



A STUDY TO ASSESS THE KNOWLEDGE, ATTITUDE AND PRACTICE OF CAREGIVER OF CHILDREN ADMITTED WITH DIARRHOEA AT KMCH HOSPITAL COIMBATORE

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ABSTRACT

AIM: The main aim of the study was to assess the knowledge, attitude and practice of caregiver of children admitted with diarrhoea. **Objectives:** The objective of this study is Assess the level of Knowledge, Attitude and Practice of Caregiver regarding childhood diarrhoea. **Methods:** Descriptive study design was used, 70 samples were recruited based on the inclusion and exclusion criteria. The caregivers Knowledge, attitude, Practice about diarrhoea were assessed. **Results:** The mean score of Knowledge on childhood diarrhoea among caregivers of under five children is 23.14 and mean score of Attitude on childhood diarrhoea among caregivers of under five children is 84.27, mean score of Practice on childhood diarrhoea among caregivers of under five children is 14.57. **Conclusion:** The study reveals that the caregivers Knowledge, Attitude and Practice show there is no significant relation exists between Knowledge and Attitude, Knowledge and Practice, Attitude and Practice of caregivers.

KEY WORDS

Childhood diarrhea, KAP of caregiver

INTRODUCTION

Diarrhoea is one of the top five causes of death among infants and under five children in India, despite the availability of easily implementable interventions and existence of National Guidelines for Management at the community level. Oral rehydration therapy with oral rehydration solution remains the cornerstone of appropriate case management of diarrheal dehydration and is considered the single most effective strategy to prevent diarrheal deaths in children. However, data from United Nations Children Fund coverage evaluation survey and third National Family Health Survey shows that ORS usage rates are still unacceptable, while unwarranted anti diarrhoeal drugs and injections continue to be prescribed frequently. Moreover, there is lack of knowledge and awareness amongst care providers on how to implement and achieve greater coverage of existing cost effective interventions.

Snyder and Merson first estimated diarrhoea incidence for young children to be 2.2 episodes/year in 1980 using available data published between 1954 and 1979. Ten years later Bern et al. published an update of this review using similar methodology, including more recent studies, and estimated children

to have 2.6 episodes of diarrhoea¹. In 2003, Kosek et al. provided another updated estimate of diarrhoea morbidity concluding that children have 3.2 episodes of diarrhoea/year². Given it has been nearly 10 years since the last published estimate of diarrhoea morbidity, there is a great need for updated estimates of incidence rates for calculating burden of disease and for planning at the country level.

In India, approximately 2.5 million children were affected with diarrhoeal illness in every year (Taper and Sanderson, 2004)³. One of the major challenges in the gastrointestinal diseases is the recent increase in the number of probable etiological agents. The main causes diarrhoea are poor personal and food hygiene and lack of clean drinking water (Sanderson Walker, 1993)⁴. In developing countries, the scenario is worse due to infection, malnutrition, and illiteracy. One out of every five children who die of diarrhoea worldwide is an Indian. Daily around 1,000 children die of diarrhoea in India, which means 41 children lose their lives every hour.

Based on the etiology studies conducted in the country, it is estimated that approximately 40% of cases of diarrhoea among hospitalized children are due to rotavirus. Most of these studies included in this review aimed to identify rotavirus infection only and

not all etiologic agents of childhood diarrhea. The case fatality rates in the rotavirus and non-rotavirus diarrheas in these studies have not been reported. So, the authors of the current review have extrapolated the proportion of hospitalized childhood diarrhea cases where rotavirus infection was demonstrated to estimate the numbers of deaths caused by rotavirus diarrhea. A recent study from Kolkata reported that of the 493 cases positive for rotavirus, 285 (57.8%) were co-infected with other pathogens; children had a higher co-infection rate than adults. In such a scenario, attributing all deaths to rotavirus where rotavirus infection was reported would be inappropriate and would lead to an overestimation of the numbers of deaths attributable to rotavirus diarrhea. Available data suggests that only 12% of all deaths attributed to diarrheal diseases took place in health facility.

As pathogens causing diarrheal diseases are mostly transmitted through the feco-oral route, hand washing is proposed as an important prevention strategy. Epidemiological evidence shows that the important risk behaviors that encourage human contact with fecal matter include lack of hand washing after defecation, after handling feces, and before handling food. Hand washing aims to decontaminate the hands and prevent cross transmission. Washing with soap and water removes pathogens mechanically as well as by chemical microbicidal action. Hand washing may require infrastructural, cultural, and behavioral changes, which take time to develop, as well as substantial resources (eg trained personnel, community organization, provision of water supply and soap).

Results from a systematic reviews indicated that vitamin A supplementation has no consistent protective effect on the incidence of diarrhea or diarrhea-related mortality in neonates and infants less than 6 months. However, there was some evidence of benefit in children aged 6-59 months in low and middle, income countries. A systematic review examining the role of vitamin A given during measles episode documented a significant reduction in duration of diarrhea. However, even this review did not document any reduction in incidence of diarrhea. Overall, the evidence related to benefit of vitamin A in prevention of diarrhea is conflicting, and thus it is not recommended as a diarrhea prevention strategy, except in case of measles.

NFHS-3 asked mothers of under-five children who suffered from diarrhea within two weeks preceding the survey, a series of questions about feeding

practices during diarrhea, the treatment of diarrhea, and their knowledge and use of ORS. Sixty percent of the mothers reported consulting a health care provider during the episode of diarrhea [3]. However, only 26% of children used ORS. Another disturbing fact was that caregivers of only one in ten children gave increased fluids during diarrhea. Twenty-seven percent of children were given less to drink, 10 percent were given much less to drink, and 4 percent were not given anything to drink, resulting in 4 in 10 children with diarrhea having their fluids decreased while suffering from diarrhea. More than half (57 percent) of children received neither oral rehydration therapy nor increased fluids when sick with diarrhea.

All three National family health surveys also assessed the knowledge of mothers of under-five children regarding ORS. NFHS-3 reported that 73% of women knew about ORS packets. Knowledge of ORS packets was considerably higher among urban mothers (86%) than rural mothers (70%). The proportion of women who knew of ORS packets increased with education and increasing wealth index. Knowledge of ORS packets was lowest among mothers belonging to the lowest wealth quintile (59%). Knowledge of ORS packets was lowest among mothers who were not regularly exposed to any mass media. There was a clear dichotomy between knowledge and practice. Despite three-fourth of women knowing about ORS, only one-fourth used it when their child suffered from diarrhea. This difference cannot be explained only on the basis of use of other home available fluids as only 43% mother used either ORS or increased fluids (including home available fluids) during diarrhea.

Continued feeding during a diarrheal episode helps in faster recovery and reduces the chances of getting malnourished. In the NFHS-3 survey, only 37% of children were given the same as usual to eat when recently suffering from diarrhea. Two percent children were given more to eat, 31% were given 'somewhat less than the usual' amount of food, 11% were given much less than the usual amount of food, and 4% were not given any food. Rural mothers were more likely to reduce feeding during diarrhea. The practice of giving semi-solids to children during diarrhea showed a marginal improvement from 15% in NFHS-2 to 20% in NFHS-3. However, this could be related to more number of older children in NFHS-3 rather than an improvement in diarrhea management practice as the NFHS-3 catered to mothers having children less than five years in comparison to NFHS-2, which surveyed mothers having children less than three years of age.

The aim of this study was to describe systematically the Knowledge, Attitude and Practice of caregiver on childhood diarrhoea and analyze the relationship between them

METHODOLOGY

The research design applied for this study was descriptive survey design. This study was conducted at Kovai medical center hospital, Coimbatore. It is multispecialty High tech Hospital with 750 beds. The sample size was 70 caregivers with their children admitted for the management of childhood diarrhoea. Non probability purposive sampling technique was adopted for the study. The subjects were included if they were under five children admitted for diarrhoea management and the subjects were excluded if they had severe complication of diarrhea, mal absorption syndrome and food allergies.

All the subjects included were explained in detail about the study and a voluntary written informed consent was obtained from them

MEASUREMENT PROCEDURE:

The tool was developed by the researcher on reviewing literature and in consultation with the medical and nursing experts in the field of paediatric medicine and nursing. It consists of 25 closed ended questions on fluid, diet, home remedies,

medications, preventive measures of childhood diarrhoea. Caregiver has to respond to the question by marking yes or no. The tool was translated into tamil, according to the level of the understanding of the caregiver without changing the concept of the study. The validity of the tool was established by submitting the questionnaire and the Attitude scale to the experts in the field of child health nursing and medical. Based on their suggestions and recommendation, the tool was modified for the main study. Data collection tool was administered to assess the Knowledge, Attitude and Practice of caregiver on childhood diarrhoea. The time taken to collect data from each caregiver will be 50 minutes give a range of subjects per day.

STATISTICAL ANALYSIS

The obtained data from the respondents were tabulated with appropriate descriptive and inferential statistics. The Descriptive statistics used are Mean at percentage and inferential statistics are Karl Pearson's correlation coefficient to correlate Knowledge, Attitude and Practice of caregivers and Chi square are used to associate Demographic characteristics of caregiver, children and Environmental data with Knowledge, Attitude and Practice.

RESULTS

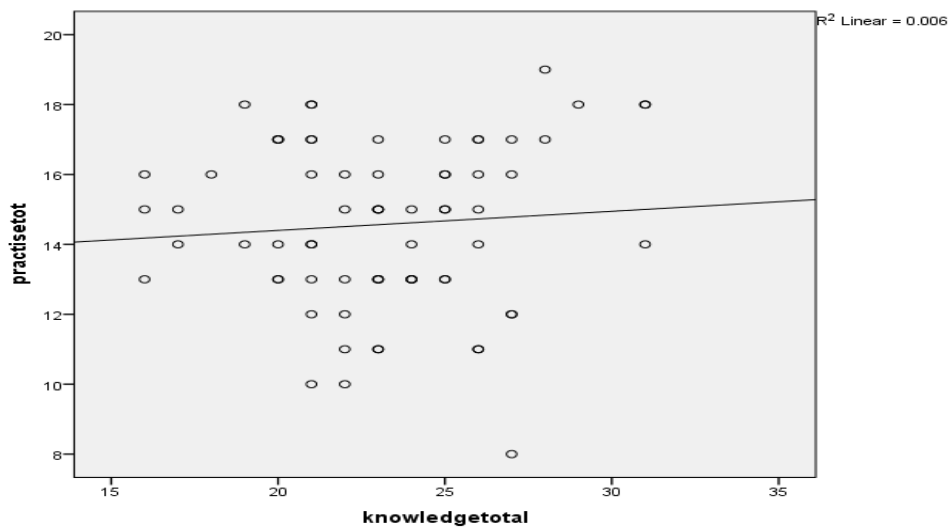
Description of the study subjects, analysis and description of data collected to evaluate the Knowledge, Attitude and Practice among caregiver of under five children with childhood diarrhoea.

Sl.no	Contents	Correct	Percentage	Wrong	Percentage
I.a	Predisposing factors				
1.	Bottle feeding	30	42.85 %	40	57.14 %
2.	Cow milk	34	48.57 %	36	51.42 %
3.	Pet animals	33	47.14 %	37	52.85 %
4.	Contaminated food	68	97.14 %	2	2.85 %
5.	Unhygienic feeding practices	64	91.42 %	6	8.57 %
6.	Eruption of teeth	45	64.28 %	25	35.71 %
7.	Eating mud	57	81.42 %	13	18.57 %
8.	Worm infestation	62	88.57 %	8	11.24 %
9.	Change of climate	43	61.42 %	27	38.57 %
10.	Changes in diet	52	74.28 %	18	25.71 %
11.	Poor personal hygiene	58	82.85 %	12	17.14 %

Correlation between Knowledge and Practice of caregivers regarding childhood Diarrhoea

Knowledge and practice of caregivers of fewer than five children with childhood diarrhoea and the value

is not statistically significant at 0.01 levels. This reveals that there is no significant relation exists between Knowledge and Practice of caregivers.



Association of selected demographic variables of caregivers with Knowledge, Attitude and Practice

The χ^2 value of Type of feeding with Attitude of caregivers of under five children with childhood diarrhoea. As the computed χ^2 value (12.536) which is more than the table value (0.006) at 0.05 level of significance, there exist a significant association between Type of feeding with Attitude of caregiver. The χ^2 value of Source of drinking water with Attitude of caregivers of under five children with childhood diarrhoea. As the computed χ^2 value (9.130) which is more than the table value (0.028) at 0.05 level of significance, there exist a significant

association between Source of drinking water with Attitude of caregiver.

The χ^2 between Education with Practice of caregivers of under five children with childhood diarrhoea. As the computed χ^2 value (5.145) which is more than the table value (0.023) at 0.05 level of significance, there exist a significant association between Education with Practice of caregivers. The χ^2 between Monthly incomes with Practice of caregivers of under five children with childhood diarrhoea. As the computed χ^2 value (7.302) which is more than the table value (0.026) at 0.05 level of significance, there exist a significant association between Monthly income with Practice of caregivers.

Variables	practice		Total	χ^2 12.536*
	Negative	Positive		
TYPE OF FEEDING	Negative	Positive		
Breast milk	14	4	18	
Cow milk	15	7	22	
Breast feeding and home food	3	11	14	
Normal diet	7	9	16	
Total	39	31	70	
SOURCE OF DRINKING WATER	Negative	Positive	Total	χ^2
Filtered and purified water	18	12	30	
Can water	9	10	19	
Tap water	9	1	10	9.130*
Bore well water	3	8	11	
Total	39	31	70	
EDUCATION	Undesirable	Desirable	total	χ^2
School education	23	7	30	
Graduate	20	20	40	
Total	43	27	70	5.145*
MONTHLY INCOME	Undesirable	Desirable	total	χ^2
5000-10000	14	3	17	
10000-20000	19	10	29	7.302*
>20000	10	14	24	
Total	43	27	70	

DISCUSSION

Childhood diarrhoea ranges from the dehydration, loose stools. It is the most common cause of morbidity and mortality in children under the age of 5 years. It's necessary to assess the Knowledge, Attitude and Practice (KAP) of the caregivers of under five children regarding childhood diarrhoea and organize health education programme for them.

The Knowledge of caregivers regarding childhood diarrhoea was assessed using knowledge questionnaire of 35 closed ended questions. The attitude of caregivers regarding childhood diarrhoea was assessed by 4 point attitude scale having 30 questions. The practice of caregivers regarding childhood diarrhoea was assessed by practice questionnaire having 25 closed ended questions. The study was conducted among 70 caregivers of under five children admitted in KMCH. The mean Knowledge score is 23.14, mean Attitude score is 84.27 and mean Practice mean score is 14.57.

Comparison between Knowledge and Practice of caregivers regarding childhood diarrhoea

The relationship between Knowledge and Practice was assessed by Pearson's coefficient of correlation. The 'r' value of Knowledge and Practice is 0.080 which is not statistically significant at 0.01 levels. So there is no significant relation exists between Knowledge and Practice.

Correlate Attitude and Practice of caregiver regarding childhood diarrhea.

The relationship between the Attitude and practice was assessed by Pearson's coefficient correlation. The 'r' value of attitude and practice is -0.78 which is not statistically significant at 0.01 level. So there exist no significant relation between Attitude and Practice.

CONCLUSION

The study reveals that the caregivers Knowledge, Attitude and Practice show there is no significant relation exists between Knowledge and Attitude, Knowledge and Practice, Attitude and Practice of caregivers. The Knowledge of caregivers with their demographic characteristics like age, relationship to fewer than five child, monthly income, and religion has significant association. The Attitude of caregivers with their demographic characteristics like gender relationship to fewer than five child, education, monthly income, place of residence has significant association. The Practice of caregivers with their demographic characteristics like education,

occupation, monthly income, religion, place of residence has significant association.

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