

## A STUDY TO ASSESS THE KNOWLEDGE AND PRACTICE REGARDING PREVENTION OF FOOD AND WATERBORNE DISEASES AMONG THE SCHOOL GOING CHILDREN IN A SELECTED RURAL COMMUNITY, MURSHIDABAD

Author's Name: Mr. Jobymon Mathai<sup>1</sup>, Ms. Madhurima Mondal<sup>2</sup>, Dibya Jaiswal3, Disha Bhattacharjee4, Nilanjana Maity<sup>5</sup>, Soumita Pal<sup>6</sup>, Abantika Biswas<sup>7</sup>, Deblina Singha Roy<sup>8</sup>, Shaonli Maiti<sup>9</sup>, Irani Goswami<sup>10</sup>, Srilekha Dhal<sup>11</sup>, Susmita Kuiry<sup>12</sup>, Parmita Roy<sup>13</sup>, Swagata Mondal<sup>14</sup>, Gargi Mondal<sup>15</sup>, Banani Barman<sup>16</sup>, Debosmita Bhowmick<sup>17</sup>

# Affiliation:

- 1. Assistant Professor, GitaRam College of Nursing, GitaRam College of Nursing, Murshidabad, West Bengal, India
- 2. Assistant Professor of GitaRam College of Nursing, West Bengal, India
- 3. B.Sc. Nursing 3rd Year students, GitaRam College of Nursing, Murshidabad, West Bengal, India

## Corresponding Author Name & E-Mail: Mr. Jobymon Mathai

## ABSTRACT

This study was conducted to assess the knowledge and practice regarding prevention of food and waterborne diseases among the school going children in a selected rural community, Murshidabad. Descriptive research design was adopted for the study. The setting of the study was primary schools of Uttarpara and Bazarpara, Murshidabad. In this study, 60 school going children were selected as a sample for the study by non-probability purposive sampling technique. The tools used for data collection were a structured interview schedule for demographic data, a structured questionnaire to assess the knowledge regarding prevention of food and waterborne diseases and practice checklist to assess the practice regarding prevention of food and waterborne diseases.

Statistical analysis was done by using frequency distribution table and chi-square test. The findings of the study revealed that majority of the children's age group is 9 -10 years that is 56.66%, gender is female that is 65%, educational status of parents is primary that is 70%, occupation of parents is business and others that is 85%, monthly income is <10,000 that is 55%. 78.34% of the children of our sample have moderate knowledge regarding prevention of foodborne diseases and 75% of the children have moderate knowledge regarding prevention of waterborne diseases. 51.66% of the children practice adequately regarding prevention of foodborne diseases and 53.34% of the children practice adequately regarding prevention of waterborne diseases. There is significant association between the knowledge regarding prevention of foodborne diseases and their selected demographic variable that is educational status of parents and no significant association between the knowledge and practice regarding prevention of food and waterborne diseases with their selected demographic variables that is age, gender, occupation of parents and monthly income. Keywords: KNOWLEDGE, PRACTICE, WATERBORNE DISEASES



## **INTRODUCTION**

According to WHO, every year worldwide unsafe food and water causes 600 million cases of food and waterborne diseases and 42,000 deaths. 30% of deaths occur among children. In India, commonly about 37.7 million people are affected by waterborne diseases. 1.5 million Children die of diarrhoea every year in India. In West Bengal, the incidence of food and waterborne diseases is also high with an attack rate of 714/1000 people and case fatality of 14.33%.

## **Objectives:**

- 1. To assess the knowledge regarding prevention of food and waterborne diseases among school children.
- 2. To assess the practice regarding prevention of food and waterborne diseases among school children.
- 3. To find out the association between the knowledge and practice with their selected demographic variables.

## Assumptions

The study assumes that:

- > School going children may have some knowledge regarding prevention of food and waterborne diseases.
- > Students may follow some practices as the preventive measures of food and waterborne diseases.

#### **Delimitations**

- $\blacktriangleright$  The study is delimited to the specific setting.
- $\blacktriangleright$  The study is delimited to children whose age is between 5 to 10 years.
- > The study is delimited to children who know Bengali language.

#### **Research Methodology:**

Research Approach: Research approach adopted for this study is quantitative research approach.

**Research Design**: The research design selected for this study is descriptive research design.

Setting: The study will be conducted in Uttarpara and Bazarpara, Murshidabad, West Bengal.

**Population of the Study**: The population of the study is all primary school going children.

Sample: In this study, the sample is all primary school going children of Uttarpara and Bazarpara, Murshidabad, West Bengal.

Sample Size: In this study, 60 school going children are selected as sample.

Sampling Technique: In this study, convenience sampling technique is used.

#### Variables

Demographic Variables -Age, sex, educational status of parents, occupation of parents and economic status.



Research Variables – Knowledge and practice regarding prevention of food and waterborne diseases.

## DEVELOPMENT OF RESEARCH TOOLS

- I. Demographic questionnaire for assessment of demographic variables.
- II. Structured questionnaire for assessment of knowledge.
- III. Checklist for assessment of practice.

## **Data Analysis and Interpretation**

SECTION A: Frequency and percentage distribution of subjects according to their selected demographic variables.

**SECTION B:** Findings related to knowledge regarding prevention of food and waterborne diseases.

**SECTION C:** Findings related to practice regarding prevention of food and waterborne diseases.

SECTION D: Findings related to association between the knowledge and practice regarding food and waterborne diseases with their selected demographic variables.

SECTION A: Frequency and percentage distribution of subjects according to their selected demographic variables.



Fig: Graphical representation of frequency and percentage distribution of demographic variables.

# **SECTION B: Findings related to knowledge regarding prevention of food and waterborne** diseases



Fig: Graphical representation of frequency and percentage of knowledge regarding prevention of foodborne diseases





Fig: Graphical representation of frequency and percentage of knowledge regarding prevention of waterborne diseases.

SECTION C: Findings related to practice regarding prevention of food and waterborne diseases.



Fig: Graphical representation of frequency and percentage of practice regarding prevention of foodborne diseases.



Fig: Graphical representation of frequency and percentage of practice regarding prevention of waterborne diseases.



## SECTION D: Findings related to association between the knowledge and practice regarding food and waterborne diseases with their selected demographic variables.

a. Association between the knowledge regarding prevention of foodborne diseases with their selected demographic variables.

|        |             |               |                          |    |   |         | n=60         |
|--------|-------------|---------------|--------------------------|----|---|---------|--------------|
| Sl no. | Demographic | Categories    | Determining<br>Variables |    |   | P Value | Expected Chi |
|        | Variables   |               |                          |    |   |         | Square       |
|        |             |               | Α                        | Μ  | Р |         |              |
| 1      | Age         | 5-6           | 1                        | 3  | 1 | 3.84    | 0.61         |
|        |             | 7-8           | 3                        | 17 | 1 |         |              |
|        |             | 9-10          | 3                        | 27 | 4 |         |              |
| 2      | Gender      | Male          | 2                        | 17 | 2 | 3.84    | 0.14         |
|        |             | Female        | 5                        | 30 | 4 |         |              |
| 3      | Educational | Primary       | 3                        | 35 | 4 | 3.84    | 9.27*        |
|        | Status      | Secondary     | 2                        | 11 | 2 |         |              |
|        |             | Higher        | 2                        | 1  | - |         |              |
|        |             | secondary and |                          |    |   |         |              |
|        |             | above         |                          |    |   |         |              |
| 4      | Occupation  | Private       | 1                        | 3  | 1 | 3.84    | 1.14         |
|        |             | Govt.         | 1                        | 2  | 1 |         |              |
|        |             | Non Govt.     | 5                        | 42 | 4 |         |              |
| 5      | Monthly     | <10,000       | 4                        | 24 | 5 | 3.45    | 1.44         |
|        | Income      | 10,000-20,000 | 2                        | 21 | 1 |         |              |
|        |             | >20,000       | 1                        | 2  | - |         |              |

b. Association between the knowledge regarding prevention of waterborne diseases with their selected demographic variables.

|        |                          |               |                          |    |   |         | n=60                   |
|--------|--------------------------|---------------|--------------------------|----|---|---------|------------------------|
| Sl no. | Demographic<br>Variables | Categories    | Determining<br>Variables |    |   | P Value | Expected Chi<br>Square |
|        |                          |               | Α                        | Μ  | Р |         | •                      |
| 1      | Age                      | 5-6           | -                        | 4  | 1 | 3.84    | 0.84                   |
|        |                          | 7-8           | 3                        | 17 | 1 |         |                        |
|        |                          | 9-10          | 7                        | 24 | 3 |         |                        |
| 2      | Gender                   | Male          | 5                        | 15 | 1 | 3.84    | 1.16                   |
|        |                          | Female        | 5                        | 30 | 4 |         |                        |
| 3      | Educational              | Primary       | 7                        | 30 | 5 | 3.84    | 0.93                   |
|        | status                   | Secondary     | 3                        | 12 | - |         |                        |
|        |                          | Higher        | 0                        | 3  | - |         |                        |
|        |                          | Secondary and |                          |    |   |         |                        |
|        |                          | above         |                          |    |   |         |                        |
| 4      | Occupation               | Private       | 0                        | 5  | - | 3.84    | 2.11                   |
|        |                          | Govt.         | 0                        | 4  | - |         |                        |
|        |                          | Non Govt.     | 10                       | 36 | 5 |         |                        |
| 5      | Monthly                  | <10,000       | 3                        | 26 | 4 | 3.84    | 0.62                   |
|        | Income                   | 10,000-20000  | 6                        | 17 | 1 |         |                        |
|        |                          | >20,000       | 1                        | 2  | - |         |                        |



c. Association between the practice regarding prevention of foodborne diseases with their selected demographic variables.

|        |             | n=60          |                          |    |   |         |                        |  |
|--------|-------------|---------------|--------------------------|----|---|---------|------------------------|--|
| Sl no. | Demographic | Categories    | Determining<br>Variables |    |   | P Value | Expected Chi<br>Square |  |
|        | Variables   |               |                          |    |   |         |                        |  |
|        |             |               | Α                        | Μ  | Р |         |                        |  |
| 1      | Age         | 5-6           | 1                        | 3  | 1 | 3.84    | 1.58                   |  |
|        |             | 7-8           | 10                       | 10 | 1 |         |                        |  |
|        |             | 9-10          | 20                       | 14 | 0 |         |                        |  |
| 2      | Gender      | Male          | 10                       | 10 | 1 | 3.84    | 0.19                   |  |
|        |             | Female        | 21                       | 17 | 1 |         |                        |  |
| 3      | Educational | Primary       | 24                       | 17 | 1 | 3.84    | 0.26                   |  |
|        | Status      | Secondary     | 5                        | 9  | 1 |         |                        |  |
|        |             | Higher        | 2                        | 1  | 0 |         |                        |  |
|        |             | Secondary and |                          |    |   |         |                        |  |
|        |             | above         |                          |    |   |         |                        |  |
| 4      | Occupation  | Private'      | 4                        | 1  | 0 | 3.84    | 1.18                   |  |
|        | -           | Govt.         | 1                        | 3  | 0 |         |                        |  |
|        |             | Non Govt.     | 26                       | 23 | 2 |         |                        |  |
| 5      | Monthly     | <10,000       | 15                       | 16 | 2 | 3.84    | 2.96                   |  |
|        | Income      | 10,000-20,000 | 13                       | 11 | 0 |         |                        |  |
|        |             | >20,000       | 3                        | 0  | 0 |         |                        |  |
|        |             |               |                          |    |   |         |                        |  |

**d.**Association between the practice regarding prevention of waterborne diseases with their selected demographic variables.

|        | 0 1         |               |           |        |     |         | n=60         |
|--------|-------------|---------------|-----------|--------|-----|---------|--------------|
| Sl no. | Demographic | Categories    | Det       | ermini | ing | P Value | Expected Chi |
|        | Variables   |               | Variables |        |     |         | Square       |
|        |             |               | Α         | Μ      | Р   |         | -            |
| 1      | Age         | 5-6           | 3         | 2      | -   | 3.84    | 1.28         |
|        |             | 7-8           | 13        | 4      | 4   |         |              |
|        |             | 9-10          | 16        | 10     | 8   |         |              |
| 2      | Gender      | Male          | 14        | 3      | 4   | 3.84    | 2.3          |
|        |             | Female        | 18        | 13     | 8   |         |              |
| 3      | Educational | Primary       | 25        | 1      | 7   | 3.84    | 0.49         |
|        | Status      | Secondary     | 6         | 5      | 4   |         |              |
|        |             | Higher        | 1         | 1      | 1   |         |              |
|        |             | Secondary and |           |        |     |         |              |
|        |             | above         |           |        |     |         |              |
| 4      | Occupation  | Private'      | 2         | 2      | 1   | 3.84    | 1.77         |
|        | _           | Govt.         | 1         | 1      | 2   |         |              |
|        |             | Non Govt      | 29        | 13     | 9   |         |              |
| 5      | Monthly     | <10,000       | 18        | 7      | 8   | 3.84    | 2.75         |
|        | Income      | 10,000-20,000 | 11        | 9      | 4   |         |              |
|        |             | >20,000       | 3         | -      | -   |         |              |
|        |             |               |           |        |     |         |              |



## **Discussion:**

The data is analyzed according to the objectives of the study by descriptive and inferential statistics. The findings show that the maximum children of our sample belong to the age group of 9-10 years, frequency is 34 & percentage is 56.66%. Maximum children of our sample are female, the frequency is 39 & percentage is 65%. The educational status of the maximum children's parents is primary, the frequency is 42 & the percentage is 70%. The occupation of parents of maximum children is business, the frequency is 51 & percentage is 85%. The maximum children's parent's monthly income is <10,000, the frequency is 33 & percentage is 55%. Most of the children of our sample has moderate knowledge regarding prevention of Foodborne diseases, the frequency is 47 & percentage is 78.33%. The knowledge of the maximum children of our sample regarding prevention of Waterborne diseases is moderate, the frequency is 45 & percentage is 75%. Maximum children adequately practice regarding prevention of Foodborne diseases, the frequency is 31 & percentage is 51.66%. Most of the children practice adequately regarding prevention of waterborne diseases, the frequency is 32 & percentage is 53.33%. The findings show that the association between the knowledge regarding prevention of Foodborne diseases and demographic variables of educational status of parents is significant.

## REFERENCES

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