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KNOWLEDGE AND PRACTICES OF WATER, SANITATION AND HYGIENE AMONG SELECTED SECONDARY SCHOOL STUDENTS

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ABSTRACT

A study on knowledge and practices of water, sanitation and hygiene among selected secondary school students at Vadodara, Gujarat." The Study was conducted on a sample 50 selected Secondary school student at Goraj, Vadodara. Using Convenient sampling. The instrument used for data collection was structured knowledge questionnaire. The data obtained was tabulated and analysed in term of objectives of the study and interferential statistics. A pre- experimental evaluative study was conducted using one group pre-test and post-test research design. The mean Post-test knowledge score (14.8) was higher than mean pre-test knowledge score (11.62). The post test knowledge score of high school students regarding water sanitation and hygiene was significantly higher at 0.05 level of significance of paired 't' test. Calculated value (t=12.57) was higher than paired 't' test table value (2.0) at 0.05 level of significance.

Keywords: Sanitation, Hygiene, Water, Knowledge

INTRODUCTION

For many communities, water sources are usually far from their homes and typically falls to women and girls to spend much of their time and energy fetching water, Safe drinking. In India, although half of all urban households have access to piped drinking water, more than 20% of urban households still obtain their water from a source located 100 m away from their households. Recent studies have shown an increased level of faecal contamination of source water and household stored drinking water leading to waterborne diseases. Poor sanitation is linked to gastrointestinal diseases that can lead to stunting, malnourishment, and impaired cognitive development in children. Water, sanitation and hygiene are crucial to human health and well-being **[1]**.

The quality of stored drinking water can be harmed in a variety of ways, depending on the source (e.g., proximity to latrines, access to animals, open defecation practises, and runoff), the distribution of the water supply system (e.g., treatment processes, distribution, and handling), and the water quality at the consumer's point of use (e.g., open versus wide-mouth storage containers, disinfection via boiling, chlorination, or solar radiation) **[2]**. Recontamination of drinking water during storage in the home, particularly due to inadequate sanitation and hygiene practises, has been associated to a higher risk of drinking water deterioration when compared to transporting water from the source to storage in the home. Contamination of drinking water is heavily influenced by how people use their hands and how they handle water.

Poor access to sanitation and hygiene services is fast-growing problems in urban populations, particularly in least developed countries. The problems are acute especially in small growing towns where availability of water and sanitation facilities is inadequate **[3]**. Use of toilets, the control of pollution and diseases related to faecal contamination of water sources, is a pressing issue. More than 2 billion people globally do not have access to even basic sanitation, and 673 million people are defecating in the open environment **[4]**.

Infectious disease propagation is aided by poor hygiene practises, insufficient water availability, and unsanitary circumstances. One of the most important reasons of infectious disease transmission is a lack of information, attitude, and practises about water sanitation and hygiene.

In some parts of the world, people are unaware of the importance of basic hygiene habits in preventing illness spread. Even when people are aware of appropriate hygiene practises, they frequently lack the soap, safe water, and washing facilities they require to make meaningful changes to protect themselves and their communities.

Today, around 2.2 billion people lack to safely managed drinking water services and 4.2 billion people lack safety managed sanitation services. Unsafe hygiene practices are widespread, compounding the effects on people's health **[5]**. The impact on child mortality rates devastating with more children under five who die annually from diarrhoeal disease due to poor sanitation, poor hygiene, or unsafe drinking water **[6-10]**.

METHODS AND MATERIAL

The Study was conducted on a sample 50 selected Secondary school student at Goraj, Vadodara. Convenient sampling. The instrument used for data collection was structured knowledge questionnaire. The data obtained was tabulated and analysed in term of objectives of the study and interferential statistics. A pre- experimental evaluative study was conducted using one group pre-test and post-test research design.

RESULTS

The data presented in **Table 1** indicates that,3(6.0%) of the students is from the age group 10-12 year, 47(94.0%) of students is from the age group of 14-18. Maximum of students of 9^{th}-10^{th}std were Male 29(58.0%) and minimum number of female 21(42.0%). Maximum of students were Hindus 37(74.0%) and minimum number of students were Muslim 13(26.0%). Maximum number of fathers education were 22(44.0%) from higher secondary education and minimum number of fathers education were 06(12.0%) no formal education. Maximum number of mothers education were 28(56.0%) from primary education and minimum number of mothers education were 06(12.0%) graduation and above. Maximum number of mothers occupation were home maker 36(72.0%) and number of mothers occupation were farming 11(22.0%), number of mother occupation were government job 2(4.0%), minimum number of mother occupation were business 1(2.0%). Maximum number of fathers occupation were farming 33(66.0%), number of fathers occupation were business 12(24.0%), number of fathers occupation were government job 3(6.0%), minimum number of fathers occupation were home maker 2(4.0%). Maximum number of source of information were friends 23(46.0%), number of source of information were mass media 12(24.0%), number of source of information were family 8(16.0%) and minimum source of information were neighbours 7(14.0%).

The mean Post-test knowledge score (14.8) was higher than mean pre-test knowledge score (11.62). The post-test knowledge score of high school students regarding water sanitation and hygiene was significantly higher at 0.05 level of significance of paired't' test. Calculated value (t=12.57) was higher than paired't'

test table value (2.0) at 0.05 level of significance.

Research hypothesis H_1 was formulated in order to find out the significance difference between pre-test and post-test knowledge scores. The post-test knowledge score of secondary school students regarding water sanitation and hygiene was significantly higher than the pre-test knowledge score at 0.05 level of significance.

The mean post-test knowledge score (11.16) was higher than mean pre-test knowledge score (14.6). The post-test knowledge score of high school students regarding water sanitation and hygiene was significantly higher at 0.05 level of significance of paired 't' test. Calculated value (12.57) was higher than paired't' test table value (2.0) at 0.05 level of significance **(Figure 1)**.

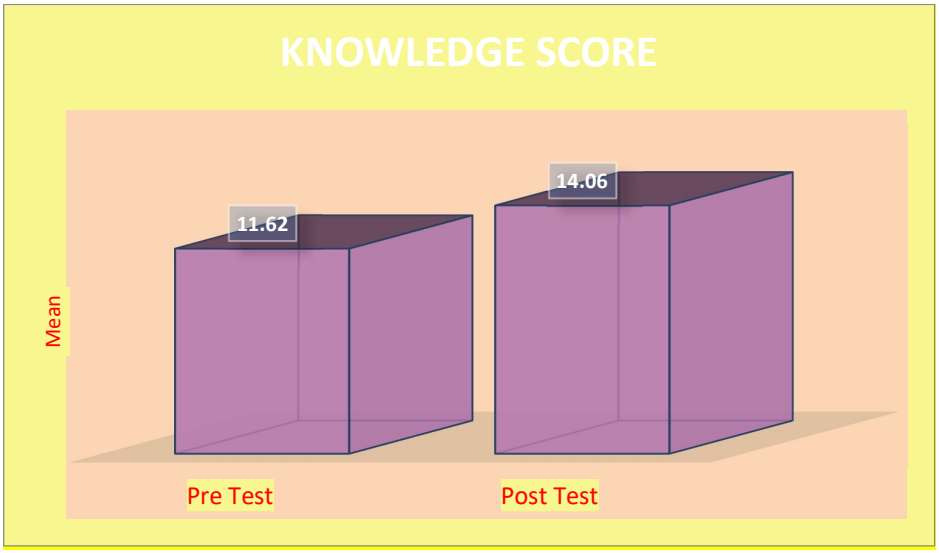

Figure 1: Findings related to the pre-test knowledge score and post-test knowledge score of school students

Table 1: Mean, Standard deviation, t calculated value(t=12.57) score, DF value(DF=49.00),Table value(2.0) of school students

Knowledge	Mean	Standard Deviation	t	DF	Table Value	Sig/Non sig.
Pre Test	11.62	2.89	12.57	49.00	2.00	Sig
Post Test	14.06	2.24				

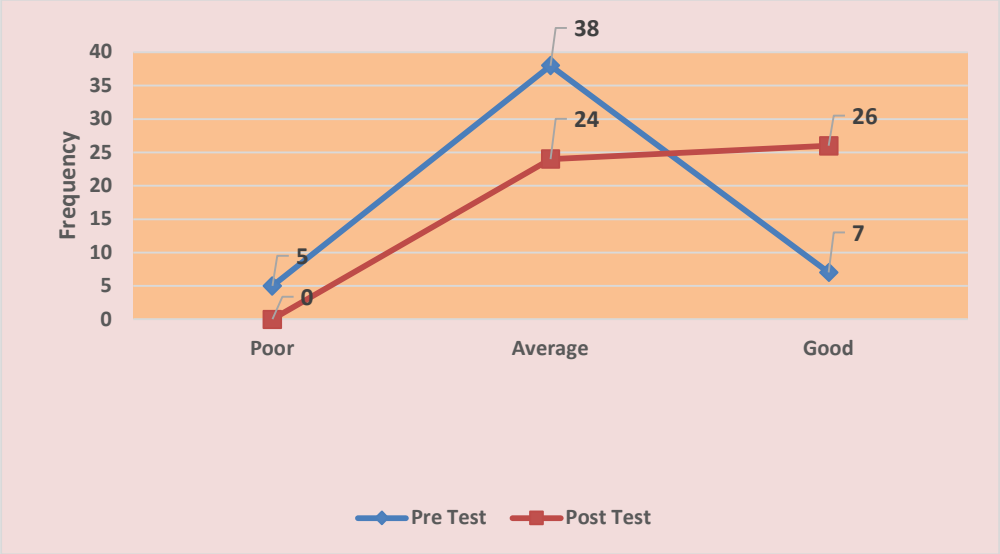

Figure 2: Line graph showing Frequency of pre-test and post-test knowledge level of water sanitation and hygiene among secondary school students

CONCLUSION

Based on the findings of the study, The following conclusion have drawn. There was evident increase in the knowledge score in all the areas included in the study after administration of intervention.

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