

# KNOWLEDGE, ATTITUDE AND PRACTICE OF MEDICAL STAFF ABOUT PREVENTION OF DIARRHEA IN DHQ TEACHING HOSPITAL SAHIWAL

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## ABSTRACT

**Background: Objective:** The main objectives of this study were to identify the nurse's knowledge about diarrhea, to identify attitudes of medical staff towards diarrhea and practice which are used for prevention of diarrhea. **Study Design:** Cross sectional study. **Setting:** DHQ Sahiwal. **Period:** Oct 2017 to Feb 2018. **Material and Method:** Descriptive comparative research design was used in this research. This research was conducted in DHQ Sahiwal. A questionnaire was designed to be filled by the nurses working in the hospital. The gathered data was processed and analyzed by SPSS to examine their results and to view. **Result:** The sample size of this research was 125 nurses working in hospitals. This research revealed that nurses has sufficient knowledge and the practice about diarrhea which are used from diarrhea prevention. **Conclusion:** The study showed the results about the perceptions of nurses towards the working environment in hospitals.

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## INTRODUCTION

Diarrheal infections are the fifth leading cause of death worldwide and continue to take a high toll on child health. Mushrooming of slums due to continuous urbanization has made diarrhoea one of the biggest public-health challenges. According to WHO. Guidelines for the management of Diarrhea, Anti-diarrhea, anti-amoebic and antibacterial have little role to play. Despite this fact over use of antimicrobial agents have reported for the management of the diarrhoea. Community Health education is the utmost importance for the effective case management, since it has potential to establish productive contact between the health services and the community to increase capability of families to recognize the danger sign of diarrhea in children and to encourage appropriate and early case seeking behaviour. Effective Health education can only be provided on the basis of an accurate understanding of prevailing knowledge, attitude and practices (KAP) of the community.

Therefore, it is necessary to have a relevant information concerning KAP of mothers about diarrhea for successful implementation of control activities.

Diarrheal diseases are the major causes of morbidity and mortality in children's of under five years in developing countries. Diarrheal infections are the fifth leading causes of death worldwide and continue to take a high toll on child health. Diarrheal disease control programme in 1980 approximately 4.6 million children used to die each year of the dehydration caused by diarrhea. Diarrhea can cause dehydration, which means the body lacks enough fluids to function properly. diarrhea is an important cause of malnutrition. Dehydration is particularly is dangerous in children and older people and it must be treated promptly to avoid serious health problems. diarrhoea diseases are a leading cause of childhood morbidity and mortality in developing countries, and an important cause of

malnutrition.

Two recent advancement in managing diarrhea disease with Oral Rehydration Solution (ORS) containing lower concentrations of glucose and salt, and success in using zinc supplementation could drastically reduce the number of child deaths. Used in addition to prevention and treatment of dehydration with appropriate fluids, breast feeding, continued feeding and selective use of antibiotics will reduce the duration and severity of diarrheal episodes and lower their incidence. Families and communities are key to achieving the goals set for managing the disease by making the new recommendations routine practice in the home and health facility.

Diarrhea is caused by various kinds of irresistible human beings, for example, infection, microscopic organisms and parasitic pathogens which are for the most part water and food borne and are obtained through the fecal-oral course. They are most predominant in settings with poor cleanliness and absence of access to clean drinking water and sanitation.<sup>1</sup> The Global multi center think about gathering led a planned case-control to learn at six destinations in Africa and Asia to explore the causes, frequency and the effect of moderate to serious Diarrhea (MSD), portrayed by extreme lack of hydration, looseness of the bowels and hospitalization. Among all pathogens discovered, rotavirus was the main source of MSD overall investigation destinations.

**Objectives of the study**

- To identify the nurse's knowledge about diarrhea
- To identify the attitudes of medical staff about diarrhea
- To identify the practices used for the prevention of diarrhea

**MATERIAL AND METHOD**

Present research study was descriptive and quantitative in nature, so descriptive. This research was conducted in the DHQ hospital

Sahiwal. For this purpose, a questionnaire was developed by using the five likert scale. Data was collected randomly from 125 nurses working in the hospital. Briefly interview survey method was used for the collection of data. Each item has five response options like strongly disagree, disagree, agree, neutral and strongly agree against their perceptions and experiences.

**RESULTS**

Above table shows the results of reliability statistics of Cronbach's Alpha test. The reliability is .75 which is greater than .7 which showed the reliability.

Knowledge about Diarrhea			
Statement		Frequency	%
Do you think the diarrheal diseases can be transmitted because of drinking contaminated water?	Yes	10	8.0
	No	104	83.2
	I Don't Know	11	8.8
Do you think diarrheal diseases can be spread because of lack of sanitary measures?	Yes	5	90.4
	No	113	4.0
	I Don't Know	7	5.6
Do you think filter machine or filtering water by placing clothe help in reducing the incidence of diarrheal diseases?	Yes	111	88.8
	No	7	5.6
	I Don't Know	7	5.6
Do you know that Boiled water is useful for preventing diarrheal episodes?	Yes	110	88.0
	No	9	7.2
	I Don't Know	6	4.8
Do you know use of any chemical can disinfect the water contaminants?	Yes	109	87.2
	No	8	6.4
	I Don't Know	8	6.4
Do you think, it is good to keep children hand clean always to prevent Diarrhea?	Yes	17	13.6
	No	102	81.6
	I Don't Know	6	4.8
Do you think that vaccination can help in the prevention of diarrheal diseases?	Yes	108	86.4
	No	11	8.8
	I Don't Know	6	4.8
Do you know about method of ORS (Oral Rehydration Solution) preparation?	Yes	16	12.8
	No	102	81.6
	I Don't Know	7	5.6
Do you think that use of yogurt is act as probiotic in diarrhea	Yes	110	88.0
	No	7	5.6
	I Don't Know	8	6.4
Washing hands before having a meal can prevent diarrhea causes diarrhea?	Yes	110	88.0
	No	8	6.4
	I Don't Know	7	5.6
Do you Know, to Avoid tap water and ice for intake to prevent diarrhea?	Yes	109	87.2
	No	8	6.4
	I Don't Know	8	6.4
Do you know Diarrhea is a deadly disease?	Yes	4	3.2
	No	111	88.8
	I Don't Know	9	7.2

Showed status of respondents according to their marriages, the results showed that 29.6 percent respondents are unmarried and 70.4 percent

respondents are married. 25 nurses having the degree of BSN, 95 nurses having general nursing degree and 5 nurses having other degree or qualification than BSN and general nursing. The survey results indicated that the respondents whose income is between the 15000 to 25000 rupees are 118 and only 7 nurses are those whose income is between 26000 to 35000 rupees income. The survey results indicated that the respondents who worked 4 to 8 hours per day are 41 and the nurses who worked more than 8 hours are 84 nurses.

Demographic Information		Results	
		Frequency	%
<b>Marital Status</b>	Single	37	29.6
	Married	88	70.4
<b>Education</b>	BSN	25	20.0
	General Nursing	95	76.0
	Other	5	4.0
<b>Income</b>	15000-20000 Rs	118	94.4
	26000-35000	7	5.6
	Generic	4	3.0
	Other	11	8.3
<b>Working Hours</b>	4 to 8 hours	41	1.6
	More than 8 hours	84	8.0

The results indicated that 10 nurses answered no, 104 nurses answered yes and 11 respondents showed the neutral behavior against the given statement. 5 nurses answered no, 113 nurses answered yes and 7 respondents showed the neutral behavior against the given statement. 111 nurses answered yes, 7 nurses answered no and 7 respondents showed the neutral behavior against the given statement. 110 nurses answered yes, 9 nurses answered no and 6 respondents showed the neutral behavior against the given statement. 109 nurses answered yes, 8 nurses answered no and 8 respondents showed the neutral behavior against the given statement. that 17 nurses answered yes, 102 nurses answered no and 6 respondents showed the neutral behavior against the given statement. 108 nurses answered yes, 11 nurses answered no and 6 respondents showed the neutral behavior against the given statement. 102 nurses answered yes, 16 nurses

answered no and 7 respondents showed the neutral behavior against the given statement. 110 nurses answered yes, 8 nurses answered no and 7 respondents showed the neutral behavior against the given statement. 109 nurses answered yes, 8 nurses answered no and 8 respondents showed the neutral behavior against the given statement. 4 nurses answered yes, 111 nurses answered no and 9 respondents showed the neutral behavior against the given statement.

The results indicated that 17 nurses strongly agreed with the statement that tap water is avoided during diarrheal disease, 107 strongly agreed with the statement, 1 remained neutral, no one disagreed and no one strongly disagreed with the above-mentioned statement. 18 disagree with the statement, 1 remained neutral, 0 agreed and 0 strongly agreed with the above-mentioned statement.

2 disagree with the statement, 0 remained neutral, 13 agreed and 109 strongly agreed with the above-mentioned statement. 1 nurse strongly disagreed with the statement that proper vaccination is important to avoid Diarrhea, 0 disagree with the statement, 01 remained neutral, 7 agreed and 116 strongly agreed with the above-mentioned statement. no one nurse strongly disagreed with the statement that environmental hygiene is important to avoid from diarrhea, 14 disagree with the statement, 5 remained neutral, 104 agreed and 2 strongly agreed with the above-mentioned statement. mothers breastfeeding care is necessary to avoid from diarrhea, 4 disagree with the statement, 1 remained neutral, 104 agreed and 16 strongly agreed with the above-mentioned statement. 0 disagree with the statement, 4 remained neutral, 5 agreed and 116 strongly agreed with the above-mentioned statement. 0 disagree with the statement, 0 remained neutral, 6 agreed and 119 strongly agreed with the above-mentioned statement. 0 disagree with the statement, 0 remained neutral, 7 agreed and 118 strongly agreed with the above-mentioned statement. no one nurse strongly



Statements	Strongly disagree	disagree	Neutral	Agree	Strongly agree
	Freq %	Freq %	Freq %	Freq %	Freq %
I avoid tap water and ice (from market) for intake to prevent diarrhea	0 0	0 0	1 .8	107 85.6	17 13.6
I suggest frequent washing of hands to minimize the chances of diarrhea	1 .8	18 14.4	1 .8	0 0	103 82.4
I avoid raw fruits and vegetables unless washed properly and peeled by oneself	1 .8	3 1.6	0 0	2 1.6	109 87.2
I suggest proper vaccination to lessens diarrhea chances	1 .8	0 0	1 .8	7 5.6	116 92.8
I suggest to live in environmental hygiene pace to prevent from diarrhea	0 0	14 11.2	5 4	104 83.2	2 1.6
I suggest mothers to breast feed the children to prevent diarrhea in babies	0 0	4 3.2	1 .8	104 83.2	16 12.8
I recommend the use of Probiotics to prevent diarrhea	0 0	0 0	4 3.2	5 4	116 92.8
I avoid food from street vendors for diarrhea prevention	0 0	0 0	0 0	6 4.8	119 95.2
I use to close my mouth during shower to avoid contaminated water to enter in the mouth	0 0	0 0	0 0	7 5.6	118 94.4
I recommend to Brush the teeth with bottle water to prevent diarrhea	0 0	3 2.4	101 80.8	5 4	16 12.8
I check the water quality being used by me because it matters in the prevention of diarrhea	0 0	3 2.4	2 1.6	109 87.2	14 11.2
I recommend appropriate use of antibiotic/s to reduces the risk of Diarrhea	0 0	1 .8	2 1.6	110 88	12 9.6

disagreed with the statement that brushing teeth with bottle water to prevent diarrhea, 3 disagree with the statement, 101 remained neutral, 5 agreed and 16 strongly agreed with the above-mentioned statement. to prevent diarrhea, 3 disagree with the statement, 2 remained neutral, 109 agreed and 14 strongly agreed with the above-mentioned statement. no one nurse strongly disagreed with the statement that use appropriate antibiotics to prevent diarrhea, 1 disagree with the statement, 2 remained neutral, 110 agreed and 12 strongly agreed with the above-mentioned statement.

**DISCUSSION**

MacDonald and Moralejo,<sup>2</sup> conducted a research on Correct arrangement and organization of oral rehydration arrangement: fundamental for protected and successful home treatment of diarrhea in Indonesia which says that Diarrhea-related lack of hydration is the main source of youth demise in creating nations, for example, Indonesia, in spite of being to a great extent

preventable and treatable through utilization of Oral Rehydration Solution (ORS). While the degree to which ORS is utilized in Indonesia has been investigated in before studies, the issue of whether it is being utilized accurately has not been enough examined. The motivation behind this examination was to survey moms' ORS arrangement and organization rehearses and to decide their wellspring of guidance for these practices. An organized poll was directed orally to 100 moms of children younger than 5 years, in a rustic town of West Java, Indonesia. Just 23.7% of moms were found to have effectively arranged ORS, and none showed completely right organization rehearses. Essential well springs of guidance were well being laborers (62.9%), bundle directions (23.7%), and relatives or companions (12.4%). Coming about proposals incorporate instruction of social insurance specialists, network well being training programs, reallocation of human services assets, and update of ORS bundling guidelines<sup>6</sup>.

Bhattacharya et al.,<sup>3</sup> studied that the "Oral rehydration and Diarrhea effects and its treatment in a provincial region, northern Thailand" which was a cross-sectional testing study of moms' routine with regards to ORT in Amp hoe Bunpotphesai in the northern piece of Thailand included 1,619 children under five. Two hundred and six children were accounted for to have 223 diarrheal scenes. The rate of diarrhea in children under five was 3.4 scenes for each tyke every year. At the point when children had diarrhea 65.5 percent of moms looked for assistance from well being suppliers, 25.2 percent treated their children with medications purchased from stores, 2.3 percent utilized homegrown drug and 6.1 percent did not treat their children. 50.7 percent of diarrheal scenes mother gave ORT, utilizing ORS 19.7, business electrolytes blend 16.6 and home accessible liquid 14.4 percent. The exactness of weakening of electrolytes powder from the parcels was checked in 80 occurrences. 31.8 and 27.8 percent of moms made right weakening of ORS and business electrolytes items separately. Well being suppliers conveyed the two ORS and business electrolytes parcels. ORS added to a glass of water was found in 13.6 percent which was multiple times concentrated. Business electrolytes items were excessively weakening in 72.2 percent. 17.5 percent of moms separated electrolytes powder to include one spoon of water to regard their children as one medication portion. Information demonstrated that the ORT use rate was 50.7 percent. Home accessible liquid was utilized by 14.4 percent. ORT ought to be additionally elevated to control diarrheal maladies and wellbeing suppliers should offer guidelines to each mother or kid minder on the most proficient method to administer ORS or electrolytes parcels for fitting weakening and use.

Agustina et al.<sup>4</sup> conducted an examination on "Maternal comprehension of dairrhoea-related lack of hydration and its effect on ORS use in Indonesia "which says that drying out coming

about because of dairrhoea remains a noteworthy reason for death for young children in creating nations, for example, Indonesia. Albeit Oral Rehydration Solution (ORS) is viable in anticipating and treating lack of hydration, its utilization in-home treatment isn't across the board. This examination looked to evaluate whether moms' comprehension of diarrhea-related drying out affected their utilization of ORS in-home treatment. One hundred moms of children younger than five years in country Indonesia were over viewed utilizing an organized survey, managed in a meeting position in their homes. Just 38 (38%) of the moms reviewed could distinguish at least two right indications of parched ness. The noteworthy relationship was found between maternal learning of right indications of lack of hydration and the utilization of ORS in-home treatment. Coming about proposals incorporate enhanced well being instruction programming for moms of young children and in addition future program assessment and mediation studies.

Cronin et al.,<sup>5</sup> "Diarrhea in children of Nigerian market ladies: predominance, information of causes, and the executives" which is a cross-sectional study was done among moms of children matured under five years in two markets in Ibadan, one with poor natural sanitation and the other spotless and very much kept up. The investigation occurred between September 1996 and March 1997. The poll utilized for this review looked for data about the event of diarrhea among children matured under five years, their moms' learning about the administration of diarrhea and their works on, including care-chasing rehearses, and the utilization of oral rehydration arrangements. Two hundred and sixty-six moms were met in the primary market.

Nazneen et al.,<sup>6</sup> investigated "The executives of youth diarrhea and utilization of oral rehydration salts in a rural West African people group" which

says that in a family unit study in Guinea-Bissau, 319 scenes of diarrhea in children were trailed by meetings consistently day with the point of researching apparent bleakness and ensuing moves made. Most of the moms had great information of oral rehydration salts (ORS). Univariate investigations demonstrated that the utilization of ORS was identified with a number of announced side effects, the mother being the guardian, counsels, past utilization of ORS, great learning of ORS, and having ORS sachets at home. Multivariate Cox relapse investigations demonstrated that the nearness of ORS sachets at home at the beginning of diarrhea was the most grounded indicator of utilization (danger proportion = 3.3, 95% CI = 1.9-3.6). Enhanced well being instruction should concentrate more on the amount of ORS required, early indications of drying out, treatment of getting teeth diarrhea, and bosom bolstering, and address moms who have no earlier learning of ORS. The board of diarrhea might be enhanced by a progressively liberal conveyance of ORS sachets<sup>10</sup>.

Black et al,<sup>7</sup> studied the Information, frame of mind and practices of moms with respect to home administration of intense diarrhea in Sunsari, Nepal" which says that in Nepal, 45,000 children under five years age kick the bucket because of diarrhea every year. Home administration of diarrhea is the sign of control of diarrheal sicknesses program in Nepal, which likewise intends to build the right utilization of Oral Rehydration Solution (ORS) by moms, so moms assume an extraordinary job in the diminishing the dismalness and mortality of children. The point of the examination was to evaluate learning, mentality and practices of the mother with respect to home administration of intense diarrhea in their children. The rundown of 330 children on Plan 'A' treatment was set up at 11 fringe well being organizations of Sunsari locale. Their distinguishing proof information was recorded by well being laborers. The moms were met by a similar well being laborer at the season of home visit after 24 hrs to know the

enhancement in the youngster and furthermore readiness and utilization of ORS. Greater part (97.6%) of the mother had data about ORS and furthermore its handiness in the administration of drying out because of diarrhea. 50% moms could make ORS appropriately and offered ORS to their children in a perfect world (after each stool). The right readiness and perfect utilization of ORS have not come to in appropriate route to the moms of Sunsari area.

Raja et al.,<sup>8</sup> investigated the Appraisal of mother's information and practice being used of oral rehydration answer for diarrhea in country Bangladesh" to evaluate moms' learning, frame of mind and utilization of oral rehydration arrangement (ORS) for diarrhea the executives at home, and bolstering works on amid diarrhea for children under 5-years old, in a provincial Health Development Project, Bangladesh. This was a cross-sectional review. This investigation was completed in Cox's Bazar locale, South Bangladesh, over a 2-week time frame, amid May 1994.

## CONCLUSION

The study showed the results about the perceptions of nurses towards the working environment in hospitals. The nurse's percept suitable support services, quality co-operation, directions, teamwork etc. these perceptions have great influence on patient care. 90% of the bad sanitary fittings can cause diarrhea. 88% nurses acknowledged that boiled water is a big remedy from its prevention. 87.2% nurses showed that chemically treated water is beneficial. 86.4% nurses know that vaccination can prevent from diarrhea. Cleaning hands and clean environment can also help preventing it.

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**AUTHORSHIP AND CONTRIBUTION DECLARATION**

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