

A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE AND PRACTICE REGARDING PREVENTION AND HOME MANAGEMENT OF DIARRHEA AMONG THE MOTHERS OF CHILDREN'S UNDER THE AGE OF 5 YEARS AT SELECTED PHC OF VIJAYAPUR DISTRICT

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ABSTRACT

INTRODUCTION: Diarrhea is a common yet potentially serious condition affecting children under the age of five. It is defined as the passage of three or more loose or watery stools in a 24-hour period. Diarrhea in children is often accompanied by other symptoms such as fever, vomiting, and abdominal pain. The impact on a child's health can be particularly severe due to their smaller body size and higher vulnerability to fluid loss. In many developing countries, diarrhea is one of the leading causes of death in children under five, particularly when combined with poor healthcare access and limited resources.

OBJECTIVES: The aim of the study was to assess the knowledge, and practice regarding the prevention and the management at home among the mothers of children's under the age of 5 years. STUDY

DESIGN: A descriptive cross sectional study design was used. METHOD: 180 mothers of children's under the age of 5 years were included in the study; the majority of the mothers were between 25 to 34 years of age. 44.4% of the mothers new that ORS is used to treat diarrhea, 53.3% of mothers believes that becoming weak is the danger sign of diarrhea, overall 108(60.0%) had adequate knowledge regarding diarrhea, and remaining 72(40.0%) had inadequate knowledge regarding diarrhea. 102(56.7%) had good home management practice.

Keywords: Prevention, Home Management, Diarrhea

INTRODUCTION:

Diarrhea is a major health concern, especially in children under the age of 5, and mothers play a crucial role in preventing, identifying, and managing this condition. Knowledge about diarrhea among mothers of children under 5 years

Understanding of Diarrhea

Definition:

Diarrhea is characterized by the passage of loose or watery stools more than three times a day. Mothers need to recognize the difference between ordinary stools and diarrhea¹.

Causes:

Common causes of diarrhea include infections (bacterial, viral, or parasitic), poor sanitation, contaminated food or water, and lack of proper hygiene. Many mothers are aware of common causes but may not be informed about less obvious ones, such as rotavirus or specific bacterial infections like *E. coli*².

Prevention Measures

Hand washing: A key preventive measure is regular hand washing with soap, especially before preparing food and after using the toilet. However, this knowledge is not always practiced in many communities due to lack of resources or awareness. **Safe Drinking Water:**

Mothers often know that contaminated water can cause diarrhea, but lack of access to clean drinking water remains a significant issue. **Breastfeeding:** Exclusive breastfeeding for the first six months of life is widely recognized as a protective factor against diarrhea, due to antibodies in breast milk that help boost the infant's immunity. **Oral Rehydration Therapy (ORT):** Awareness of oral rehydration salts (ORS) and how to make and administer ORS can be a life-saving intervention for managing dehydration caused by diarrhea³.

Management of Diarrhea

Rehydration: Many mothers are aware of the importance of rehydrating a child with diarrhea using oral rehydration solutions (ORS) or homemade solutions like salt-sugar water.

Zinc Supplements: Zinc supplementation is recommended in cases of diarrhea to reduce severity and duration, though not all mothers may be aware of this intervention.

Dietary Practices: Some mothers know the importance of continuing to feed their child nutritious foods, but misconceptions can exist about restricting food during diarrhea. **Warning Signs and Seeking**

Medical Help: When to Seek Help: Mothers need to recognize signs of severe dehydration (e.g., dry mouth, sunken eyes, lethargy) and know when to seek medical attention. Unfortunately, in some areas, there is a lack of knowledge about when to seek professional help⁴.

NEED FOR STUDY:

Diarrhea is a major health concern, especially in children under the age of 5, and mothers play a crucial role in preventing, identifying, and managing this condition. Knowledge about diarrhea among mothers of children under 5 years old can vary depending on factors such as education, socioeconomic status, and access to healthcare.

RESEARCH STATEMENT:

“A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE OF DIARRHEA AMONG THE MOTHERS OF CHILDREN’S UNDER THE AGE OF 5 YEARS AT SELECTED PHC OF VIJAYAPUR DISTRICT”

OBJECTIVES OF THE STUDY:

1. To determine the knowledge of the mothers of the children’s under the age 5 years
2. To identify the preventative measures and management (Home) of diarrhea among the mothers of children’s under the age of 5 years.
3. To determine the influencing factors associated with the practice of diarrhea among the study participants

MATERIAL AND METHODS:

A descriptive cross sectional study design was used to assess the mother’s knowledge, practice, prevention and management among the mother’s under the age of 5 years old children’s. A sample size was calculated using single proportion sample size formula and total of 180 study respondents were included in the study using simple random sampling techniques

STUDY POPULATION:

A study population includes all the mothers of children’s under the age of 5 years old who are residing at Vijayapur district.

Inclusion criteria:

1. All the mothers who are residing at Vijayapur district.
2. All the mothers who are willing to participate in the study
3. All the mothers who knows local language (Kannada)

Exclusive criteria:

1. Mothers who are not available at the time of data collection
2. Mothers whose children’s are severely ill

SAMPLING TECHNIQUES:

Six wards were selected using simple random sampling techniques. From each ward 30 household with at least one children's under the age of 5 years were selected

DATA ANALYSIS:

The collected data were entered in MS excel and the data was analyzed using SPSS version.21. Descriptive statistics was used to compute the frequency, percentage, graphs, diagrams, and means of the study variables. Inferential statistics was used to analyses the association.

RESULTS:

Table no 1: Frequency and percentage distribution of socio-demographic characteristics among the study participants

Variables	Sub-division	Frequency	Percentage
Age	18-26	30	16.7
	27-35	118	65.6
	36-44	32	17.7
Occupation	Housewife	120	66.7
	Private employee	50	27.7
	Government Employee	10	5.6
Education	Primary	52	28.9
	Higher primary	75	41.7
	PUC	10	5.5
	Graduates	25	13.9
	Post graduates	18	10.0
Religion	Hindu	123	68.3
	Muslim	36	20.0
	Christian	09	5.0
	Others	12	6.7
	Nuclear	100	55.6

Types of family	Joint	60	33.3
	Extended	20	11.1

Table no 1 revealed that, the mean age of the mothers were 30.5 ± 5.2 and majority 118(65.6%) of them were in the age group 27-35, Majority 120(66.7%) were housewife, 75(41.7%) of the, had higher primary education, 123(68.3%) were Hindu, and 100(55.6%) were belongs to the joint family

Table no 2: Knowledge of the mothers of children’s under the age 5 years regarding diarrhea

Variables	Correct response	Percentage
Use of ORS solution		
Rehydration	68	37.7
Treatment for diarrhea	82	45.5
Is it good to stop breast feeding during diarrhea	54	30.0
Improper hand wash before preparing food for children’s can cause diarrhea	125	69.4
Open disposal of tool can cause diarrhea	115	63.8
Unclean feeding bottle can cause diarrhea	117	65.0
Prevention & management of diarrhea is possible at home	119	66.1
Breast feeding at least 6 months can prevent diarrhea	90	50.0
Poor sanitation	36	20.0
Danger signs of diarrhea		
Becoming weak	105	58.3
Frequent passing tool	35	19.4
Vomiting	30	16.7
Blood in stool	10	5.6

Table no 2 showed that 150(83.3%) knew that ORS solution is useful in treating diarrhea, 54(30.0%) mothers knew that, it’s not good to stop breast feeding during diarrhea, more than half 129(69.4%) knew that improper hand wash can cause diarrhea, 115(63.8%) mother’s knew that open disposal of tool can

cause diarrhea, 117(65.0%) knew that unclean feeding bottle can cause diarrhea among the children's, 119(66.1%) knew that diarrhea is preventable and manageable at home, half of the mothers 90(50.0%) knew that exclusive breast feeding for at least 6 months can prevent diarrhea. Majority 105(58.3%) of the study respondents knew that becoming weak is danger sign of diarrhea

Conclusion: overall 108(60.0%) had adequate knowledge regarding diarrhea, and remaining 72(40.0%) had inadequate knowledge regarding diarrhea.

Table no 3: Preventive Practice of diarrhea among the mothers of children's under the age of 5 years

Variables	Correct response	Percentage
Breast feeding duration		
< 6 months	72	40.0
≥ 6 months	108	60.0
Hand wash Practice		
Before food preparation	126	70.0
Before feeding	50	27.7
After defecation	90.0	50.0
After attending defecated child	9	5.0
Hand wash practice with		
Only water	135	75.0
Water and mud	20	11.1
Water and soap	25	13.9
Place of tool disposal		
Toilet	81	45.0
Rinsed in the vicinity of the home	36	20.0
Dust bin	60	33.3
Others	3	1.7

From table no 3, out of 180 mothers, majority 108(60.0%) practiced exclusive breast feeding more than or equal to 6 months, more than half 126(70.0%) hand wash before food preparation, 135(75.0%) mothers had hand wash practice only with water and 81(45.0%) toilet as the place for tool disposal

Table no 4: Home management of regarding diarrhea among the mothers of children’s under the age of 5 years.

Variables	Correct response	Percentage
Help was taken during diarrhea from		
Family members	34	18.9
Pharmacist	84	46.7
Consulting doctors	26	14.4
Others	36	20.0
Regarding breast feeding during diarrhea		
No breast feeding required	30	16.7
Less than usual	25	13.9
More than usual	90	50.0
No idea	35	19.4
Amount of water given to the children’s		
Less than usual	60	33.4
More than usual	40	22.2
No idea	80	44.4
Amount of food given to the children’s		
Less than usual	120	66.7
More than usual	20	11.1
No idea	40	22.2
Use ORS during diarrhea		
Yes	80	44.4
No	100	55.6

Table no 4 showed that, out of 180 mothers, 84(46.7%) believe that , it’s better to take pharmacist advise/help during diarrhea episodes among the children’s, exactly half 90(50.0%) of the mothers feel that breast feeding should be more than usual during the diarrhea, 80(44.4%) of the mothers had no idea regarding amount of water is to be given to the children’s during diarrhea episodes, 120(66.7%) mothers believe that foods should be given to the children’s less than usual and less than half 80(44.4%) mothers

feels that use of ORS during diarrhea episodes

Conclusion: Overall 102(56.7%) had good home management practice and remaining 78(43.3%) had poor home management practice

Table no 5: Factors associated with the practice of diarrhea among the study participants

Variables	Sub-division	Practice		Chi-square	P-value
		Good (n=102)	Poor (n=78)		
Age	18-26	11	19	0.693	0.70(NS)
	27-35	48	70		
	36-44	15	17		
Occupation	Housewife	50	70	1.06	0.58(NS)
	Private employee	25	25		
	Government Employee	4	6		
Education	Primary	10	42		
	Higher primary	16	59		
	PUC	4	6		
	Graduates	20	5		
	Post graduates	16	2		
Religion	Hindu	53	70	3.27	0.35(NS)
	Muslim	11	25		
	Christian	05	04		
	Others	8	4		
Types of family	Nuclear	40	60	1.62	0.44(NS)
	Joint	30	30		
	Extended	8	12		

DISCUSSION:

All the mothers in the study were belonging to the age group 18-44 years. The majority of the mothers were Hindu and most of them belong to the nuclear family. ORS is one of the most used solution to treat diarrhea so that, it can replace electrolytes that are lost during diarrhea episodes. Actually 44.4% of the mothers actually gave ORS to their children's which is less than the study conducted Ibadan, where nearly 50.0% are stated to use ORS⁵. Hand washing with soap can reduce prevalence of diarrhea among

the children's before feeding, before food preparation, after attending child after defecation. 70.0% of the mothers was their hands before food preparation, but most of them (75.0%) wash their hands with only water, (11.1%) wash their hands with water and mud, and only few mothers (13.9%) mothers was their hands with soap and water, this is because of lack of knowledge and these result outcomes are exactly opposite to the study conducted in Sudan⁶

CONCLUSION:

It was concluded that mother's education and knowledge are the influencing factor on the health of her family. The mothers education and knowledge determines her ability to understand and adopt proper health care

REFERENCES

1. Hailemariam MW, Abdilahi SS, Esubalew MA. Mothers' knowledge, attitude and practice towards the prevention and home-based management of diarrhoea among under-five children in Diredawa, Eastern Ethiopia. *BMC Pediatr.* 2018;18(1):358. 10.1186/s12887-018-1321-6 [DOI] [PMC free article] [PubMed] [Google Scholar]
2. Ajoke OA, Solayide AA, Mary Theresa N, Akitoye OC. Cholera in Nigeria, an overview. *Pan Afr Med J.* 2012;(12):59. 10.4103/1596-3519.108243 [DOI] [PMC free article] [PubMed] [Google Scholar]
3. Kakulu R. Diarrhoea among under-five children and household water treatment and safe storage factors in Mkuranga district, Tanzania. *Medicine.* 2012.
4. WHO *The Management of Prevention of Diarrhoea. Journal Geneva. (III Edition) 1993:1.* [Google Scholar]
5. Olubunmi OO, Bolaji E. Awareness and knowledge of diarrhoeal home management among mothers of under-five in Ibadan, Nigeria. *Univers J Public Health.* 2017;5(1):40–45. 10.13189/ujph.2017.050106
6. Panom PDK, Ying-Chun D. Mothers knowledge attitude and practice on preventing diarrhoea in Juba, South Sudan. *S Sudan Med J.* 2018; 11:60–64