



A CROSS SECTIONAL STUDY ON KNOWLEDGE, ATTITUDE AND PRACTICE DURING ACUTE DIARRHOEA AMONG MOTHERS OF UNDER-5 CHILDREN IN A RURAL TERTIARY CARE CENTER, MANDYA, KARNATAKA.

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ABSTRACT

Introduction: Diarrhoea is defined as change in consistency and frequency of stools, i.e. liquid or watery stools, that occur >3 times a day. Diarrhea is one of the major killer of the under five children, mainly in the developing nations. Awareness among the general public in the form of knowledge, attitude and practice (KAP) about the preventive measures, use of standard as well as home based oral rehydration therapy, measures to prevent dehydration, identification of danger signs and early consultation with health care personnel among parents in diarrheal illness is important. **Methodology:** This study was conducted in Adichunchanagiri Institute of Medical Sciences, B.G.Nagara, Mandya, Karnataka from January 2020 to June 2021 with the objective to assess the knowledge, attitude and practice among mothers of under 5 children during acute diarrhoea. **Results:** There were 250 study subjects were enrolled in the study, there was slight male preponderance, most of the mothers in the study group had adequate knowledge regarding what is diarrhoea, what causes diarrhoea, importance of breast milk and ORS in diarrhoea but there was lack of knowledge regarding harmful effects of bottle feeding. There was gap between knowledge and practice of the knowledge. **Conclusion:** Community education regarding knowledge of diarrhoea is required but motivating the public to implement the knowledge in practice is very important.

KEYWORDS : Diarrhoea, Knowledge, Attitude and Practice.

INTRODUCTION

Diarrhoea is defined as change in consistency and frequency of stools, i.e. liquid or watery stools, that occur >3 times a day.¹ Diarrhea is one of the major killer of the under five children, mainly in the developing nations. The current worldwide estimates in under five children suggest approximately 1.4 billion yearly episodes of diarrhea, with annual 123 million clinic visits and 9 million hospital admissions, leading to a loss of 62 million disability adjusted life years (DALYs).² In India, 1 in 82 children are dying from diarrhea before the age of 5 years.³ India is still the largest contributor to worldwide under five child mortality.⁴

An episode of diarrhoea can cause nutrient deprivation in child, which is crucial for growth of child. Diarrhoea can cause malnutrition and malnutrition predisposes the child for diarrhoea, this becomes a vicious cycle. Diarrhoea can be because of infection in intestinal tract, which can be caused by variety of bacterial, viral or parasitic organisms. Various preventive methods are reported in literatures including exclusive breastfeeding, safe drinking water and diet, proper hand washing and good personal hygiene are reported to be helpful in preventing diarrhoea.

It is important to raise the awareness among the general public in the form of knowledge, attitude and practice (KAP) about the preventive measures, use of standard as well as home based oral rehydration therapy, measures to prevent dehydration, identification of danger signs and early consultation with health care personnel among parents in diarrheal illness. Introduction of rotavirus vaccine into national immunization program of India may help to further reduce under-5 mortality and morbidity.⁵

METHODS

This study was conducted in Adichunchanagiri Institute of Medical Sciences, B.G.Nagara, Mandya, Karnataka from January 2020 to June 2021.

OBJECTIVES

To assess the knowledge, attitude and practice among mothers of under 5 children during acute diarrhoea.

Inclusion Criteria

All mothers with children less than 5 years of age visiting pediatric outpatient and in-patient department in Adichunchanagiri institute of medical sciences, B.G.Nagara with a history of diarrhoea.

Exclusion Criteria

1. Age of babies more than 5 years.

2. Not willing to participate in the study.

Method of data collection

Informed consent was taken from mothers of children aged < 5 years visiting paediatric outpatient and in-patient department of Adichunchanagiri Institute of Medical Sciences. A face to face interview using a pre-designed, self-administered, standardized questionnaire regarding knowledge, attitude and practices during acute diarrhoea was conducted. The questionnaire, included data about age of the child, gender of the child maternal age, education of mother, type of family, employment, socioeconomic status and questions regarding the knowledge, attitude and practices during acute diarrhoea.

STATISTICAL ANALYSIS

Data thus obtained was compiled and entered in MS Excel spread sheet; descriptive statistics was applied, cross tables were constructed, data was expressed in terms of frequency and percentage.

RESULTS

A total of 250 mothers who were willing to participate were included in the study. Among them most of the babies were of the age group of <1 year, 106 babies (42.4%), which was followed by 1- 3 years of age, 99 babies (39.6%). Majority of our babies were males 133 babies (53.2%). Our study subjects were mostly of joint family 168 (67.2%). About 76 mothers (30.4%) had education till intermediate, 64 mothers (25.6%) had education till secondary school, 51 mothers (20.4%) had completed their bachelor degree and above. Majority of the mothers were agriculturists 74 mothers (29.6%), which was followed by homemakers 57 mothers (22.8%), which was followed by business 53 mothers (21.1%). About 83 mothers (33.2%) belonged to class 3 socioeconomic status of modified B.G.Prasad classification, which was followed by class 2, 76 mothers (36.4%) and class 4, 37 mothers (14.8%). (Table 1)

Table 1: Demographic details of all participants.

Background characteristics	Values	Frequency (n=250)	%
Age(months)	< 1 years	106	42.4
	1- 3 years	99	39.6
	3- 5 years	45	18
Gender	Male	133	53.2
	Female	117	46.8
Type of family	Nuclear	82	32.8
	Joint	168	67.2

Mother's education	Illiterate	12	4.8
	Primary	47	18.8
	Secondary	64	25.6
	Intermediate	76	30.4
	Bachelor and above	51	20.4
Mother's occupation	Home maker	57	22.8
	Agriculture	74	29.6
	Business	53	21.2
	Skilled work	32	12.8
	Professional	34	13.6
Socio-economic status	Class 1	23	9.2
	Class 2	76	30.4
	Class 3	83	33.2
	Class 4	37	14.8
	Class 5	31	12.4

Among 250 mothers who participated in the study 213 (85.3%) of them knew the definition of diarrhoea. 187 mothers (74.8%) knew the causes of diarrhoea. Only 94 mothers (37.6%) believed that feeding bottle is risk factor for diarrhoea. 139 others (55.6%) believed that tooth eruption causes diarrhoea. 174 mothers (69.6%) knew that breast feeding is beneficial in diarrhoea. While 164 mothers (65.6%) knew that breast feeding should not be stopped in diarrhoea. 211 mothers (84.4%) knew that oral rehydration therapy is beneficial in diarrhoea. While only 154 mothers (61.6%) knew correct method of preparing ORS. 133 mothers knew the benefits of zinc during diarrhoea. Only 87 mothers (34.8%) knew to identify signs of dehydration. 170 mothers (68%) believed rotavirus vaccine will prevent all types of diarrhoea. 204 mothers (81.6%) believed antibiotics and antidiarrheal can stop diarrhoea immediately.

Among 250 mothers 149 mothers (59.6%) considered diarrhoea as serious health problem. 161 mothers (64.4%) consulted doctors immediately for diarrhoea. 197 mothers (78.8%) considered cleaning the feeding bottle can prevent diarrhoea. 203 mothers (81.2%) believed that diarrhoea will stop in 2- 3 days. 198 mothers (79.2%) considered IV fluid is better than ORS in diarrhoea.

144 mothers (57.6%) made ORS before coming to hospital. 92 mothers (36.8%) had ORS powder in their home for diarrhoea. 79 mothers (31.6%) gave glucose water or plain water for diarrhoea. 70 mothers (28%) stopped feeding the baby in diarrhoea. 89 mothers gave bottle feeds to their babies. 166 mothers (66.4%) gave home based rehydration fluids in diarrhoea. 188 mothers (75.2%) asked for antibiotics if diarrhoea did not resolve early. 143 mothers (57.2%) asked for IV fluids in diarrhoea.

Table 2: Knowledge, attitude and practices of under 5 mothers during acute diarrhoea.

QUESTION	Frequency (n= 250)	%
KNOWLEDGE		
Definition of diarrhoea	213	85.2
Causes of diarrhoea	187	74.8
Feeding bottle is risk factor for diarrhoea	94	37.6
Tooth eruption causes diarrhoea	139	55.6
Breastfeeding is beneficial in diarrhoea	174	69.6
Breastfeeding or other feeds should not be stopped in diarrhoea	164	65.6
Oral rehydration therapy is beneficial in treating diarrhoea	211	84.4
Know correct method of preparing oral rehydration solution	154	61.6
Zinc is beneficial in treating diarrhoea	133	53.2
Know how to identify dehydration due to diarrhoea	87	34.8
Rotavirus vaccine will prevent all diarrhoea	170	68
Antibiotics and antidiarrheal medications can stop diarrhoea early	204	81.6
ATTITUDE		
Diarrhoea is a serious health problem	149	59.6
Consulted a doctor for diarrhoea immediately in child	161	64.4
If bottle-fed cleaning the bottle properly will prevent diarrhoea	197	78.8
Antibiotics & antidiarrheal should be given for diarrhoea	199	79.6

Diarrhoea will stop in 2-3 days	203	81.2
IV fluids better than oral fluids in diarrhoea	198	79.2
PRACTICE		
Made Oral rehydration fluid at home in diarrhoea before coming	144	57.6
Oral rehydration powder kept at home for	92	36.8
Gave glucose/sugar or plain water in diarrhoea	79	31.6
Stopped feeding baby in diarrhoea	70	28
Bottle feeds given to your child	89	35.6
Gave home based rehydration fluids in diarrhoea	166	66.4
Asked for antibiotics if diarrhoea didn't resolve early	188	75.2
Asked to give IV fluids in diarrhoea	143	57.2

DISCUSSION

Diarrhoea is a major cause of under-5 childhood mortality and morbidity in developing nations. Overall, the steady decline in under-5 mortalities is laudable in developing nations however innovations are still required at various levels.⁶ Diarrhoea is multifactorial in origin. As mother is important person responsible for child care during illness, this study was conducted on maternal knowledge, attitude and practices among mothers of children with diarrhoea less than five years of age.

There was slight male preponderance in our study, similar observations were made in Mallick AKR et al⁷, Padhy S et al⁸. Most of the mothers in the study group had adequate knowledge regarding what is diarrhoea, what causes diarrhoea, importance of breast milk and ORS in diarrhoea similar results were seen in studies done by Mallick AKR et al⁷ and Kunwar N⁹. Other studies done by Padhy S et al⁸, Hackett KM¹⁰ and Kelly P¹¹ found that there was lack of knowledge regarding what is diarrhoea, what causes diarrhoea, importance of breast milk and ORS in diarrhoea. In our study there was lack of knowledge regarding harmful effects of bottle feeding similar observations were made by Mallick AKR et al⁷, Padhy S et al⁸.

84.4% of mothers knew the importance of ORS in diarrhoea but only 57.6% of mothers actually prepared implying knowledge that is not practiced; similar observations were made by Mallick AKR et al⁷. Apart from acquiring the adequate knowledge one should implement it to change the attitude and the practice.

CONCLUSION

Community education regarding knowledge of diarrhoea is required but motivating the public to implement the knowledge in practice is very important.

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Conflict Of Interest: Nil

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