

## Original Research Article

# A study to assess the Knowledge regarding Household Water Sanitation Measures among Home Makers at selected rural area, Ramnagar, Kanpur.

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## Abstract

In India, water pollution is becoming a serious problem. Developing countries carry a heavy burden of water related diseases, the heaviest being the diarrhoea diseases. Improved water supply reduces diarrhoea morbidity by between 6% -25%. in drinking-water quality through household water treatment, such as chlorination at point of use, can lead to a reduction of diarrhoea episodes by between 35% and 39%. Improved water quality reduces childhood diarrhoea by 15-20% but better hygiene through hand washing and safe food handling reduces it by 35%. The present study is conducted to assess the knowledge regarding household water sanitation measures among home makers at selected rural area, Ramnagar, Kanpur. A descriptive survey approach with descriptive research design was adopted and convenient sampling technique was used to select the required numbers of homemakers. The sample size was 40. Data was collected by using structured questionnaire schedule. Data was analyzed by descriptive and inferential statistics. The overall knowledge score of homemakers was 35.7% that is inadequate. There was no significant association found between socio-demographic variables and knowledge score.

**Keywords:** Home makers, Water Sanitation

## Introduction

The water which is required for human consumption should be palatable and free from any kind of impurities so that it is safe and suitable for daily activities. Man's health is affected by the ingestion of contaminated water either directly or through food and by the use of contaminated water for purpose of personal hygiene and recreation [1].

In India, water pollution is becoming a serious problem. Developing countries carry a heavy burden of water related diseases, the heaviest being the diarrhoeal diseases. Much of the ill-health which affects humanities, especially in the developing countries can be traced to lack of safe and wholesome water supply. Water is also integrated with other PHC components because it is an essential part of health education, food and nutrition and also MCH (maternal and child health) [2].

Around 1.8 million people die every year from diarrhoeal diseases (including cholera), 90% are children under 5, mostly in developing countries. 88% of diarrhoeal disease is attributed to unsafe water supply, inadequate sanitation and hygiene [3].

Improved water supply reduces diarrhea morbidity by between 6% -25%, if severe outcomes are included. Improved sanitation reduces diarrhoea morbidity by 32%. Hygiene interventions including hygiene education and promotion of hand washing can lead to a reduction of diarrheal cases by up to 45%. Improvements in drinking-water quality through household water treatment, such as chlorination at point of use, can lead to a reduction of diarrhoea episodes by between 35% and 39%. Improved water quality reduces childhood diarrhoea by 15-20% but better hygiene through hand washing and safe food handling reduces it by 35% and safe disposal of children's faeces leads to a reduction of nearly 40% [4].

## Objectives

1. To assess the knowledge regarding household water sanitation measures among homemakers at rural area, Ramnagar, Kanpur.
2. To find the association between knowledge score with their selected demographic variables.

## Hypothesis

H1: There is a significant association between the knowledge scores of household water sanitation measures with their selected demographic variables

## Methodology

**Research Design:** Simple descriptive research design was adopted for this study which is one of them on experimental design.

**Research Approach:** survey approach was adopted for this study.

**Setting of the Study:** The setting of the study is selected rural area Ramnagar, Kanpur.

**Population:** In this study, population refers to the home makers who were living in Ramnagar area.

**Target Population:** In this study, the target population was homemakers in Ramnagar.

## Sampling

**Sample:** The present study consists of homemakers residing in Ramnagar area that fulfills the inclusion criteria.

**Sample Size:** The present study comprises the sample size of 40 homemakers.

**Sampling Technique:** In this study convenient sampling technique was used.

## Variable

**Research Variable:** In this study research variables are knowledge regarding water sanitation measures among homemaker.

**Demographic Variable:** Age, religion, educational status, type of family, type of house, habits and income of home makers.

## Sampling Criteria

### Inclusion Criteria

1. Homemakers who are living in home.
2. Homemakers who are willing to participate in the study.
3. Homemakers who can read and write Hindi.

### Exclusion Criteria

1. Homemakers who are not residing in Ramnagar.
2. Homemaker who are not available during the time of data collection.

## Description of Tool

The tool has two parts –

**Part A:** Include selected demographic variables related to household water sanitation measures under study such as Age, Religion, Educational status, Type of family, Type of house, Habits and Income of family member.

**Part B:** Includes close ended questions related to household water sanitation measures. The measures used in home for cleaning, purification, storage and disease related to impure water consumption related to water and water sanitation.

## Analysis and Interpretation

### Demographic variables of the homemakers

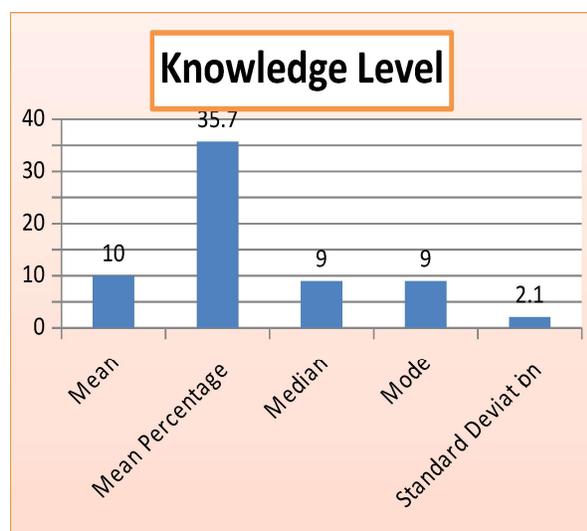
- Percentage wise distribution of homemakers according to their Age group reveals that highest percentage, 40% were between 20 – 30 years of age, followed by 22.50% with 31-40 years of age group, 20% with 41-50 years of age group, 17.50% with >51 years of age group.
- Percentage wise distribution of homemakers according to their religion reveals that highest percentage, 87.5% were Hindu followed by 7.5% were Muslim and only 5% were Christian
- Percentage wise distribution of homemakers according to their educational status reveals that majority, 50% were studied higher secondary, followed by 35% were with the graduation, 15% were primary education.
- Percentage wise distribution of homemakers according to their marital status reveals that highest 87.50% were married and only 12.50% were unmarried.
- Percentage wise distribution of homemakers according to their family type shows that highest 55% belongs to single family, followed by 37.50% with the joint family and only 7.50% were extended family.
- Percentage wise distribution of homemakers according to their type of houses shows that highest 77.50% were having Pucca house followed by 12.50% were with the semipucca house and 10% were having Kachcha house.
- Percentage wise distribution of homemakers according to their monthly income of family shows that highest 37.50% were having income between Rs.5001–10000 followed by 30% was having income between 10001 – 15000, 27.50% were having income <5000Rs. and only 5% were having income above 15000 Rs.
- Percentage wise distribution of homemakers according to their source of water supply shows that highest 87.50% were using tap water and only 12.50% were using tank water.
- Percentage wise distribution of homemakers according to ever attended the programme related to water sanitation shows that highest 95% were not attended any programme related to water sanitation and only 5% attended the programme related to water sanitation.

- Percentage wise distribution of homemakers according to their source of information shows that highest 82.50% were receiving information from radio/TV followed by 12.50% newspaper & magazine, 5% with friends, family & relatives.

**Mean, Median, Mode & Standard deviation of knowledge score.**

The overall mean knowledge score of homemakers on water sanitation is 10 mean percentage is 35.71%, median value is 9, mode value is 9, with standard deviation 2.1.

The overall knowledge score of homemakers on water sanitation measures was found to be inadequate.



**Figure 1:** Mean, Median, Mode & Standard deviation of knowledge score.

**Frequency and Percentage distribution of samples according to knowledge level**

Percentage wise distribution of homemakers according to their knowledge level reveals that majority of homemakers 42.50% were having moderate level of knowledge followed by 40% were having high level of knowledge and 17.50% were having low level of knowledge. The overall mean knowledge percentage was 35.7%. Hence it can be interpreted that knowledge level of homemakers was inadequate.

**Table 1:** Frequency and Percentage distribution of samples according to knowledge level

N=40				
Sl. No	Knowledge Score	Interval	Frequency	Percentage
1	High	19-28	16	40

2	Moderate	10-8	17	42.5
3	Low	1-9	7	17.5

**Association between knowledge score of homemakers with their selected demographic variables**

The obtained chi-square value shows there is no significant association between knowledge level of house hold water sanitation measures among home makers with selected demographic variables such as age, religion, educational status, marital status, types of family, types of house, monthly income of family, source of water, ever attained programme related to water sanitation and source of information at 0.05 level. Hence it is interpreted that hypothesis H<sub>1</sub> is rejected.

**Conclusion**

The overall mean percentage of knowledge of home makers was 35.7% which was inadequate. No significant association was found between knowledge score with selected demographic variables. The study found that there is a need of enhancing knowledge level of home makers through teaching intervention.

**Bibliography**

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