children according to their types of family shows that 33% were Nuclear family, 58% were Joint family, 5% were extended family, 4% were others respectively.

Distribution of children according to their residential area shows that 73% were the urban and 27% were the rural area respectively. According to children according to their number of children shows that 13% were belonging to the 1 child, 48% were belonging to the 2 child, and 27% were belonging to the 3 children and 12% were belonging to the 4 and above child respectively.

Section II: Assessment of knowledge of the water born disease among school going children

The (1%) had poor level of knowledge, (1%) were having average level of knowledge and (28%) were having good level of knowledge score, (49%) were having very good level of knowledge, (19%), (3%) were having excellent knowledge level. The minimum score was 4 and maximum score was 23, the mean score for the test was 12.78 \pm 0.387 and mean percentage of knowledge was 12.78.

Section III: Association of knowledge score in relation to demographic variables

Association of knowledge score regarding of water born disease among children in relation to age

The association of knowledge scores with the age in years of children. The calculated 'F' i.e. 0.252 at 5% level of significance. Also the calculated 'p'=0.860 which was much higher than the acceptable level of significance i.e. 'p'=0.05. Hence it is interpreted that the age in years of the children is not associated with their knowledge scores.

Association of knowledge score regarding of water born disease among children relation to Gender

The association of knowledge scores with the gender. The calculated 't' i.e. 0.059 at 5% level of significance. Also the calculated 'p'=0.809 which was higher than the acceptable level of significance i.e. 'p'=0.05. Hence it is interpreted that the gender of children is not associated with their knowledge scores.

Association of knowledge score on children in relation to types of family

The association of knowledge scores with the types of family. The calculated 'F' i.e. 2.650 at 5% level of significance. Also the calculated 'p'=0.053 which was higher than the acceptable level of significance

i.e. 'p'=0.05. Hence it is interpreted that knowledge score of children is not associated with their occupation.

Association of knowledge score on in relation to Residential area

The association of knowledge scores with the residential area of children. The calculated 't' i.e. 1.827 at 5% level of significance. Also the calculated 'p'=0.180 which was higher than the acceptable level of significance i.e. 'p'=0.05. Hence it is interpreted that knowledge score of children is not associated with their residential area.

Association of knowledge score regarding of child in relation to number of children.

The association of knowledge scores with the number of children of child. The calculated 'f' i.e. 1.182 at 5% level of significance. Also the calculated 'p'=0.321 which was higher than the acceptable level of significance i.e. 'p'=0.05. Hence it is interpreted that the child on number of children is not associated with their knowledge scores.

Discussion

The finding of the study show that mean and standard deviation was 12.78 and 0.387 respectively. And also the mean percentage of knowledge score of school going children was 12.78 and 12.78 \pm 0.387 respectively. so it is concluded that children have more knowledge regarding water born disease.

In most parts of the world polluted water, improper waste disposal, and poor water management cause serious public health problems. Such water-related diseases as cholera, typhoid, and schistosomiasis harm or kill millions of people every year. Overuse and pollution of water supplies also are taking a heavy toll on the natural environment and pose increasing risks for many species of life. The quality as well as the quantity of water is deteriorating globally as a result of rapid urbanization, population growth and industrialization. Most countries however currently are aware of the necessity of fresh water as a requirement for survival. Fresh water needs to occupy highest priority, on the international agenda. Moreover, the supply of the freshwater that is available to humanity is shrinking, in effect, because many fresh water resources have become increasingly polluted or dried. In some countries lakes and rivers have become receptacles for a vile assortment of wastes, including untreated or partially treated municipal sewage, toxic industrial effluents, and harmful chemicals that leached into surface and ground waters from agricultural activities.⁶

6. Conclusion

Analysis of data shows that the most of the school children were 13-14 years of age and majority of them gender is male 55%. Majority of school children were in Hindu religion and most of the school going children were belong to nuclear family, most of the school children were belongs to urban area and most of the number of children in 2 children. overall knowledge regarding water born disease of school going children was very good.

7. Recommendation

- A similar study can be undertaken for large sample to generalize the findings.
- A comparative study can be carried out the on knowledge regarding water born diseases among school going children.
- A similar study can be conducted in student nurses on a large population.
- A study can be undertaken to identify the existing knowledge and attitude of school going children regarding water born disease.
- A similar study can be conducted in school.

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