

Study to Assess Knowledge Belief Practices of Feeding During Diarrhoea Among Mothers of Under-fives KMCH, Coimbatore

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Abstract

I have a far consequences on the overall development of the country. Diarrhoea refers to the passage of three loose or more watery stools per day. Diarrhoeal disease is the second leading cause of death under five years of age. Every year 5,25,000 deaths occur. Globally 1.7 billion diarrhoeal cases every year. (WHO, May 2017).

Objectives: The main objectives was to assess the Knowledge, Belief and Practices and to correlate the Knowledge and Belief, Belief and Practices, practice and knowledge of mothersgraphic variables of mothers.

Methods: The data collection was done during 2014 after ethical clearance form ethical committee KMCH.

Design: the study design was descriptive correlation; variables studied were Knowledge, belief and practice.

Results: Statistical computations was done by SPSS and the study revealed that the mothers edge, Belief and Practice showed significant relationship, Knowledge and Belief ($r = 0.24$), Belief and Practice ($r = 0.01$) Practice and Knowledge ($r = 0.12$). So the study concluded that what the mothers believed and the knowledge they possessed brought desirable practice of feeding during diarrhoeal episodes.

Keywords: Knowledge; Belief; Practice; Feeding; Diarrhoea; ORS; SSS; Mothers; Children.

Introduction

Diarrhoeal disease is the second leading cause of death among under - five years of age. Every year 5, 25,000 deaths, globally 1.7 billion cases every year. (WHO, May 2017)). An average of 3 episodes per year in children younger than 5 years is reported; however, some areas reported that 6-8 episodes per year per child. In these malnutrition is an important

additional risk factor for diarrhoea, and recurrent episodes of diarrhoea lead to growth faltering and substantially increased mortality (Carmen Cuffari, 2013). Diarrhoea is caused by many organisms, mainly viral, bacterial, and protozoa.

Diarrhoea can also be due to intolerance of some types of food especially lactose containing milk. Infections in other parts of the body can lead to parenteral diarrhoea. The foremost cause of diarrhoea leading to death and morbidity worldwide in childhood is rotavirus infection¹ (Adimora, 2011). Diarrhoeal diseases pathogens are usually transmitted through the feco-oral route² (Curtis, 2000). The mode of transmission include ingestion of food and water contaminated by fecal matter, person-to-person contact, or direct contact with infected feces (Black, 1989).

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A survey was carried out amongst a population on diarrhoeal mortality and morbidity along with belief and practices at Addis Zemen, North-western Ethiopia. The prevalence (13.5%) and the proportion of diarrhoea related deaths (41.7%) were high among children below five years. Most of the mothers believed that diarrhoea was caused by the will of God (33.1%) and by sorcery (11.5%). This indicates that lack of knowledge regarding causes of diarrhoea.³

A study conducted in Nigeria revealed that majority of mothers perceived that diarrhoea was caused by teething.⁴ Whole animal milk or formula especially when mixed with other foods such as grains are tolerated better. On other hand solid food cause delay in gastric emptying and consequently decreased intestinal motility. Soya content milks are not recommended because of intolerance (Walker, 2004). Home fluids such as sweet drinking, fruit juices and tea are not suggested due to high Osmolality, (Behrman, 2004).

Home available foods/fluids, e.g. loose soft rice and pulse/cereal water, oral rehydration solution, salt sugar water solution and more frequent breast feeding were the most favored approaches for the management of diarrhoea. However, it was believed that all types of diarrhoea are not manageable with ORS and Salt Sugar Water (SSW) solutions. Mothers were mostly in favor of home available foods and fluids. However, there were contradictory opinions among the mothers about whether cow milk, yogurt, fish and meat are harmful or beneficial during diarrhoea. Spicy, oily and rotten food items were commonly believed to be harmful during diarrhoea. Generally mothers' breast milk can be given during diarrhoea.⁵

A Longitudinal study was conducted among 927 mothers in Nyando district, Kenya in 2004-2006 regarding home management of diarrhea among under five in a rural community. The study showed that Perceived causes of diarrhea were, unclean water 524 (55.6%), contaminated food 508 (54.9%), bad eye 464 (50.0%), false teeth 423 (45.6%) and breast milk 331 (35.8%). More than 70% of mothers were given less fluid during diarrhoeal episodes. (Fig. 3) The mothers perceived wheat flour, rice water and selected herbs as anti-diarrhoeal agents. During illness, 239 mothers said not to have drunk any fluids at all, 487 (52.5%) drunk (27.8%) much less and only 93 (10.0%) were reported to have drunk more than usual. 831 (89.6%) withheld milk including breast milk with the notion that it enhanced diarrhea.⁶

Cross-sectional descriptive study was conducted

in Sokoto, Nigeria about Home management of diarrhoea. Pre-tested, structured, open and close-ended interview questionnaire and observation checklist were used for data collection. A total of 423 respondents were interviewed. The mean knowledge score was 59.7 ± 23.0 . Majority 62.9% knew correctly that diarrhoea is said to occur when a child passes loose stool more than three times within 24 hours. Most of them 81.1% knew that diarrhoea can be caused by contaminated water; however, 32.4% were viewed that evil eye is the cause of diarrhoea. 73.7% of the mothers believed that ORS / SSS is the best method for home management of diarrhoea while 11.1% believed it is harmful to the child. great proportion 90.5% of those who had attempted to manage diarrhoea at home reported that the child's condition improved.⁷

An Interventional study conducted on Raipur in Haryana Mothers' beliefs and practices regarding prevention and management of diarrheal diseases. 48 mothers with at least one child aged less than 5 years were interviewed to determine whether their beliefs and practices had changed after the diarrheal diseases control program was implemented. In that 23% believed that eating uncovered food, eating dirty or stale food, eating mud, and dirty feeding bottles were causes of diarrhea. Others perceived causes of diarrhoea due to excessive heat 75%, specific foods 52%, over-eating 22.9%, excessive cold 14.5%, teething 14.5%, and side effects of medication 6.2%, top milk 4.2%, and constipation 4.1%. Only 10.4% knew specific ways to prevent diarrhoea. 85.5% approved of continuing breast feeding during diarrhoea, while, before the program, most mothers withheld breast milk. 50 % believed less fluids than the normal amount should be given during diarrhoea. 65% thought that the usual amount of food should be given. 68.8% would administer home remedies to treat diarrhoea. 18.8% would begin oral rehydration therapy at home.⁸

A Cross Sectional study was carried out 2006 in villages of Kashmir valley, India. The cultural feeding practices adopted by the families in the management of diarrhoea at home were studied and it was observed that 48% of parents showed no special preference for any food during current and 66.6% during past episodes of diarrhoea. 4.0 % of parents were withheld foods during current and 6.9% during past episodes of diarrhoea. Curd and salt tea was preferred by 23.6% of parents in past episode and 18.0% of parents of children during current episodes. However, 24.4% parents preferred to use ORS packets in past episodes whereas only 8.4% parents preferred ORS in current episodes of

diarrhea.⁹

Cross sectional study was conducted in Kosovo about maternal practice on management of acute diarrhoea among children under five years old. The study sample included 106 mothers of children less than 5 years old from all parts of Kosovo. They were interviewed using a pre designed and pre tested questionnaire. In that the 60.7% declared that they provide less or even not at all fluids, while 19.6% as usually and only 17.8% more than usually. More than one third of mothers did breastfeed their babies less than usually, and 75% cases more than usually during diarrhoea. One third of the mothers do not give anything to their children in term to stop the diarrhoea, 19.6% uses rice juice, 15.9% banana, and only 9.3% oral dehydration solution.¹⁰

Methods

A formal permission from chairman KMCH was obtained by giving assurance to abide by the rules and regulations and recommendations of the ethical committee. KMCH Coimbatore. At first, the researcher collected the list of children admitted in the pediatric ward every day, the researcher introduced herself, to the mothers and children, Prior consent was obtained from the parents and assured that results and details will be confidential. The subjects were selected according to the selection criteria. Almost 50 minutes was used to collect data from each parent by interview method. Each day 6 or 8 mothers were taken for study. The data collection was done for a period of 6 weeks.. The sample size was 60 mothers of children aged less than five years, admitted for diarrhoeal management. Non - probability purposive sampling technique was adopted to select the samples for the study

The tool used for the study consists of four sections.

Section A

Demographic characteristics of mothers and children includes Age, Educational status, Occupation, Number of children, Type of family, Locality of living, Family income, Religion, Source of information and Source of drinking water, the child demography include Age, weaning started at which month, and Number of diarrhoeal episodes (Fig. 1).

Section B

Questionnaire on Knowledge of feeding during

diarrhoea. consists of 20 closed ended statements, true/ false type. It consists of Meaning,, Causes, and Hygienic practices, Management of feeding during diarrhoea. The correct answers carry one mark and the wrong answer carries zero. Maximum score was 20, minimum score was zero. The total Knowledge score was interpreted as 0-5 (poor) 5-10 (Average) 10-15 (Good) 15-20 (Excellent).

Section C

Rating scale to assess the Belief of mothers on feeding during diarrhoeal episodes. Five point Likert scale used for assessing the belief of mothers regarding diarrhoea which consists of 20 statements with strongly agree, agree, disagree, and strongly disagree. Maximum score was 80 and minimum was 20. The items 4, 5, 6, 7, 8, 10, 11, 12, 14, 17, 19, 20 are positive statement. The items 1, 2, 3, 9, 13, 15, 16, 18 are negative statement, which were reversely scored. Positive statements scores are interpret as strongly agree (4), Agree (3), Disagree (2) strongly disagree (1)

Reverse scoring was done to items 1, 2, 3, 4. The total Belief score was interpreted as poor, average, good and excellent. The Belief total score as 0-20 (Poor) 20-40 (Average) 40-50 (Good) 60-80 (Excellent).

Section D

Questionnaire to assess the feeding practices of mothers during diarrhoea. Consists of 20 closed ended questions on General hygienic practices, Fluids, Foods and Do's and Don'ts during diarrhoea. Mother has to respond to the question by marking yes or no. Yes carries one mark and no carries zero mark. The total Practice score was interpreted as 0-5 (Poor) 5-10 (Average) 10-15 (Good) 15-20 (Excellent).

Pilot study

Pilot study was conducted among 16 mothers to test the feasibility of the study, the tools reliability were tested with split half method. Knowledge score was 0.9, Attitude score was 0.8 and Practice score was 0.9. The results reveals that the study was feasible for the present setting.

Results

The outcome of the study was computed using SPSS package both descriptive and inferential statistics.

Demographic characteristics of mothers and children: 45% of mothers under the age group of 20-25 years, 37% mothers are graduate, 47% house wife, 57% having one children, 62% nuclear family, 60% living in urban area, 45% mothers monthly income is Rs. 5,000-10, 000, 58% belongs to Hindu, 42% mothers receiving information from family members, 58% using tape water (inside the house)(Fig. 2).

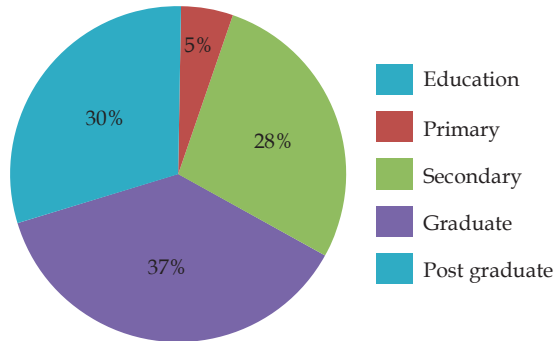


Fig. 1. Distribution of mothers according to their Education.

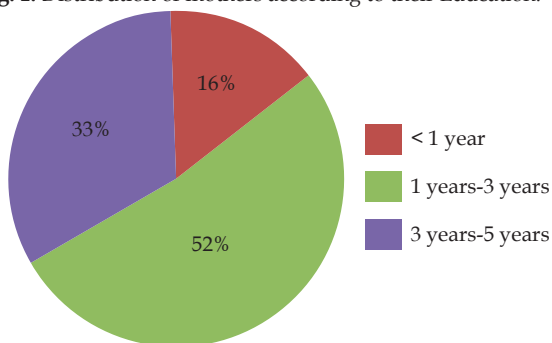


Fig. 2. Distribution of Children according to their Age.

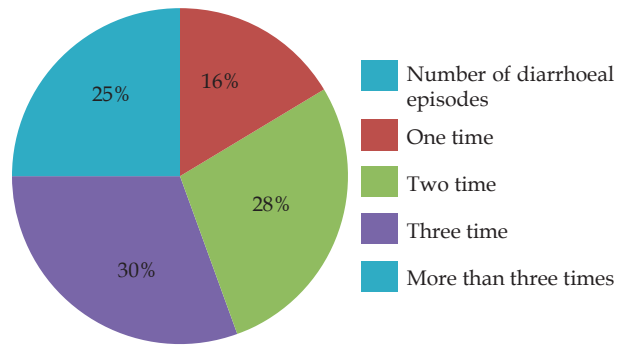


Fig. 3. Distribution of Children according to the Number of diarrhoeal episodes.

Knowledge Belief and Practices Feeding During Diarrhoea Among Mothers of Under five Children

Knowledge score

Mean knowledge score on feeding practices of diarrhoea among mothers of under five children was 13.05.

Belief score

Mean Belief score was 50.02.

Practice score

Mean Practice score was

Belief and Practice

The 'r' value 0.01 at P<0.05, which was statistically significant. There was a significant relation exists between Knowledge and Belief of mothers.

Practice and Knowledge

The 'r' value 0.12 at P<0.05, which was statistically significant.

Correlation between Knowledge Belief and Practices of Mothers on Feeding During Diarrhoea:

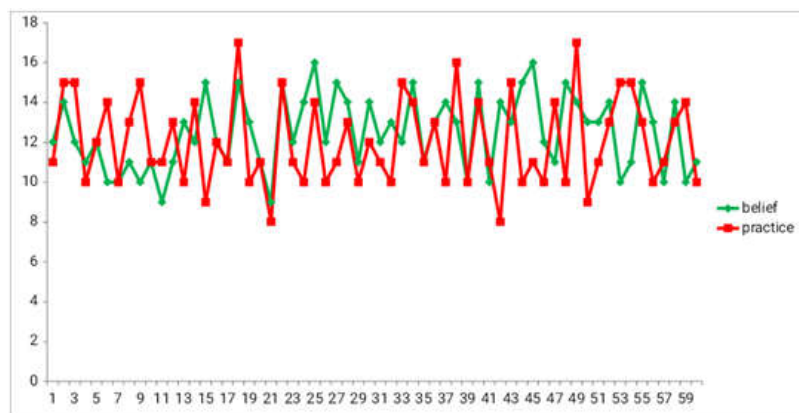


Fig. 4. Correlation between Belief and feeding Practices of mothers during diarrhoea

The 'r' value was significant at $p < 0.05$ level. This reveals that there was a significant relation exists between Belief and Practice of mothers. (Fig. 4)

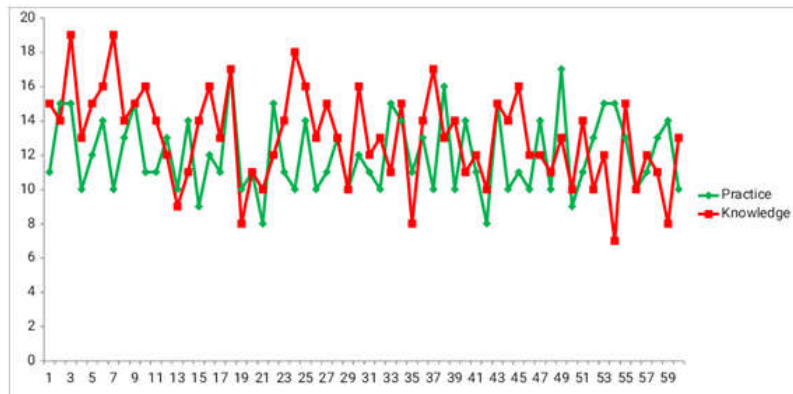


Fig. 5. Correlation between Practice and Knowledge of mothers feeding during diarrhoea

The 'r' value was statistically significant at $p < 0.05$ level. This reveals that there was a significant relation exists between Knowledge and Practice of mothers. (Fig. 5)

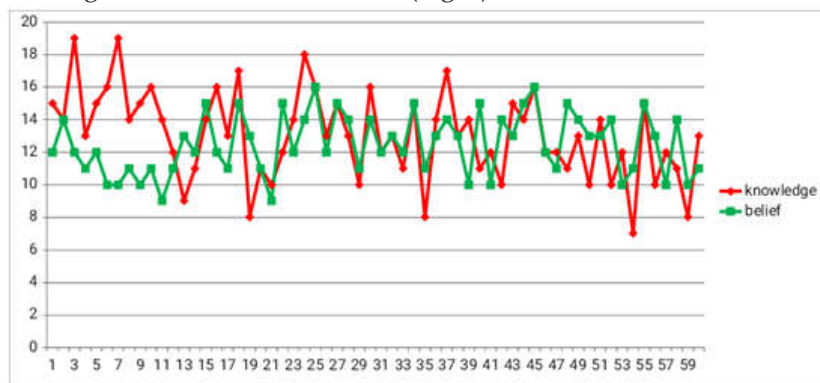


Fig. 6. Correlation between Knowledge and Belief of mothers on feeding practices.

The 'r' value for Knowledge and Belief of mothers of under five children with feeding practices during diarrhoea and the value was statistically Non-significant.

Association between Knowledge, Belief and Practice

The association of selected demography of mothers with their belief was tested using Chi-square. The following selected demographic characteristics of mothers had significant relationship between belief and Age, Education and Occupation, Number of children and Religion at $p < 0.05$ level.

Conclusion

Computed statistical value reveals that the mother's Knowledge, Belief and Practice had statistical relationship between Belief and Practice ($r=0.01$), Practice and Knowledge ($r=0.12$). Association of

mother's belief with Age, Education, Occupation Number of children, and Religion. had significant relationship at $p < 0.05$ level. So the study concluded that the knowledge, belief and practice are inter related one enhances the other so what the mothers believed they Practiced. (Fig. 6)

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