

# A Study to Assess the Knowledge Regarding Selected Water Borne Diseases among the People Residing in Selected Areas of Bangalore

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**Abstract:** A study was undertaken to assess the knowledge regarding selected water borne diseases among the people residing in selected areas of Bangalore. The objectives of the study were to assess the knowledge regarding selected water borne diseases among the people and to associate the findings with selected demographic variables. Quantitative approach was chosen for the research study. The research design used for the study was exploratory survey design. The study consists of 200 samples which were selected by non - probability convenient sampling. The study was conducted in Bagalur, Kadusonappanahalli, and Kannur area. The data was collected by administering structured questionnaire to 200 participants under study. The questionnaire consists of two parts. Section - A which deals with demographic data of participant and Section - B which consist of questions related to knowledge regarding selected water borne diseases. The validity of the tool was done by 5 experts from various fields of Nursing i. e, Community health nursing, Obstetrics and Gynecology Nursing, Medical and Surgical Nursing. The reliability of questionnaire was established by the method of test-retest method and was found to be 0.89. In this study it is found that most people were having average knowledge but still there are people whose knowledge level are poor. It shows that water borne diseases are still limited and it requires greater attention commitment from health professional. There is significant association between the selected demographic variables and the knowledge of the selected water borne diseases.

**Keywords:** Knowledge, water borne diseases, people

## 1. Introduction

Water is the most indispensable nature resource in the world for every living being. The entire life - support systems are dependent upon this vital resource. It is most important to all as it is directly consumed by all living entities. From that point of view, water is particularly related with health. Ninety percent of cases are reportedly attributed to the supply of unsafe drinking water coupled with improper sanitation and poor hygiene.

Adequate supply of fresh and clean drinking water is a basic need for all human beings on the earth, yet it has been observed that millions of people worldwide are deprived of this. Industrial growth, urbanization and the increasing use of synthetic organic substances have serious and adverse impacts on freshwater bodies. Many areas of groundwater and surface water are now contaminated with heavy metals, POPs (persistent organic pollutants), and nutrients that have an adverse effect on health. The burden of waterborne diseases is paramount in the globe. About 4% of the global burden of diseases is attributable to water, sanitation and hygiene. Nearly 2.2 million people die every year due to diarrhoeal diseases globally. Of these, 1.8 million deaths occur alone in low - income countries. Further, in low and middle - income countries one of the tenth leading causes of death is attributable to diarrhoea - related diseases. Globally, diarrhoea alone kills more children compared to malaria and tuberculosis together. The awareness of peoples about waterborne disease and preventive services is a barometer by which we can measure the progress of family, community and country. Lack of awareness can lead to health hazards in country.

## 2. Methodology

A non experimental research design was adopted to conduct the study. A total of 200 samples was selected by using non probability convenient sampling technique. Study instrument was self - structured questionnaire used by the researcher, section 1 consist of demographic variables and section 2 consist of structured knowledge questionnaire. The tool was content validated by expert and translated in to Kannada. The value is 0.89 which is highly reliable The samples were selected by using non probability convenience sampling method. The collected data were analyzed by using descriptive and inferential statistics.

## 3. Results

**Table 1:** Demographic description of sample by frequency and percentage of demographic data N=200

Sr. no	Characteristics	Frequency	Percentage
1.	<b>Age</b>		
	a) 14 to 18 years	73	19.5%
	b) 19 to 30 years	66	36.5%
	c) 31 to 45 years	39	33%
	d) 46 to 60 years	22	11%
2.	<b>Religion</b>		
	a) Hindu	173	86.5%
	b) Muslim	09	4.5%
	c) Christian	03	1.5%
	d) Any other	15	7.5%
3.	<b>Education</b>		
	a) Primary education	27	13.5%
	b) Secondary education	109	54.5%
	c) Graduate	51	25.5%
	d) Post graduate	11	5.5%
	e) Illiterate	02	01%

4	<b>Occupation</b>		
	a) Housemaker	38	19%
	b) Job	75	37.5%
	c) Business	27	13.5%
	d) Worker	33	16.5%
5	<b>Family income</b>		
	a) Below Rs 10000	38	19%
	b) Rs 10001 to 20000	75	37.5%
	c) Rs 20001 to 40000	54	27%
	d) Above Rs 40001	33	16.5%
6.	<b>Family type</b>		
	a) Joint family	81	40.5%
	b) Nuclear family	103	51.5%
	c) Extended family	10	05%
	d) Any other	06	03%

The data given in table - 1 shows that Maximum sample (36.5%) were in the age group of 19 to 30 years. Maximum of samples (86.5%) were Hindu. Maximum sample (54.5%) studied till Secondary education. Almost (37.5%) are having job as an Occupation. Maximum samples (37.5%) are having family income between Rs 10001 - 20000. Maximum samples (51.5%) belongs to nuclear family Maximum (49.5%).

**Table 2:** Showing knowledge score of knowledge regarding selected water borne diseases among the people of selected area of Pune, N=200

Sr. No	Level of knowledge	frequency	Percentage
1	00 - 09 (poor knowledge)	20	10%
2	10 - 20 (average knowledge)	99	49.5%
3	21 - 25 (good knowledge)	71	35.5%
4	26 - 30 (Excellent knowledge)	10	5%

The above table shows that out of samples, 49.5% of the people are showing the average knowledge about selected water born disease, 10% are showing poor knowledge about selected water borne disease.

**Table 3:** Mean and standard deviation of the knowledge of postnatal mothers regarding self - care after childbirth, N=100

Sr. No	Categories	Mean N=200	Standard deviation N=200
1	Mean knowledge score	18.135	0.97858

The data represents in table - 3 shows that the mean and standard deviation is 18.135 and 0.2390 respectively.

**Table 4:** Association of knowledge score with demographic data

Demographic data	df	Table value	Calculated value	P - value
Age	9	23.36	16.92	0.01
Religion	9	13.06	14.68	0.1
Education	12	15.24	18.55	0.90
Occupation	12	7.368	18.55	0.95
Family income	9	10.62	14.68	0.1
Family type	9	8.890	14.68	0.90

The above table shows that there is an association of Age with knowledge as the calculated chi square value is (23.26) greater than table value (16.92), And as the p value is less than 0.05.

#### 4. Conclusion

The purpose of the present study was to assess the knowledge regarding selected water borne diseases among the selected area of Bangalore. The 200 sample were selected from selected area of Bangalore, which include Bagalur, Kadusonappanahalli and Kannur Descriptive research design was used for the study. The content validity and reliability of the tool was done, which suggested that the tool was reliable. The pilot study was conducted on 20 samples and the feasibility of the study was established. It was found that the tool had no major flaws and was used for the final study with the changes as per the experts and Guide.

Based on the objectives, the collected data was analyzed by using descriptive statistics. In this majority of the samples that is 49.50% of samples having average knowledge regarding selected water borne diseases 35.50% having good knowledge and 4% sample shows excellent knowledge and 10% sample having poor knowledge category.

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