

# Mothers' Attitude about Treatment and Prevention of Diarrhea in Children Under Five Years at the Eastern AL Hamza city

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## ABSTRACT

**Objectives:** This study aimed to evaluate Mothers' Attitude about Treatment and Prevention of Diarrhea in Children Under Five Years.

**Methodology:** The study was descriptive using quantitative data collection method. In which assessment approach is applied to achieve the objectives of the study and was conducted during the period of the study from October 25th 2021 to March 1st 2022.

**Results:** The study findings showed that (63.2%) of mothers had negative attitude regarding the treatment and prevention of diarrhea and (36.8%) only of them had positive attitude.

**Conclusion:** Most mothers' had negative attitude about prevention and home management of diarrhea in children under five years..

**Key words:** Mothers' attitude, Treatment, Prevention , Diarrhea, Children.

## INTRODUCTION

Diarrhea is the world's second leading cause of illness and death among children. Every year, 2.5 billion episodes and 1.5 million deaths occur among children under the age of five. In underdeveloped countries, this still accounts for 21% of all deaths. More children die from diarrhea than from AIDS, malaria, and measles combined. Furthermore, it results in secondary infection<sup>(1)</sup>. In the case of severe diarrhea, home remedies are essential. This is the case since most nations have a cultural practice of treating diarrhea patients at home or on their own. Children's diarrhea usually begins at home and continues after they leave the clinic. According to studies, caregivers are the ones who discover diarrhea first, thus they choose to seek treatment at home. Diarrhea is commonly treated at home with a combination of conventional and natural therapies. Conventional therapy doses are frequently incorrect and insufficient. This technique raises the risk of diarrheal sickness, as well as morbidity and mortality. Children with diarrhea must be handled at home to minimize dehydration and nutritional injury<sup>(1)</sup>. In poor countries, diarrhea is more common than in developed countries. This is due to a number of factors, including a lack of safe drinking water, a lack of sanitary hygiene knowledge, and low nutritional and public health status. 2.5 billion people are predicted to have insufficient sanitation facilities, while 1 billion people do not have access to clean water<sup>(2)</sup>. Diarrhea causes symptoms such as vomiting and stooling, and in young children, it can quickly progress to dehydration. Thirst, irritability, restlessness, lethargy, sunken eye, dry mouth and tongue, dry skin, and fewer trips to the bathroom to urinate are all signs of dehydration. Others include a lack of desire to play and severe tiredness, as well as rapid respiration and heartbeat<sup>(3)</sup>.

## METHODOLOGY

**Design of the Study:** The study was descriptive using quantitative data collection method. In which assessment approach is applied to achieve the objectives of the study and was conducted during the period of the study from October 2021 to March 2022.

**Setting of the Study :**The accessible population included mothers of children under five years who attend to the any reason in the primary health care centers (PHCCS) in Eastern AL Hamza city. The study conducted in Eastern AL Hamza city including AL hamza sector primary health care . A total of (6) primary health care centers distributed in the eastern city of Hamza were selected from the primary health care sector in Hamza ( and they were chosen randomly for the purpose of the study).

**Sample of the Study:** The sample selected by using of probability sampling (Randomly sample). sample of (250) mothers from the primary health care centers when they companied their children at

the time of attending the health centers. The total sample of mothers was selected (10%) from the average of the (2 previous monthly) that was 2500 mothers .Inclusion criteria for the mothers were All women have children under five years of age and Having inclination for communication and consent to participate in the research. The following exclusion criteria were applied Nulliparous women, women who do not have any under five children, and women outside the reproductive age group were excluded from the study and The criteria for discontinuation were as follows withdrawal of the mother from the study after beginning of the data collection.

**Study instrument :** A questionnaire is constructed for the purpose of the study throughout a review of relevant literature and consultation from panel of experts and related studies. It consists of Two parts:

**Part I:** This part contains Sociodemographic characteristics of the mother participated in the study and which include age, education level, working condition, monthly income ,address ,family type , number of children under 5 years old and Information sources about diarrhea

**Part II:** this part is consisted of 20 items using to assess the mothers Attitudes regarding the prevention and home management of diarrhea .

## RESULTS

Table (1) indicates that most mothers are less than 35 years old, as the study showed that (36.8%) of them were between 15-24 years old and (44.0%) of them were between 25-34 years old. The results of the study also showed that most of the mothers had a low educational level, as (30.0%) of them could not read and write and( 21.6%) of those could read and write. Most of the mothers worked as housewife, with a rate of (68.0%). The study showed that (44.4%) of the mothers were of low income so their answers about monthly income were "hardly enough". The mothers' place of residence was close to rural and urban, and the percentage was (44.8%) and (55.2%), respectively. There was no difference between the types of mothers' families in the sample, as (56%) of them were of the type (Father, mother, and sons) and (44%) of the type (Father, mother, sons, and relatives). (45.2%) of the mothers participating in the study had two children. The study indicated that (86.4%) of the mothers had health care workers as the source of their information.

Table (1): Distribution of the mother's Socio-demographic Characteristics.

Socio-demographic Characteristics		Freq.	%
Age	15- 24 years	92	36.8
	25- 34 years	110	44.0
	35 - 45 years	48	19.2
	Total	250	100

Educational level	Do not read and write	75	30.0
	Read and write	54	21.6
	Primary level	30	12.0
	Middle school graduate	15	6.0
	Preparatory school graduate	19	7.6
	Institute graduate	20	8.0
	College graduate	35	14.0
	Master's Degree	2	.8
	Total	250	100
Working Status	Housewife	170	68.0
	Employee	65	26.0
	Free business	3	1.2
	Student	12	4.8
	Total	250	100
Monthly income	Enough	89	35.6
	Hardly enough	111	44.4
	Not enough	50	20.0
	Total	250	100
Address	Rural	112	44.8

family type	Urban	138	55.2
	Total	250	100
	Father, mother and sons	140	56.0
Number of children under 5 years old	Father, mother, sons and relatives	110	44.0
	Total	250	100
	One child	80	32.0
Information sources about diarrhea	Two children	113	45.2
	Three children	57	22.8
	Total	250	100
Health care workers	Health care workers	216	86.4
	Internet	29	11.6
	Television	3	1.2
	Other ways	2	.8
	Total	250	100

%; percentage, ferq. : Frequency

Table (2): Attitudes of mothers regarding the treatment and prevention of diarrhea.

Item	Agree		Disagree		Assess	
	Freq.	%	Freq.	%	mean of score	Attitudes
Diarrhea is a life-threatening disease for children.	99	39.6	151	60.4	1.39	Negative
Diarrhea is a non-contagious disease.	111	44.4	139	55.6	1.44	Negative
Bottle feeding contributes to diarrhea.	100	40.0	150	60.0	1.44	Negative
Cow's milk causes diarrhea in children less than two years of age.	110	44.0	140	56.0	1.44	Negative
Teething can cause diarrhea in children.	95	38.0	155	62.0	1.38	Negative
Foods that contain fiber contribute to diarrhea.	98	39.2	152	60.8	1.39	Negative
Sugary substances make diarrhea worse.	97	38.8	153	61.2	1.38	Negative
Fatty foods should be avoided during the period of diarrhea.	100	40.0	150	60.0	1.4	Negative
Diarrhea can be prevented.	89	35.6	161	64.4	1.35	Negative
Diarrhea can be controlled at home.	65	26.0	185	74.0	1.26	Negative
Mothers can prepare oral rehydration fluids at home.	55	22.0	195	78.0	1.22	Negative
Diarrhea can be treated with oral rehydration solution.	59	23.6	191	76.4	1.23	Negative
Oral rehydration solution replaces fluids and minerals lost as a result of diarrheal disease.	53	21.2	197	78.8	1.21	Negative
Breastfeeding is important for children with Diarrhea.	69	27.6	181	72.4	1.27	Negative
Avoid tap water in cases of diarrhea in children.	59	23.6	191	76.4	1.23	Negative
Breast milk should not be diluted during diarrhea in children.	89	35.6	161	64.4	1.35	Negative
Washing hands before and after eating helps prevent diarrhea.	92	36.8	158	63.2	1.36	Negative
Using the toilet is a healthy practice to prevent diarrhea.	92	36.8	158	63.2	1.36	Negative
Yogurt relieves diarrhea.	86	34.4	164	65.6	1.34	Negative
Zinc reduces the severity and duration of diarrheal disease.	64	25.6	186	74.4	1.25	Negative

%; percentage, ferq. : Frequency negative =1-1.4 , positive =1.5-2

Table (2) indicates that most of Attitudes of mothers regarding the treatment and prevention of diarrhea were negative.

Table (3): Total attitudes of mothers regarding the treatment and prevention of diarrhea.

Assess Attitudes	Positive		Negative		Total	
	Freq.	%	Freq.	%	Freq.	%
attitudes of mothers regarding the treatment and prevention of diarrhea	92	36.8	158	63.2	250	100

This table found that (63.2%) of mothers had negative attitude regarding the treatment and prevention of diarrhea and (36.8%) only of them had positive attitude.

## DISCUSSION

Socio-demographic Characteristics of the study sample. As show in table (1): The current study has shown that (44.0%) of them were between 25-34 years old. The results of the study also showed that most of the mothers had a low educational level, as (30.0%) of them could not read and write and 21.6% of those could read and write. Most of the mothers worked as housewife, with a rate of (68.0%). The study showed that (44.4%) of the mothers were of low income so their answers about monthly income were "hardly enough" (table 4-1).

We believe that the reason for the appearance of nearly half of the participants aged (25-34) is that this age period is the appropriate period for childbearing. The researcher also attributes the reason for the low level of education of most mothers to the nature of the study community, which does not encourage education for females. Most of the mothers worked as housewives, the researcher attributed this to their low level of education. The poor economic status of the study population, which lacks

agriculture, industry, and commerce, is the reason that led most mothers to answer about monthly income was "hardly enough" (the researcher).

Similar results were obtained in study which found that 42.7% of them were between 20-24 years old, they also observed that most of the mothers had a low educational level (93.2%). Most of the mothers worked as housewife, with a rate of (46.2%)<sup>(4)</sup>.

Out results may also come in accordance with study done by Workie et al., who conducted a study from March 15 –April 14, 2016, in Ethiopia and found that more than half of the mothers (51.5%) were in the age of 25–34 years, (38.3%) of them were housewives and 132 (44.8%) were unable to read and write<sup>(5)</sup>. Another study conducted in the Morang district of Nepal from included 130 mothers participated in the interviews and observed that most (80%) of them were not educated <sup>(6)</sup>. Khatun et al showed that only (47.3%) of women have completed primary education, (34.5%) were illiterate, SSC (12.7%), bachelor. (9%) and master (4.5%)<sup>(6)</sup>. Also study showed that Median age for

respondents was 28.2 years old and 56.5% of mothers had completed primary school. The majority of participants were married (81.8%) and lived in an urban setting (86.0%)<sup>(6)</sup>. Children represented by study household found that the mean age of the mothers participating in the study was  $32.37 \pm 4.63$ , their mean age of marriage was  $25.03 \pm 4.00$ , and their mean age at first childbirth was  $27.16 \pm 4.83$ <sup>(8)</sup>. It was determined that (14.4%) of the mothers were primary school graduates, (98.6%) were married, (13%) earned less than their expenses, (10.6%) had extended families.

Regarding source of information, it has been observed that 86.4% of the mothers had health care workers as the source of their information (table 4.1). This is attributed to the role of physician and nurses who educated the patients and their relatives about the disease and its management (the researcher). The current study agrees with cross sectional study was among mothers attending Karbala teaching hospital for children and found that most mothers received the information about ORS from medical staff by (90.8%)<sup>(9)</sup>. Study found that most of the respondents (37.19%) came to know about ORS on contact with doctors followed by media (25%) and their mothers (20%)<sup>(10)</sup>. Similarly results of a KAP study carried out among mothers whose children presented with diarrhea showed that (75.8%) mothers got information pertaining to ORS mainly from doctors<sup>(11)</sup>.

**Attitudes of mothers regarding the treatment and prevention of diarrhea:** As show in table (4): The current study indicated that (63.2%) of the mother's attitudes regarding the treatment and prevention of diarrhea were negative attitudes, and only (36.8%) were positive attitudes (table 4.4). The attitude seems to be correlated to knowledge which is – in turn – associated with educational level of the women, so that low attitude is also attributed to low educational status (the researcher). This result comes in agreement with (Workie et al., 2018) who found that more than half of mothers (54.9%) had a negative attitude towards home-based management and prevention of diarrhea among under-five children<sup>(12)</sup>; However, opposite results were obtained by another studies, It was also determined that all mothers who participated in the study had a preferred traditional practice for when their children had diarrhea<sup>(8)</sup>.

Another study reported that high levels of knowledge, good attitude and preventive practices against causes of diarrhea especially intestinal and urinary parasites<sup>(13)</sup>. Also another study found that most of the mothers (67.8%) usually have positive attitude toward washing their hands before preparing food, and after defecation respectively<sup>(14)</sup>. But in Ethiopia it was found that only 11.7, and (16%), of the mothers was wash their hands before preparing food, and after defecation respectively<sup>(15)</sup>. Cross sectional descriptive study from March 7- April 6, 2021 among 113 mothers of children below five years who visited hospital-seeking treatment for diarrhoeal diseases of their children and found that majority of mothers has good attitude towards diarrhea<sup>(16)</sup>.

To contrary, in Bangladesh, 60.0 and 3.1% don't wash their hands before food preparation and after defecation respectively<sup>(17)</sup>. This variation might be due to differences in culture, sociodemographic and information access.

## CONCLUSION

According to the results obtained by the current study, it is concluded that Most mothers' had negative attitude about prevention and home management of diarrhea in children under five years.

**Recommendation:** There must be awareness of diarrhea, its causes, and ways to prevent it through the various media.

Provide ongoing educational community campaigns in schools, displaced people camps, health centers, and workplaces. Future research needs to identify other relating factors that may contribute to maternal preventive behaviors regarding diarrhea in children.

The diarrheal diseases control program (CDD) of the WHO at MCH centers, otherwise, will be rising hospitalization children related to sever diarrhea .

Educational programs of mothers about use and preparation for ORS at home, promoting appropriate feeding during diarrheal episode, child nutrition.

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