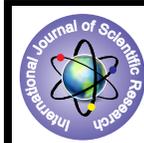


Assessment of Knowledge, Attitude and Practices of Mothers of Under-fives Regarding Diarrhoea in Rural Field Practice Areas



Medical Science

KEYWORDS : KAP, diarrhoea, under-fives, rural field practice areas

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ABSTRACT

BACKGROUND: Diarrhoea is the second leading killer of under-fives. Most of the deaths are preventable, treatable and occur in rural areas. Knowledge, Attitude and Practice (KAP) study is a tool of educational diagnosis. It helps in planning and decision making.

AIMS AND OBJECTIVES: 1. To assess the knowledge, attitude and practices of mother of under-fives regarding diarrhoea. 2. To provide suggestive measures if required.

METHODS AND MATERIALS: A cross sectional study was carried out in rural field practice areas. We included 400 women having children less than five years by simple random sampling. Mothers of children were interviewed using a predesigned, pretested questionnaire. Results were analysed using test of percentages.

RESULTS: All women were aware that a change in consistency (watery/loose) is diarrhoea followed by increase in frequency more than three times (75%). One fifth didn't know reasons for getting diarrhoea. Those who thought they knew only a quarter of them knew that diarrhoea occurs due to contamination from outside. Around 60 per cent mothers have given less food and 20 per cent less fluid than usual to their children during episodes of diarrhoea. Only 38.5 per cent have given more fluid during episodes of diarrhoea which is recommended. 42.75 per cent have given same as usual. Only 66 per cent received ORS, of these only two third used ORS. Only half of these knew correct methods of making and giving ORS. Reasons for not using it were no faith in ORS (62.20%) followed by child doesn't like it (20.73%) and doesn't know how to make it (12.20%). Sugar salt solution was used by 53 per cent. Around 50 per cent knew correct method of making and using it. Knowledge about some food based solution and special food (Khichdi etc.) to be given during diarrhoea was in 43.25 and 68.50 per cent respectively.

CONCLUSION AND RECOMMENDATIONS: Unawareness and misconceptions in mothers regarding knowledge, attitude and practices related to diarrhoea are significant. A need for behaviour change by empowering women with correct information is felt.

INTRODUCTION

Diarrhoea is the second most common cause of child deaths worldwide¹. Most of deaths are preventable, treatable and occur in rural areas. Knowledge, Attitude and Practices (KAP) study is a tool of educational diagnosis. It helps in planning and decision making.

It is proved that behavioural issues are central to the success of health promotion. Knowledge and practices of mother of children are vital determinants of the occurrence or outcome of diarrhoeal disease. Planning for diarrhoeal intervention programmes requires reliable data on what mothers know, what they can do, what they need to know, what the impediments are to practicing what is known etc.

This study was carried out in the field practice areas of Rural Health and Teaching Centre of department of Community Medicine with the aims and objectives 1. To assess the knowledge, attitude and practices of mothers of under-fives regarding diarrhoea 2. To provide suggestive measures if required.

MATERIAL AND METHODS:

This was a cross sectional study carried out in registered areas of RHTC from July 2011 to June 2012. We estimated a sample size of 400 on the basis of 50 per cent cases of diarrhoea among under-fives with 5 per cent permissible error and 95 per cent confidence interval. We selected mothers of under-fives by Simple Random Sampling technique for interview. Literature review along with pretesting yielded a questionnaire designed to assess KAP level. The questionnaire contained both closed ended and open ended questions. Responses for open ended questions were analysed and divided into specific dimensions. Interns and Junior Residents were trained to take interview. Mothers were explained the nature of study thereby getting implied consent. After completion of the studies they were educated regarding various health related issues where needed. Data was entered on excel sheets and Test of Percentages was used for statistical analysis.

RESULTS:

Most of the families were of middle and low income group. Majority of them were labourer and skilled workers (44.25% and 18.75% respectively) followed by business (15.25%) and service (7.5%). Only 8.5% owned land and were agriculturist. Around 94% women were housewives. Around one-fourth (26%) men and two-third (62%) women were illiterate. 73.50% were Hindu, rest (26.50%) were Muslims. Majority of people belonged to general category, followed by OBC (23.50%) and SC/ST (21.0%). 55.5 per cent families were nuclear and 44.5 per cent were joint. Maximum numbers of people (44.75%) were residing in pucca houses and semi-pucca houses (35%). One fifth (20.25%) was living in katcha houses. Regarding treatment most common was treatment by doctor (79.44%) followed by quacks (12.18%), home based (4.57%) and self-medication (3.30%). Only 5 per cent believed that diarrhoea can be corrected with ORS only while rest (95%) told that medicines are also required to cure diarrhoea.

FIGURE 1 : KNOWLEDGE ABOUT WHAT IS DIARRHOEA

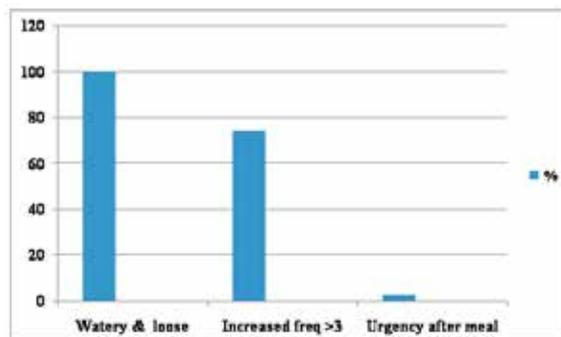


Figure 1 reveals that all women were aware that change in consistency (watery/loose) is diarrhoea. Three-fourth knew that increase in frequency more than three times is also diarrhoea.

Figure 2 shows that one-fifth didn't know reasons for getting diarrhoea.

FIGURE 2

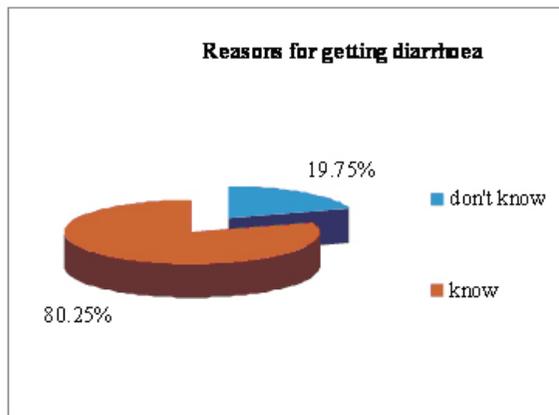


TABLE1: REASONS FOR GETTING DIARRHOEA

S.No.	Reasons for getting diarrhoea (N=321)	No. (%)
1.	Eating spoilt/contaminated food & drink	41 (12.77)
2.	Putting dirty hands in mouth/eating mud/playing in dirt (contamination from outside)	20 (12.77)
3.	Eating from outside	126 (38.32)
4.	Eating in excess/many times	44 (13.71)
5.	Pet ki garmi se	6 (1.87)
6.	Bad weather (Hot/Cold)	54 (16.82)
7.	Weakness of body/liver/stomach	9 (2.8)
8.	Normal, everybody gets it	10(3.12)
9.	Mother eats wrong things	16 (4.98)
10.	Some foods causing diarrhoea (Potato, spicy food, oily food, urad n masoor dal)	46 (14.33)
11.	Worm infestation	6 (1.87)
12.	Tooth eruption	23 (7.17)

*Multiple answer

As per Table 1 those who thought they knew only a quarter knew that diarrhoea occurs due to contamination from outside. 38 per cent said that it is because of eating food from outside. Rest gave various reasons like eating in excess/many times, bad weather, tooth eruption, weakness of body and some food causing diarrhoea etc.

FIGURE 3

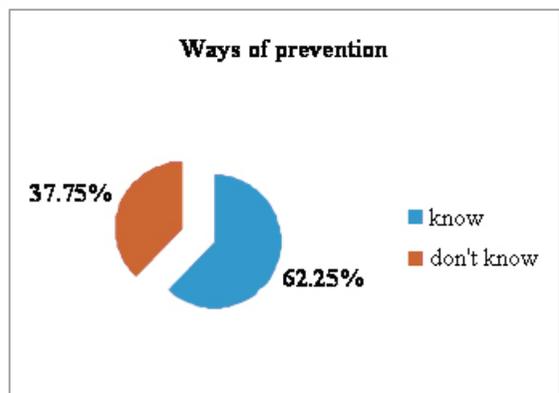


Figure 3 shows around 62 per cent perceived that they knew some ways of prevention.

TABLE 2: WAYS OF PREVENTION OF DIARRHOEA

S.No.	Ways of Prevention N=249 (62.25%)	No. (%)
1.	Keeping cleanliness, proper hygiene & sanitation, keeping food covered	98 (39.36)
2.	Avoiding food from outside	38 (15.77)
3.	Improving body strength	9 (3.62)
4.	No way to prevent/Normal/Destiny	67 (26.91)
5.	Eating right food/avoiding oil & spice	28 (11.25)
6.	More fluid/ORS/SSS	24 (9.64)
7.	Prevention from cold	18 (7.23)

Multiple answers

Table 2 reveals that the two-third women who thought they knew the ways to prevent diarrhoea, only around 40 per cent told that diarrhoea can be prevented by maintaining hygiene and sanitation and handling food properly. A quarter of them told that it is normal to get diarrhoea and it is destiny and you can't prevent it. Around 15 per cent told that you can prevent diarrhoea by avoiding food from outside, eating right food, avoiding spices and oil followed by prevention from cold (7.23%), giving more fluid (9.64%) and improving body strength (3.62%)

PRACTICES OF MOTHER REGARDING DIARRHOEA:

FIGURE 4: AMOUNT OF FOOD GIVEN (N=400)

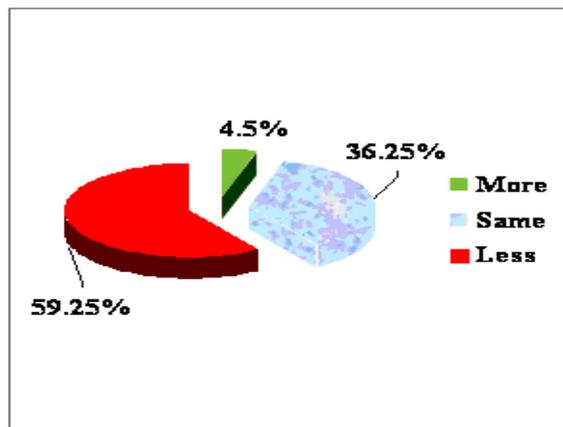


FIGURE 5: AMOUNT OF FLUID GIVEN (N=400)

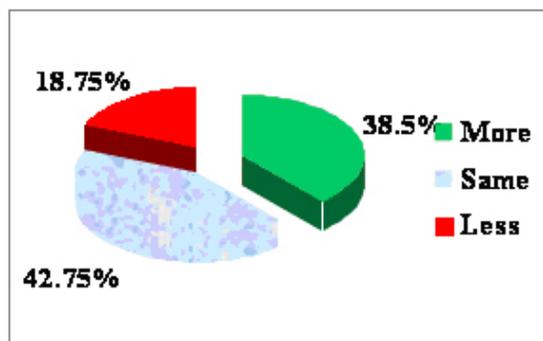
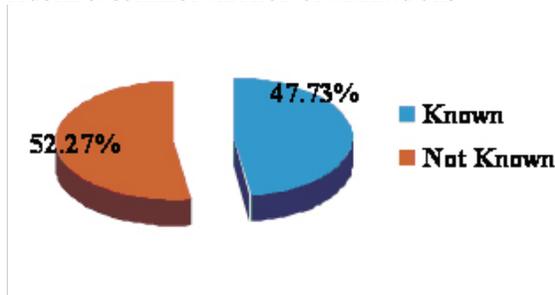


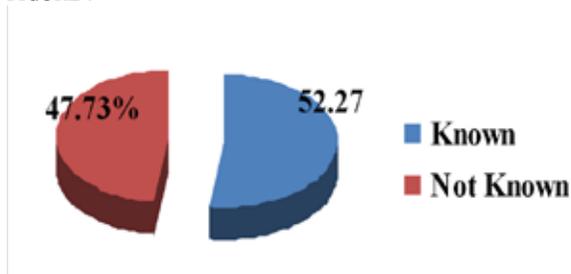
Figure 4 & 5 shows that around 60 per cent mothers have given less food and 20 per cent less fluid than usual to their children during episodes of diarrhoea. Only 38.5 per cent have given more fluid during episodes of diarrhoea which is recommended while 42.75 per cent have given same as usual.

Oral Rehydration Salt (ORS) given N=264 (66%)
 ORS used=182 (68.94% of ORS Given)
 ORS used out of Total (400) children=45.5%

FIGURE 6: CORRECT METHOD OF MAKING ORS



Correct Method of giving ORS
FIGURE 7



Only 66 per cent received ORS. Of these only half knew correct method of making (47.73%) and giving (52.27%) ORS. Only two-third used ORS if given. 53 per cent used sugar salt solution. Only 53.49 per cent knew correct method of making and 60.85 per cent using it.

Sugar Salt Solution (SSS)used (N=400)=212 (53%)

FIGURE 8: CORRECT METHOD OF MAKING SSS

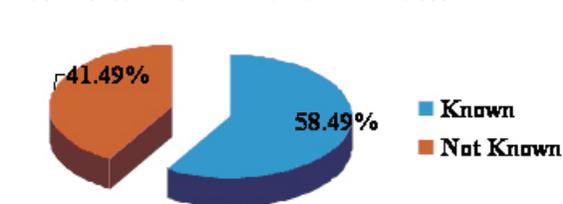
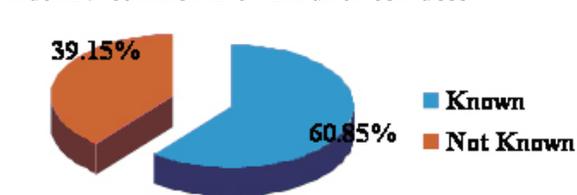


FIGURE 9: CORRECT KNOWLEDGE OF USING SSS



Around 53 per cent women used SSS. Of these 58.49 per cent knew how to make it and 60.85 per cent how to use it. (Figure 8 & 9)

ORS not used when given n=82 (31.06%)

FIGURE 10

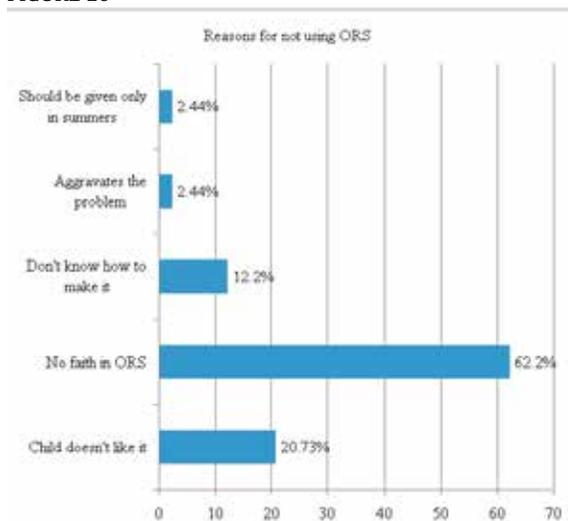


Figure 10 shows reasons for not using ORS by 31.06 per cent mothers were No faith in ORS (62.20%) followed by child doesn't like it (20.73%) and doesn't know how to make it (12.20%).

TABLE 3: FOOD BASED SOLUTION AND SPECIAL FOOD GIVEN AND FOOD NOT TO BE GIVEN DURING DIARRHOEA

1.	Food based solution known N=400	173	43.25
2.	Knowledge about any special food during diarrhoea N=400 (khichdi, rice, banana, curd, moong dal)	274	68.5
	Usual Meal	100	25.00
	Don't know	26	6.5
3.	Foods not to be given during diarrhoea N=400		
i	Don't know	88	22.00
ii	No restriction	38	9.5
iii	Food from outside	35	8.75
iv	Sweets	4	1.00
v	Aloo, Masur dal, Urad dal, oil & fat, Heavy n spicy diet, Roti, Non-veg etc.	245	61.25

Table 3 reveals knowledge about some food based solution and special food (Khichdi, moong dal, curd etc.) was in 43.25 and 68.50 per cent respectively. When probed into perception regarding food not to be given during diarrhoea most common food items (61.25%) were aloo (Potato), masur dal, urad dal, oil and fat, heavy and spicy food, roti, non-veg etc. Only one per cent told that sweets should not be given during diarrhoea.

DISCUSSION

Considering our findings almost all the women were aware of what is diarrhoea. Around eighty per cent perceived that they knew reasons for getting diarrhoea. Those who thought they knew only 20 per cent knew that diarrhoea occurs due to contamination from outside. 38 per cent said that it is because of eating food from outside. All foods from outside may not be contaminated, so it is not totally correct. Rest of them did not have correct knowledge regarding transmission of diarrhoea. Knowledge regarding how the diarrhoeal diseases transmit is the first step towards its prevention.

More than one third did not know how to prevent diarrhoea. Those women who thought (62.25%) they knew the ways to prevent diarrhoea, only around 40 per cent told that diarrhoea can be prevented by maintaining hygiene and sanitation and

handling food properly. Misconceptions were rife beside unawareness regarding ways of preventing diarrhoea.

Most of the diarrhoeal deaths are due to dehydration. To prevent dehydration more fluid in any form and ORS is recommended for treatment during episodes of diarrhoea. In our study only 38.5 per cent children received more fluid, 18.75 per cent same as usual and 42.75 per cent less than usual fluid. NFHS III² reported that only 10 per cent children were given more fluid, 49 per cent were given same as usual and 40 per cent were given less fluid to drink while suffering from diarrhoea. Another study revealed that only less than on quarter (22 %) children received more fluids of any type during their illness³. While suffering from Diarrhoea children are to continue to be fed as they normally are. This was found to be only in 36.25 per cent of children, 4 per cent were given more food and around 60 per cent were given less food during diarrhoea. This was done for fear of exacerbation of diarrhoea. NFHS III² found that only 37 per cent children were given same food as usual, 2 per cent more food, 42 per cent less food and 4 per cent no food at all. UNICEF/WHO³ reported that nearly one third children with diarrhoea in developing countries receive either less food or none during their illness-placing far too many children at risk of worsening nutritional status.

Only 66 per cent were given ORS. Of these only two third (68.94%) used it. The overall use of ORS in the study areas was 45.5 per cent. A use of 46 per cent was reported in a study in urban slum of Delhi⁴. Correct knowledge of making ORS and using ORS was found only in 47.72 per cent and 52.27 per cent respectively. The same was reported to be 38.7 per cent and 41.6 per cent respectively in another study⁴. Fifty three per cent mothers gave sugar salt solution to their children during episodes of diarrhoea. Of these only 58.49 per cent knew the correct method

of making it and 60.85 per cent had the correct knowledge of using it. Around one third mothers (31.06%) did not use ORS given to them because of misconceptions. Majority of them (62.2 %) had no faith in ORS. They thought diarrhoea can be treated only with medicines. 2.44 per cent told it aggravates the problem. Other reason for not using ORS when given was child doesn't like it (20.73%), don't know how to make (12.2%) and should be given only during summers (2.44%) not in winters. Misconceptions among 29.3 per cent mothers regarding the use of ORS was found in some study⁴. 43.25 per cent mothers knew some food based solution (Rice water, dal water, butter milk etc) to be given during episodes of diarrhoea. Food based solutions have greater nutritive value.

Regarding perceptions about food not to be given during diarrhoea, 61.25 per cent mothers told that food items like aloo (Potato), masur dal, urad dal, oil and fat, heavy and spicy food, roti, non-veg etc should not be given during diarrhoea. Sweets aggravate diarrhoea because of its osmotic action. Only one per cent mothers told that sweets should not be given during diarrhoea. 68.5 per cent told that some special food like khichdi, rice, banana, curd, moong dal should be given during diarrhoea.

CONCLUSION AND RECOMMENDATIONS:

Unawareness and misconceptions regarding how the diarrhoeal diseases transmits, how they can be prevented, importance of fluid replacement, use of ORS and continued feeding during episodes of diarrhoea are significantly high. Mother's knowledge, attitudes and practices regarding diarrhoea are vitally important to prevent high morbidity and mortality resulting from diarrhoea. So there is an urgent need to educate mothers and caregivers regarding these issues in the light of their own meanings, perceptions and cultural backgrounds to make sense of new information.

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