

Assessment of Knowledge of Health Workers regarding IMNCI Guidelines of Diarrhoea for Children under Five Year in Kamrup (M) District, Assam

Thaudem Mayarani Devi

Child Health Nursing Department, CPMS College of Nursing, SrimantaSankaradeva University of Health Sciences
Email: mayathaudem0[at]gmail.com

Abstract: *Background:* Acute diarrhoea remains a leading cause of childhood deaths – despite the undeniable success of oral rehydration therapy over the years. The provision of improvement in knowledge among health care workers is a very major move in order to alleviate, promote and prevent illness of children under five year. *Aim:* The study aim to assess the level of knowledge of health workers regarding IMNCI guidelines of diarrhoea for children under five year in Kamrup (M) district, Assam, to find the association between the knowledge of health workers regarding IMNCI guidelines of diarrhoea for children under five year with selected demographic variables in Kamrup (M) district, Assam and distribute Information Booklet. *Methodology:* Descriptive survey design was adopted. Probability sampling technique was used to select the subject of 150 health workers (ASHA and Anganwadi) from Chandrapur Developmental Block. Data were collected by using self-structured questionnaire for level of knowledge. *Result:* The findings revealed that majority 62.6% of participants had moderate knowledge, 26.7% had inadequate knowledge and 10.7% had adequate knowledge. Also it showed that there was a significant association between the knowledge of health workers with the occupation of health worker ($\chi^2= 13.24, t = 5.99$) at 0.05 level of significance. *Conclusion:* From the findings of the present study, it concluded that majority of the health workers have moderate level of knowledge regarding IMNCI guidelines of diarrhoea for children under five years.

Keywords: Assess, Knowledge, IMNCI, Diarrhoea, Health Workers

1. Introduction

According to WHO, diarrhoea is defined as ‘passage of 3 or more loose stools per day or passing more stools than normal for the age. WHO and UNICEF have released revised recommendations aimed at dramatically cutting the number of deaths due to diarrhoea. These new recommendations take into account two significant recent advances: demonstration of the increased efficacy of a new formulation for ORS containing lower concentrations of glucose and salt, and success in using zinc supplementation in addition to rehydration therapy in the management of diarrhoeal diseases.

2. Literature Survey

Every year there are about 2.5 billion cases of diarrheal disease worldwide, which account for an estimated 1,400 deaths daily, according to WHO. It mostly results from contaminated food and water sources. Worldwide, around one billion people lack access to clean water and 2.5 billion have no access to basic sanitation. In India Diarrhoea is the major public health problem among children below the age of 5 years. About one-third of total hospitalized children are due to diarrhoeal diseases and 17 % of all deaths in indoor pediatric patients are related to this condition.

Basu P. Chakrabarty A. Bhattacharya S. Bhattacharya K. conducted a study on “Assessment on the awareness level about diarrhoea and its management among mothers attending outpatient department in a rural hospital of West Bengal, India” (2019 March).³⁴ The study was based on cross-sectional descriptive epidemiological study conducted

among 62 mothers having their children of 6 months to five years with diarrhoea. The objective of the was to assess the level of knowledge about diarrhoea and oral rehydration therapy among the mothers having their children of 6 months to 5 yrs with diarrhea. The data was collected by face to face interview of the mothers in the outpatient department of the hospital using a pre-designed and pre-tested questionnaire. Findings of the study depicted that 36 persons (37.1%) had lower knowledge and 26 person (62.9 %) had higher knowledge. The result reveals that majority mothers had inadequate knowledge about its management of diarrhoea.

According to the above research studies and data acquired, Diarrhoea is preventable by enhancing the knowledge and adhere with common practices so the researcher felt that provision of improvement in knowledge among health workers would positively affect the outcomes.

3. Methods

Research approach: Quantitative research approach

Research design: Descriptive survey design

Setting of the study: Chandrapur block, Kamrup (M) district, Assam.

Target Population: All the health workers of Assam.

Accessible Population: Health workers (ASHA and Anganwadi) of Kamrup (M) District.

Sample: Health Workers (ASHA and Anganwadi) of Kamrup (M) District, Assam.

Sample size: 150 samples.

Sampling Technique: Probability, Multistage random sampling technique

Volume 12 Issue 1, January 2023

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Variables

Research Variables: In this study the research variable is knowledge

Demographic Variables: In this study demographic variables include age, marital status, educational qualification, occupation, work experience, previous attended programme on under five management of diarrhoea.

Development of tools

Section A: Demographic Variables

Section B: Self-structured Knowledge Questionnaire on IMNCI guidelines of diarrhoea for children under five year.

Data collection procedures:

- In order to collect the primary data, the researcher found out the number Health Workers (Anganwadi and ASHA workers) of Kamrup (M) District, Assam.
- The ethical aspect of research was maintained.
- Before providing self-structured questionnaire, the investigator introduced self to the participants then an informed written consent was obtained from each participant and explained the purpose of the study and ascertained the willingness of the participants.
- The knowledge of the study was assessed through self-structured questionnaire.

Plan for data analysis

Analysis of the data was analysed by using descriptive and inferential statistics based on the objectives of the study.

- 1) Descriptive statistics: Frequency and percentage distribution, mean was used for analysis of knowledge and demographic data.
- 2) Inferential statistics: Chi-Square was used to find out the association of knowledge and practice among different demographic variables.

4. Results

Table 1: Frequencies and percentage distribution of health workers according to demographic variables n=150

| Sl. No. | Demographic Variables | Groups | Frequency | Percentage |
|---------|--|--------------------|-----------|------------|
| 1 | Age in years | Below 25 years | 0 | 0 |
| | | 26-35 years | 23 | 15.30% |
| | | 36-45 years | 65 | 43.40% |
| | | Above 46 years | 62 | 41.30% |
| 2 | Marital status | Married | 92 | 61.30% |
| | | Unmarried | 25 | 16.70% |
| | | Widow | 33 | 22% |
| | | Divorced | 0 | 0 |
| 3 | Educational qualification | HSLC | 122 | 81.30% |
| | | HSSLC | 28 | 18.70% |
| | | Graduate and above | 0 | 0 |
| 4 | Occupation | ASHA | 45 | 30% |
| | | Anganwadi | 105 | 70% |
| 5 | Work experience | Below 1 year | 48 | 32% |
| | | 1-3 years | 5 | 3.30% |
| | | 3-5 years | 9 | 6% |
| | | Above 5 years | 88 | 58.70% |
| 6 | Attended any programme on under-five management of diarrhoea | Yes | 150 | 100% |
| | | No | 0 | 0 |

Table 2: Frequency and percentage distribution of knowledge of health workers regarding IMNCI guidelines of diarrhoea for children under five year = 150

| Level of knowledge | Frequency (f) | Percentage (%) | Range | Mean | SD |
|--------------------|---------------|----------------|---------|-------|-------|
| Adequate | 16 | 10.7 % | ≥ 22 | 17.97 | 3.675 |
| Moderate | 94 | 62.6 % | 15 – 21 | | |
| Inadequate | 40 | 26.7 % | 0 - 14 | | |

Table 3: Association between knowledge of health workers regarding IMNCI guidelines of diarrhoea for children under five year with age of the health workers n = 150

| Sl. No. | Demographic Variable | Knowledge | | | Chi square value | df | Tabulated value (t) | Remarks |
|-----------------------|--|-----------|----------|------------|------------------|----|---------------------|---------|
| | | Adequate | Moderate | Inadequate | | | | |
| 1. | Age in years | | | | 6.808 | 4 | 9.49 | NS |
| | a) Below 25 years | 3 | 16 | 4 | | | | |
| | b) b) 26 – 35 years | 9 | 43 | 13 | | | | |
| | c) 35 – 40 years | 4 | 35 | 23 | | | | |
| d) d) Above 40 years | -- | -- | -- | | | | | |
| 2. | Marital status | | | | 3.992 | 4 | 9.49 | NS |
| | a) Married | 10 | 62 | 20 | | | | |
| | b) Unmarried | 3 | 15 | 7 | | | | |
| | c) Widow | 3 | 17 | 13 | | | | |
| d) Divorced | -- | -- | -- | | | | | |
| 3. | Educational qualification | | | | 1.511 | 2 | 5.99 | NS |
| | a) HSLC | 13 | 79 | 30 | | | | |
| | b) HSSLC | 3 | 15 | 10 | | | | |
| c) Graduate and above | -- | -- | -- | | | | | |
| 4. | Occupation | | | | 13.24 | 2 | 5.99 | S |
| | a) ASHA | 4 | 20 | 21 | | | | |
| b) Anganwadi | 12 | 74 | 19 | | | | | |
| 5. | Work experience | | | | 10.30 | 6 | 12.59 | NS |
| | a) Below 1 year | 7 | 32 | 9 | | | | |
| | b) 1-3 years | 1 | 3 | 1 | | | | |
| | c) 3-5 years | 0 | 9 | 0 | | | | |
| d) Above 5 years | 8 | 50 | 30 | | | | | |
| 6. | Attended programme on under-five management of diarrhoea | | | | | | | |

| | | | | | | | |
|--------|----|----|----|----|----|----|----|
| a) Yes | 16 | 94 | 40 | NA | NA | NA | NA |
| b) No | -- | -- | -- | | | | |

*0.05 level of significance

NS – Non Significant, S – Significant, NA – Not applicable

5. Discussion

The study was done to assess the level of knowledge of health workers regarding IMNCI guidelines of diarrhoea for children under five year in Kamrup (M) district, Assam. In this study, the frequency and percentage distribution of knowledge of health workers regarding IMNCI guidelines of diarrhoea for children under five year scores shows that majority 62.6% of participants had moderate knowledge, 26.7% of participants had inadequate knowledge and 10.7% of participants had adequate knowledge.

Similar findings were reported by Charan A. who conducted a study to assess effectiveness of a structured teaching programme on knowledge of ASHA workers regarding the case management of children with diarrhea at home situation as per IMNCI guidelines, where the study was conducted among 30 ASHA workers which reported that mean post-test knowledge score (23.2) is higher than the mean pre-test knowledge score (17.06) which concluded that there is effective in enhancing the knowledge among ASHA workers. It concluded that the Structured Teaching Programme was effective in enhancing the knowledge and practices of ASHA workers regarding the Case management of children with diarrhea as per IMNCI guidelines.

Similar study was conducted by Awasthi S. to assess the effectiveness of various communication strategies for improving childhood case management among health workers in rural Lucknow, Uttar Pradesh, India, where the study was conducted among trained Auxillary Nurse Midwife (ANM) and ASHA workers which reported that majority 78.7% of the sample belongs to the work experience of above 5 years followed by 21.3 % belong to the work experience of above 3 years.

6. Conclusion

From the findings of the present study, it can concluded that majority of the health workers have moderate level of knowledge regarding IMNCI guidelines of diarrhea for children under five years. It is important for the health personnel to take initiatives in educating themselves regarding IMNCI guidelines to reduce the morbidity and mortality among children under five years.

7. Future Scope

- The study can be conducted on the basis of assessing knowledge, attitude and practice among other health professionals.
- A comparative study can be conducted to find out the knowledge between ASHA and Anganwadi health workers regarding IMNCI guidelines of diarrhea.
- The study can be replicated in other parts and other developmental blocks of Assam so that the findings can be generated.

- Health education programme and training to health workers can be arranged in the PHC's, sub-centers and also in Anganwadi centers.

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Author Profile

Thaudem Mayarani Devi, Child Health Nursing Department, CPMS College of Nursing, Guwahati-26, Assam.

Banashri Lata Sadhanidar, Principal, Medical Surgical Nursing Department, CPMS College of Nursing, Guwahati-26, Assam.

Dropati Thapa, Assistant Professor, Child Health Nursing Department, CPMS College of Nursing, Guwahati-26, Assam