



MATERNAL KNOWLEDGE AND PRACTICES REGARDING DIARRHOEA IN UNDER FIVES.

Community Medicine

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ABSTRACT

Diarrhoea is a major cause of morbidity and mortality among under-fives. Mothers play an important role in preventing diarrhoea and associated deaths. Present cross-sectional study was carried out in 575 mothers attending Immunoprophylaxis Clinic of Community Medicine Department, GMCH, Nagpur to assess their awareness and practices regarding diarrhoea. Eating contaminated food, improper maternal diet, early weaning, and worm infestation were commonly cited causes. Common danger signs known were persistent diarrhoea, drowsiness, refusal to feed and frequent vomiting followed by dry tongue etc. Preventive measures like using boiled water, keeping food and water covered and washing of hands were known to around one-third of the mothers. More than 50% were practising fluid or food restriction during diarrhoeal episodes and very few were using home remedies. Mothers had inadequate knowledge regarding diarrhoea and many of their practices were improper.

KEYWORDS:

Knowledge, Practice, Under-five children, Diarrhoea.

INTRODUCTION

Diarrhoeal diseases continue to be a major concern for developing countries as they are a leading cause of childhood morbidity and mortality besides contributing significantly to the problem of undernutrition.¹ Globally, there are nearly 1.7 billion cases of childhood diarrhoea with around 525000 under five deaths every year.² The continuing high mortality due to diarrhoea is to a large extent because of ignorance combined with harmful traditional beliefs and practices which lead to the institution of inappropriate therapeutic measures or inordinate delays in starting the therapies.^{3,4} Mothers, being the chief caretakers of child can play an important role in preventing diarrhoea associated deaths. Present study was therefore carried out to assess the existing level of maternal knowledge, beliefs and practices about diarrhoeal diseases. This information can serve as a basis for formulating educational campaigns seeking to bring desired changes in this group.

MATERIAL AND METHODS

This cross sectional study was carried out in mothers attending Immunoprophylaxis Clinic run by the Department of Community Medicine, Government Medical College & Hospital, Nagpur. All 575 mothers attending the IPC over a period of 3 months and having at least one child less than five years of age, constituted the study sample. Data was collected using a predesigned and pretested proforma by interview technique. Information regarding various aspects of diarrhoea such as definition, presumed etiology, danger signs, prevention and treatment measures, as well as feeding practices in diarrhoea were noted.

RESULTS

Majority (90%) of the respondents were of the age group 20-25 years. Most of them belonged to middle and upper middle social classes according to Modified Kuppuswamy Scale. 90.4% were literate, 32% were employed, 67.8% had one or two children, 45.4% were living in a nuclear family.

Majority of mothers considered any change in frequency and consistency of stools as diarrhoea. Only 156 (27.1%) were aware of the WHO definition (>3 stools/day). Table 1 shows general awareness and beliefs regarding childhood diarrhoea. Causes cited by most of the mothers were contaminated food (53.4%), improper maternal diet in breastfed children (51.6%), top feeds/early weaning (34.3%), worm infestation (32.5%), etc. Common danger signs reported were persistent diarrhoea (76.3%), drowsiness (53.2%), refusal to feed (51.8%) frequent vomiting (41.7%), dry tongue (23.8%) etc. Preventive measures of diarrhoea like using boiled water for children

(43.0%), keeping food and water covered (41.7%) and washing hands (33.4%) were known to quite a few. However, very few were aware of the fact that exclusive breastfeeding for first 6 months and spoon feeding rather than bottle feeding is recommended for prevention of diarrhoea. More than 50% of mothers were of the opinion that anti-diarrhoeal and antibiotics are required for treatment. ORS was known to 63% of the mothers. Of these, only 9.7% knew how to prepare it correctly. Sources of such knowledge were mainly mass media, doctors and other health personnel. 43.1% mothers were aware about home remedies for diarrhoea.

Feeding pattern during diarrhoea is seen in table 2. Most of the mothers were in the favour of continuing breastfeeding during diarrhoea. However 35.0% choose to withhold. As many as 62% resorted to partial or complete fluid restriction and about 72% gave less than usual amount of food or completely restricted food. Khichri was given by 37.6% mothers. Buttermilk (16.0%), pulsewater (7.8%) and ricewater (7.0%) were the home available fluids given in diarrhoea. Only 10.8% started ORS at home. In case of serious illness or when home remedies did not seem to benefit 42.3% consulted local medical practitioner and others sought treatment from government health functionaries. Knowledge regarding diarrhoea in mothers was found to be inadequate and many faulty practices were prevalent.

Table 1: Knowledge regarding diarrhoea

Possible causes	No.	% (N=575)
Eating uncovered / stale food	307	53.4
Improper maternal diet in breastfed children	297	51.6
Top feeds / early weaning	197	34.3
Worm infestation	187	32.5
Contaminated / dirty water	165	28.7
Eating raw / uncooked food	111	19.3
Infection	107	18.6
Danger signs		
Persistent diarrhea	439	76.3
Drowsy / sleepy child/ Weakness	306	53.2
Refusal to feed	298	51.8
Frequent vomiting	240	41.7
Dry tongue	137	23.8
Dry and sunken eyes	98	17.0

Decreased urine output	52	9.0
Loose dry skin	25	4.3
Preventive measures		
Using boiled water for children	247	43.0
Keeping food and water covered and clean	240	41.7
Hand washing with soap before taking food	192	33.4
Discourage children from eating outside food items	167	29.0
Disinfecting well water with bleaching powder	97	16.9
Using spoon and katori for feeding	80	13.9
Exclusive breast feeding- first 6 months	60	10.4
Awareness regarding treatment of diarrhoea		
Using ORS	363	63.1
IV fluids	205	35.7
Antibiotics	123	21.4
Antidiarrhoeal (antimotility and binding agents)	216	37.6
Homemade remedies	248	43.1

Table 2: Practices during diarrhoea

Sr no	Feeding pattern	No.	% (N=575)
1	Withholding breastfeed	201	35.0
2	Fluids		
	More than usual	119	20.7
	Usual	100	17.4
	Less than usual	333	57.9
	Complete restriction	23	4.0
3	Food		
	Usual food	157	27.3
	Less than usual	320	55.7
	Complete restriction	98	17.0
4	Khichri	216	37.6
5	Curd/butter milk	92	16.0
6	Pulse water	45	7.8
7	Rice water	40	7.0

Discussion:

One of the major steps towards combating the mortality and morbidity due to diarrhoeal diseases is providing health education to mothers regarding various aspects of diarrhoea and its management. An important prerequisite of health education is to assess existing knowledge and attitudes and study the local practices concerning diarrhoea and its management, hence the present study was carried out. The findings about present knowledge, beliefs and practices of mothers are comparable to other studies. In the present study, only 27.1% mothers were aware of the WHO definition of diarrhoea however, the proportion of mothers defining diarrhoea properly as reported by various studies varies from 35% to 88%.^{5,6,7}

Diarrhoea was perceived by mothers to be due to a host of reasons, the commonest being contaminated food (53.4%). Similar findings were reported by other authors also.⁸ However in some studies this percentage was quite less.^{3,9} In our study, 51.6% perceived improper maternal diet as a cause of diarrhoea in breastfed children while Mumtaz Y et al reported a figure of 63.1%.⁸

However, very few mothers attributed the cause of diarrhoeal diseases to infection and dirty environment. It is important to emphasize about the role played by the same. Regarding danger signs of diarrhoea the knowledge of mothers was relatively better as compared to other studies.^{8,10} Mothers being the prime caregivers for children should be able to recognize the signs for seeking immediate help.

Majority were unaware about preventive measures for diarrhoea. Most common method perceived was using boiled water (43.0%), followed by keeping food and water covered and clean (41.7%) and adequate washing of hands (33.4%). In a similar study, very few mothers (14.5%) knew about boiling water as a method of prevention.⁸ There was a relatively better awareness among mothers on personal hygiene factors such as water and food hygiene (82% each) and washing of hands (62%) in a study by Choudhary P et al.¹¹ Prevention of diarrhoea

and its consequences should receive major emphasis in health education.

In spite of good knowledge of mothers about ORS, very few of them knew the correct method of preparation. Similar findings were noted by others.^{8,12} Drugs have a limited role to play in the management of diarrhoea. Many of the mothers were of the opinion that anti-diarrhoeals and antibiotics should be used to cure diarrhoea. The misuse of drugs leads to adverse reactions, resistant organisms and increase in the cost of treatment and hence this practice should be discouraged.

Feeding during diarrhoea is a key concern, the popular belief being that food should be withheld. As many as 72% opted for partial or complete restriction of food and 62% were in favour of partial or complete restriction of fluids. Respective figures reported by Kaur A et al, were 35% and 54%.¹³ This is contrary to the guidelines given by WHO, which recommends continued feeding. Very few mothers were giving homemade food like khichri, butter milk, pulse water and rice water which is similar to findings of other studies.^{5,8,9}

Another significant finding noted was withholding of breastfeeding by 35% mothers which is in line with other studies.¹³ Lack of awareness in the community regarding importance of exclusive breast feeding and continuing breastfeeding during episodes of diarrhoea requires focusing on health education regarding the importance of continued feeding and giving excess of fluids during diarrhoea. A sound knowledge about appropriate feeding practices and proper method of preparation and administration of ORS is essential to break the vicious cycle of diarrhoea and malnutrition.

The study has helped to understand the mother's perception of causes, preventive measures, feeding practices during diarrhoea and lack of knowledge of fluid loss, dehydration and rehydration. These findings could be utilized for preparing a plan for proper health education to guide on the dangers of diarrhoea, its prevention, rehydration and nutritional rehabilitation.

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