

# ORIGINAL RESEARCH PAPER

# A STUDY TO ASSESS THE KNOWLEDGE REGARDING FOOD AND WATER BORNE DISEASES AND THEIR PREVENTION AMONG STUDENTS OF A SELECTED SCHOOL AT PILKHUWA, DIST. HAPUR (U.P.)

## Nursing

KEY WORDS: Assess,

Knowledge, Descriptive, Prevention, Food and Water borne diseases

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Prevention of food and water borne disease involves healthy life style. It may reduce developing health problems in children. It becomes the Nurse's responsibility to stress out the importance of prevention of food and water borne diseases and urgency of receiving medical advice.

#### AIM

The main aim of the study was to assess the knowledge regarding food and water borne diseases & their prevention among students of a selected school at Pilkhuwa, Dist. Hapur, Uttar Pradesh.

## MATERIALS AND METHOD

A descriptive design with stratified random sampling method was adopted. The study was conducted in St. Xavier school of village Khera, Pilkhuwa on a sample size of 60 students in the age group of 10-15 years. The tools used to collect the data were demographic proforma and Self Structured Knowledge Questionnaire.

Collected data was analyzed by using descriptive and inferential statistics. The study revealed that 76.67 % of the students had moderate knowledge and 23.33 % of the students had adequate knowledge regarding food and water borne disease & their prevention.

## INTRODUCTION

Children constitute a large section of the population of India and school children are an important group because they often form a higher proportion. It is a great challenge to the nation to provide health, education and food to the children below 15 years who are dependent and comes under unproductive section comprising of 38% of the total population of the country (Census, 1991).

Food and water borne diseases are the significant health risk in the developing countries as well as in the world, especially among poor rural communities and the most vulnerable age groups – the young and the old ones.

## **OBJECTIVES**

- 1. To assess the existing knowledge of school going children regarding Food and Water borne diseases and their prevention.
- To associate the knowledge score regarding Food and Water borne diseases and their prevention among students with selected demographic variables.

## **REVIEW OF LITERATURE**

Worldwide, 1.2 billion people do not have access to clean and safe drinking water and 2.4 billion lack sanitation. Every year, 5 million people die of waterborne diseases.

A study was conducted to assess the status of waterborne diseases in India for future strategies and better planning. Data from survey of causes of death, India was collected and analysed. The sample size was 2000-5000 of the selected Primary Health Centres (PHCs); and forms were used for data collection. Result was deaths from dysentery (amoebic & bacterial), cholera, diarrhoea (plus gastroenteritis), typhoid (plus paratyphoid) and polio were 218 (95 males, 123 Females), 52 (24 males, 28 females), 453(215 males, 238 females), 423 (200 males, 223 females) and 23 (16 males, 7 females) respectively during 1998 in India. Deaths due to diarrhoea of new born (<1 yr.) alone was 121 (57 males, 64 females). Research concluded that Improvements in water and sanitation coverage including the implementation of low-cost, simple technology systems-can reduce the incidence of dysentery, cholera, diarrhoea, typhoid, polio, hepatitis A, ascariasis, guinea worm, schistosomiasis and other water-related diseases.

## **METHODOLOGY**

Research Approarch: Evaluative approach Research Design: Univariant Descriptive design

Settings of the study:St. Xavier's School, Village- Kheda, pilkhuwa

Population: Students

Sample: students studying in 6<sup>th</sup> – 8<sup>th</sup> standard

Sampling Technique: Stratified random sampling

### **Inclusion Criteria:**

Sample Size: 60

- The students studying in  $6^{th} 8^{th}$  class.
- Students studying in an English medium school.
- Who knows English very well.
- Students who were willing to participate in the study.
- Students who were available at the time of the study.

## TOOLS AND DATA COLLECTION

The tool was prepared and validated by the experts from Medical and Nursing field.

Tool I: consisted of demographic variables like age, gender, class, religion, occupation of mother and father, educational status of mother and father, type of family, total no. of family members, communication facilities at home, source of drinking water at home, source of drinking water at school, method of purification of water at home, history of diarrhea and typhoid among family members in last 6 months.

Tool II: self structured knowledge questionnaire consisted of total 40 items divided into 2 sections. Section I comprised of 20 questions of multiple choice and section II comprised of 20 true or false statements.

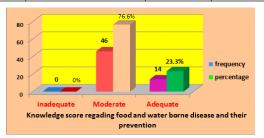
## **RESULTS**

Section I: The data showed that majority of the sample (33.33%) were in the age group of 10-11 years and (56.67%) of students were Male. Mostly (88.33%) were Hindus and (51.67%) students belonged to Joint family. (46.66%) of students had more than 5 family members and (36.67%) of student's fathers had secondary level educational, (36.67%) of students mother's educational status is secondary level, (56.67%) of student's fathers were self employed and (58.33%) of student's mothers were Unemployed. (36.67%) of students used water purifier at home and (33.23%) of students had television as communication facilities at home. (81.67%) of students didn't had previous history of diarrhea among family members and (61.67%) of students uses boiling method to purify water at their home and (45%) of students drank water directly from the tap in school.

**Section 2:** Finding related to knowledge score of the sample regarding food and water borne disease and their prevention.

Table1: frequency and percentage distribution according to knowledge score.

S.NO	Knowledge Score	Frequency	Percentage
1	Adequate (27-40)	14	23.33%
2	Moderate (14-26)	46	76.67%
3	Inadequate (0-13)	00	00.00%



**Fig 1:**Percentage and Frequency distribution of samples according to their knowledge score.

**Table 2:** CHI square, 'P' value, Degree of freedom, inference according to demographic variables.

S.NO	DEMOGRAPHIC	CHI-	TABLE	DF	INFERENCE
	VARIALES	<b>SQUARE</b>	VALUE		
1	Age	3.22	5.99	2	NS
2	Gender	19.33	3.84	1	S
3	Religion	0.26	3.84	1	NS
4	Type of family	0.87	3.84	1	NS
5	Communication facilities at home	18.6	14.07	7	S
6.	No. of family members	10.5	11.07	5	NS

## S- Significant

#### **NS-** Not- Significant

Calculating chi-square, there was a significant association of Gender and communication facilities at home with the knowledge score.

**Table 3:** Analysis of variance (Anova) and inference according to demographic variables.

S.NO	DEMOGRAPHIC VARIALES	F	Р	INFERENCE
1	Class	2.18	.13	NS
2	Educational status of father	5.45	.44	S
3	Educational status of mother	5.33	.08	S
4	Occupation of father	4.46	.07	NS
5	Occupation of mother	4.43	.73	NS
6	Source of drinking water at home	44.16	.20	S
7	Source of drinking water at school	3.29	.97	NS

# S- Significant

NS- Not- Significant

Calculating Anova, there was a significant association of Educational status of father and mother and source of drinking water at home with the knowledge score.

## DISCUSSION

The demographic variables showed that majority of the sample i.e. (33.33%) were in the age group of 10-11 years, (56.67%) of students were Male. (88.33%) were Hindus, (51.67%) of students belonged to Joint family. (46.66%) of students have more than 5 family members, (36.67%) of student's fathers had secondary level educational, (36.67%) of students mother's were educated up to secondary level, (56.67%) of student's fathers were self employed and (58.33%) of student's mothers were Unemployed. (36.67%) of students used water purifier at home and (33.23%) of students had television as communication facilities at home. (81.67%) of students didn't had previous history of diarrhea among family members, (61.67%) of students uses boiling method to purify water at their home and (45%) of students drinks water directly from the tap in school. 76.67% had

moderate knowledge level. Chi square and Anova was calculates to find out the association between demographic variables and there was a significant association between Gender, Educational status of father, Educational status of mother, communication facilities at home and Source of drinking water at home with the knowledge level of students.

#### **IMPLICATIONS**

NURSING PRACTICE: Nurses have an important role in preventing of food and water borne disease in school and community. Greater emphasis should be given on health education. Nursing envisage and provision of support system of the youth, community, patients and family members.

**NURSING EDUCATION:** Education faces tremendous challenges in keeping pace with the changes in nursing practice to maintain its high quality. Attention should be given to nursing education in the training period as it is the student life where a mother as well as patients. As the nursing curriculum imparts lot of stuff related food and water bore disease and its prevention at school. So to aware the school going children, the nursing curriculum should also include all these conditions for students' nurses.

NURSING RESEARCH: There is need of extensive and intensive nursing research in the area food and water borne disease and their prevention school going children. Emphasis should also be laid on the publication of finding of research based evidence for nurse practitioners. Future research can be conducted at different areas.

**NURSING ADMINISTRATION:** Nurses' administrator should develop nursing practices standards, policies and manuals for food and water borne disease and their prevention school gong children.

### RECOMMENDATIONS

- On the basis of findings, the following recommendations were offered for future research:
- The study can be replicated on a large sample in different setting, so that the findings can be generalized to large population.
- A same study can be conducted on mothers.
- A similar study can be conducted in community.
- Similar study can be replicated using different strategies viz. planned teaching program (PTP), Computer simulation, pamphlets, video films etc.
- A comparative descriptive study can be carried out the school at rural and urban settings.
- A follow up study can be conducted to assess the retention of knowledge regarding food and water borne disease and their prevention among students.

## CONCLUSION

After the detailed analysis the study lead to the following conclusion: only 23.33% had adequate knowledge and 76.67% had moderate knowledge regarding food and waterborne diseases and their prevention. There was a significant association between Gender, Educational status of father, Educational status of mother, Communication facilities at home and Source of drinking water at home with the knowledge level of students.

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