IJNRD.ORG ISSN : 2456-4184
INTERNATIONAL JOURNAL OF NOVEL RESEARCH AND DEVELOPMENT (IJNRD) | IJNRD.ORG
An International Open Access, Peer-reviewed, Refereed Journal

A STUDY TO ASSESS THE KNOWLEDGE REGARDING PREVENTION OF WATER BORNE DISEASE AMONG SCHOOL GOING CHILDREN IN SELECTED SCHOOLS OF PERINTHALMANNA WITH A VIEW TO DEVELOP AN INFORMATION BOOKLET.

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ABSTRACT

The present study was aimed to assess the impact of online classes during Covid 19 pandemic among 4th year BSc Nursing students.the objective of the study was to aassess the impact of online classes during Covid 19 pandemic among 4th year BSc Nursing students and to find out the association between the impact of online classes with their selected demographic variables. Quantitative approach was usedfor this study. A non-experimental descriptive design was used to collect data from 59 samples among 4th year BSc Nursing students at a selected nursing college in Perinthalmanna and samples were selected by using convenient sampling technique. The tool used for data collection was a socio demographic perform and a checklist. The findings showed that out of 59 samples 0% has severe negative impact, 30 % has moderate negative impact and 29 % has mild negative impact of online classes during Covid 19 pandemic and there was no association between impact of online classes with their selected demographic variables.

Keywords. Impact, Online classes, Covid 19 Pandemic ,Nursing students.

INTRODUCTION

Waterborne diseases remain as leading causes of human morbidity and mortality worldwide. Waterborne diseases are conditions caused by pathogenic microorganism that are transmitted by water. These diseases can be spread while bathing, washing, drinking water or by eating food exposed to contaminated water. They are a pressing issue in rural areas amongst developing countries all over the world. Many developing countries do not have proper water treatment plants, and in some places, the availability of

water is so scarce that people have neither the time nor the money to afford the water purifiers or other water treatment mechanisms. While diarrhea and vomiting are the most commonly reported symptoms of waterborne illness, other symptoms can include skin, ear, eye or respiratory problems. Lack of clean water supply, sanitation and hygiene are major causes for the spread of waterborne diseases in a community. Therefore, reliable access to clean drinking water and sanitation is the main method to prevent waterborne diseases. The fecal-oral route is a diseases transmission pathway for waterborne diseases. Poverty also increases the risk of communities to be affected by waterborne diseases. For example, the economic level of community impacts their ability to have access to clean water. Less developed countries might be more at risk for potential outbreaks of waterborne diseases but more developed regions also at risk to waterborne outbreaks.

In Kerala, during the 12 months periods around 72 episodes of WBDs are recorded with incidence rate of 49/1000 person years proportional morbidity due to WBDs was 11.9%. The WBD repeated were ADD, dysentery and hepatitis Malappuram tends to report most number of cases but percentage share was highest from Kozhikode.[3]

Children constitute a large segment of population in our country and every day, 6,000 children die of water-related diseases. Young children are more prone to get sick and die from waterborne and sanitation-related illnesses—including diarrheal diseases and malaria. The simple practice of proper hand washing and intake of safe water can aid to eliminate this problem. Though many programs are running in schools on safe water supply and sanitation, investigators felt still it is important for children in school going age to know about water borne diseases and steps of preventing them. Many similar studies are conducted that aid to generatea picture of what is known and not known about a particular situation.[4]

It is estimated that around 37.7 million Indians are affected by waterborne diseases annually; 1.5 million children are estimated to die of diarrhea alone and 73 million working days are lost due to waterborne disease each year. Water-borne diseases pose a high disease burden and significantly impact on country's economic growth. These diseases erupt every year during summer and rainy seasons as a result of improper management of water supply especially of drinking water and sanitation.

STATEMENT OF THE PROBLEM

"A study to assess the knowledge regarding prevention of waterborne diseases among school going children in selected schools of Perinthalmanna with a view to develop an information booklet".

OBJECTIVES

1. Assess the knowledge regarding prevention of waterborne diseases among school going children in selected schools of Perinthalmanna.

2. Find association between the knowledge regarding prevention of waterborne disease and selected demographic variables among school going children in selected schools of Perinthalmanna.

NEED FOR THE STUDY

Waterborne diseases remain as leading causes of human morbidity and mortality worldwide. Over 95% of these are preventable. Ensuring universal access to water and sanitation, the major preventive action for preventing these diseases, is one of the United Nation's Sustainable Development Goals for 2030. The Sustainable Development Goal, 2017 aimed to ensure availability and sustainable management of water and sanitation for all by 2030. However globally 780 million people live without access to safe water and approximately 2.5 billion people in the developing world lived without access to adequate sanitation. Polluted water and poor sanitation practices expose individuals to health risks. Emerging water-borne pathogens constitute a significant health hazard in both developed and developing nations as they can spread rapidly and affect large sections of the population. Water-borne diseases are transmitted through contaminated drinking water with pathogen microorganisms such as protozoa, virus, bacteria, and intestinal parasites. According to the projection of Global Burden Disease report, the burden of water borne disease was the second highest reason for mortality in 1990 however, it was lower down in ninth most important reason for mortality in 2020. Around 829,000 people are estimated to die each year from diarrheal diseases majorly cholera, dysentery and typhoid fever due to unsafe drinking water and unhygienic sanitation practice. Further, the WHO (2015) reported that about 6.3 per cent of deaths occur due to unsafe water, inadequate sanitation, and poor hygiene. Adequate, safe, and accessible water supplies as well as satisfactory sanitation are most required to have secure health status. According to WHO (2015), nearly 4 percent of the global disease burden could be prevented by improving water supply, sanitation, and hygiene

.CONCEPTUAL FRAMEWORK

Health promotion model by Nola. J. Pender.

Nola Pender's Health Promotion Model theory was originally published in 1982 and later improved in 1996 and 2002. The Health Promotion Model was designed to be a "complementary counterpart to models of health protection." It develops to incorporate behaviours for improving health and applies across the life span. The model focuses on the following three areas: individual characteristics and experiences, behaviour-specific cognitionsand affect, and behavioural outcomes.[16]

MATERIALS AND METHODS

Research approach: quantitative approach

Research design: non-experimental descriptive designSample size:

100 subjects

Sampling technique: Non- probability convenient sampling.

SETTING OF THE STUDY

The study was conducted in Tharakan's high school, Perinthalmanna.

POPULATION

The population for the present study is school going children.

Target population: School going children in selected schools of Perinthalmanna studying inthe classes 6,7 and 8.

Accessible population: School going children in selected schools of Perinthalmanna who areavailable at the time of study

DATA COLLECTION INSTRUMENTS

The data collected are presented under the following headings

- **Section A:** Description of demographic variables
- **Section B:** Description of knowledge scores of schools going children
- **Section C**: Association between demographic variables and knowledge score regarding prevention of waterborne diseases among school going children.

DATA COLLECTION PROCESS

After getting permission from Principal of Alshifa College of Nursing the data of main study was collected from 100 school going children selected based on inclusion criteria using convenient sampling technique on 28 November 2023 by using structured questionnaire and demographic data. Investigators introduced themselves and developed a rapport with study participants. Also explained the purpose of the study. After collecting the data, it was analysed and interpreted using descriptive and inferential statistics.

RESULTS

Section A: Description of demographic variables of selected samples The characteristics of the study population are:

- In the given samples, 41(41%) belongs to the age group of 10-11 years, 31 (31%) belongs to the age group of 12-13 years, 26 (26%) belongs to the age group of 13 -14 years and 2(2%) belongs to the age group

of 14 years and above.

- Among the school going children, 50(50%) are male and 50 (50%) are female gender.
- Among the school going children, 36(36%) belongs Hindu religion, 62 (62%) belongs to Muslim religion, and 2 (2%) belongs to Christian religion.
- Among the school going children, 23(23%) belongs to 6th standard, 32(32%) belongs to 7th standard and the remaining 45(45%) belongs to the 8th standard.
- Regarding the educational status of mothers of school going children, 9(9%) have primary education, 22(22%) have secondary education, 45(45%) have higher secondary education and 24(24%) have graduate, diploma and above educational status**.**
- Regarding the educational status of fathers of school going children, 15(15%) have primary education, 30(30%) have secondary education, 37(37%) have higher secondary education and 18(18%) have graduate, diploma and above educational status.
- Among the school going students, 8(8%) belong to single parent type, 67(67%) belong to nuclear family and the remaining 25(25%) belong to joint family.
- Regarding the area of residence of the school going children, 51(51%) belongs to rural area, 31(31%) belongs to semi urban area and the remaining 18(18%) belongs to urbanarea.
- Among the school going children, 74(74%) depend on wells, 21(21%) depend on borewell and the remaining 5(5%) depend public water supply as a source of water supply.
- Among school going children, 74(74%) of the children have previous knowledge regarding prevention of waterborne diseases and the remaining 26(26%) have no previous knowledge regarding waterborne diseases.
- Among 74(74%) school going children who have previous knowledge regarding prevention of waterborne diseases, 16(21**.**62%) had school curriculum, 12(16.21%) had magazines, 40(54.05%) and 6(8.10) had others as source of previous knowledgeregarding prevention of waterborne diseases.

Section B: Description of knowledge scores of schools going children

In the given samples of 100 school going students, 0(0%) has poor knowledge,22(22%) has average knowledge, 70(70%) has good knowledge and 8(8%) has very good knowledge regarding prevention of waterborne diseases**Distribution of school going children according to level of knowledge regarding prevention of waterborne diseases**

SI. No	Level of knowledge	Frequency (f)	Percentage %
1	Poor knowledge	0	0
2	Average knowledge	22	22%
3	Good knowledge	70	70%
4	Very good knowledge	8	8%

Association between impact of online classes with their selected demographic variables

SL.NO	Demographic variable	Chi square	t value	df	inference
1.	Age	14.996	12.59	6	Significance
2.	Gender	2.696	5.99	2	No significance
3	Religion	9.92	9.49	4	significance
4	Class of study	8.873	9.49	4	
5	Education level of mother	7.78	12.59	6	No significance
6	Education level of father	8.64	12.59	6	No significance
7	Type of family	7.887	9.49	4	No significance
8	Area of residence	4.892	9.49	4	No significance
9	Source of water	1.245	9.49	4	No significance
10	Previous knowledge of school going children	1.120	5.99	2	No significance
11	Source of previous knowledge	2.696	12.59	6	

The findings shows that there is significant association between the knowledge scores and the demographic variables age and religion.

DISCUSSION

A quantitative study was conducted to assess the knowledge regarding prevention of water borne diseases (Cholera, Diarrhea, Typhoid fever) among school going children in selected community area at Meerut. The finding of the present study revealed that the prevention of water borne disease was 55% among school goingchildren. These finding were to some extent similar with study of the students gain the knowledge regarding water borne disease. The mean knowledge scores 11.49 of school going children on preventive measures of water borne diseases and the standard deviation is 4.11. They knowing about the water borne disease also all demographic is significant but accept age are not significant

The present study was aimed to assess the knowledge regarding prevention of waterborne diseases among school going children in selected schools of Perinthalmanna.The study was conducted among school going children in selected schools of Perinthalmanna. 100 samples were taken for the study by using convenient sampling technique. The data was collected from the school going children using self-report structured questionnaire

The data gathered were summarised in master sheets and descriptive and inferential statics were used to analysis the data. Chi square method is used to analysis their association between the knowledge scores and the selected demographic variables such as age, gender, religion, class of study, educational status of mother, educational status of father, type of family, area of residence, source of water, previous knowledge, and source of previous knowledge.

The findings shows that there is significant association between the knowledge scores and the demographic variables age and religion.

CONCLUSION

The study revealed that there is significant association between the knowledge scores and the demographic variables like age and religion and there association no association between the knowledge scores and the selected demographic variables like gender, class of study, educational status of mother, educational status of father, type of family, area of residence, source of water, previous knowledge source of previous knowledge.

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