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Parental Awareness and Practices in Acute Diarrhea

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Diarrhea is a major cause of morbidity and mortality, accounting for four million deaths in children. Most of these deaths are due to dehydration and preventable through oral rehydration therapy (ORT). However, at present only one million expected deaths are being prevented through ORT(l). Factors like illiteracy and poverty contribute to persistence of diarrhea in the community(2). Indiscriminate use of drugs in childhood diarrhea even by professionals is of serious concern. Since diarrheal diseases are common in infancy, we conducted this study to find out the awareness and practices in infantile diarrhea among parents belonging to both educated and uneducated class, so that remedial measures could be taken to improve the knowledge regarding management of diarrheal disease in a proper manner.

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Material and Methods

This study was conducted in the Pediatric Outpatient Department of Institute of Medical Sciences, Srinagar during the year 1992. A cross sectional group of 1600 infants with acute diarrhea were selected. Using a purposive random sampling procedure, the accompanying parents were interviewed for awareness and practices regarding diarrheal disease as per the predesigned open ended questionnaire. Information regarding description of diarrhea, the presumed etiology and knowledge about ORT was collected. Based on their status, which included professional and educational, parents were divided into two groups. Group A (included doctors, engineers, teachers, professors, lawyers, clerks and educated business men) and Group B (included all others and uneducated parents).

Results

Of the total 1600 infants, 1060 (66.2%) were boys and 540 (33.8%) were girls. One hundred and forty (8.7%) were neonates and 58.7% were 6-9 months old. Mother was the informant in 62% cases, father in 17% and both the parents in 21% cases. There were 41.2% families in Group A and the rest in Group B.

From *Table I,* it is clear that only 15% parents responded to the WHO definition of diarrhea (3 loose stools/day), significantly from Group B ($p<0.001$). Parents from Group A considered any change in color or consistency of stools as abnormal ($p<0.001$). Infantile diarrhea was related to weaning (58.1%), maternal diet (42.5%) and teething (34.4%). A significant number ($p<0.001$) of Group A parents related it to infections and formula and dirty feeds. Only 30.2% parents on Group B and 9% of Group A were ignorant about the danger signs of diarrhea ($p<0.001$).

Table II depicts parental awareness regarding management of infantile diarrhea

TABLE I—*Awareness Regarding Infantile Diarrhea (%)*

	Awareness parameters	Total (n=1600) %	Group A (n=660) %	Group B (n=940) %	'p' value
(*a*)	*Definition of diarrhea*				
	Any loose stool or color change	3.1	6.7	0.6	<0.001
	Upto 3 stools/day	15.0	10.0	18.5	<0.001
	Frequent stools/day	81.9	83.3	80.0	<0.001
(*b*)	*Cause of diarrhea*				
	Weaning	58.1	47.3	65.7	<0.001
	Maternal diet	42.5	30.3	51.1	<0.001
	Teething	34.4	29.2	38.0	<0.001
	Infections	16.9	27.4	9.5	<0.001
	Formula & dirty feeds	4.3	7.6	2.0	<0.001
(*c*)	*Recognition of danger signs*				
	Loss of weight	25.1	21.2	27.9	<0.01
	Persistent diarrhea	13.6	13.2	13.9	NS
	Drowsiness	8.1	15.0	3.2	<0.001
	High fever	7.4	8.9	6.3	<0.05
	No knowledge	21.5	9.1	30.2	<0.001
(*d*)	*Reasons for seeking treatment*				
	Child will deteriorate	38.8	36.5	40.4	NS
	Frequent napkin change	14.3	13.6	14.8	NS
	Both	46.9	49.8	44.8	<0.05

TABLE II—*Awareness Regarding Management (%)*

	Awareness parameters	Total (n=1600) %	Group A (n=660) %	Group B (n=940) %	'p' value
(*a*)	*Diarrhea to be treated with*				
	Antidiarrheal & antispasmodic drugs	55.0	22.7	77.7	<0.001
	ORT	0.6	0.4	0.7	NS
	Both	31.5	65.2	7.9	<0.001
	Intravenous fluids	12.9	11.7	13.7	NS
(*b*)	*Knowledge about ORT*				
	Present	31.6	65.6	7.7	<0.001
	Absent	68.4	34.4	92.3	<0.001
(*c*)	*Dietary restrictions*				
	Complete	19.4	6.2	28.7	<0.001
	Milk feeds	76.9	87.9	69.1	<0.001
	Others feeds	3.7	5.9	2.1	NS

and utility of oral rehydration. About half (55%) the parents preferred to give only antidiarrheal and antispasmodic drugs. However, a significant number ($p<0.001$) of Group A parents liked to give supplementary ORT solutions also. A very small number (0.6%) preferred ORT only. Only 31.6% parents had knowledge about the composition of various ORT brands, reconstitution of solution and their utility in diarrhea. Source of such knowledge was mainly through mass media, doctors and other health personnel. One-fifth (19.4%) preferred to have complete dietary restrictions during a diarrheal episode, significantly more by Group B parents ($p<0.001$).

Discussion

The use of glucose electrolyte solution has revolutionized the management of acute diarrhea in children. Unfortunately, most of the parents and even professionals are not fully aware of these solutions(3-5). Although parents belonging to Group A were more conscious about diarrheal disease in children; however, most of the parents felt that diarrhea means passage of frequent loose motions only. As noted in this study, various earlier reports(6-8) have emphasized the notions of teething, weaning, hot—cold foods as the chief causes of acute diarrhea.

Regarding danger signs of diarrhea, most of the parents, significantly ($p<0.001$) from Group B were unaware. In one previous study, Anand *et al.* (3) reported that 64% of rural mothers, were unaware of danger signs of diarrhea, possibly due to low socioeconomic status, and illiteracy. In conformity with a few previous studies(3,5,6), the important factors compelling parents to seek medical attention were loss of weight and persistence of diarrhea and of course, altered sensorium, reported more frequently ($p<0.001$) by group A parents. Certain parents sought medical attentions only,

because they were disturbed due to frequent napkin changes in diarrhea. Most of the parents preferred to use only antidiarrheal and antispasmodic preparations in diarrheal disease, since these drugs are easily available in market. Very few liked to give ORT because most of the parents had very poor or no knowledge regarding ORT, significantly from Group B ($p<0.001$). Lack of knowledge about ORT solution has been reported in earlier studies also(2,3,5,6).

Practice of imposing dietary restrictions during diarrheal disease is a known fact(6-8); however, it was observed by us that the restrictions were more common among Group B parents, probably due to various superstitious notions and lack of knowledge among such families.

So keeping in view, these facts and the role of mass media and other agencies in propagating the message of ORT, a great emphasis is needed for creating effective and cheap means, to educate parents regarding proper use of ORT. Particular stress has to be laid on low socio-economic group of society. A stringent policy of maintaining uniform size of ORT packets and ingredients resembling WHO formulations has to be implemented to avoid confusion while prescribing ORT.

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