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## Assess the knowledge regarding water purification among school children in Saraswathi Nagar, Nellore

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### Abstract

The study aims to assess the level of knowledge regarding water purification among school children. Water purification is the process of removing undesirable chemicals, materials and biological contaminants from water. The goal is to produce water fit for a specific purpose. Most water is purified for human consumption but water purification may also be designed for a variety of other purposes including meeting the requirement of chemical and institutional application. A descriptive research design was adopted for this study. 100 school children were selected by using nonprobability convenience sampling technique. The study was conducted in Sravanthi English Medium high school, located at Saraswathi Nagar is an urban, slum area which is located 6 kilometers away from Narayana College of Nursing, Nellore with the population of 5000. The structured questionnaire was used to know the level of knowledge regarding water purification among school children. The study findings reveal that majority of school children had 'A' grade knowledge regarding water purification.

**Keywords:** Knowledge, water purification, school children

### Introduction

Water purification is the process of removing undesirable chemicals, materials and biological contaminants from water. The goal is to produce water fit for a specific purpose. Most water is purified for human consumption but water purification may also be designed for a variety of other purposes including meeting the requirement of chemical and institutional application.

Water purification may remove particulate sand, suspended particles of organic material, parasite, giardia, crypto sporidium, bacteria, algae, virus, fungi, such as mineral, calcium, silica and magnesium etc. Some purification may be elective in the purification process including smell, tastes and appearance.

Hence the researchers felt need to study and assess the effectiveness of one purified water in among school children in Saraswathi Nagar, Nellore.

### Problem statement

**A study to assess the knowledge regarding water purification among school children in Saraswathi Nagar, Nellore**

### Objectives

- To assess the level of knowledge regarding water purification among school children.
- To find out the association between regarding water purification with their selected socio demographic variables.

### Material and Methods

A descriptive research design was adopted for this study. 100 school children were selected by using nonprobability convenience sampling technique. The study was conducted in Sravanthi English Medium high school, located at Saraswathi Nagar is an urban, slum area which is located 6 kilometers away from Narayana College of Nursing, Nellore with the population of 5000. The structured questionnaire was used to know the level of knowledge regarding water purification among school children.

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**Inclusion Criteria**

**Inclusion criteria**

- Children who are available at the time of data collection
- The children who is willing to participate in the study

**Exclusion criteria**

- The children’s who are not willing participate
- Children who not present at the time of data collection

**Method of Data Collection**

The tool is divided into two parts as follows:

S. No	Data Analysis	Method	Purpose
1.	Descriptive statistics	Frequency and percentage distribution Mean and standard deviation	To describe the socio demographic variables To assess the knowledge regarding water purification among school children
2.	Inferential statistics	Chi square test	To find the association between knowledge regarding water purification among school children and their selected socio demographic variables

**Results and Discussion**

The data was organized, tabulated, analyzed and interpreted by using descriptive and inferential statistics based on the Objectives of the study. The findings were presented in the following sections. The analysis of the data was mainly classified as

**Section-I:** Frequency and percentage distribution of sociodemographic variables of school children.

- Related to age, 38(38%) belongs to 8-10 years, 62(62%) belongs to 11-12 years
- With context to sex, 45(45%) belongs to male and 55(55%) belongs to female.
- With context to religion, 50(50%) belongs to Hindu, 35(35%) belongs to Christian, 15(15%) belongs to Muslims and 0(0%) belongs to others
- With relation to medium of education, 78(78%) belongs to English and 22(22%) belongs to Telugu
- With relation to education, 13(13%) belongs to Primary, 87(87%) belongs to Secondary and 0(0%) belongs to High school.
- Related to type of family, 28(28%) belongs to Joint Family, 62%(62%) belongs to Nuclear Family and 10(10%) belongs to extended family
- Regarding to socio economic status. 24(24%) belongs to 5,000, 55(55%) belongs to <5,000-10,000 and 21(21%) belongs to >10,000.
- With context to area of residence, 50(50%) belongs to urban area and 4(4%) belongs to Hill areas

**Seciton-II: Knowledge regarding water purification among school children**

The study results revealed that level of knowledge regarding water purification among 100 school children 7(7%) are A+, 31(31%) are A 13(13%) are B+, 10(10%) are B, 15(15%) are C, 24(24%) are D grade.

**Section-III: Mean and standard deviation of level of Knowledge among school children.**

The mean level of knowledge is 20.94 with standard deviation of 1.99.

**Part-I:** Deals with demographic data

**Part-II:** Deals with questionnaire on knowledge of water purification

**Plan for data analysis**

The data was obtained and analyzed by based on the objectives of the study using descriptive and inferential statistics.

**Section–IV: Association between Level of knowledge and Socio Demographic Variables of school children**

Hence there is significant association between age, medium of education, type of family socio economic status and level of knowledge among school children.

**Conclusion**

The study findings reveal that majority of school children had ‘A; grade knowledge regarding water purification.

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