CONTROL OF DIARRHOEAL DISEASES

Water and Sanitation

unicef
United Nations Children's Fund
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Introduction

It is well known that diarrhoeal diseases are common in children under 5 years and that their causes are poor hygiene, lack of sanitary habits and unsafe drinking water. Equally well known is the fact that diarrhoeal diseases are among the predominant causes of mortality in children under five years of age. Over seven hundred thousand children die of dehydration due to diarrhoeal attacks, in India, every year. Diarrhoea accounts for as many as 40% of paediatric beds and one-third or more of paediatric out-patient visits from June to September, the peak season for the disease in the country.

A strategy to combat diarrhoeal diseases requires not only their effective management but also their prevention by ensuring proper hygiene and sanitary practices and safe drinking water facilities.

This need has given rise to the CDD-WATSAN+ Integrated Strategy which has two major goals to be achieved in phases within a specified period of time. The goals are:

- To reduce the incidence of diarrhoeal diseases among children under five years.

- To provide universal access to safe drinking water and improved sanitation.

In order to achieve these goals three broad objectives have been outlined:

1. Improved access to services

2. Promotion of key practices to prevent diarrhoea

3. Promotion of key practices for management of diarrhoea
The CDD-WATSAN strategy was introduced in rural and urban areas of 15 districts of India.

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The Baseline Survey

In order to assess the extent to which the interventions of the CDD-WATSAN strategy would reduce diarrhoeal morbidity, it was necessary to have baseline information on the existing situation. A social marketing research organisation was commissioned to conduct a comprehensive data collection exercise in 15 districts on:

- Diarrhoeal morbidity through point-prevalence rates and two-week incidence rates at a specified period of time in the year.
- Availability of and use of safe drinking water, facilities for safe disposal of human excreta, Oral Rehydration Salts (ORS) for children and measles immunization for infants.
- Household behaviour and practices related to collection, storage and use of drinking water as well as sanitation and personal hygiene.
- Prevailing child feeding practices both during and after diarrhoea.
- Case management of diarrhoea including use of Oral Rehydration Salts, recommended home fluids and drugs.
- The adequacy and effectiveness of the present reporting system on diarrhoeal diseases and death through the existing health infrastructure such as sub-centers, primary health centers and urban health centers.
THE SAMPLE

The study included a total sample of 11865 rural as well as urban households (rural-5939 and urban-5926). In Delhi, the urban households were chosen from the urban slums only.

The sampling procedure followed for the study made use of the 30 cluster sampling technique developed by the World Health Organisation.

30 clusters* each, both from urban and rural areas were selected based on 'probability proportionate to size'. Thirteen eligible respondents** were then identified and interviewed in each cluster resulting in 390 urban and 390 rural interviews per district.

RESPONDENT SELECTION

In the rural areas, a village map was drawn to determine whether different population clusters existed. Where no such clusters were found, the village was notionally divided into five zones and from each, a starting address was picked at random. Moving onwards from each starting address, households were contacted using the right hand rule of field movement until 13 eligible households were identified and interviewed. In the event that 13 eligible households could not be identified in one village, neighbouring villages were drawn into the cluster and households contacted until 13 eligible households were found.

In the urban areas, using ward-wise electoral rolls as the sampling frame, 13 starting addresses were identified in each cluster by employing a systematic random sampling procedure. Households were then contacted around each starting address following the right-hand rule of field movement until one eligible household per starting address was identified and interviewed.

* **Rural Areas**: A cluster was defined as a village or a group of contiguous villages till the required number of respondents were identified.

Urban Areas**: A cluster was defined as a ward or a group of contiguous wards till the required number of respondents were identified.

** An eligible respondent was defined as the care-giver of a child below 5 years of age who was suffering from diarrhoea in the preceding 24 hours.
The incidence of diarrhoea in the 15 districts was determined using two measures, namely:

- Point prevalence
- Two-week incidence

Incidence of Diarrhoea
POINT PREVALENCE

Diarrhoea point prevalence rates amongst under five children suffering from diarrhoea was determined by checking for any reported occurrence of diarrhoea during the 24 hours preceding the interview.

Care-givers of children in the different districts revealed point prevalence rates which varied widely. These ranged from a low of 49 per 1000 in Mysore to a high of 197 per 1000 in Nashik.

Further, point prevalence rates across various districts showed that the rates were higher in rural than in urban areas. Delhi, however, was an exception where point prevalence rates were higher in urban than in rural areas, indicating that the hygiene conditions in the rural areas were better than those in the urban slums, despite the latter being part of the metropolis.
**TWO-WEEK INCIDENCE**

Two-week incidence rates of diarrhoea were established by asking care-givers in all households contacted whether there had been any incidence or fresh occurrence of diarrhoea during the two weeks prior to the interview, among children below five years of age.

Reports showed that the two-week incidence rates varied widely across the districts. On the one hand, the incidence of diarrhoea in the preceding two weeks was low in Mysore (rate 84 per 1000) while on the other hand, Medinipur had a much higher incidence of the disease (rate 309 per 1000) in a similar time span.

The incidence rates in the rural areas were higher than in the urban areas.
Access to Services

One of the objectives of the CDD-WATSAN strategy is to provide the basic amenities related to water, sanitation and health to care-givers of children in selected parts of the country to ensure better access to them. With this in view, the baseline survey examined the existing situation with regard to the access various households had to these facilities.
ACCESS TO WATER

It was found that the proportion of households with access to safe drinking water sources such as private and community taps, hand-pumps and sanitary wells differed widely across the 15 districts. At the lower end only 34% of all households in Ranchi (both rural and urban) had the facility of safe drinking water available to them while 100% households in Delhi had access to this facility.

In each of the 15 districts, the proportion of urban households with access to safe drinking water was higher than the proportion of households in the rural areas. These ranged from 58% in urban Alleppey to 100% in urban Allahabad and between 19% in rural Ranchi to 100% in rural Delhi.

The proportion of rural households with access to safe drinking water is related to the proportion of villages in each district that have such a facility. The larger the number of villages with safe drinking water sources, the larger was the proportion of households with access to them.

DISTANCE FROM SAFE SOURCE OF DRINKING WATER

Most village women (82% in Dhar - 99% in Mysore) across the 15 districts reported that a source of safe drinking water was located within half a kilometer of their homes.
ACCESS TO LATRINES

Less than a quarter of households in 13 of the 15 districts had access to a latrine. It was only in Kamrup (52%) and Alleppey (55%) that more than half of the households had this facility available to them. Thus, a large proportion of households in all districts (ranging from 45% in Alleppey to 76% in Mysore to 92% in Dhar and Nashik) had no option but to defecate out in the open.

Household latrines were less common in rural than in urban areas. In fact, the only districts with a relatively high presence of private latrines in rural areas were Alleppey, Kamrup and Delhi. When it came to urban households, more than half of such households in most districts had a private latrine.
ACCESS TO HEALTH SERVICES

Health facilities including the primary health centers (PHCs), sub-centers, and ORT corners are important in the management of diarrhoeal diseases, particularly with regard to the provision of ORS packets and referral services.

A total of 501 health centers (PHCs and sub-centers) were covered in this survey to obtain an overview of their diarrhoea case-management related practices. The number of such health centers ranged from 18 in Periyar to 31 in Dhar to 42 in Allahabad.

Furthermore, it was found that in one out of three villages, there was a source of information that care-givers could approach for advice on management of diarrhoea. Ambala was an exception in that none of the villages in this district had such a source while Medinipur was a case in contrast where every village had a source which offered information on diarrhoea management.

ORT corners, on the whole, were rare, except in Dhar where as many as 61% of health centers (including sub-centers, PHCs, community health centers and hospitals) reported the presence of this facility during the period of the study.

With respect to availability of ORS, more than 50% of all health centers in the 15 districts reported that they did indeed have stocks of ORS at the time of the survey.
Practices Related to Prevention of Diarrhoea

Another goal of the CDD-WATSAN strategy is to promote key hygienic practices for prevention of diarrhoea. The baseline survey, therefore, investigated existing practices related to water usage, sanitation and health in order to identify areas for specific interventions through the CDD-WATSAN strategy.
UTILIZATION OF DRINKING WATER SOURCES

Safe Sources

Care-givers across the 15 districts reported that the tap and hand-pump formed the two major sources of safe drinking water for households. Taps, both private as well as those belonging to the community, were used by a low 1% of households in Phulbani to a high 72% of households in Delhi, while the hand-pump was utilized by 2% in Alleppey to 75% in Medinipur. The sanitary well was used by a much smaller proportion ranging from 1% in Allahabad to 20% in Panchmahals.

A comparison of the use of safe sources in the urban and rural areas revealed that the use of safe sources of drinking water was more common in urban than in rural areas. Tap usage was a more urban phenomenon than rural, while the hand-pump was found to be more popular in the rural areas.

Unsafe Sources

The open well, a traditional and unsafe source, emerged as a major source of drinking water for a third or more of households in 7 of the 15 districts. The use of the open well was relatively high in Allahabad (40%), Phulbani (58%), Ranchi (63%) and Alleppey (70%).

Unsafe sources of drinking water were accessed more in rural than in urban areas.
HOW WATER WAS USED

On the topic of collection of drinking water, care-givers reported that most often, water was collected twice a day. In most districts, it was a common practice to store this water, except in Ambala and Delhi where 39% and 15% of all households respectively, did not store water at all. This could be because of the use of piped water (Delhi 29%) and private hand-pumps (Ambala 43%) which permit the convenience of using water as and when required.

Across districts, rural households preferred to keep stored water at floor level while urban households kept theirs on a raised platform. Alwar and Panchmahals were deviations from the norm as both urban and rural households used a raised platform to keep stored water (95% of households each in rural and urban areas of Alwar; 83% of the rural households and 94% of the urban households in Panchmahals).

HOW WATER WAS HANDLED

Over 90% of all households in most districts kept their drinking water containers covered, although this was less common in the eastern districts of Allahabad (60%), Phulbani (65%), Ranchi (85%) and Kamrup (89%). However the positive effects of this habit were somewhat negated by the predominant use of wide-mouthed rather than narrow-mouthed containers and the common practice of not using a ladle to remove water from the utensil. The proportion of households (in 11 out of the 15 districts) that followed the inappropriate practice of dipping fingers along with a cup or glass...
into the water container to remove water ranged from 31% in Ranchi to 54% in Nashik to as high as 91% in Anantapur.

Narrow-mouthed containers were commonly used in Periyar, Panchmahals and Alwar, while a ladle was used in Dhar, Alwar, Panchmahals and Delhi by a small proportion that ranged from 11%-25% and more in urban than rural households. The other acceptable methods commonly followed were:

- Tilting the vessel to pour out the water (1% in Alwar to 32% in Phulbani to 78% in Medinipur)
- Using a glass or cup especially kept aside only for removing water.

This practice was observed mainly in Nashik (35%), Alwar (42%), Dhar (45%) and Panchmahals (50%).

MAINTENANCE OF HAND-PUMPS

Hand-pumps are a major source of safe drinking water and it was necessary to investigate the extent of knowledge people had regarding to whom they should report the breakdown of a pump.

Across the 15 districts it was found that there was a consistent absence of a sense of ownership with regard to hand-pumps. No one person or group was seen as being responsible for their maintenance and there was little uniform knowledge about whom to report the breakdown to. In Ambala, not a single village named such a person while in Delhi the person to whom a breakdown should be reported was named by only one village spokesperson. This is due to the fact that in the villages of these two districts, hand-pumps were privately owned. Nearly 50% of the village spokespersons in Alleppey and Kamrup too did not specify a person.
USAGE OF LATRINES

The use of latrines was very high in Kamrup, Ranchi, Medinipur, Panchmahals, Dhar, Mysore and Alleppey, with almost all household members using this facility. However, a household’s access to a latrine did not necessarily imply that it was used by all members.

Among adults (15+ years), the use of the latrine was higher among females (88%-99% across all districts) than males(22%-99% across all districts). The use of this facility reduced with a decline in age of the household members. Most children below 5 years of age across the 15 districts (63%-98%) defecated out in the open.

The survey brought to light the fact that by and large, there was little understanding of the correlation between sanitation and health in communities to which the care-givers belonged. Care-givers in the different districts revealed that latrines were used mainly because they were there (53%-98%). Other
reasons cited, but by much lower proportions, were:

- Latrines are more hygienic (4% in Ambala to 74% in Alleppey)
- Using a toilet is in keeping with one's status (1% each in Ambala, Delhi and Periyar to 31% in Kamrup)

Latrines were not used largely because:

- The child was too small to use the toilet (4% in Anantapur to 87% in Panchmahals).
- They were inconvenient (1% in Panchmahals and Phulbani to 89% in Kamrup)
- They were not in a condition to be used (1% in Kamrup, Panchmahals and Alleppey to 21% in Anantapur)

**OPEN AIR DEFECTION**

When asked where their young children under 5 years of age defecated, over 60% of care-givers in districts other than Delhi and Ambala said that children defecated near the house. More than 10% of children defecated on or near a drain while 4%-6% went to a place away from the house. The data revealed that little importance was attached to training children to use latrines where they existed.
HAND-WASHING

One of the most important practices with regard to prevention of diarrhoea is that of hand-washing, especially after defecation, after disposing of children's faeces, before taking meals and before feeding children.

In spontaneous (*) response to a question to ascertain activities requiring hand-washing (with or without a cleansing agent), post defecation hand-washing was mentioned by as few as 16% of the respondents in Anantapur to as many as 89% of the care-givers in Dhar. However, when care-givers were aided with the name of different activities that called for hand-washing, post defecation hand-washing was mentioned by almost all the respondents in all the districts.

Post defecation hand-washing was more of an urban (21%-90%) than rural phenomenon. In Dhar, this practice was equally common in both urban as well as rural areas-90% and 89% respectively.

A majority of care-givers in Alleppey (60%), Delhi (76%) and Ambala (82%) washed their hands with soap after defecation. In the remaining districts barring Anantapur, Mysore, Periyar and Nashik, hand-washing with ash was the most common practice (47%-74%). Water alone was used predominantly in Nashik (53%), Mysore (64%), Anantapur (76%) and Periyar (83%).

Among care-givers, 74%-100% spoke of hand-washing after disposing of children's faeces. Hand-washing for this activity was understood to be less important than hand washing after defecation.

The practice of washing hands after disposing of children's faeces was followed almost equally in both the urban and rural areas.

The use of soap for washing hands after disposal of children's faeces was common in Ambala (80%), Delhi (76%) and Alleppey (58%). The use of water alone was a common practice for 46%-79% of care-givers in Phulbani, Medinipur, Mysore and Periyar. The use of ash for hand-washing prevailed in the remaining districts.

* Mention by care-giver herself without any prompting or aiding
Among care-givers across the 15 districts, 30%-84% washed their hands before eating food. However, in contrast to hand-washing for defecation related practices, the use of soap or ash for hand-washing prior to eating was very low. A majority of care-givers (72%-99%) washed their hands with water only. It was only in Ambala and Delhi that soap was used by about a quarter of care-givers (27% and 24% respectively); in the remaining districts the use of soap ranged from 1%-13%.

The data gathered on hand-washing revealed the low extent of awareness about linkages between personal hygiene and health. Clearly, activities related to defecation were seen to warrant hand-washing with soap or ash. For all other activities such as cooking, serving food, eating and washing of utensils, care-givers mainly washed their hands with water only. There seems to be a clear demarcation in care-givers' minds with regard to activities that require more intensive hand-washing (i.e. with a cleansing agent) and others which do not.
DISPOSAL OF FAECES

Another key practice for prevention of diarrhoea is the safe disposal of a child’s faeces.

Care-givers in the various districts disclosed that many of them (i.e. 32%-89%) disposed of faeces in the vicinity of their homes but outside the compound. This practice was followed more among the rural than urban households.

A relatively large proportion of care-givers in Dhar (38%), Anantapur (19%), Allepey (12%) and Periyar (16%) said that they did not dispose of the excreta at all. This could imply that either the care-giver makes her child defecate in a drain or that she cleans the place of defecation after the activity.

Among those care-givers who did dispose of their child’s faeces, the common practice was to dispose of them soon after defecation rather than leave them unattended for a while. Care-givers across the districts (33%-86%) reported this practice.

A higher proportion of care-givers from urban areas (31%-91%) than those from rural areas (1%-85%) reported this practice.

The practice of wrapping the stools in some way, e.g. in a leaf or paper and then disposing of them was followed by a majority of respondents in 10 out
of 15 districts (50%-93%). Care-givers in Anantapur, Phulbani and Ranchi were exceptions where only 6%-10% of them stated that they followed this practice.

Disposal of faeces after wrapping them in some form was more a rural than urban phenomenon.

The practice of digging a hole and putting the faeces in it and covering the hole with mud, dust or leaves was not as common as the practices discussed earlier.
One of the tasks that the CDD-WATSAN strategy envisages is the promotion of exclusive breast-feeding among infants up to 4-6 months of age. This is widely encouraged, as breast-milk provides not only the nutrition that a child requires till this age but is also hygienic, easily digested and helps the child’s system to build up immunity against diseases. Moreover, breast-milk has fewer chances of being contaminated. It is for these properties that continued feeding of breast-milk during a diarrhoeal attack is strongly recommended.
In all the districts except Dhar and Panchmahals, it was found that 13%-65% of children between 6 months-1 year of age had been exclusively breast-fed (*). A high proportion of children in Alleppey (57%) and Periyar (65%) had been exclusively breast-fed till the age of 4 months, while in Dhar and Panchmahals, only 1% and 2% of children respectively had received exclusive breast-feeding till they were 4 months old.

It was learnt that 20%-53% of children across the districts had been exclusively breast-fed till they were 4-6 months of age.

The proportion of children who were exclusively breast-fed till they were between 6 months and 1 year of age varied from a low 6% in Alleppey to a high 77% in Dhar.

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<th>District</th>
<th>Age Upto Which Child Exclusively Breast-Fed</th>
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<td>Nashik</td>
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<td>Phulbani</td>
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<td>Ranchi</td>
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The age of exclusive breast-feeding was similar in both urban as well as rural areas.

A district-wise comparison showed that the average age of breast-feeding varied across the districts. Care-givers in Alleppey and Periyar stopped exclusive breast-feeding earlier than did care-givers in Dhar and Nashik.

Care-givers reported that solid foods were introduced in a child’s diet earliest at 2-3 months and latest around 9-10 months. No clear differences emerged between urban and rural areas with respect to this aspect of nutrition.

On the issue of immunization, it was learnt that the proportion of children aged between 1-2 years who had been immunized against measles varied considerably. The proportions ranged from a low 19% in Ranchi to a high 79% in Mysore and Alleppey.

* Fed only breast-milk and no other food or fluid items
While a higher proportion of urban (30%-92%) than rural children had received immunization in 8 of the 15 districts, in the remaining districts of Dhar, Nashik, Anantapur, Mysore, Alwar, Ranchi and Phulbani, more rural (59%-87%) than urban children had been immunized.
Practices Related to Management of Diarrhoea

Another key objective of the CDD-WATSAN strategy is to promote key practices for management of diarrhoea in order to reduce morbidity and prevent mortality due to diarrhoea in children under 5 years of age.

An examination of the existing practices related to diarrhoea management included:

- Intake of fluids
- Continued feeding
- Administration of ORS
- Medical consultation and symptoms for referral
INTAKE OF FLUIDS

The National Policy on Diarrhoea Management emphasizes correct home management of diarrhoea which includes use of appropriate home available fluids as well as the Oral Rehydration Salts (ORS).

It is crucial that a child suffering from diarrhoea is offered increased quantities of fluids.

The data on practices related to intake of fluids during diarrhoea revealed that in all districts except Panchmahals, Alleppey and Dhar, low proportions of care-givers (9%-22%) had increased the quantity of fluids fed during a diarrhoeal episode. The majority (50%-75%) in 11 out of the 15 districts gave the child the normal quantity of fluids while in Dhar, Alleppey and Mysore, 3%-9% of care-givers had decreased the quantity of fluids. This shows that in a majority of districts there is a long way to go before increased amounts of fluids are given to children during diarrhoea attacks.

Various home available fluids were fed to children and the variety mentioned included: milk, water, dal water, rice water, tea, buttermilk, vegetable soup, sugar salt solution (SSS), lemon water with salt, and coffee. Between 34%-64% of all care-givers in the 15 districts had breast-fed the child during diarrhoea.

CONTINUED FEEDING

A vast majority of care-givers ranging from 74% in Allahabad to 99% in Kamrup had correctly continued to feed a child suffering from diarrhoea in the preceding 24 hours. This shows that efforts to reinforce this practice will be successful and therefore should form a part of the strategy.

Less than 5% of care-givers in all districts (1%-4%) except Allahabad (7%), Anantapur (7%) and Alleppey (12%) had stopped feeding their diarrhoea affected child.

Very few care-givers actually increased the quantity of food given to the child and this ranged from 1% in Dhar and Panchmahals to 11% in Alwar and Mysore. The most common practice was to continue feeding the same quantity of food as always. The practice varied across districts and ranged from 30% in Dhar and Allahabad to 71% in Nashik.
**ADMINISTRATION OF ORS**

ORS was administered to a child by a very small proportion of care-givers ranging from 2%-13% across most districts. Only Dhar displayed a high level of ORS administration where close to two-fifths of care-givers had administered ORS to the child.

ORS was procured from chemists and from the primary health centers and sub-centers, which were accessed more frequently in Dhar than in the other districts.

By and large, care-givers prepared as much of the salts as they thought was needed (13% in Medinipur to 56% in Nashik to 98% in Panchmahals); it was only in Dhar and Alleppey where 66% and 16% of care-givers respectively used the entire pack to prepare a litre of ORS as explained or as prescribed.

Among care-givers, 64% had administered ORS to their suffering child in the preceding 24 hours and had used the solution over a 12 hour period, while in Dhar more than half (56%) retained ORS for 24 hours in accordance with prescribed norms. Evidently, care-givers in Dhar were well informed with respect to ORS administration.

### HOW TO MIX

**FOR TREATMENT OF HYDRATION DUE TO DIARRHEA AND CHOLERA**

<table>
<thead>
<tr>
<th>AGE</th>
<th>Below 2 years</th>
<th>2 to 10 years</th>
<th>Above 10 years</th>
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</thead>
<tbody>
<tr>
<td>Amount</td>
<td>50-100 ml (1/4 glass)</td>
<td>50-100 ml (1/4 glass)</td>
<td>As much as able to drink</td>
</tr>
<tr>
<td></td>
<td>40-90 ml (1/2 glass)</td>
<td>100-200 ml (1/2 glass)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>40-90 ml (1/2 glass)</td>
<td>100-200 ml (1/2 glass)</td>
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</tr>
</tbody>
</table>

OR to be given after each loose motion. ORS to be used within 24 hours.
MEDICAL CONSULTATION AND SYMPTOMS FOR REFERRAL

Amongst all care-givers across the 15 districts, 25%-70% had sought medical consultation for their diarrhoea afflicted child with 70% each in Dhar and Alleppey having done so. The smallest proportion belonged to Periyar and Ranchi (25% in each) followed by Anantapur (29%). In most other districts, 45%-55% of care-givers sought medical help.

Between the urban and rural areas, it was found that medical attention for diarrhoea was sought more in urban than in rural areas.

When asked who they turned to for medical advice, care-givers revealed that the private doctor was the most popular source of help. Barring Phulbani where only 10% of care-givers went to a private doctor, 45%-89% care-givers across the remaining districts turned to this source for medical help for their diarrhoea afflicted child.

The second most sought after source of medical help was the Government doctor and 6%-36% of care-givers across the districts turned to this source for medical advice.

Seeking help from a private doctor was a common rural practice in Delhi, Ambala, Alwar, Allahabad, Anantapur and Alleppey. In the remaining districts, where rural care-givers consulted the private doctors less, more rural care-givers consulted the Government doctor than did their urban counterparts.

<table>
<thead>
<tr>
<th>Alleppey</th>
<th>Allahabad</th>
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<th>Ambala</th>
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<th>Kamrup</th>
<th>Medinipur</th>
<th>Mysore</th>
<th>Nashik</th>
<th>Panchmahals</th>
<th>Periyar</th>
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% of care-givers

PRIVATE

GOVERNMENT

MEDICAL CONSULTATION BY SOURCE

30 CDD-WATSAN
One of the most important principles of correct diarrhoea management is that treatment must be sought when it is needed. The survey thus attempted to learn about the symptoms that care-givers recognized as signalling the need for medical attention.

The majority of care-givers (79%-97%) across most districts considered it important to seek medical consultation when the child began passing frequent stools. Care-givers in Mysore were an exception and only 53% considered frequent stools as requiring medical attention.

Care-givers considered it necessary to seek medical help if the child's condition did not improve in about 2 days. 10%-33% of care-givers considered this symptom to be important while a relatively high 64% of care-givers in Dhar considered this to be an important indicator of the need for medical help. Only 5% in Medinipur felt the same.

Fever in a child suffering from diarrhoea and repeated vomiting were also symptoms which were understood to be indicators of the need for medical attention.

Other symptoms such as the child becoming irritable or lethargic, eating and drinking poorly and passing blood with stools were also recognized as symptoms that called for medical attention. However, only a small proportion of care-givers in different districts spoke of these symptoms.
Goals for Water and Sanitation

SUMMIT GOALS
At the World Summit for Children, the international community set 27 major goals for the survival, protection and development of children, to be achieved by the year 2000.

These included:

• universal access to safe drinking water
• universal access to sanitary means of excreta disposal

These Summit goals were endorsed by India and have been included in the National Plan of Action for Children.

WATER AND SANITATION GOALS IN THE NATIONAL PLAN OF ACTION FOR CHILDREN
The major water and sanitation goals in the National Plan of Action for Children are to provide universal access to safe drinking water and improved access to sanitary means of excreta disposal.

MID-DECADE GOALS
To stimulate progress and capacities for achieving the year 2000 goals, a series of regional meetings of national leaders adopted a set of 'mid-decade goals', to be achieved by the end of the year 1995.

These include increasing water supply and environmental sanitation so as to narrow the gaps between 1990 levels and universal access by the year 2000, by 1/4th for water supply and by 1/10th for sanitation.