



Health Seeking Behavior among 0-5 Years of Children in Diarrhea in Rural Wardha District, Maharashtra

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Abstract

Health care seeking behavior among children, aged <5 years, is strongly influenced by maternal practices as the mothers contribute to the decision making. In this study, the mothers' knowledge, attitude and practices were studied as well as the factors responsible for the health seeking behavior in diarrheal diseases was examined. Two hundred and thirty mothers of children, aged <5 years were sampled. The study showed that the education, occupation, attitude and, knowledge of the mother was strongly associated to positive health seeking behavior in diarrheal diseases. The factors affecting the health care seeking behavior were the decision making abilities of the mothers and the source from which they got the information regarding diarrhea. The income of the household was also associated with the attitude and the practices of the mother for diarrhea. Among social factors, caste was seen to be associated with the health seeking behavior. Thus, there is need for the information and effective communication between the health workers and the mothers and the betterment of the public health facilities in the rural areas.

Keywords: Health seeking behavior; Diarrhea; Under five children; Oral rehydration salts; Rural Wardha district; Maharashtra

Introduction

Diarrheal diseases account for roughly 530,000 deaths a year, 9% of total deaths among children under-five years of age, making them the second most common cause of child deaths worldwide. Over half of the deaths occur in just five countries: India, Nigeria, Afghanistan, Pakistan and Ethiopia. Despite this heavy toll, progress is being made. From 2000 to 2015, the total annual number of deaths from diarrhea among children under 5 decreased by more than 50 percent from over 1.2 million to half a million. With each episode the child gets deprived of the necessary nutrition required for their growth. Thus diarrhea is one of the major causes of malnutrition and these children have a higher chance of getting infected by diarrhea. An estimated 801,000 children younger than 5 years of age perish from diarrhea each year, mostly in developing countries. This amounts to 11% of the 7.6 million deaths of children under the age of five and means that about 2,200 children are dying every day as a result of diarrheal diseases. In 2011, more children under the age of five died in India than anywhere else in the world. That's 1.7 million children over 4,650 child deaths a day—according to a new report by the United Nations Children's Fund. Africa and South Asia are home to more than 80 percent of child deaths due to diarrhea. Just 15 countries account for almost three quarters of all deaths from diarrhea among children under five years of age annually [1-5].

While it is of utmost importance that there should be improvement in the infrastructure, safe drinking water, good sanitation practices and facilities which only can be improved if they are coordinated with good hygiene practices. UNICEF had given 7-point prevention out of which 5 points emphasis on prevention. These points are early and exclusive breastfeeding and vitamin A supplementation, Rotavirus and measles vaccinations, Hand washing with soap, improved water supply and Community-based sanitation [6-9]. There is an importance of measles vaccination and vitamin A dosage for maintaining the integrity of epithelial cells. Against the backdrop of the importance attached to maternal literacy, this paper also asks if such literacy also delivers benefits in terms of protecting children from diarrhea [10].

This remarkable reduction in diarrheal cases and mortality was possible due to the inception and success of many universal programs like expanded program on immunization, program for the control of diarrheal diseases and acute respiratory infection. Oral

Rehydration Therapy (ORS) have been used as a drug of choice for proper management of cases with diarrhea. Supplies of ORS packets to the states are being organized by the Govt. of India centrally. The demonstration that Oral Rehydration Therapy could prevent mortality due to diarrheal diseases was an important milestone [11-13].

Information on diarrheal diseases, its determinants in India and preventive and control strategies in light of recent developments need to be reviewed for better planning and organization of health services within the community. The knowledge of mothers regarding diarrhea is a determining factor for the treatment of diarrhea within a specific time period. The practice of the mother in diarrhea depends upon the income of the household, education, societal norms, has been found to be associated with the sociocultural beliefs in the society.

The special focus should be upon the education of the mothers related to the childhood diarrhea and other infections which are responsible for fatal outcomes in the children. Therefore the objective of the paper is to determine the knowledge, practices and attitude of mother about diarrhea disease in rural Wardha District, Maharashtra. The inadequate amount of knowledge about diarrhea among the mothers attributes to the sociocultural beliefs in the society, the practices in the society, the family pressure and low female autonomy. The woman is the one who takes care of the child mostly in the house and looks after the child around the day. She needs to be educated about the disease conditions in the child and the proper treatment options for the child. Thus, there is a low utilization of health care facilities in the area and most of the households go for the private health care and wait for a couple of days before visiting the health facility. There are negative attitudes prevailing among the mothers about diarrhea and the treatment of diarrhea from the public health facilities.

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Materials and Methods

Study population, site and design

This study is conducted in the Talegaon block of Wardha district in the state of Maharashtra. Talegaon block is situated at a distance of 25 kilometers from Wardha city and located on a highway, midway between the Wardha city and Hinganghat block. The PHC is located in the Talegaon village and it is very difficult for the villagers in the Talegaon block to travel to the PHC for any treatment. This block consists of majority of Hindu population followed by Buddhists and Muslims. Talegaon is a large block considering the population and the coverage area in the Primary Health Center (PHC).

Since the study was conducted to find out the reasons and the factors associated with the health seeking behavior among 0-5 years' children when they suffer from diarrhea with their mothers as the respondents, the universe was the mothers of the 232 children participated in the study from the Talegaon PHC area. District-Wardha, Maharashtra, India. The respondents were selected from the universe based on certain criteria and the objectives of the study. This study was done to assess the factors which are responsible for the health care seeking behavior among the mothers of the children between 0 to 5 years of children in the Talegaon block of Wardha district [13-16].

With the help of a quantitative design, a semi structured interview schedule was used among the mothers of the children to find out the factors responsible for the health care seeking behavior in diarrhea. In this study, there is a systematic collection and presentation of data which provides a clear picture of the situation of the problem in the area. The main source of data was the primary data which was collected on the field by the researcher by direct face to face interviews with the mothers of the children. Also the data about the households which had children below the age of five years was also collected from the Sub-centres from the Village ANM and also the list of the children sought from the Anganwadi centers in the village.

Process for data collection

The researcher had selected 5 villages from the Talegaon block of the Wardha district for the study. Data collection permission has been taken from the District health officer from that area. Thereafter the researcher went to the respective villages and to the Subcentres and took the list of the children who are below the age of 5 years. Also the researcher went to the Anganwadi centres and took the same list from them and also cross checked with the list from the sub centre. Finally using simple random sampling eligible households has been selected. After visiting the house, the researcher sought the informed consent from the participants (mothers) and then direct face to face interviews with the mothers of the children were conducted in the local language. The interviews consisted of only the closed ended questions. In case if the mother had any questions, the researcher would clarify the doubts of the mother. Interviews were conducted in Marathi language which is locally spoken in the area. It took a time span of 45 days for data collection in year 2015.

Data processing and analysis plan

The researcher collected only the quantitative data from the respondents in the study.

Quantitative data was entered in Software statistical package for social sciences (SPSS) 20. Appropriate Univariate and bivariate analysis has been applied. Also to find out the significant association between dependent and independent variable of the study we have applied chi square test.

Results

Knowledge of the mother about diarrhea disease

Table 1 shows the awareness about diarrhea disease with rise in income among the households. The Occupation of the mother has a significant impact (0.010) on the knowledge of the mother whether she considers diarrhea as serious phenomenon. Occupation of the mother

	Consider diarrhea as serious		Knowledge of sign n symptoms		To whom ORS is given		ORS prepared at home		Sample Size
	Yes (%)	P value	Yes (%)	P value	Yes (%)	P value	Yes (%)	P value	
Income of the household									
0-2000	57.1	0.002	98.2	0.000	80.4	0.000	69.6	0.000	56
3000-5000	54.5		94.8		75.3		68.8		77
6000-10000	27.6		98.7		30.3		27.6		76
10000 and above	47.8		100		0		65.2		23
Occupation of the mother									
Farming	52.6		100		68.4		36.8		19
Manual labor	58	0.010	93.8	0.587	67.9	0.001	66.7	0.019	81
Any other	37.1		99.2		43.9		50.8		132
Caste of the household									
General	60		85		100		60		
Other Backward Caste	64.9	0.035	63.5	0.035	98.6	0.005	56.8	0.086	20
Scheduled Caste	54		50		100		36		74
Scheduled tribes	31.8		50		90.9		22.7		50
Nomadic Tribes	50		41.3		100		43.5		22
Special Backward Class	55		35		85		45		46
Education of the mother									
Illiterate	50		100		0		100		2
Below primary	59.6	0.256	93	0.062	66.7	0.002	84.2	0.051	57
Above primary and below 10 th	27.5		96.1		43.1		37.3		51
10 th and above	46.7		100		54.1		48.4		122

Table 1: Knowledge of mother about diarrhea treatment according to background characteristics.

has a significant association with the knowledge about whom the ORS is given. Thus the significant association between Occupation and Knowledge of the mother shows that the occupation of the mothers has an impact upon the knowledge of the mother whether she knows about whom the ORS is given. The occupation of the mother has an impact upon the knowledge of the mother whether the ORS can be prepared at home. The occupation of the mother has an impact upon the knowledge of the mother about the fever as a common health problem in the children below five years. Occupation of the mother has a significant association with the knowledge of the mother whether respiratory problem is a common health problem in the children below the age of five years. Thus the significant association between the two variables shows that the occupation of the mother has an impact upon the knowledge of the mother about the respiratory problems as a common health problem in the children below five years. Thus the association between the two variables shows that the caste of the household has an impact upon the knowledge of the mother regarding the seriousness of diarrhea in the children below 5 years of age. Household from the upper caste has higher percentage when asked about the seriousness of diarrhea, knowledge of the mother about the signs and symptoms of diarrhea in the children below the age of five years as compared to the household from lower caste [17-20].

Attitude of the mother

Thus the significant association between the Income and Attitude of the mother shows that the income of the household has an impact upon the attitude of the mother about why she thinks that ORS is good for the children below the age of 5 years. Income of the household (0.000) has a significant association with the attitude of the mother about what would be her first reaction when her child gets diarrhea and it shows that with rise in income of the household there is a positive attitude among the mothers. Occupation of the mother (0.000) have a significant association with the attitude of the mother about why does she think that the ORS is good for children which shows that with every

occupation of the mother, there is a positive attitude of the mother about why she thinks that the ORS is good for children below the age of 5 years. Occupation of the mother (0.001) has a significant association with the attitude of the mother about what will you do if your child does not get cured within 2-3 days of diarrhea which shows that every occupation of the mother has an positive impact upon the attitude of the mother about what will she do if child does not get cured within 2-3 days of diarrhea.

Caste of the household (0.015) does have a significant association with the attitude of the mother about why does she think that the ORS is good for children which shows within the castes of the household, there is a positive attitude of the mother is associated about why does she think that the ORS is good for children. Caste of the household (0.295) does not have a significant association with the attitude of the mother about does she think that ORS is the only means to control diarrhea which shows that within the castes of the household, there is a negative attitude of the mother about does she think that ORS is the only means to control diarrhea. Caste of the household (0.061) does not have a significant association with the attitude of the mother about what will she do if her child doesn't get cured in 2-3 days of diarrhea which shows that within the castes of the household, there is a negative attitude of the mother about what will she do if her child doesn't get cured in 2-3 days of diarrhea. Education of the mother does not play a significant role in determining the attitude of the mother towards the treatment of diarrhea and the ORS use in children (Table 2).

Practice of the mother

The income of the household has an impact upon the practices of the mother about the reasons of visiting the health facility late when her child had diarrhea. Income of the household (0.000) has a significant association with the practice of the mother whether she had taken her child to any of the superstitious healer in the last 6 months which shows that the Mothers from low income group has taken her child to the superstitious healer in the past 6 months. Income of the

	ORS good for children		Why do you think it as good		Reaction when child had diarrhea		Not cured in 2-3 days		Sample Size
	Yes (%)	P value	Yes (%)	P value	Yes (%)	P value	Yes (%)	P value	
Income of the household									
0-2000	80.4	0.034	5.4	0	44.6	0	89.2	0.113	56
3000-5000	94.8		3.9		16.9		80.5		77
6000-10000	90.8		3.9		26.3		50		76
10000 and above	95.7				100		82.6		23
Occupation of the mother									
Farming	94.7		0		0		73.7		19
Manual labor	84	0.071	2.5	0	43.2	0.414	96.3	0.001	81
Any other	93.2		5.3		34.8		58.3		132
Caste of the household									
General	90		5		60		100		20
Other Backward Caste	87.8		5.4		21.6		70.3		74
Scheduled Caste	90	0.694	8	0.015	22	0.295	68	0.061	50
Scheduled tribes	86.4		0		72.7		90.9		22
Nomadic Tribes	91.3		0		30.4		56.5		46
Special Backward Class	100		0		60		85		20
Education of the mother									
Illiterate	50		100		50		100		2
Below primary	87.7		8.8		49.1		96.5		57
Above primary and below 10 th	92.2	0.211	0	0.012	43.1	0.312	64.7	0.015	51
10 th and above	91		1.6		24.6		64.8		122

Table 2: Attitude of the mother about oral rehydration therapy and diarrhea according to background characteristics.

household (0.021) has a significant association with the Practice of the mother whether she has ever used ORS for the child in the past which shows that the mothers in the low income household have not used the ORS in the past as compared to the mothers in the high income group. Income of the household (0.061) does not have a significant association between the practice of the mother whether they keep the ORS sachets in the house for emergency in the case of diarrhea which shows that with every income group, there are no practices of the mother to keep ORS in the house in case of emergency in diarrhea.

Occupation of the mother (0.017) has a significant association with the practice of the mother in the house to prevent diarrhea which signifies that with every income group, mothers in the household have the practice to prevent diarrhea. Occupation of the mother (0.450) does not have a significant association with the practice of the mothers for the reasons of visiting the health facilities late when the child had diarrhea which shows that the occupation of the mother does not have an impact upon the practice of the mother of reasons of visiting late in the health facilities in the case of diarrhea. Occupation of the mother (0.180) does not have a significant association with the practice of the mothers as they have sought treatment for their child in the past from the superstitious healer which shows that the occupation of the mother does not have an impact upon the practice of the mother of seeking the treatment for their child from the superstitious healer anytime in the past. Household practice of the mother for preventing diarrhea increases with higher education and ORS use has been increased with higher education (Table 3) [20-23].

Discussion

The health seeking behavior of the mother is mainly associated with the education of the mother, the income of the household, the caste of the household, occupation of the mother and the other family members. It is affected by the region in which the family lives and the cultural values of the society with the disease. Many of the cultures have a specific treatment of the disease and they prefer the local and household medicines rather than visiting the health facilities. It also

depends upon the coverage of the health facilities in the concerned area. Health seeking behavior in diarrhea differs across the regions and it varies according to the caste, class and the other socio demographic factors which have an impact over the health seeking behavior in diarrhea. Especially in the rural areas, the severity of diarrhea in the children below the age of 5 years is not known to the mothers and diarrhea remains one of the major contributors to the morbidity and the mortality in the children below the 5 years of age. The households which are very far away from the health facilities do not wish to travel to the health facilities. Nowadays, awareness campaigns and Mobile medical units have been established but not enough awareness about diarrhea and its consequences have been realized to the society. In our study, it was found that the Income and caste of the household had a significant impact on the Knowledge of the mother about diarrhea. When the knowledge was compared with the occupation of the mother, more than the half of the mothers, whether they were in the farming occupation or the household work, the knowledge was enough in all the categories. The knowledge for the education of the mother was found to be good among the women who were less educated than the women who were more educated.

Non Educated mothers have a good amount of knowledge than the mothers who were non educated It was found that the attitude of the mother in the higher castes was low as compared to the backward classes. With every occupation, there was a positive attitude among the women for the treatment of diarrhea of the children. It was also due to the activities which are carried out in every village about various illnesses and programmes that are currently being organized in various parts. It was also affected by the regular visits by the health staff to the houses and counselling on one to one basis which helps in improving the knowledge of the mother and it helps in a positive attitude toward diarrhea. Thus, many of the women have heard of the ORS therapy but some of them do not know that it is specifically used in the treatment of the diarrheal diseases. It was found that the mothers in the higher castes seek more treatment from the superstitious healers as compared to the backward castes. The frequency of using ORS was high among the

Income of the household	Household practices			Seek t/t from superstitious healer			Ever used ORS			Keep ORS in house		
	Yes (%)	P value	Total	Yes (%)	P value	Total	Yes (%)	P value	Total	Yes (%)	P value	Total
0-2000	50	0.310	56	33.3	0.000	48	35.6	0.021	45	25	0.061	56
3000-5000	77.9		77	17.5		57	48.4		64	51.9		77
6000-10000	89.5		76	0		34	43.8		32	15.8		76
10000 and above	100		23	0		11	0		11	0		23
Occupation of the mother												
Farming	84		19	0		11	50		14	47.4		19
Manual labor	66.7	0.017	81	21.6	0.180	74	37.5	0.673	72	27.2	0.161	81
Any other	82.6		132	15.4		65	40.9		66	26.5		132
Caste of the household												
General	55		20	56.3		16	26.7		15	25		20
Other Backward Caste	74.3	0.061	74	18.2	0.458	44	50	0.000	48	33.8	0.000	74
Scheduled Caste	80		50	25.9		27	42.3		26	24	0	50
Scheduled tribes	86.4		22	9.5		21	15		20	18.2		22
Nomadic Tribes	82.6		46	0		28	53.6		28	30.4		46
Special Backward Class	80		20	0		14	26.7		15	30		20
Education of the mother												
Illiterate	0		2	0		0	0		1	0		2
Below primary	64.9	0.161	57	23.5	0.170	34	39.5	0.012	38	31.6	0.214	57
Above primary and below 10 th	72.5		51	11.4		35	19.4		36	15.7		51
10 th and above	86.1		122	17.3		81	50.6		77	32.8		122

Table 3: Practice of the mother about the treatment in diarrhea and ORS use according to background characteristics.

households belonging to the backward castes as compared to the higher caste. It was found that the education of the mother was associated with the hand washing practice of the mother [24-25].

A study done by Manna and nasrin shows that the primary education of the care providers to the children was associated with the health care seeking behavior among them. While in our study, it was found that the education of the mother was mostly not associated with the health care seeking behavior and the knowledge, attitude and the practices of the mother. It is mostly associated with the sociodemographic factors which were positively associated with the health care seeking behavior of the mother.

Our study shows that the knowledge about ORS was good enough among the participants. The practices for the prevention of diarrhea were quite well in the household like washing hands before eating was practiced by a majority of the households. Also, drinking boiled water was practiced in some of the households. Some of the participants were confused about the practices which have to be practiced in the prevention of diarrhea in the household.

A study done in the Assosa district of Ethiopia finds that the knowledge of the mothers regarding diarrhea in the area is very low and the attitude of the mothers towards diarrhea is also low. Thus the knowledge about the transmission and causes of diarrhea was also low among the participants in the study. In our study, it was found that the knowledge of the mothers was significantly associated with the income of the household, occupation of the mother, caste of the mother and the education of the mother. Whereas the household with the low income had a difficulty in reaching the health facilities and were low on knowledge of the signs and symptoms of diarrhea.

Considering the attitude of the mothers, it was found that with the increase in the education, there was an increase in Positive attitude of the mothers whether the ORS is good for the children, also there was a positive association between the education of the mothers and why do they think that it is important for the children in the diarrhea. Whether it was found that with the increase in the education of the mother there was a decrease in the attitude of the mothers to take their children to the hospital and admit them in the hospital in the case of diarrhea. Considering the caste of the household, it was found that the very less amount of respondents knew and had a positive attitude about the knowledge of the ORS and their tendency to take their child to the hospital in the case of diarrhea. This was due to the fact that many women think that the diarrhea can be controlled with the household medicines and is not required to take the child to the hospital in the case of diarrhea.

Conclusion

The study illustrates that the socio demographic factors play a major role in the health seeking behavior among the mothers. The study also depicts that lack of awareness among the masses about the severity and symptoms of diarrhea isn't adequate which results into diarrheal illness. The findings from our study suggest that the mothers need to be made aware about the factors causing diarrhea and measures to prevent the illness. Efforts should also be put in to increase the knowledge about the illness of the caretakers whether home based care or hospital care is needed. The mothers or caretakers should improve hygiene through hand washing with soap; prevent dehydration through early administration of Oral rehydration salts. They should promote exclusive breastfeeding and increase breastfeeding after every episode of diarrhea. They should recognize the signs of dehydration and take the child to the nearby health facility for ORS for intravenous

electrolyte solutions. Health workers also should counsel the parents about providing suitable oral fluids in diarrhea and reach out to the nearest health facility available.

Ethical Consideration

Informed consent was obtained from the mother of each study participant aged 0-5 years old. The identity of the mothers and the children wasn't revealed during anytime of the study. The privacy and confidentiality of the data was maintained throughout.

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