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REVIEW OF ONGOING ORT PROGRAMME IN INDIA

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B. S. Nagi



COUNCIL FOR SOCIAL DEVELOPMENT
53, Lodi Estate, New Delhi-110003

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REVIEW OF ONGOING ORT PROGRAMME IN INDIA

B. S. Nagi

*Sponsored by:
Ministry of Health and Family Welfare, Government of India*

*Funded by:
World Health Organization, New Delhi*



COUNCIL FOR SOCIAL DEVELOPMENT
53, Lodi Estate, New Delhi-110003

1990

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Dr. B. S. Nagi
Director (ORT Project)

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INTRODUCTION

1.1 Country Profile

India, a Union of States, is a sovereign, socialist, secular, democratic republic with a Parliamentary system of Government. It is a vast country with an estimated population of 820 million people residing in 25 States and 7 Union Territories having different religions, social customs, languages and social norms. There are 15 official languages specified in the Constitution. Seventy-seven per cent of the people live in rural areas comprising more than 5,00,000 villages. Children in the age group of 0-4 years comprise about 14 per cent of the total population and are more than 100 million in number. Approximately 36.3 per cent of the population is literate. Women have a lower literacy rate than men. Only 60 per cent of the population (1985) have access to safe drinking water supply. The birth and death rates are around 32 per 1000 (1987) and 10.9 per 1000 (1987) respectively while the infant mortality rate is about 95 per 1000 live births (1987). The major causes of mortality in the age group below five years are premature births, respiratory diseases, diarrhoea, fevers and mal-nutrition. Because of the emphasis on safe motherhood practices and better care of infants, the infant mortality rate has declined from 129 in 1976 to 95 in 1987. However, there is no marked change in the 0-4 years mortality rate which was 41.8 in 1979-80 and 41.2 in 1984. Diarrhoea is a major killer in this age group.

1.2 CDD Programme in India

Government of India is committed to reducing the infant mortality and preschool child mortality rates from the levels of 95 per 1000 and 41.2 per 1000 to 50 and 10 respectively by the year 2000 AD. Child survival activities are of utmost importance to the Government of India. The National Control of Diarrhoeal Diseases Programme for children under the age of 5 years (ORT Programme) has been taken up as a centrally sponsored scheme (under Child Survival Activities) under the umbrella of the Family Welfare Programme.

Diarrhoea is one of the major causes of death in children under 5 years in India. An estimated 1.5 million children die because of diarrhoea and diarrhoea related causes. The main objective of the programme is to prevent deaths due to dehydration. The efficacy of ORT in combatting dehydration problem successfully in epidemics near Calcutta during the Bangladesh war and the discovery by scientists that non-cholera diarrhoeal diseases could also be treated with ORT led to the centrally funded National Control of Diarrhoeal Diseases Programme amongst children under five years of age. Rs. 25 crores (\$250 million) was earmarked for the ORT Programme in the 7th Plan period (1985-90). However, the scheme was approved and circulated to the States in the year 1987-88. The programme has been implemented in the country for four years. The main components of the programme are:

(2)

1. Training of medical and para-medical personnel;
2. Education of community, especially the mothers, through inter-personal communication, printed educational material and the mass media on prevention and home management of diarrhoea;
3. Supply of ORS packets;
4. Augmentation of staff and mobility; and
5. Periodic monitoring and evaluation of the programme.

Programme implementation was similar to that of the Universal Immunization Programme, the district being taken up in a phased manner for the various CDD activities. The programme was implemented in ninety districts in each of the two years 1986-87 and 1987-88. Another 120 districts were added in the year 1988-89, and by 1989-90 the whole country was covered.

To assess the knowledge, attitude and practices prevailing in the prevention and treatment of childhood diarrhoea in various parts of the country a major KAP study was also conducted by Indian Market Research Bureau (IMRB), New Delhi, with UNICEF assistance at the request of the Government of India. This study proved quite helpful in formulating the action plan for the programme of ORT for children under the age of five years.

In the year 1989, the Government of India decided to review the ongoing programme of ORT in the country. In order to get a countrywide picture, the study was taken up in six randomly selected states, representing different regions of India. The Council for Social Development was entrusted with the responsibility of conducting the study. The main objectives of the study were :

1. To ascertain the extent to which the ORT programme has been implemented in six States;
2. To assess the level of knowledge about ORT among mothers and health providers in these States; and
3. To suggest measures which would improve ORT training.

CHAPTER 2

METHODOLOGY

2.1 Sampling Design

A six stage random sampling method was used for the purpose of selecting sample units for the study. These stages are described below:

- (i) **At the first stage** 17 major states were arranged in descending order on the basis of mortality estimates for children between age group 0-4 years available for the year 1984 in rural India (See Annexure 1). In the absence of data regarding deaths due to diarrhoea, child mortality rate had to be used as a basis for stratifying the states. After arranging the states in this order two states were excluded from the list, i.e., Kerala due to its extra-ordinarily low child mortality rate (8.8) and Punjab due to its currently disturbed situation. Based on child mortality rate the remaining 15 states were grouped in five strata, i.e., (i) > 65, (ii) 55 to 64, (iii) 45 to 54, (iv) 35 to 44, (v) 25 to 34. Since there was only one state in the first stratum, the selection of Uttar Pradesh was obvious. One state from each of the next 3 strata was randomly selected. Since the last stratum consisted of 6 states, two states were selected randomly. Following states were thus finally selected:
 1. Uttar Pradesh
 2. Rajasthan
 3. Orissa
 4. Haryana
 5. Maharashtra
 6. Tamil Nadu
- (ii) **At the second stage** From each of the selected States, a minimum of two or 15% of the total districts in the state were selected with probability proportional to their size (population). In all, a total of 24 districts were sampled for the survey.
- (iii) **At the third stage** From each of the selected districts, a minimum of two or 15% of the total number of blocks in a district were selected with probability proportional to the rural population size in each district.

- (iv) At the fourth stage From each of the selected blocks, a minimum of two or 15% of the total sub-centres were selected with probability proportional to the size of the population of the sub-centres. The selection was done by simple random sampling if the population figures were not available.
- (v) At the fifth stage 1, 2 or 3 villages were selected from each of the selected sub-centres with simple random sampling procedure if the number of villages was upto 4, 4-8 or more than 8 respectively.
- (vi) At the sixth stage 25% of the total households with children in the age group of 0-4 years were randomly selected in each village.
- (vii) In the urban sample, the survey was confined to the headquarters of the districts selected. From each of the district headquarters, 15% of the wards were selected by simple random sampling. A minimum of two wards were selected in each district headquarter. From each of the selected wards, 25% of the households with children in the age group of 0-4 years were randomly selected.

2.2 Schedules

The study consisted of eleven types of schedules, to be administered to different types of respondents. (A complete list of the schedules is given in Annexure 2). The schedules were designed during meetings with personnel from the Ministry of Health and Family Welfare, the World Health Organization and the Council for Social Development. The following persons were primarily involved in developing the schedules: Dr. K.P.M. Prabhu, Assistant Commissioner (ORT), Ministry of Health and Family Welfare; Dr. K.B. Singh and Dr. A.V.K.V. De Silva, WHO, New Delhi and Dr. B.S. Nagi, Project Director (ORT), Council for Social Development. The schedules were revised after receiving the comments from WHO, Headquarter, Geneva. These schedules were then pre-tested in three States, U.P. (Moradnagar), Haryana (Sonapat), and Rajasthan (Jhun Jhunu). On the basis of the findings of the pretest, these schedules were again modified by a Committee consisting of Dr. K.P.M. Prabhu, Dr. B.S. Nagi, Dr. Forsberg and Dr. Richards from WHO, Geneva.

The schedules for Household, Village and Para-medical Staff were translated into four languages: Hindi, Marathi, Tamil and Oriya. Before printing these were pretested in respective States to ensure that the questions were easily understood by the respondents in their own language. On the basis of pretests, changes were made in the translation.

Most of the questions of these schedules were structured and formatted in a manner so that data could be entered on computer directly from the schedules. This procedure avoided the error-prone laborious method of coding the data on separate sheets.

2.3 Identification of State Coordinators

State Coordinators with a sound background in medicine or the social sciences were selected to help in selecting the field investigators and supervisors and to direct the survey in their respective states.

Two types of investigators were recruited to collect the data : medical graduates and post graduates in social sciences. The medical graduates (investigators) were to interview - physicians, pharmacists and some of the para-medical staff at health facilities (excluding sub-centres). The remaining respondents (mothers/caretakers, village leaders, health trainers and para-medical staff at sub-centres) were interviewed by the social science post-graduate investigators.

A team of three to four investigators and one supervisor was deputed for each district. The supervisors were entrusted with the responsibility of selecting the sampling units and checking the work of the investigators.

The following schedules were completed by the social science post-graduate investigators:

a. Enumeration Proforma (Schedule No.11 see Annexure 2)

This proforma was administered to all the families residing in the selected villages/wards. (Family is defined here as the members of a household living together and eating from a common kitchen). After the enumeration in the village was complete, 25% of the households (families) having children below 5 years were randomly selected. An additional 5% of the households were selected for the purpose of substitution.

b. Household Schedule (Schedule No.10 see Annexure 2)

This schedule was administered to the 25% of the households selected. The Respondents were mothers of children below 5 years of age. If the mother was not available during the period of the survey, the caretaker (usually a woman) responsible for looking after the child/children was interviewed. If neither the mother nor the caretaker was available during the survey, another household from the substitution list was selected.

As a check on the work of the investigators, the supervisors were instructed to revisit at least 5% of the sampled houses. The supervisor asked the mother/caretaker a few questions from the schedule to determine whether the investigators had actually visited the household or not. A one page proforma was designed for this purpose (see Annexure 3).

(a) Village Schedule (Schedule No.8 see Annexure 2)

The main respondent for the village schedule was the head of the village or elderly person(s) of the village. But there were certain questions for which other persons, such as the ANM, were also interviewed. In many cases other persons such as teacher, shopkeeper, sarpanch, panchayat member, etc., were also consulted for getting the requisite information for the village schedule.

(b) Schedule for para-medical staff (Health Workers) (Schedule No.3 see Annexure 2)

The para-medical staff, i.e., ANM or MPH (Male) or both were interviewed. If the sub-centre was without any staff, the staff of the nearby sub-centre was interviewed.

(c) Schedule for Assessment of Supplies and Facilities of Sub-Centre (Schedule No.5 see Annexure 2)

This schedule was administered to ANM or MPH (Male) at the sub-centre.

The following schedules were convassed by the medical graduates (investigators) (see Annexure 2):

1. Schedule for Medical Officer: Medical College / District Hospital / Taluka Hospital / CHC / PHC / Dispensary.
2. Schedule for Health Worker (Paramedical).
3. Schedule for Assessment of Supplies and Facilities.
4. Schedule for Health and Family Welfare Training Centre.
5. Schedule for Private Practitioner.
6. Schedule for Pharmacist.

2.4 Training Courses

The post-graduate Investigators and Supervisors were oriented in three-days training courses organized in various States. Medical graduates underwent a similar three-days training course which was held in New Delhi. Each training course included one day of field work.

Question by question instructions and guidelines were prepared to help the investigators with problems which might arise in the field.

2.5 Checking of Data

After 7 to 8 days field work, the schedules were checked in the field by the Senior Staff from the Council for Social Development. This exercise helped to remove doubts about questions which the investigators might have faced even after the training. Each schedule was checked in presence of the investigator and ambiguities were cleared and the mistakes committed by the investigators were rectified. When serious errors detected, he/she was asked to go back to the field and get the required information once again.

Every fortnight or so the completed schedules were hand carried to CSD or sent to New Delhi by the State Coordinators by registered mail.

A team of six coders transferred the data in the boxes provided in the schedules. A code book was designed for the open ended questions.

The data entry/verification was done at CSD and software was developed to cross check certain variables by computer. The data were thoroughly checked before starting the computer analysis. Software was also developed beforehand for processing the data on SN-23 and PC - AT computers.

CHAPTER 3

PROFILE

Union of India comprises of 25 States and 7 Union Territories divided into a total of 440 Districts. Out of these, six States and 24 Districts which were systematically selected for the purpose of this study are shown in Figure 3.1.

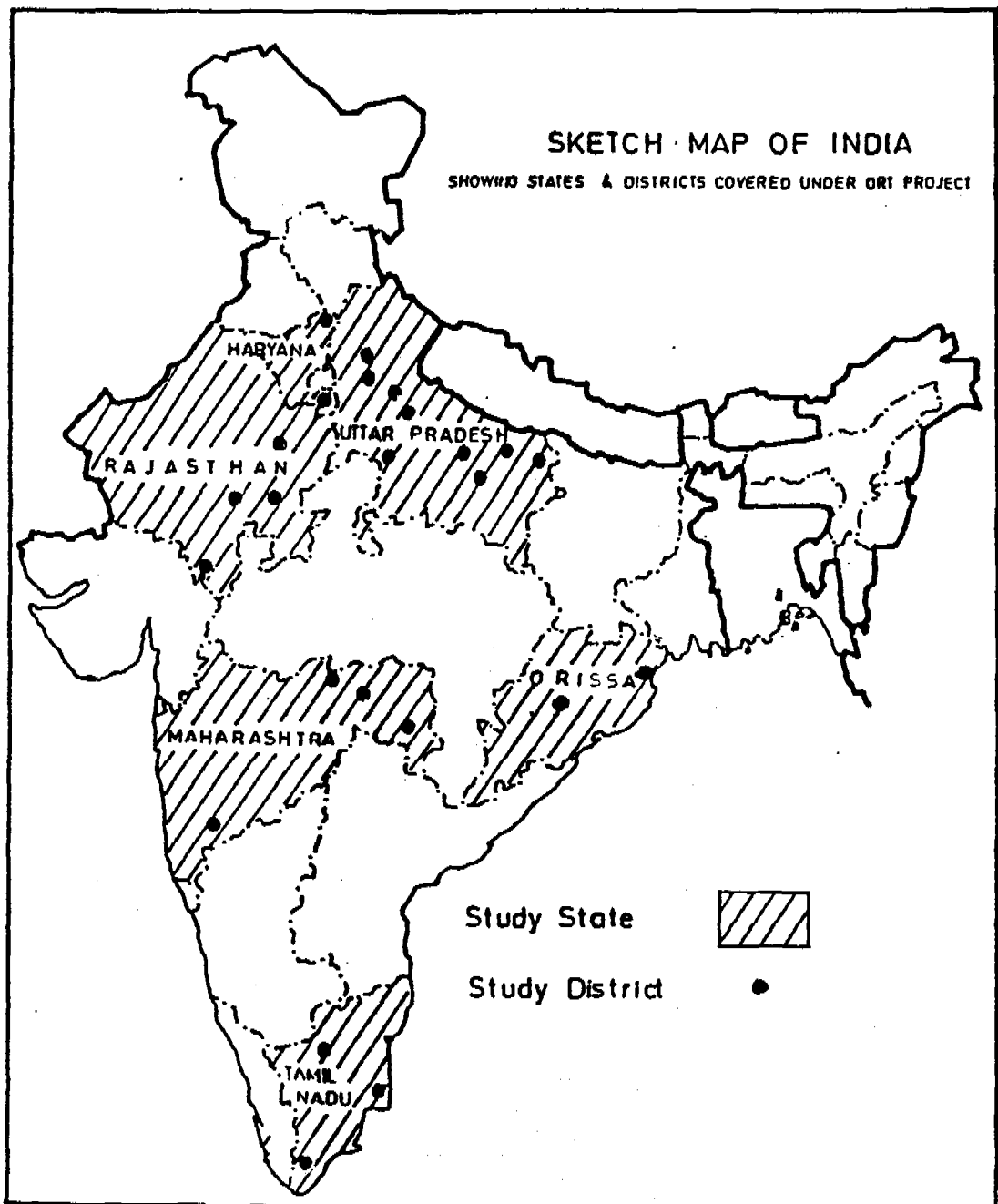


FIGURE 3.1

Table 3.1 shows rural and urban population and the number of children under 5 years of age in each of the six selected States, i.e., Haryana, Maharashtra, Orissa, Rajasthan, Tamil Nadu and Uttar Pradesh.

Table 3.1: Total population and total number of children under 5 years of age*

S. State No.	Population			No. of children under 5 years of age		
	Total	Rural	Urban	Total	Rural	Urban
1. Haryana	12850902	10029073	2821829	2106789	1686988	419801
2. Maharashtra	62715300	40748494	21966806	8748461	6181682	2566779
3. Orissa	26272054	23166419	3105635	3963806	3498772	465034
4. Rajasthan	34108292	26967871	7140421	5926969	4772523	1154446
5. Tamil Nadu	48297456	32369504	15927952	6596806	4524305	2072501
6. Uttar Pradesh	110885874	90912651	19973223	18928272	15701704	3226568
Total	295129878	224194012	70935866	46271103	36365974	9905129

* Source: *Census of India 1981, Series I Part IV-A (Social and Cultural Tables)*

Population figures pertaining to rural and urban areas of the 24 selected districts are given in Table 3.2

Table 3.2: Rural and urban population of 24 districts*

S.No.	State / District	Population		
		Total	Rural	Urban
Haryana				
1.	Ambala	1400133	936755	463378
2.	Gurgaon	840817	671655	169162
	Total	2240950	1608410	632540
Maharashtra				
3.	Wardha	926737	695231	231506
4.	Amravati	1858120	1313673	544447
5.	Sangli	1826186	1432150	394036
6.	Chandrapur	2054286	1792883	261403
	Total	6665329	5233937	1431392
Orissa				
7.	Phulbani	712772	675656	37116
8.	Baleswar	2253090	2067163	185927
	Total	2965862	2742819	223043
Rajasthan				
9.	Jaipur	3406104	2166248	1239856
10.	Bundi	586596	486759	99837
11.	Bhilwara	1308500	1120225	188275
12.	Dungarpur	680865	636744	44121
	Total	5982065	4409976	1572089
Tamil Nadu				
13.	Salem	3429822	2437772	992050
14.	Tirunelveli	3559174	2321482	1237692
15.	Thangavur	4057230	3121028	936202
	Total	11046226	7880282	3165944
Uttar Pradesh				
16.	Basti	3576783	3404916	171867
17.	Barabanki	2012576	1836497	176079
18.	Etawah	1748737	1490717	258020
19.	Bareilly	2264770	1613628	651142
20.	Sultanpur	2037783	1970404	67379
21.	Deoria	3487350	3255923	231427
22.	Muradabad	3151044	2300209	850835
23.	Shahjahanpur	1648659	1329009	319650
24.	Bijnor	1925637	1445271	480366
	Total	21853339	18646574	3206765
Grand Total		50753771	40521998	10231773

Source: Census of India, 1981

Table 3.3 presents district-wise population covered under the study. This table also shows the female-male ratio as well as the percentage of children under 5 years of age to the total population.

Table 3.3: Distribution of population covered under the study

S.No.	State/District	Total population	Percentage of		Percentages of children under 5 years			Percentages of married population		Total no. of households enumerated	% of households covered
			Male	Female	Male	Female	Total	Male	Female		
1	2	3	4	5	6	7	8	9	10	11	12
HARYANA											
01	Ambala	38910	51.67	48.33	5.97	5.31	11.27	23.10	24.79	7276	10.21
02	Gurgaon	22034	52.41	47.59	6.56	6.24	12.81	22.86	24.70	3746	11.61
	Total :	60944	51.94	48.06	6.18	5.64	11.83	23.01	24.76	11022	10.69
MAHARASHTRA											
03	Wardha	23541	51.36	48.64	4.92	4.97	9.89	21.76	24.25	5439	7.83
04	Amravati	94965	54.14	45.86	8.73	5.29	14.02	23.89	17.72	13991	5.42
05	Sangli	41780	51.12	48.88	5.65	5.45	11.10	23.28	25.67	7571	10.01
06	Chandrapur	26902	51.20	48.80	5.75	5.26	11.01	21.69	23.92	5037	10.38
	Total :	187188	52.70	47.30	7.14	5.28	12.42	23.17	21.21	32038	7.69
ORISSA											
07	Phulbani	10162	50.05	49.95	7.05	6.71	13.76	21.09	23.50	1987	16.51
08	Baleswar	14644	51.39	48.61	5.77	5.31	11.08	21.07	23.84	2477	11.63
	Total :	24806	50.84	49.16	6.29	5.89	12.18	21.08	23.70	4464	13.80
RAJASTHAN											
09	Jaipur	64475	53.14	46.86	6.33	5.36	11.69	22.84	23.71	10029	11.65
10	Bundi	26325	52.40	47.60	6.51	5.99	12.51	23.56	25.26	4629	12.25
11	Bhilwara	38021	51.84	48.16	3.48	2.94	6.42	24.85	26.61	7564	7.91
12	Dungarpur	26693	50.99	49.01	6.01	5.98	11.98	23.27	24.81	4551	12.96
	Total :	155514	52.33	47.67	5.61	4.98	10.59	23.53	24.87	26773	10.92
TAMIL NADU											
13	Salem	72001	50.65	49.35	4.10	4.00	8.10	23.71	27.63	15831	7.29
14	Tirunelveli	28879	50.54	49.46	4.36	4.10	8.46	22.16	26.42	6053	8.21
15	Thanjavur	51311	50.33	49.67	4.81	4.61	9.42	21.76	25.44	14087	8.72
	Total :	152191	50.52	49.48	4.39	4.23	8.61	22.76	26.66	35971	8.00

UTTAR PRADESH											
16	Basti	31252	52.34	47.66	6.56	6.44	12.99	23.20	24.29	4381	14.36
17	Barabanki	36153	54.75	45.25	6.63	5.58	12.21	24.66	24.29	6567	11.51
18	Etawah	27216	54.20	45.80	7.31	6.28	13.59	22.10	23.18	4909	12.75
19	Bareilly	78060	52.37	47.63	6.06	5.71	11.76	21.12	22.65	13602	11.62
20	Sultanpur	18916	51.72	48.28	8.06	7.33	15.39	26.14	28.12	2848	14.96
21	Deoria	42584	52.07	47.93	7.18	6.83	14.00	22.65	24.11	6142	14.72
22	Muradabad	59038	52.72	47.28	7.78	7.30	15.08	19.82	20.54	12106	14.19
23	Shahjahanpur	16085	53.47	46.53	6.53	5.89	12.42	21.82	23.27	3049	12.73
24	Bijnor	11506	53.55	46.45	7.27	6.44	13.71	21.46	22.35	1956	15.54
TOTAL :		320810	52.88	47.12	6.93	6.38	13.31	22.11	23.19	55560	13.08
ALL STATES		901453	52.23	47.77	6.25	5.48	11.73	22.72	23.77	165828	10.45

Number and type of different sampling units selected for the study are given in Table 3.4.

Table 3.4 Number and type of different sampling units covered in the ORT survey

S. No.	Type of sampling units	Haryana	Mahara- shtra	Orissa	Rajasthan	Tamil Nadu	Uttar Pradesh	Total
1.	Number of villages**	19	55	19	64	45	133	335
2.	Mothers/ Caretakers	1178	2465	616	2923	2879	7269	17330
3.	No. of Medi- cal Colleges	4	2	2	2	9	9	28
4.	No. of District Hospitals	8	3	4	4	4	19	42
5.	No. of Taluka Hospitals	0	3	4	0	19	0	26
6.	No. of PHCs/ CHC	26	15	9	13	52	99	214
7.	Others*	24	4	14	2	27	25	96
8.	No. of Health and Family Welfare Training centres	1	2	2	1	2	4	12
9.	No. of SCs	11	37	8	43	39	86	224
10.	No. of Pharmacists	23	36	18	55	82	148	362
11.	No. of Medical Officers	62	27	33	21	111	152	406
12.	No. of Private Practitioners	29	56	18	53	102	166	424
13.	No. of Health Workers	57	107	47	102	253	336	902
14.	No. of Blocks covered in Rural areas	4	8	5	9	13	24	63
15.	No. of Wards covered in urban areas	5	31	6	18	17	31	108

** Data regarding the infrastructural facilities available for the sampled villages were collected and relevant tables (Tables 1-5) are given in Annexure 4.

* Others include Dispensaries, Nursing homes, I.D.Hospitals, Police & Rly.Hospitals, Mission/Charitable hospitals, State Health Centres/State Ayurvedic Hospitals, and Municipal Hospitals.

Health system in rural India is well defined. Functions and responsibilities allocated at various levels are given as under:

At the state level, the Directorate of Health Services is responsible for the health care of rural and urban people in the state.

At the district level, Chief Medical Officer is responsible for the health care of rural and urban people in the district. Within the district there are Primary Health Centres (PHCs) responsible for health of the people in rural areas allocated to them. Each PHC is divided into sub-centres, depending on the population in the PHC area. The sub-centre is the lowest health unit in rural area. Each sub-centre looks after a number of villages comprising population of about 5000 in plains, but in hilly, tribal and inaccessible areas, the sub-centre looks after only about 3000 population. Auxiliary Nurse Midwife (ANM) is the person incharge of sub-centre. She is in a sense, the only real grass root worker who is in constant touch with the people and looks after the health problems of the people in her area. Sub-centre is the only health facility which is very close to the villagers. There are Community Health Centres also in the rural areas. One Community Health Centre covers 80,000 to 1.2 lakh of population. This serves as a referral institution, having a minimum of 30 beds and 4 specialists, for 4 Primary Health Centres. It was expected to have 50% of the total required Community Health Centres in position in the country by 31.3.1990.

Table 3.5 gives the distribution of PHCs, CHCs and sub-centres in the six States selected for the study.

Table 3.5 Number of Primary Health Centres, Community Health Centres and Sub-Centres in six states**

S.No.	State	PHC	CHC	Sub-centre
1.	Haryana	341 @	41 *	2299 *
2.	Maharashtra	1546 *	278 *	9248 *
3.	Orissa	984 *	83 *	5426 *
4.	Rajasthan	898 @	136 @	6492 *
5.	Tamil Nadu	1222 *	72 *	8558 *
6.	Uttar Pradesh	2972 *	185 *	21653 *
Total		7962	795	53676

Information relates to 31.12.89

@ Information relates to 30.9.89

*** Source : Rural Health Statistics in India, Dec. 1989*

Table 3.6 presents the actual figure of trained personnel in the sampled states.

Table 3.6: Number of medical and paramedical personnel trained under the Multi-purpose Worker Schemes since inception of the scheme as on December 1987 *

S. No.	State	Medical Officer	@BEE	Health Assistant (male)	Health Assistant (female)	Multi-Purpose Worker (male)	Multi-Purpose Worker (female)
1.	Haryana	892	95	640	132	1913	1021
2.	Maharashtra	3719	00	3949	2807	11409	14609
3.	Orissa	667	312	1373	443	4457	6953
4.	Rajasthan	883	186	1614	520	3761	2436
5.	Tamil Nadu	2107	401	2239	1701	4970	4185
6.	Uttar Pradesh	2486	1020	4593	5442	11363	26215
Total		10754	2014	14408	11045	37873	55419

* Source: *Rural Health Statistics in India Dec. 1989.*

Directorate General of Health Services, Ministry of Health & Family Welfare, Govt. of India.

@ Block Extension Educator

Twelve Health and Family Welfare Training Centres were also visited by the investigators (medical graduates) but the response was not very encouraging. These centres train the medical and paramedical personnel on ORT. At most of these training centres it was pointed out that the faculty who had undergone the training in management of diarrhoea at NICED, Calcutta was inadequate (there is a general feeling that personnel trained at NICED, Calcutta are the best facilitators). Table 3.7 gives the number of faculty members trained in ORT at NICED, Calcutta.

Table 3.7: Distribution of faculty members of Health and Family Welfare Training Centres who got training at NICED, Calcutta

S.No.	State	No. of H & F W T centres	Total Faculty members			Faculty members trained at NICED, Calcutta
			Male	Female	Total	
1	2	3	4	5	6	7
1.	Haryana	1	5	6	11	2 (18.2)
2.	Maharashtra	2	10	6	16	2 (12.5)
3.	Orissa	2	9	6	15	1 (6.7)
4.	Rajasthan	1	10	6	16	2 (12.5)
5.	Tamil Nadu	2	17	9	26	3 (11.5)
6.	Uttar Pradesh	4	30	12	42	4 (9.5)
Total		12	81	45	126	14 (11.1)

Figures in parenthesis are the percentages.

Table 3.8 gives the number of medical officers and health workers trained in management of diarrhoea by the Health and Family Welfare Training Centres.

Table 3.8 Personnel trained by H&FWTCs in management of diarrhoea

S. No.	State	No. of H&FWTC	Medical Officers		Health Workers		Total personnel trained so far	
			87-88	88-89	87-88	88-89	medical officers	health workers
1	2	3	4	5	6	7	8	9
1.	Haryana	1	9	NA	26	16	9	42
2.	Maharashtra	2	12	726	24	NA	738	24
3.	Orissa	2	315	75	NA	8	390	8
4.	Rajasthan	1	NA	NA	NA	NA	NA	NA
5.	Tamil Nadu	2	94	439	817	8536	533	9353
6.	Uttar Pradesh	4	675	331	4930	2656	1006	7586
Total		12	1105	1571	5797	11216	2676	17013

NA: Information not available.

CHAPTER 4

MOTHERS' KNOWLEDGE OF ORT

The success of ORT programme depends to a very large extent on mothers' knowledge about different aspects of ORT. In order to study different aspects of ORT 17,330, mothers/caretakers of children below 5 years of age were interviewed through semi-structured interview schedule and their knowledge about different aspects of the management of diarrhoea was investigated. About 53 per cent of these respondents are illiterate. Taking those who are literate, 16.6 per cent, 13.2 per cent and 17.6 per cent have studied upto primary, middle and matric and above levels respectively (Table 4.1). The percentage of literate mothers is the highest (68.2%) in Tamil Nadu followed by Maharashtra (63.4%) and Haryana (56.4%). Level of literacy among mothers is as low as 37 per cent in Rajasthan and Uttar Pradesh, whereas in Orissa it is about 50 per cent.

Table 4.1: Distribution of mothers/caretakers by education

S.No.	State	No. of mothers/ care-takers	Illite- rate	Upto primary	Upto middle	Upto matr- ic/higher secondary	Grad- uate & above
1	2	3	4	5	6	7	8
1	Haryana	1178	513 (43.6)	135 (11.5)	145 (12.3)	197 (16.7)	188 (15.9)
2	Maharashtra	2465	903 (36.6)	537 (21.8)	558 (22.6)	374 (15.2)	93 (3.8)
3	Orissa	616	313 (50.8)	104 (16.9)	89 (14.4)	95 (15.4)	15 (2.4)
4	Rajasthan	2923	1868 (63.9)	360 (12.3)	291 (10.0)	254 (8.7)	150 (5.9)
5	Tamil Nadu	2879	914 (31.8)	860 (29.9)	616 (21.4)	441 (15.3)	48 (1.6)
6	Uttar Pradesh	7269	4584 (63.1)	875 (12.0)	583 (8.0)	726 (10.0)	501 (6.9)
Total :		17330	9095 (52.5)	2871 (16.6)	2282 (13.2)	2087 (12.0)	995 (5.7)

Figures in parenthesis are the percentages.

Note: - Percentages are calculated on the basis of Col.3.

4.1 Children's health problems: Who takes decision?

Table 4.2 shows that only 18.1 per cent of the mothers/caretakers play the role of decision makers with regard to the health problems of children in the family whereas in majority of families the decisions are taken by the husbands of the respondents (66.4%). However, in 14 per cent of the households, the main decision makers are fathers-in-law, mothers-in-law, brothers-in-law.

Table 4.2: Decision makers with regard to health problems of children in the family

S. No.	State	No. of mothers/ caretakers	Relationship with respondent					Others*
			Self	Spouse	Father-in-law	Mother-in-law	Brother-in-law	
1	2	3	4	5	6	7	8	9
1	Haryana	1178	280 (23.8)	656 (55.7)	181 (15.3)	39 (3.3)	9 (0.8)	13 (1.1)
2	Maharashtra	2465	176 (7.1)	1776 (72.0)	348 (14.1)	73 (3.0)	26 (1.1)	66 (2.7)
3	Orissa	616	29 (4.7)	512 (83.1)	50 (8.1)	7 (1.1)	11 (1.8)	7 (1.1)
4	Rajasthan	2923	38 (1.3)	2076 (71.0)	691 (23.6)	46 (1.6)	45 (1.6)	27 (0.9)
5	Tamil Nadu	2879	1218 (42.3)	1582 (55.0)	18 (0.6)	38 (1.3)	3 (0.1)	20 (0.7)
6	Uttar Pradesh	7269	1400 (19.3)	4905 (67.5)	578 (8.0)	490 (2.6)	62 (0.9)	134 (1.8)
Total :		17330	3141 (18.1)	11507 (66.4)	1866 (10.8)	393 (2.3)	156 (0.9)	267 (1.5)

Figures in parenthesis are the percentages.

Note: - Percentages are calculated on the basis of Col. No. 3.

* Others include Father, Sister-in-law, Mother, Brother, Grand father, Grand mother, Nephew, Daughter, Daughter-in-law, Uncle and Aunt.

4.2 Management of diarrhoeal children by mothers/caretakers

Table 4.3 shows that 50.7 per cent of children with diarrhoea are treated at home by their mothers/caretakers. Only 9.6 per cent of mothers seek the advice of healthworkers. However, 72 per cent children are taken to private practitioners and 20.9 per cent of them are taken to the government hospitals or PHCs.

Table 4.3: Action taken by mothers/caretakers when the child under 5 years had diarrhoea during the last 30 days

S.No.	State	No. of children having diarrhoea in the last 30 days	Treated at home	Got advice from health-worker and then treated	Went to private practitioner	Went to nearest hospital/PHC
1	2	3	4	5	6	7
1.	Haryana	188	101 (53.7)	11 (5.9)	161 (85.6)	18 (9.6)
2.	Maharashtra	507	208 (41.0)	85 (16.8)	442 (87.2)	134 (26.4)
3.	Orissa	149	114 (76.5)	21 (14.1)	44 (29.5)	54 (36.2)
4.	Rajasthan	781	468 (59.9)	101 (12.9)	271 (34.7)	290 (37.1)
5.	Tamil Nadu	527	185 (35.1)	71 (13.5)	337 (63.9)	107 (20.3)
6.	Uttar Pradesh	1732	892 (51.5)	85 (4.9)	1541 (89.0)	210 (12.1)
Total		3884	1968 (50.7)	374 (9.6)	2796 (72.0)	813 (20.9)

Figures in parenthesis are the percentages.

Note : Percentages are calculated on the basis of Col.3.

It is interesting to note that more than 85 per cent of the children with diarrhoea are taken to private practitioners in Haryana, Maharashtra and Uttar Pradesh. Consequently percentages of children with diarrhoea who are taken to the government hospitals are as low as 9.6 in Haryana and 12.1 in Uttar Pradesh.

4.3 Recognising ORS packets

Figure 4.1 shows that percentage of mothers/caretakers' recognition of government ORS packets is higher in rural areas as compared to urban areas. This percentage is the highest in Tamil Nadu (28.2%) followed by Haryana and Maharashtra (23%). The trend is, however, just the opposite in the State of Rajasthan where the percentage of such mothers is higher in urban areas than in the rural areas.

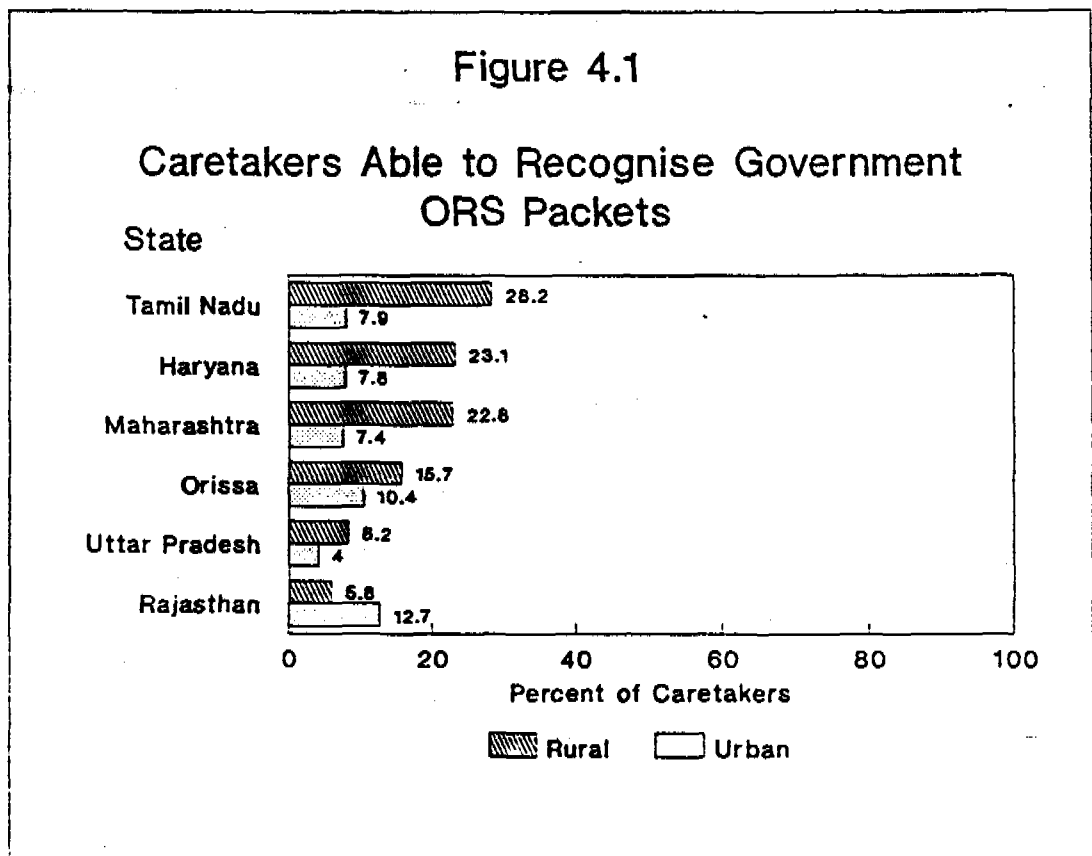
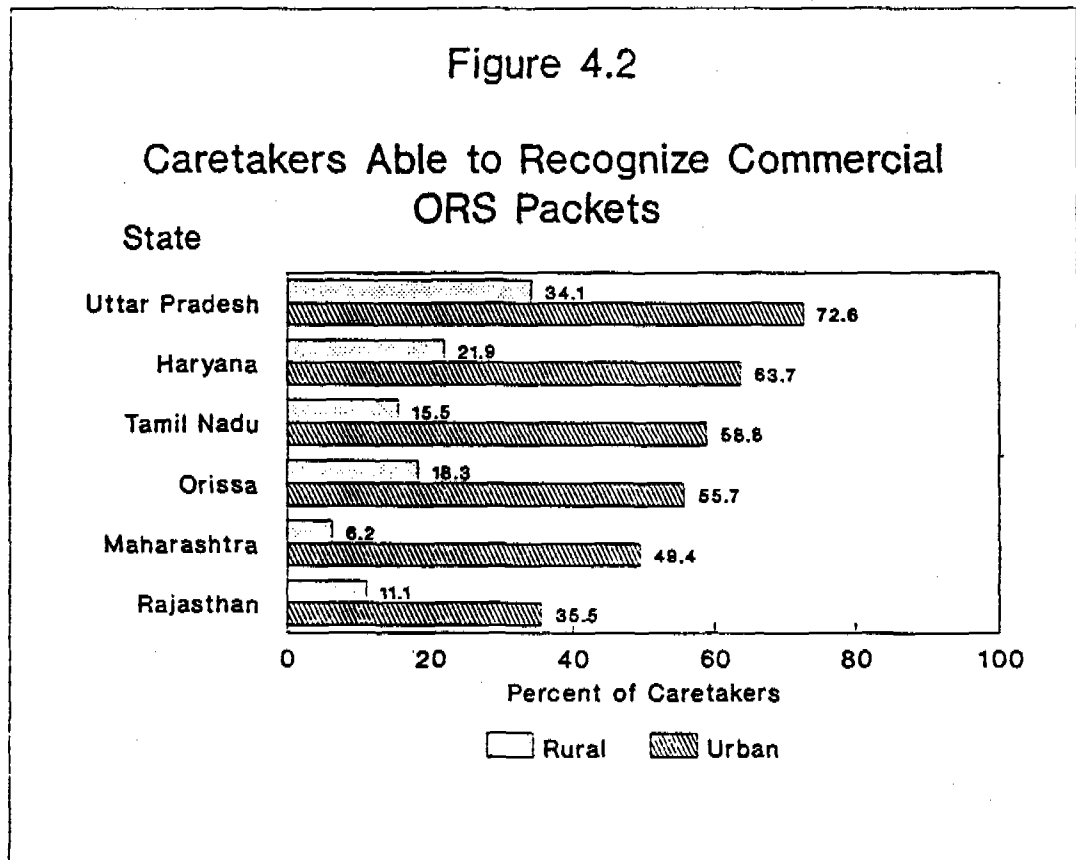


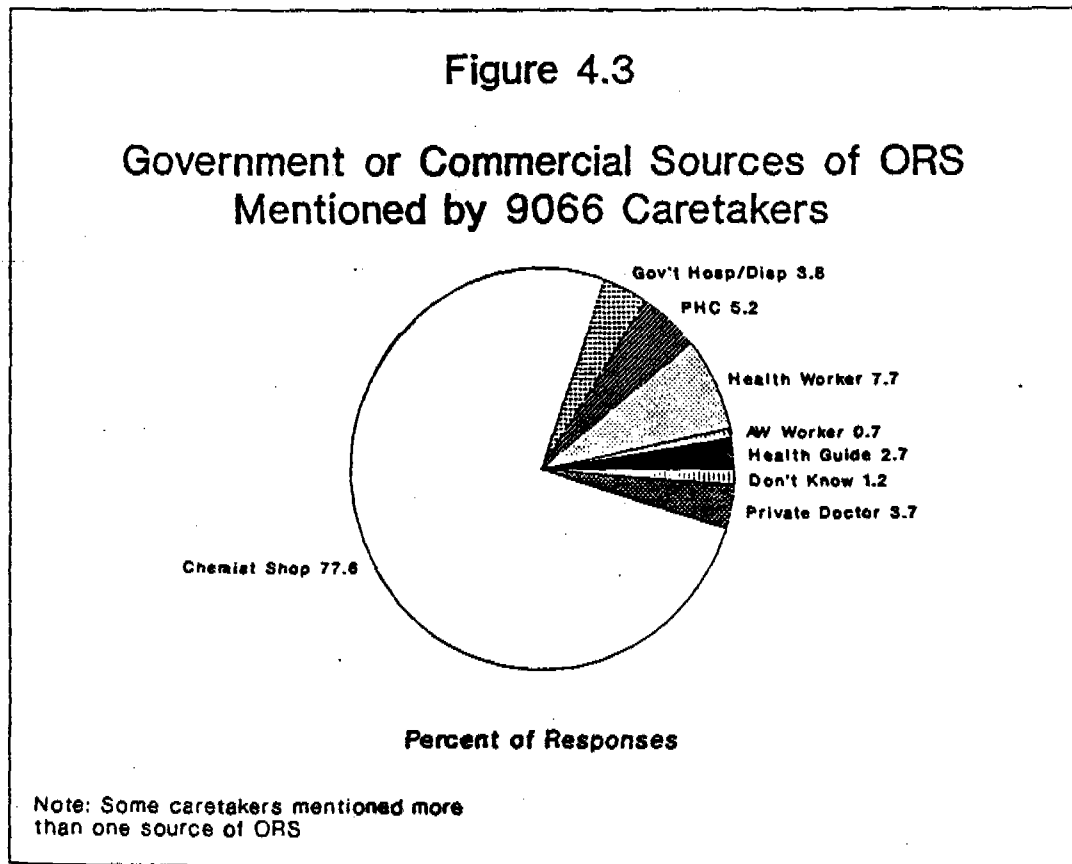
Figure 4.2 shows that the percentage of respondents recognizing the commercial ORS packets is quite high in urban areas as compared to rural areas in almost all the States. It varies from 72.6 per cent to 35.5 per cent, highest being in Uttar Pradesh and lowest being in Rajasthan. The recognition of commercial ORS packets in rural areas also happens to be the highest (34.1%) in Uttar Pradesh. It is, therefore, quite evident from Figures 4.1 and 4.2 that commercial ORS packets are recognised more widely than the government ORS packets in all the States.



Mothers were shown the leading local commercial ORS packets to recognize only after they failed to recognize the government packets, thus the question was biased in favour of government packets. In other words, the proportion of mothers recognizing the local packets is understated because the formulation of the question was such that it does not take into account mothers who were familiar with both commercial as well as the government packets. Districtwise distribution of mothers recognising government/commercial ORS packets is given in Annexure 4 (Table 6).

4.4 Supply of ORS packets

Figure 4.3 shows that out of the total number of mothers who have recognised ORS packets, 77.6 per cent can get these from chemists' shops as against all governmental sources put together such as village health guides, anganwadi workers, health workers, PHC and government hospital or dispensary which account for only 20 per cent of the ORS supply to the mothers. Most frequented source among them is the health workers who have been mentioned by 7.7 per cent of the mothers.



Statewise distribution of sources of supply of ORS packets to mothers is given in Table 4.4.

Table 4.4: Distribution of mothers/caretakers by the source of supply of ORS packets
(Govt/Commercial)

S. No.	State	Number recognised ORS Packets	Health Guide	Angan-wadi Worker	Health Worker	PHC	Govt. Hospital/ Dispensary	Chemist Shop	Private Doctor	Don't Know the source of supply
1	2	3	4	5	6	7	8	9	10	11
1.	Haryana	723	35 (4.8)	4 (0.6)	77 (10.7)	17 (2.4)	11 (1.5)	540 (74.7)	25 (3.6)	30 (4.1)
2.	Maharashtra	1080	43 (4.0)	16 (1.5)	121 (11.2)	110 (10.2)	50 (4.6)	688 (63.7)	67 (6.2)	14 (1.3)
3.	Orissa	305	23 (7.5)	1 (0.3)	19 (6.2)	20 (6.6)	26 (8.5)	216 (70.8)	3 (1.0)	1 (0.3)
4.	Rajasthan	972	35 (3.6)	7 (0.7)	105 (10.8)	76 (7.8)	82 (8.4)	731 (75.2)	13 (1.3)	26 (2.7)
5.	Tamil Nadu	1611	50 (3.1)	29 (1.8)	239 (14.8)	68 (4.2)	117 (7.3)	1110 (68.9)	19 (1.2)	0 (0.0)
6.	Uttar Pradesh	4375	55 (1.3)	3 (0.1)	141 (3.2)	178 (4.1)	58 (1.3)	3753 (85.8)	207 (4.7)	39 (0.9)
Total :		9066	241 (2.7)	60 (0.7)	702 (7.7)	468 (5.2)	344 (3.8)	7038 (77.6)	334 (3.7)	110 (1.2)

Figures in parenthesis are the percentages.

Note: Some respondents have indicated more than one response.

The percentages are calculated on the basis of col.2.

4.5 Use of ORS

Table 4.5 shows that 44 per cent of the mothers have used ORS (government/commercial) for diarrhoea. Percentage of such mothers is highest in Haryana (50.7%) and lowest in Rajasthan (27.5%).

Table 4.5: Use of ORS by mothers/caretakers

S.No.	State	No.of mothers/ caretakers	ORS used		
			Yes	No	Do not know
1	2	3	4	5	6
1	Haryana	1178	597 (50.7)	128 (10.9)	453 (38.4)
2	Maharashtra	2465	950 (38.6)	136 (5.5)	1379 (55.9)
3	Orissa	616	283 (46.0)	23 (3.7)	310 (50.3)
4	Rajasthan	2923	805 (27.5)	240 (8.2)	1878 (64.3)
5	Tamil Nadu	2879	1408 (48.9)	203 (7.1)	1268 (44.0)
6	Uttar Pradesh	7269	3584 (49.3)	355 (4.9)	3330 (45.8)
Total :		17330	7627 (44.0)	1085 (26.3)	8618 (49.7)

Figures in parenthesis are the percentages.

Note: - Percentages are calculated on the basis of Col.3.

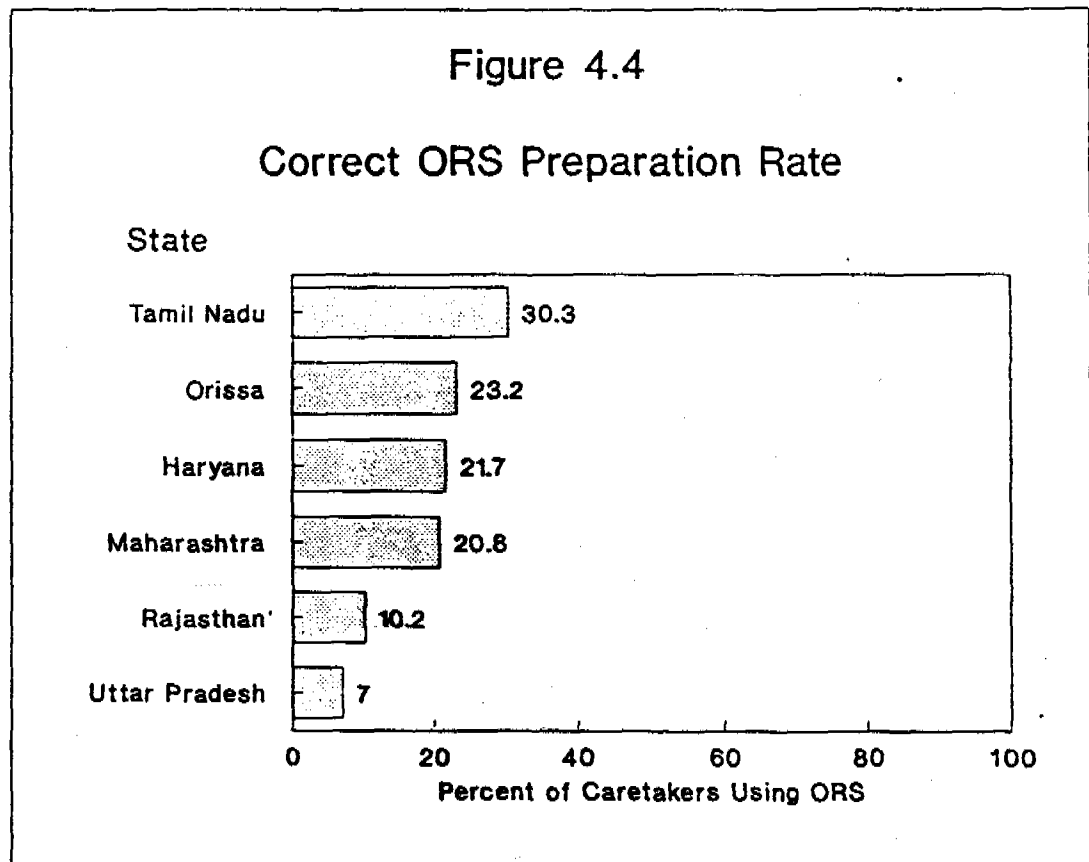
4.6 Preparation of ORS solution

Table 4.6 shows the distribution of mothers who have recognised ORS packets and claimed to know how to prepare ORS solution.

Table 4.6: Preparation of ORS solution

S.No.	State	No. of mothers/ caretakers	No. of mothers who claimed to know how to pre- pare ORS solu- tion	Percentages
1	2	3	4	5
1.	Haryana	1178	617	(52.4)
2.	Maharashtra	2465	954	(38.7)
3.	Orissa	616	284	(46.1)
4.	Rajasthan	2923	832	(28.5)
5.	Tamil Nadu	2879	1442	(50.1)
6.	Uttar Pradesh	7269	3940	(54.2)
Total		17330	8069	(46.6)

Figure 4.4 shows that of the 8069 mothers/caretakers who have claimed to know how ORS solution is prepared, not more than 30.3 per cent of them could prepare it correctly in any of the States under the study. The highest percentage of such respondents is in Tamil Nadu (30.3 %) and the lowest percentage is in Uttar Pradesh (7%).



Correct preparation of ORS solution is defined as dissolving the ORS according to instructions given on the packet. For example, for some commercial ORS brands such as Electral, correct preparation means dissolving the correct amount of powder, measured by a spoon, into a glass; and for government ORS packet, it means emptying the entire packet into 950-1200 ml of water. In both the cases the correct preparation means dissolving the ORS completely.

The distribution of mothers/caretakers on different items considered relevant for the correct preparation of ORS solution is given in Table 4.7. It is clear from the table that 93.9 per cent of the mothers prepared the ORS in clean container and 80 per cent prepared with clean hands. Around 75 per cent did not use the correct amount of ORS, about 83 per cent dissolved the ORS completely.

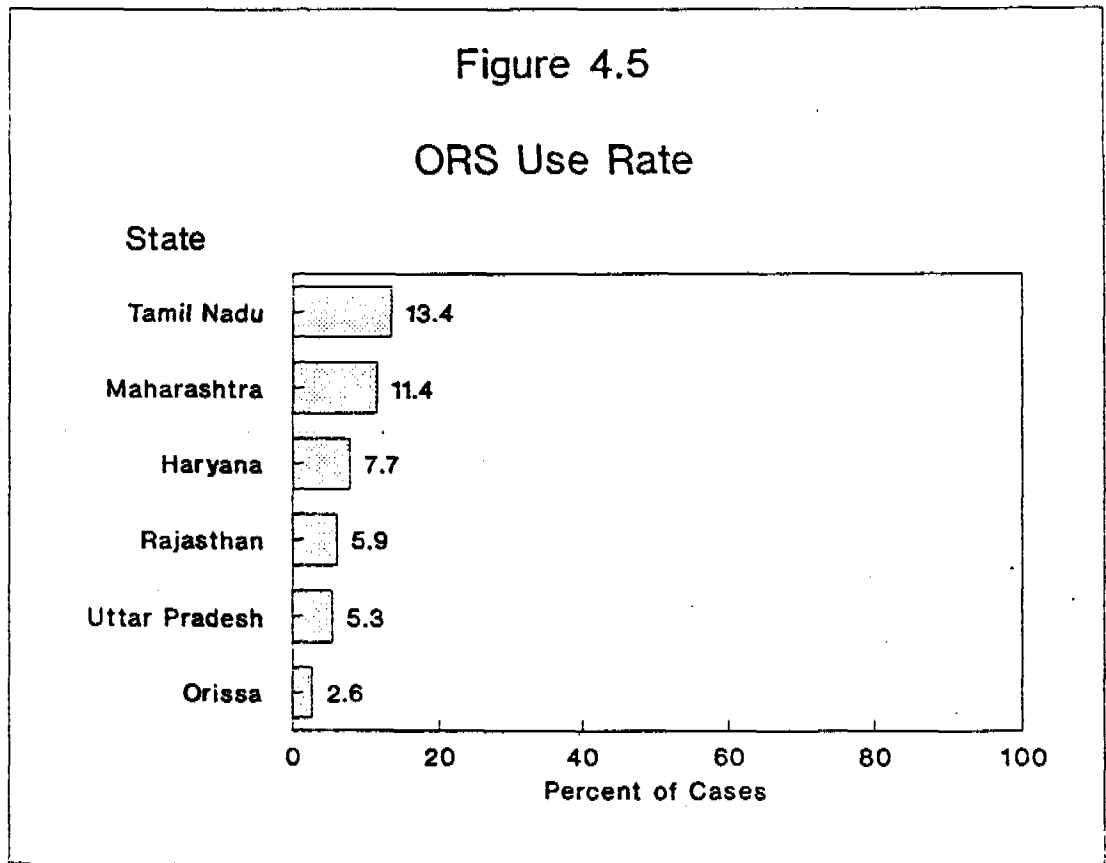
Table 4.7: Observations made by the investigators while the mothers were preparing ORS solution

S. No.	State	No. of mothers who claimed to know how to prepare ORS solution	Clean container used	Clean water used	ORS completely dissolved	Correct amount of powder used	Respondents hands were clean	Correct amount of water used
1	2	3	4	5	6	7	8	9
1.	Haryana	617	614	613	548	209	594	143
2.	Maharashtra	954	879	898	850	216	693	212
3.	Orissa	284	252	266	76	68	203	68
4.	Rajasthan	832	832	815	755	106	742	219
5.	Tamil Nadu	1442	1343	1206	1149	488	1137	487
6.	Uttar Pradesh	3940	3672	3737	3346	991	3087	964
Total		8069	7575 (93.9)	7535 (93.4)	6724 (83.3)	2078 (25.8)	6456 (80.0)	2093 (25.9)

Figures in parenthesis are the percentages.

4.7 ORS use rate

ORS use rate is defined as the percentage of cases who have used ORS for diarrhoea. Figure 4.5 shows that it is the highest in Tamil Nadu and lowest in Orissa.



4.8 Preparation of SSS

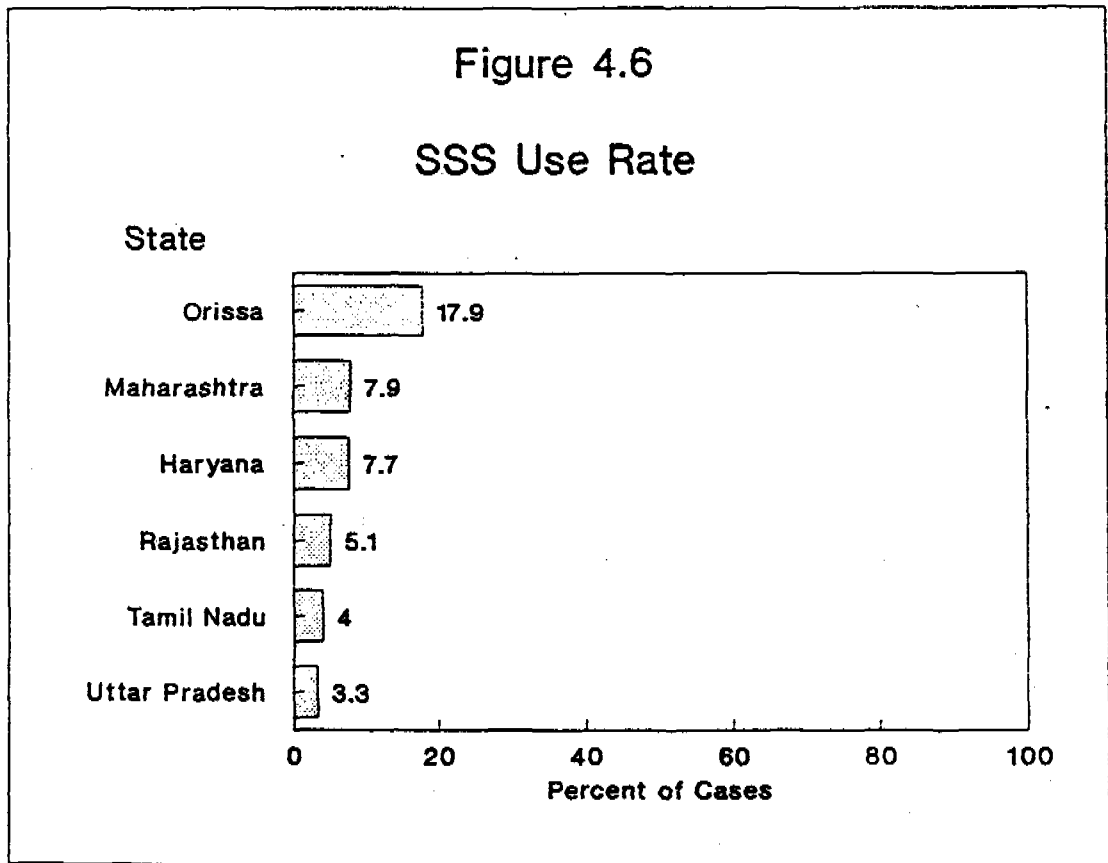
Table 4.8 shows that about 38 per cent of the mothers/ caretakers have claimed to know how to prepare Sugar Salt Solution (SSS). The percentage of such mothers is more than 55 in Haryana, Maharashtra and Orissa; whereas, it is the lowest in Tamil Nadu (24.2 %).

Table 4.8: Percentage of mothers / caretakers who prepared SSS

S.No.	State	No. of mothers/ caretakers	No. of mothers/ caretakers who claimed that they know how to prepare SSS	Percentage of mothers who claimed to know how to prepare SSS
		A	B	B/A
1.	Haryana	1178	679	57.6
2.	Maharashtra	2465	1464	59.4
3.	Orissa	616	343	55.7
4.	Rajasthan	2923	977	33.4
5.	Tamil Nadu	2879	698	24.2
6.	Uttar Pradesh	7269	2383	32.8
	Total	17330	6544	37.8

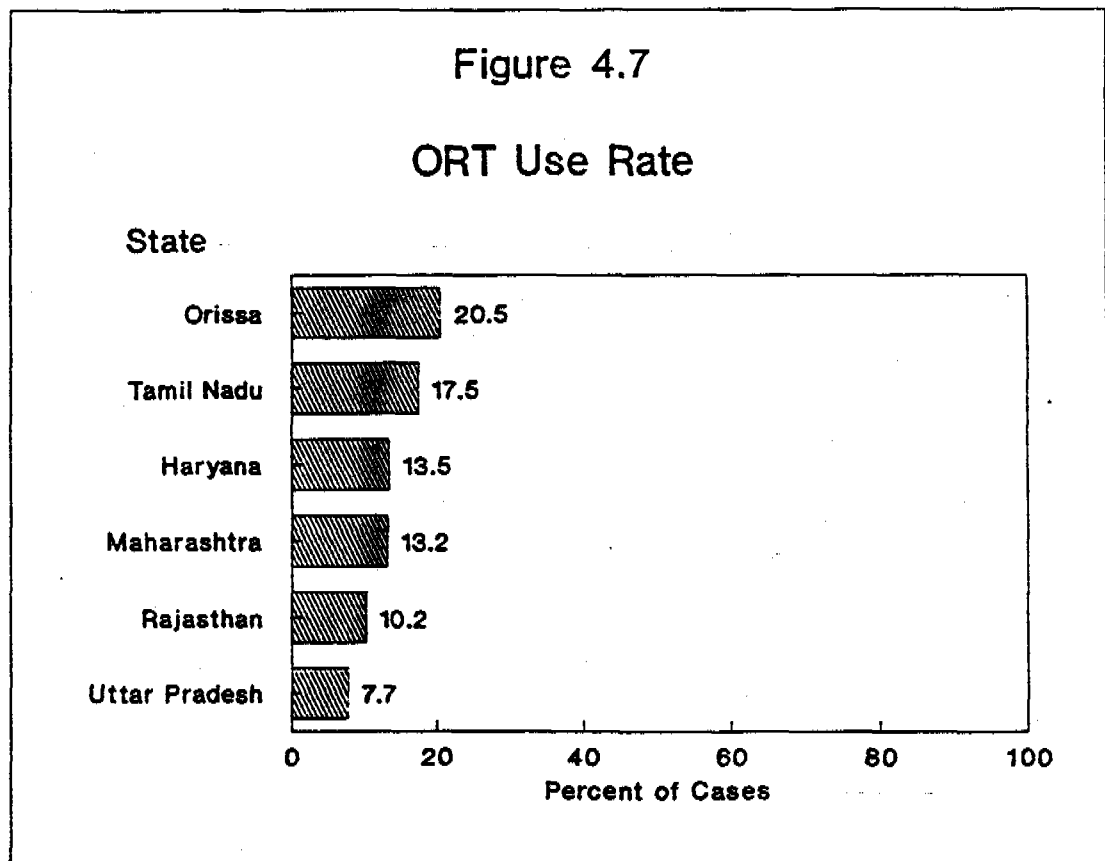
4.9 SSS use rate

Figure 4.6 indicates that SSS use rate is the highest in Orissa (17.9%) followed by Maharashtra (7.9%) and is the lowest in Uttar Pradesh (3.3%).



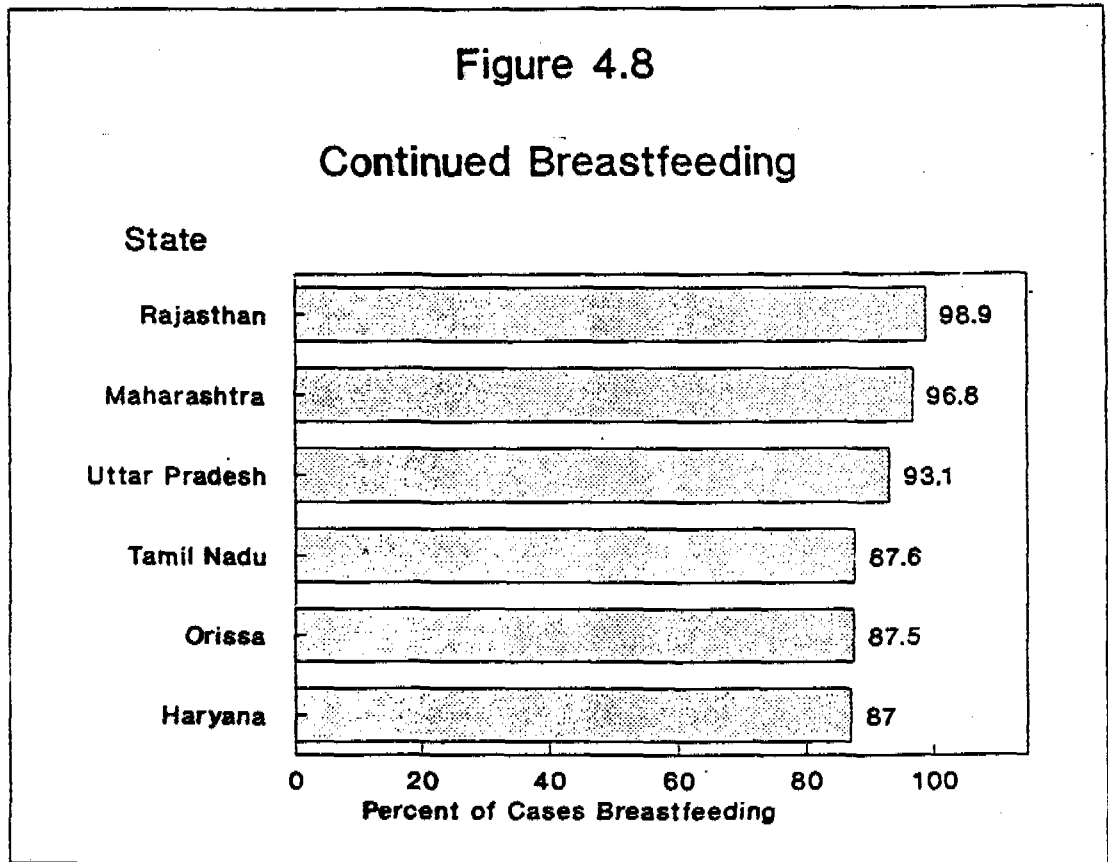
4.10 ORT use rate

The ORT use rate is defined here as percentage of children with diarrhoea in the last 24 hours who are given either ORS or SSS. The ORT use rate ranges from 20.5 per cent in Orissa to 7.7 per cent in Uttar Pradesh (Figure 4.7).



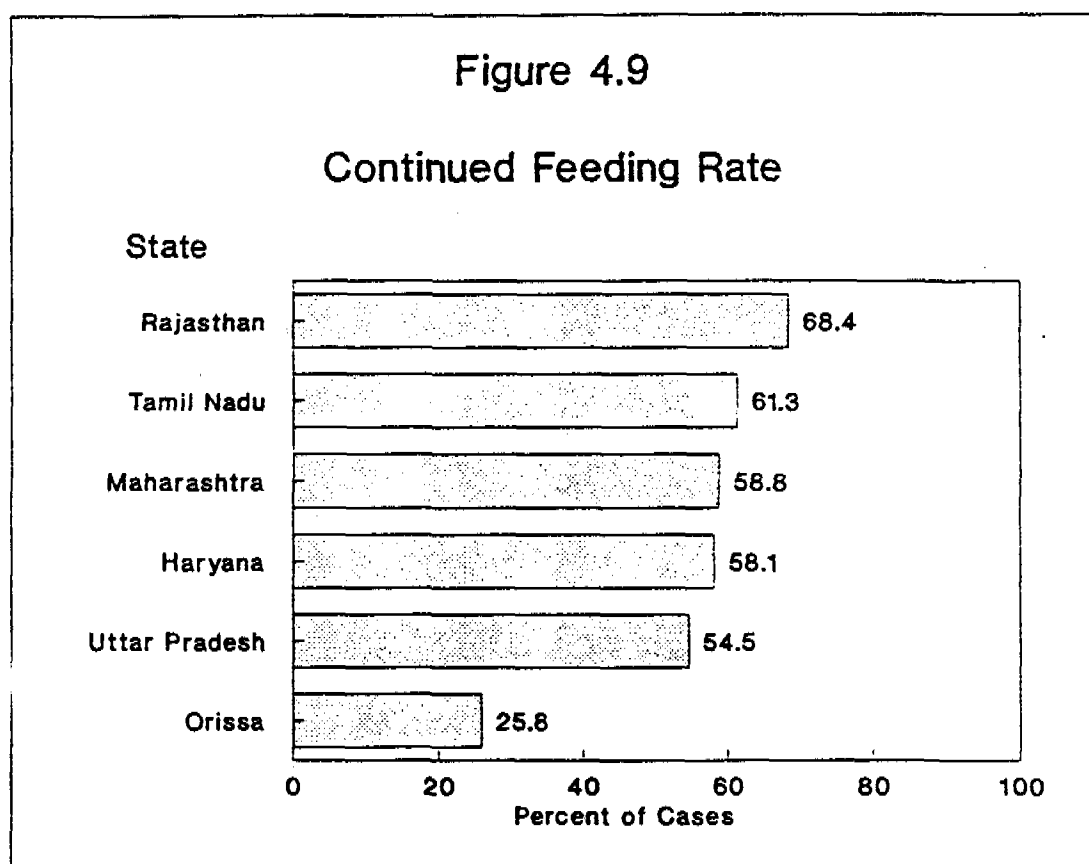
4.11 Continued breast feeding rate

Continued breast feeding rate has been calculated from out of the mothers who were breast feeding before their children developed diarrhoea. Figure 4.8 shows that percentage of such mothers is the highest in Rajasthan (98.9%) and the lowest in Haryana (87%) which indicates quite a satisfactory state of affairs as far as breast feeding is concerned.



4.12 Continue feeding rate

More than half the mothers/caretakers give their children as much food as usual or more food than usual during diarrhoea (Figure 4.9). Percentage of such mothers is 68.4 in Rajasthan. However, this percentage varies from 54.5 to 61.3 in other States except Orissa where this percentage is very low, i.e., 25.8 only.



4.13 Increased fluid rate other than breast feed

Figure 4.10 shows quite a low percentage of mothers who say that they have increased the amount of fluids to their children during diarrhoea. The percentage of such mothers varies from 1.5 to 11.6, the highest being in Haryana and the lowest being in Tamil Nadu.

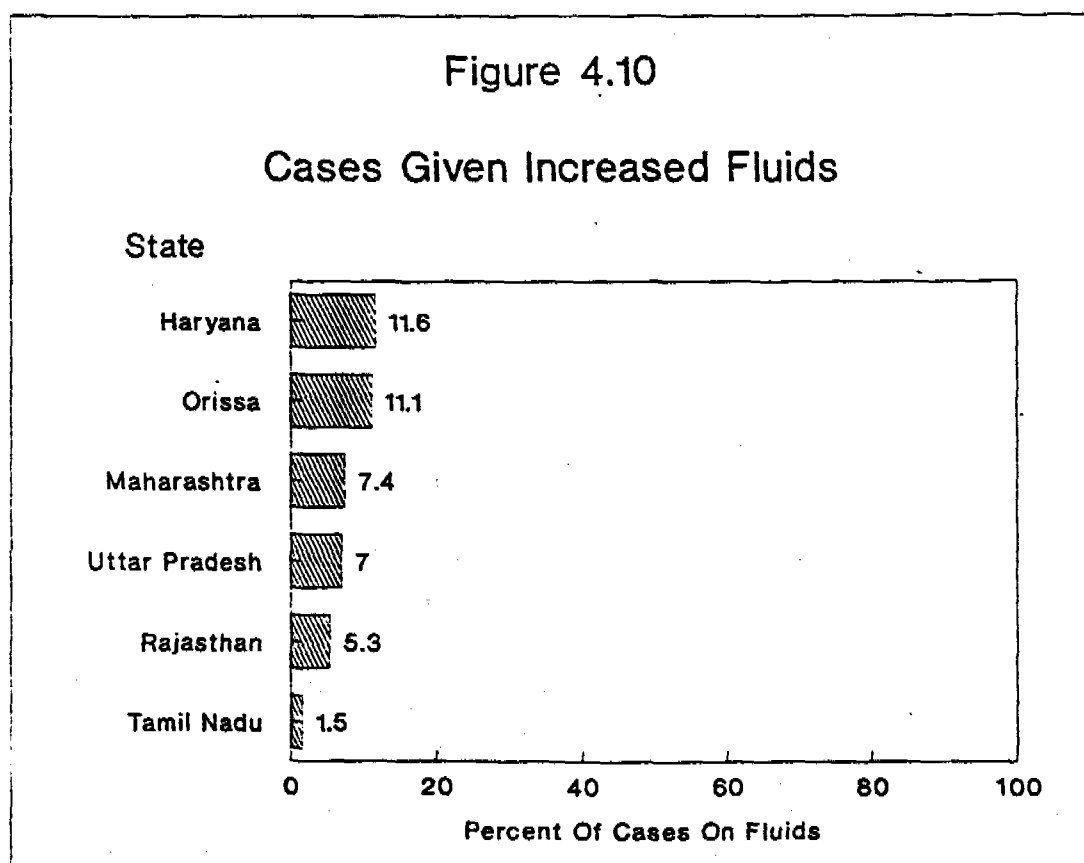
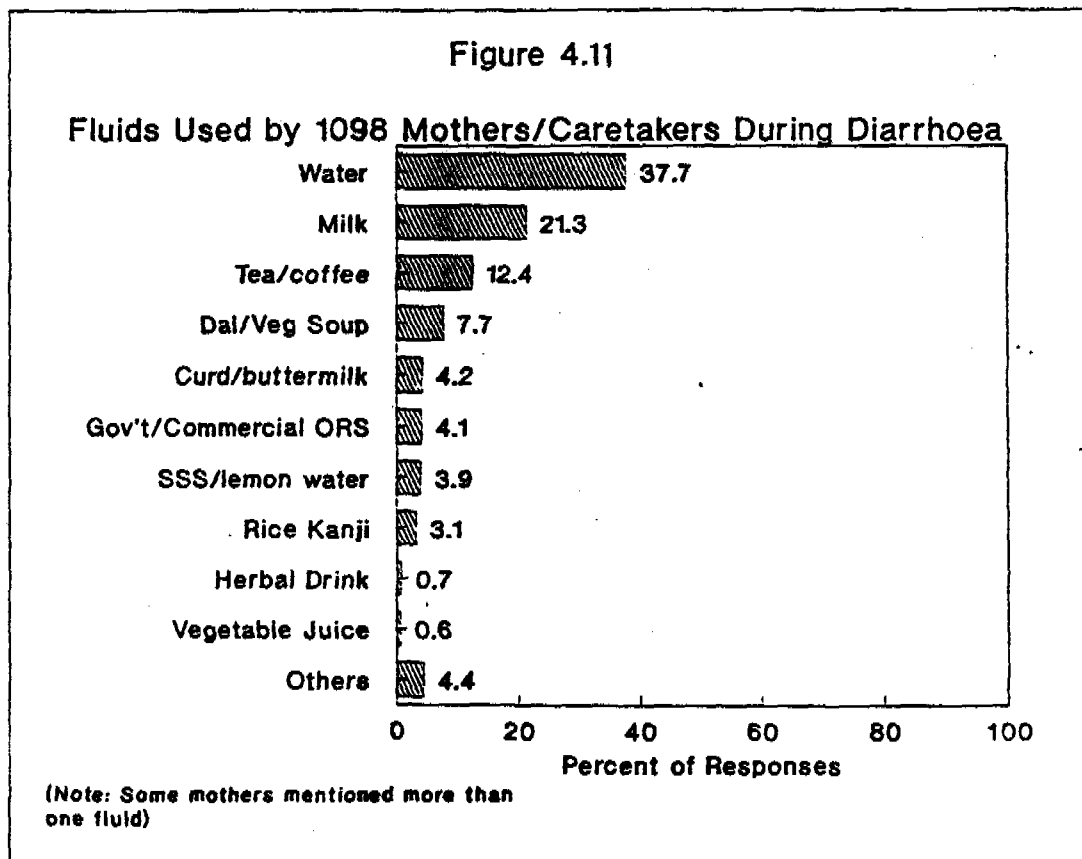
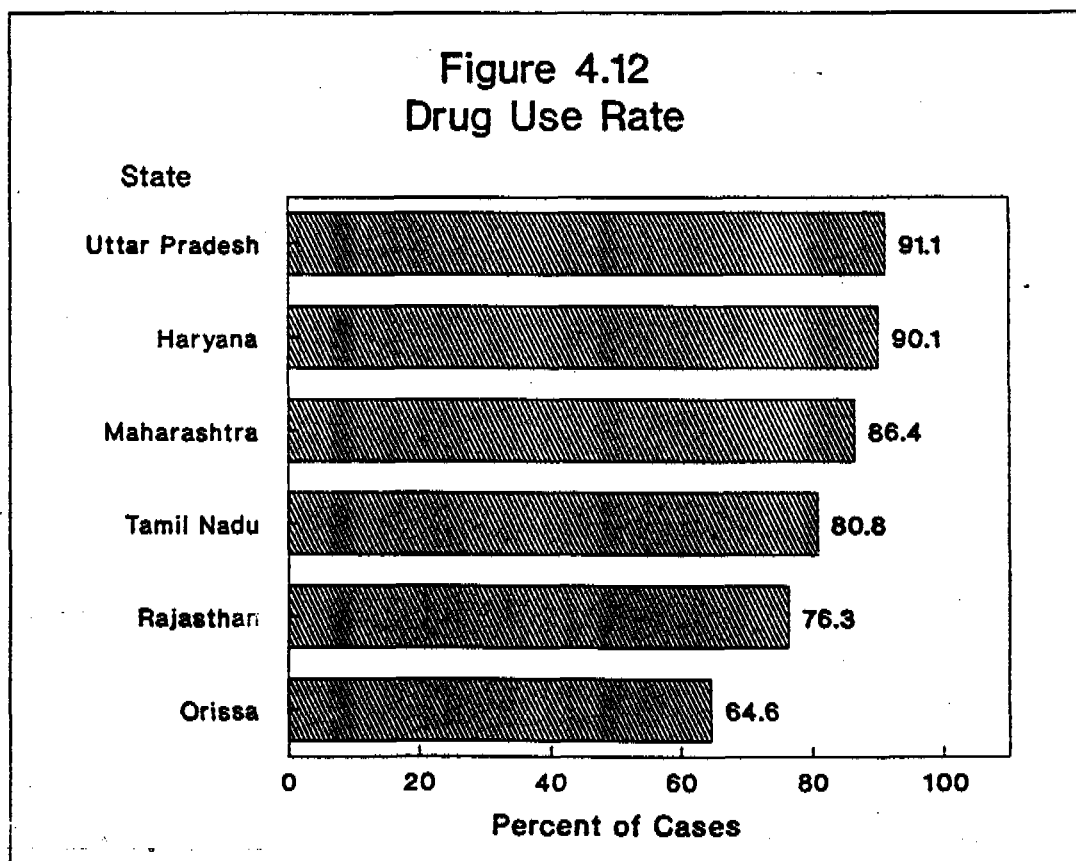


Figure 4.11 shows that the most common fluids given to children during diarrhoea are water (37.7%), milk (21.3%), and tea/coffee (12.4%). ORS and Sugar Salt Solution (SSS) are mentioned by almost equal percentage but they rank sixth and seventh among the ten fluids most frequently mentioned by the mothers.



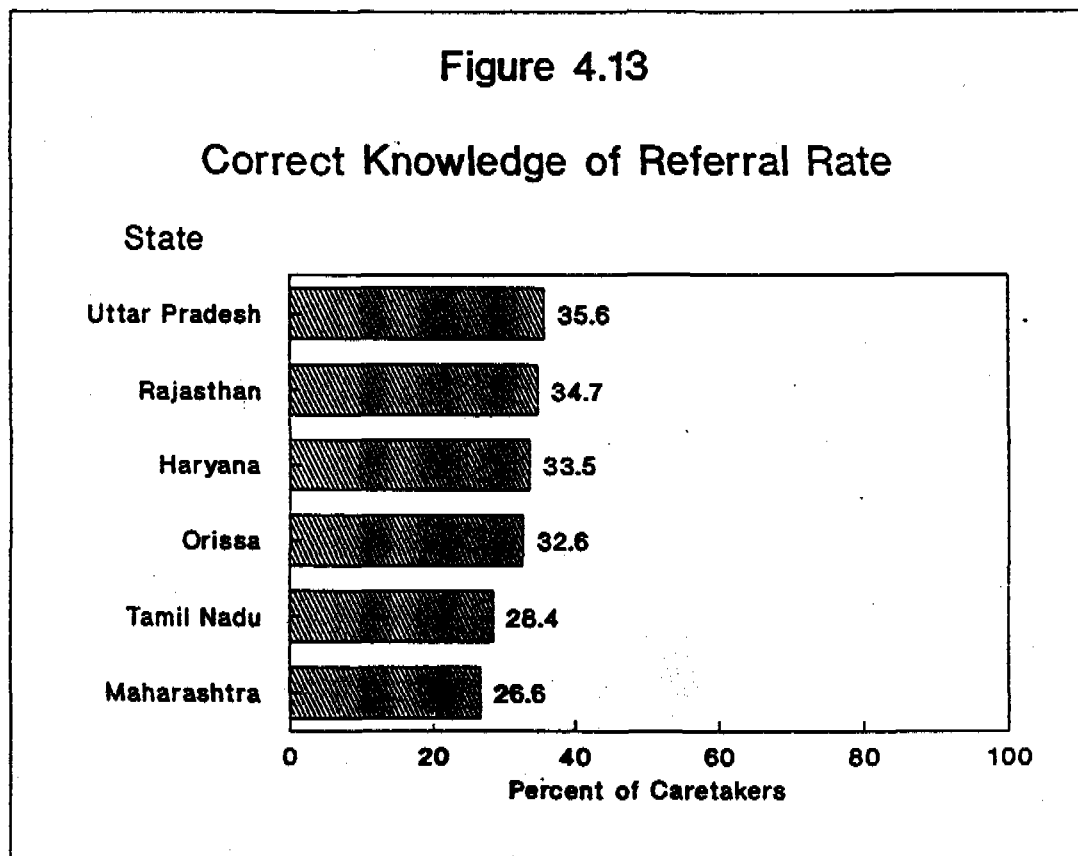
4.14 Drug use rate

The percentage of children given drugs during the last diarrhoeal episode is very high. It ranges from 91.1 per cent in Uttar Pradesh to 64.6 per cent in Orissa (Figure 4.12). Mothers were asked what medicines they gave to their children during the last episode of diarrhoea; if they gave traditional remedies such as, tonics, herbs, and powders, these were also included in this answer along with allopathic medicines.



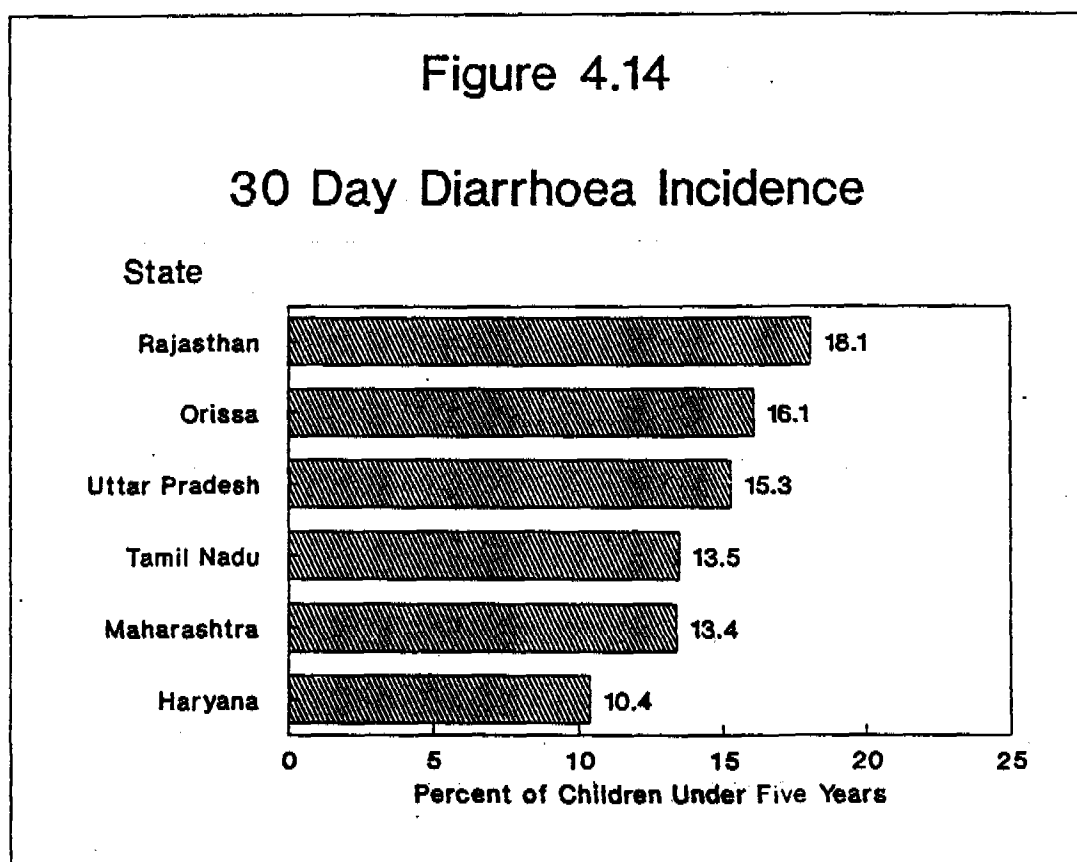
4.15 Knowledge of referral

Mothers were asked about the diarrhoeal symptoms which compelled them most to seek medical help. Figure 4.13 shows that approximately 1/4th to 1/3rd of the mothers could name three or more symptoms of dehydration in a child that compelled them to seek medical help. Awareness of these symptoms is quite uniform among the States, highest being in Uttar Pradesh (35.6%) and the lowest in Maharashtra (26.6%).



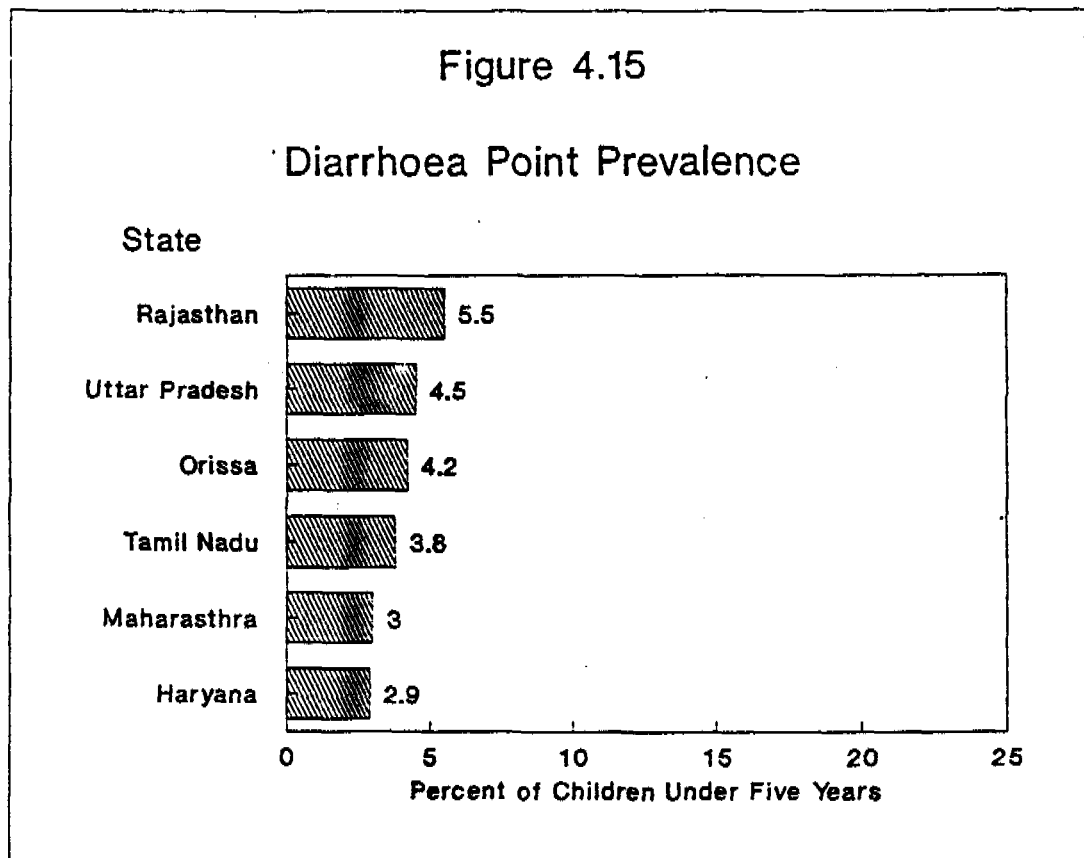
4.16 30 days diarrhoea incidence rate

The 30 days diarrhoea incidence rate is the percentage of children having diarrhoea during the last 30 days. Figure 4.14 shows that the percentage of such children is the highest in Rajasthan (18.1%) and it is lowest in Haryana (10.4%).



4.17 Diarrhoea point prevalence

This is the percentage of children having diarrhoea during the last 24 hours. Figure 4.15 shows the percentage of children with diarrhoea during the last 24 hours. The percentages vary from 5.5 to 2.9 highest being in Rajasthan and lowest being in Haryana.



Summary

The diarrhoea incidence figures obtained through the present survey are in the same range as those from previous surveys conducted by National Institute of Communicable Diseases, New Delhi in 1985 and 1987.

Data presented in this Chapter lead us to the following observations:

- i) The continued breast feeding rate is high in all the States, reflecting the long standing practice among the mothers who continued breast feeding during diarrhoea.

- ii) Continued feeding rate is very low in Orissa. However, the low rates were also found in Orissa during KAP study conducted by the Indian Market Research Bureau from 1985 to 1989 in which 68 per cent of mothers interviewed reported that they gave their children less food and/or fed them less after and during diarrhoeal episode.
- iii) The percentage of diarrhoeal cases given increased fluids is surprisingly very low in all the States. It seems that this aspect of ORT programme has not been adequately emphasised and communicated to the mothers.
- iv) Rate of increased fluid intake during diarrhoea in Tamil Nadu is unexpectedly low.
- v) There is a wide variation in SSS use rates between the States. Again Tamil Nadu surprisingly has the lowest rate among all the States. It may be due to the fact that SSS use rate is promoted and/or used more widely in States where access to government ORS is low.
- vi) Familiarity of mothers with the commercial brands of ORS is more than government ORS. Unfortunately very few of the commercial brands adhere to the WHO formula.

The percentage of mothers going to private practitioners for diarrhoeal treatment of their children is very high. This might be the reason for the mothers' familiarity with commercial ORS packets because the private practitioners, more often than not, recommend the use of commercial ORS. This also gets supported from the data when the large number of mothers have mentioned that they obtain their ORS packets from chemist shops or doctors' dispensary rather than from the local PHC or sub-centre.
- vii) The ORS use rate is highest in Uttar Pradesh and Haryana, the States where commercial ORS brands are most widely known to mothers.
- viii) And, finally, the high drug use rate reflects the tendency of mothers to get their children cured immediately and therefore, they turn to drugs to achieve quick results and relief for their children.

Recommendations

Mothers need to be educated about nutrition and locally available food to be given to children during diarrhoea, and also about giving atleast the same or more amount of food.

Major emphasis should be placed on the message to mothers about increasing use of fluids during diarrhoea. Mothers should be adequately informed about the recommended home made fluids available in their regions.

The high familiarity with commercial ORS brands in most States suggests that there is a larger potential market for WHO formula for ORS where it becomes more widely available through social marketing. Ideally, this formula should be sold through chemists' shops, where it will compete with the familiar but more expensive commercial ORS brands.

Mothers will continue to prepare ORS incorrectly as long as there are packets of different sizes available in the market with different preparation instructions written on them. The problem of incorrect ORS preparation is compounded by the low literacy rate among the mothers in most of the states. It is strongly recommended that much of the confusion could be easily eliminated by adopting a uniform packet size with clear and uniform instructions and a familiar logo identifying packets using the WHO formula.

CHAPTER 5

HEALTH WORKERS' KNOWLEDGE OF ORT

The paramedical workers, especially the ANMs and the MPHWS(M), are really the grassroot workers as they are the ones who remain in constant touch with the rural masses. In rural areas, the higher level and specialised health and medical facilities, like dispensaries, PHC level hospitals, etc. are not within the easy reach of the village population. Consequently, the sub-centre is relatively easily accessible to them. The ANMs or the MPHWS are expected to stay at or around the sub-centre so that they become accessible to the rural masses visiting sub-centres at any time for their health problems. Thus, the success of any health programme, whether it is ORT or Immunization, depends largely on the knowledge, competence and commitment of these health workers. In view of the importance of the services of the health workers, it is essential to involve them in framing the health plans at the grassroot level which they have to really carry out. Any plan, thrust upon them from above may not be a success and may be devoid of real needs of the village population which only a grassroot worker may understand.

In the present study, 902 health workers from different health facilities of the study areas were interviewed with a view to assess their knowledge in respect of handling different aspects of ORT programme. The type of health workers interviewed are ANM/MPHW(M), Lady Health Visitor, Health Inspector, Nurse and Block Extension Educator. Results of the study are presented in the following pages.

5.1 Training in management of diarrhoea

The statewide distribution of the health workers who have received special training in management of diarrhoea is given in Table 5.1. This Table shows that more than 50 per cent of the health workers have not received the training and in case of Rajasthan only 5 per cent of them have undergone any such training.

Table 5.1: Health workers who received special training in management of diarrhoea

S.No.	State	No. of health workers	Received Special Training in Management of Diarrhoea
1	2	3	4
1.	Haryana	57	23 (40.4)
2.	Maharashtra	107	44 (41.1)
3.	Orissa	47	26 (55.3)
4.	Rajasthan	102	5 (4.9)
5.	Tamil Nadu	253	130 (51.4)
6.	Uttar Pradesh	336	189 (56.3)
Total :		902	417 (46.2)

Figures in parenthesis are the percentages

5.2 Knowledge about signs to assess simple diarrhoeal patients

The health workers are expected to have the knowledge of atleast three out of six signs of simple diarrhoea. The percentage of health workers having adequate knowledge, i.e., of atleast three signs is about 63 in all the states (Table 5.2). This percentage is as high as 80.2 in Tamil Nadu and as low as 44 in Maharashtra. In rest of the States this percentage is over 50. The statewise distribution of health workers having knowledge of the major six signs for assessing diarrhoea is given in Table 5.3. This Table shows that the knowledge among health workers about four signs, viz., duration of diarrhoea, number of stools in 24 hours, colour of stools or bloody stools and consistency of loose or watery stools is quite adequate.

Table 5.2: Health workers recognizing three or more signs of diarrhoeal illness

S.No.	State	No. of health workers	Recognised less than three signs	Recognised three or more signs
1	2	3	4	5
1.	Haryana	57	22 (38.6)	35 (61.4)
2.	Maharashtra	107	60 (56.1)	47 (43.9)
3.	Orissa	47	23 (48.9)	24 (51.1)
4.	Rajasthan	102	45 (44.1)	57 (55.9)
5.	Tamil Nadu	253	50 (19.8)	203 (80.2)
6.	Uttar Pradesh	336	133 (39.6)	203 (60.4)
Total:		902	333 (36.9)	569 (63.1)

Figures in parenthesis are the percentages

Table 5.3: Signs recognised by health workers regarding diarrhoea

S.No.	State	No. of health workers	Duration of diarrhoea	No. of stools in 24 hours	Colour of stool or bloody stool	Consistency of loose or watery stool	Child has fever	Child has other illness
1	2	3	4	5	6	7	8	9
1.	Haryana	57	47 (22.5)	50 (87.7)	28 (49.1)	32 (56.1)	7 (12.3)	0 (0.0)
2.	Maharashtra	107	73 (68.2)	86 (80.4)	32 (29.9)	59 (55.1)	14 (13.1)	3 (2.8)
3.	Orissa	47	31 (66.0)	38 (80.9)	22 (46.8)	22 (46.8)	9 (19.1)	7 (14.9)
4.	Rajasthan	102	86 (84.3)	71 (69.6)	41 (40.2)	62 (60.8)	7 (6.9)	2 (2.0)
5.	Tamil Nadu	253	244 (96.4)	231 (91.3)	162 (64.0)	189 (74.7)	51 (20.2)	12 (4.7)
6.	Uttar Pradesh	336	281 (83.6)	255 (75.9)	201 (59.8)	203 (60.4)	86 (25.6)	20 (6.0)
Total :		902	762 (84.5)	731 (81.0)	486 (53.9)	567 (62.9)	174 (19.3)	44 (4.9)

Figures in parenthesis are the percentages

Note: Percentages are calculated on the basis of col.3

5.3 Knowledge about signs to assess the dehydrated children

The health workers are expected to know at least 8 out of 12 signs to assess dehydration. Table 5.4 shows the distribution of health workers having knowledge of 8 or more signs. It is evident from the Table that the percentage of health workers with requisite knowledge of 8 or more signs to assess the dehydration is rather low in almost all the States except Tamil Nadu where it is about 50 per cent. It is as low as 2 per cent in Rajasthan.

Table 5.4: Recognising eight or more signs of dehydration

S.No.	State	No. of health workers	Recognised eight or more signs	Recognised less than eight signs
1	2	3	4	5
1	Haryana	57	7 (12.3)	50 (87.7)
2	Maharashtra	107	12 (11.2)	95 (88.8)
3	Orissa	47	12 (25.5)	35 (74.5)
4	Rajasthan	102	2 (2.0)	100 (98.0)
5	Tamil Nadu	253	123 (48.6)	130 (51.4)
6	Uttar Pradesh	336	82 (24.4)	254 (75.6)
Total		902	238 (26.4)	664 (73.6)

Figures in parenthesis are the percentages

Table 5.5 shows statewise distribution of health workers on all the 12 signs for assessing the dehydration of children.

Table 5.5: Signs recognised by health workers regarding diarrhoea with some dehydration

S.No.	State	No. of health workers	No. of stools per day	Amount of vomiting	Thirst (Is child demanding water frequently)	Decrease or no urine	Child drowsy/ listless	Absence of tears	Sunken eyes	Dry mouth	Rapid breathing	Skin pinch goes	Rapid pulse rate	Fontanelle sunken
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	Haryana	57	44 (72.2)	14 (24.6)	28 (49.1)	9 (15.8)	25 (43.9)	9 (15.8)	52 (91.2)	49 (86.0)	10 (17.5)	48 (84.2)	17 (29.8)	12 (21.1)
2.	Maharashtra	107	80 (74.8)	57 (53.3)	43 (40.2)	17 (15.9)	54 (50.5)	6 (5.6)	88 (82.2)	50 (46.7)	23 (21.5)	97 (90.7)	26 (24.3)	49 (45.8)
3.	Orissa	47	38 (80.9)	29 (61.7)	21 (44.7)	26 (55.3)	21 (44.7)	5 (10.6)	33 (70.2)	43 (91.5)	8 (17.0)	34 (72.3)	9 (19.1)	15 (31.9)
4.	Rajasthan	102	80 (78.4)	28 (27.5)	52 (51.0)	6 (5.9)	54 (52.9)	16 (15.7)	71 (69.6)	48 (47.1)	5 (4.9)	79 (77.5)	15 (14.7)	11 (10.8)
5.	Tamil Nadu	253	241 (95.3)	172 (68.0)	116 (45.8)	145 (57.3)	147 (58.1)	56 (22.1)	243 (96.0)	192 (75.9)	38 (15.0)	231 (91.3)	133 (52.6)	173 (68.4)
6.	Uttar Pradesh	336	285 (84.8)	184 (54.8)	197 (58.6)	104 (31.0)	214 (63.7)	33 (9.8)	284 (84.5)	237 (70.5)	51 (15.2)	251 (74.7)	95 (28.3)	111 (33.0)
Total :		902	768 (85.1)	484 (53.7)	457 (50.7)	307 (34.0)	515 (57.1)	125 (13.9)	771 (85.5)	619 (68.6)	135 (15.0)	740 (82.0)	295 (32.7)	371 (41.1)

Figures in parenthesis are the percentages

Note: Percentages are calculated on the basis of Col.3.

5.4 Advising mothers/caretakers about diarrhoea without dehydration

Table 5.6 shows that more than 66 per cent of the health workers give advice to mothers/caretakers regarding ORT except in Rajasthan where it is comparatively low, i.e., 48 per cent. About 71 per cent say that home fluids should be given more frequently to the children with diarrhoea. More than 57 per cent mention about the diet to be given to children with diarrhoea, i.e., the type of food and the feeding should be continued during diarrhoea, except in Maharashtra and Orissa where the percentage of such health workers is about 40. About 40 per cent of the health workers also advise the mothers regarding prevention of diarrhoea. The percentage of health workers who advise to give extra food to the children after the diarrhoea stops is very low (9.6 per cent). There are only 19 per cent of workers who mention that the mothers/caretakers should bring the children to health facility if they notice any sign of dehydration among their children.

Table 5.6: Advice given to mothers/caretakers for children having diarrhoea

S.No.	State	No. of health workers	Advice on ORT	Advice on home fluids (increase amount, frequency, type of fluids)	Advice on diet (continue feeding, type of food)	Advice to give extra food after diarrhoea stops	Continue breast feeding	Advice on proper weaning practices	Advice on when to bring child (signs of dehydration)	Advice how to prevent diarrhoea (hygiene, clean food, clean water, disposal of stools)
1	2	3	4	5	6	7	8	9	10	11
1.	Haryana	57	44 (77.2)	45 (78.9)	33 (57.9)	2 (3.5)	35 (61.4)	29 (50.9)	1 (1.8)	10 (17.5)
2.	Maharashtra	107	85 (79.4)	62 (57.9)	43 (40.2)	2 (1.9)	46 (43.0)	9 (8.4)	15 (14.0)	44 (41.1)
3.	Orissa	47	42 (89.4)	39 (83.0)	19 (40.4)	2 (4.3)	16 (31.9)	2 (4.3)	15 (31.9)	12 (25.5)
4.	Rajasthan	102	49 (48.0)	43 (42.2)	64 (62.7)	6 (5.9)	34 (33.3)	15 (14.7)	2 (2.0)	14 (13.7)
5.	Tamil Nadu	253	185 (73.1)	214 (84.6)	167 (66.0)	65 (25.7)	180 (72.1)	17 (6.7)	132 (52.2)	151 (59.7)
6.	Uttar Pradesh	336	222 (66.1)	239 (71.1)	193 (57.4)	10 (3.0)	170 (50.6)	96 (28.6)	6 (1.8)	129 (38.4)
Total :		902	627 (69.5)	642 (71.2)	519 (57.5)	87 (9.6)	481 (53.3)	168 (18.6)	171 (19.0)	360 (39.9)

Figures in parenthesis are the percentages

Note: Percentages are calculated on the basis of col.3.

5.5 Knowledge about treatment of children with diarrhoea having some dehydration

Most of the health workers in all the States except in Tamil Nadu mention that they give ORS packets to mothers/caretakers who come to them with children having some dehydration (Table 5.7). It is interesting to note that in Tamil Nadu 60.9 per cent of the health workers detain the children at least for one hour for ORT whereas this practice is not so prevalent in other States. Only 12.5 per cent of the health workers refer such cases to other health facilities and about 2 per cent give medicines on their own.

Table 5.7: Treatment of children with diarrhoea having some dehydration

S.No.	State	No. of health workers	Send home with ORS	Detain at least for one hour	Refer	Admit	Hygenic food & water should be given	Sugar & Salt Solution	Medicine be given	Lemon Juice
1	2	3	4	5	6	7	8	9	10	11
1.	Haryana	57	52 (91.2)	1 (1.8)	2 (3.5)	2 (3.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
2.	Maharashtra	107	77 (72.0)	10 (9.3)	1 (0.9)	0 (0.0)	0 (0.0)	6 (5.6)	13 (12.1)	0 (0.0)
3.	Orissa	47	33 (70.2)	11 (23.4)	3 (6.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
4.	Rajasthan	102	80 (78.4)	1 (1.0)	14 (13.7)	0 (0.0)	0 (0.0)	5 (4.9)	1 (1.0)	1 (1.0)
5.	Tamil Nadu	253	53 (20.9)	154 (60.9)	25 (9.9)	20 (7.9)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)
6.	Uttar Pradesh	336	197 (58.6)	27 (8.0)	68 (20.2)	23 (6.8)	2 (0.6)	16 (4.8)	3 (0.9)	0 (0.0)
Total :		902	492 (54.5)	204 (22.6)	113 (12.5)	45 (5.0)	2 (0.2)	28 (3.1)	17 (1.9)	1 (0.1)

Figures in parenthesis are the percentages

Note: Percentages are calculated on the basis of col.3.

5.6 Knowledge about treating children with severe dehydration

Over 3/4th of the health workers refer the severely dehydrated cases to PHCs or other health facilities (Table 5.8). About 60 per cent of them refer the cases with ORT in transit. Only about 25 per cent admit such cases for Intra-venous (IV).

Table 5.8: Treatment of children with diarrhoea having severe dehydration

S.No.	State	No. of health workers	Admit for I.V. and ORT	Admit for I.V. only	Refer with I.V. in transit	Refer with ORT in transit	Refer without I.V. or ORT in transit	Refer to PHC with SSS in transit
1	2	3	4	5	6	7	8	9
1.	Haryana	57	10 (17.5)	4 (7.0)	1 (1.8)	34 (59.6)	8 (14.0)	0 (0.0)
2.	Maharashtra	107	19 (17.8)	16 (15.0)	5 (4.7)	55 (51.4)	6 (5.6)	6 (5.6)
3.	Orissa	47	17 (36.2)	2 (4.3)	0 (0.0)	25 (53.2)	3 (6.4)	0 (0.0)
4.	Rajasthan	102	26 (25.5)	6 (5.9)	2 (2.0)	45 (44.1)	17 (16.7)	6 (5.9)
5.	Tamil Nadu	253	43 (17.0)	28 (11.1)	23 (9.1)	135 (53.4)	24 (9.5)	0 (0.0)
6.	Uttar Pradesh	336	22 (6.5)	27 (8.0)	13 (3.9)	220 (65.5)	35 (10.4)	19 (5.7)
Total :		902	137 (15.2)	83 (9.2)	44 (4.9)	514 (57.0)	93 (10.3)	31 (3.4)

Figures in parenthesis are the percentages

Note: Percentages are calculated on the basis of col. 3.

5.7 Estimation of ORS solution requirement

Health workers are supposed to know the correct quantity of ORS solution to be given to diarrhoeal patients. But it is disheartening to note from Table 5.9 that only 50 per cent of the health workers know the correct quantity of ORS solution to be given. About 13 per cent health workers do not know at all about correct quantity of ORS solution requirement. This percentage is as high as 59 in Haryana followed by Uttar Pradesh (56%), Rajasthan (53%) and Maharashtra (51.4%).

Table 5.9: Estimation of ORS solution requirements

S.No.	State	No. of health workers	Correct Response	Incorrect Response	No Response
1.	Haryana	57	34 (59.6)	13 (22.8)	10 (17.6)
2.	Maharashtra	107	55 (51.4)	38 (35.5)	14 (13.1)
3.	Orissa	47	20 (42.6)	23 (48.9)	4 (8.5)
4.	Rajasthan	102	54 (53.0)	30 (29.4)	18 (17.6)
5.	Tamil Nadu	253	106 (41.9)	97 (38.3)	50 (19.8)
6.	Uttar Pradesh	336	188 (56.0)	123 (36.6)	25 (7.4)
Total :		902	457 (50.7)	324 (35.9)	121 (13.4)

Figures in parenthesis are the percentages

5.8 Estimation of IV fluids requirement

Table 5.10 shows that about 85 per cent of the health workers do not know the correct estimation of IV fluid requirements to be given to severely dehydrated children. As a matter of fact the health workers who had undergone the special training in the management of diarrhoea must know about IV fluid estimation as this is an essential part of their training courses.

Table 5.10: Estimation of IV fluids requirements

S.No.	State	No. of health workers	Mentioned correctly	Not mentioned correctly	No Response
1.	Haryana	57	4 (7.0)	7 (12.3)	46 (80.7)
2.	Maharashtra	107	1 (0.9)	9 (8.4)	97 (90.7)
3.	Orissa	47	10 (21.3)	12 (25.5)	25 (58.2)
4.	Rajasthan	102	7 (6.9)	12 (11.7)	83 (81.4)
5.	Tamil Nadu	253	23 (9.1)	38 (15.0)	192 (75.9)
6.	Uttar Pradesh	336	5 (1.5)	11 (3.3)	320 (95.2)
Total :		902	50 (5.5)	89 (9.9)	763 (84.6)

Figures in parenthesis are the percentages

5.9 Knowledge about drugs to be given to diarrhoeal cases

Only about 3/4th of the health workers seem to have given drugs to the diarrhoeal patients (Table 5.11).

Table 5.11: Distribution of health workers who have given drugs to diarrhoeal patients

S.No.	State	No. of health workers	Drugs Given
1	2	3	4
1.	Haryana	57	51 (89.5)
2.	Maharashtra	107	94 (87.9)
3.	Orissa	47	41 (87.2)
4.	Rajasthan	102	90 (88.2)
5.	Tamil Nadu	253	179 (70.8)
6.	Uttar Pradesh	336	216 (64.3)
Total :		902	671 (74.4)

Figures in parenthesis are the percentages

5.10 Knowledge about preparation of ORS solution

Health workers must know how to prepare ORS solution correctly because they are responsible to impart this knowledge to mothers/caretakers. Table 5.12 shows that only about 66 per cent of the health workers know how to prepare ORS solution correctly; 29 per cent incorrectly; whereas about 5 per cent do not know how to prepare ORS solution at all.

In Tamil Nadu over 84 per cent of the health workers know about the preparation of ORS solution correctly followed by Uttar Pradesh (67%) and Maharashtra (60%). It is seen from Table 5.13 that over 3/4th of the health workers can prepare ORS solution correctly out of the total 417 who received the special training in management of diarrhoea. On the other hand about 58 per cent can prepare correctly out of the total 485 who have not undergone the training. Hence, it is evident from the Table that the percentage of health workers who can prepare the ORS solution correctly is quite high from among those who have received special training in management of diarrhoea than from those who have not received the special training.

Table 5.12: Health workers knowing how to prepare ORS Solution

S.No.	State	No. of health workers	Prepared Correctly	Prepared Incorrectly	Don't know how to prepare
1	2	3	4	5	6
1	Haryana	57	29 (50.8)	23 (40.4)	5 (8.8)
2	Maharashtra	107	64 (59.8)	43 (40.2)	0 (0.0)
3	Orissa	47	19 (40.4)	28 (59.6)	0 (0.0)
4	Rajasthan	102	47 (46.1)	50 (49.0)	5 (4.9)
5	Tamil Nadu	253	213 (84.2)	25 (9.9)	15 (5.9)
6	Uttar Pradesh	336	224 (66.7)	94 (28.0)	18 (5.3)
Total :		902	596 (66.1)	263 (29.1)	43 (4.8)

Figures in parenthesis are the percentages

Table 5.13: Distribution of health workers by correct preparation of ORS and special training in management of diarrhoea

S.No	State	No. of health workers	Special Training			
			Received		Did not Receive	
			Prepared Correctly	Prepared Incorrectly	Prepared Correctly	Prepared Incorrectly
1	2	3	4	5	6	7
1.	Haryana	57	14 (24.6)	9 (15.8)	15 (26.3)	19 (33.3)
2.	Maharashtra	107	27 (25.2)	17 (15.9)	37 (34.6)	26 (24.3)
3.	Orissa	47	12 (25.5)	14 (29.8)	7 (14.9)	14 (29.8)
4.	Rajasthan	102	5 (4.9)	0 (0.0)	42 (41.2)	55 (53.9)
5.	Tamil Nadu	253	114 (45.1)	16 (6.3)	99 (39.1)	24 (9.5)
6.	Uttar Pradesh	336	142 (42.3)	47 (14.0)	82 (24.4)	65 (19.3)
Total :		902	314 (34.8)	103 (11.4)	282 (31.3)	203 (22.5)

Figures in parenthesis are the percentages.

5.11 Knowledge regarding the correct advice about feeding children during diarrhoea

Most of the health workers advise the mothers/caretakers that breast feeding should be continued as usual to the children during diarrhoea (Table 5.14). Only in Maharashtra about 26 per cent are of the opinion that breast-feeding should be increased followed by Haryana (19.3 per cent) whereas in Orissa no health worker advises about the increase in breast feeding.

Table 5.14 shows that 49 per cent advise that the quantity of other fluids should be increased during diarrhoea. The percentage of such health workers in Tamil Nadu is about 67 whereas in Orissa it is only 4.3 per cent. As far as solid food is concerned only 43.3 per cent are of the opinion that this should be continued as usual.

Less than 50 per cent of the health workers are of the opinion that bottle-feeding should be stopped. More attention should be given to the bottle feeding because it should be stopped absolutely during diarrhoea. The children who were taking milk with bottle before diarrhoea should be given milk with cup and spoon during diarrhoea. Although all the health workers are expected to know that breast feeding and other fluids should be increased during diarrhoea but it is not found so. Therefore, this is a matter of great concern.

Table 5.14: Advice given to mothers regarding feeding children under 5 years during diarrhoea

S. State No.	No. of health workers	Breast Feeding				Bottle Feeding				Other Fluids				Solid Feeds				
		Stop	Decre- ase	Conti- nue as usual	Incre- ase	Stop	Decre- ase	Conti- nue as usual	Incre- ase	Stop	Decre- ase	Conti- nue as usual	Incre- ase	Stop	Decre- ase	Conti- nue as usual	Incre- ase	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Haryana	57	1 (1.8)	0 (0.0)	45 (78.9)	11 (19.3)	32 (56.1)	9 (15.8)	15 (26.3)	1 (1.8)	0 (0.0)	2 (3.5)	31 (54.4)	24 (42.1)	8 (14.0)	9 (15.8)	35 (61.4)	5 (8.8)	
2. Mahara shtra	107	5 (4.7)	1 (0.9)	73 (68.2)	28 (26.2)	29 (27.1)	13 (12.1)	49 (45.8)	16 (15.0)	3 (2.8)	5 (4.7)	48 (44.9)	51 (47.7)	23 (21.5)	31 (29.0)	38 (35.5)	15 (14.0)	
3. Orissa	47	12 (25.5)	5 (10.6)	30 (63.8)	0 (0.0)	25 (53.2)	4 (8.5)	18 (38.3)	0 (0.0)	4 (8.5)	8 (17.0)	33 (70.2)	2 (4.3)	32 (68.1)	6 (12.8)	9 (19.1)	0 (0.0)	
4. Rajasthan	102	11 (10.8)	18 (17.6)	58 (56.9)	15 (14.7)	51 (50.0)	41 (40.2)	7 (6.9)	3 (2.9)	3 (2.9)	16 (15.7)	46 (45.1)	37 (36.3)	11 (10.8)	34 (33.3)	47 (46.1)	10 (9.8)	
5. Tamil Nadu	253	9 (3.5)	7 (2.8)	215 (85.0)	22 (8.7)	156 (61.7)	15 (5.9)	72 (28.5)	10 (4.0)	3 (1.2)	10 (4.0)	70 (27.7)	170 (67.2)	77 (30.4)	18 (7.1)	146 (57.7)	12 (4.7)	
6. Uttar Pradesh	336	29 (8.6)	70 (20.8)	204 (60.7)	33 (9.8)	141 (42.0)	98 (29.2)	66 (19.6)	31 (9.2)	8 (2.4)	55 (16.4)	115 (34.2)	158 (47.0)	72 (21.4)	127 (37.8)	115 (34.2)	22 (6.5)	
7. Total:	902	67 (7.4)	101 (11.2)	625 (69.3)	109 (12.1)	434 (48.1)	180 (20.0)	227 (25.1)	61 (6.8)	21 (2.3)	96 (10.7)	343 (38.0)	442 (49.0)	223 (24.7)	225 (24.9)	390 (43.3)	64 (7.1)	

Figures in parenthesis are the percentages.

Note: Percentages are calculated on the basis of Col.3.

5.12 Knowledge regarding the correct advice about feeding children after diarrhoea

More than 3/4th of the health workers are of the opinion that breastfeeding after diarrhoea should be continued as usual whereas only 17.8 per cent are of the opinion that breast feeding should be increased.

As far as bottle feeding is concerned, 67.4 per cent are of the view that it should be continued as usual. Around 70 per cent opine that other fluids should also be given to children as usual after diarrhoea.

As far as solid food is concerned, 23.1 per cent of the health workers are of the opinion that this should be increased after diarrhoea whereas more than 60 per cent are of the view that it should be given to the children as usual.

Table 5.15: Advice given to mothers/caretakers regarding feeding children under 5 years after diarrhoea

S. State No.	No. of health workers	Breast Feeding				Bottle Feeding				Other Fluids				Solid Feeds				
		Stop	Decre- ase	Conti- nue as usual	Incre- ase	Stop	Decre- ase	Conti- nue as usual	Incre- ase	Stop	Decre- ase	Conti- nue as usual	Incre- ase	Stop	Decre- ase	Conti- nue as usual	Incre- ase	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Haryana	57	4 (7.0)	50 (87.7)	3 (5.3)	0 (0.0)	20 (35.1)	33 (57.8)	4 (7.0)	0 (0.0)	4 (7.0)	51 (89.5)	2 (3.5)	0 (0.0)	3 (5.3)	50 (87.7)	4 (7.0)	0 (0.0)	
2. Maharashtra	107	2 (1.9)	74 (69.2)	29 (27.1)	2 (1.9)	13 (12.1)	66 (61.7)	26 (24.3)	3 (2.8)	0 (0.0)	44 (41.1)	3 (2.8)	0 (0.0)	8 (7.5)	36 (33.3)	3 (2.8)	0 (0.0)	
3. Orissa	47	3 (6.4)	41 (87.2)	3 (6.4)	0 (0.0)	10 (21.3)	34 (72.3)	3 (6.4)	0 (0.0)	0 (0.0)	44 (93.6)	3 (6.4)	0 (0.0)	8 (17.0)	36 (76.6)	3 (6.4)	0 (0.0)	
4. Rajasthan	102	4 (3.9)	75 (73.5)	23 (22.5)	0 (0.0)	22 (21.6)	65 (63.7)	14 (13.7)	1 (1.0)	16 (15.7)	72 (70.6)	14 (13.7)	0 (0.0)	12 (11.8)	68 (66.7)	22 (21.6)	0 (0.0)	
5. Tamil Nadu	253	1 (0.4)	200 (79.1)	52 (20.6)	0 (0.0)	20 (7.9)	194 (76.7)	31 (12.3)	8 (3.1)	4 (1.6)	182 (71.9)	67 (26.5)	0 (0.0)	26 (10.3)	144 (56.9)	83 (32.8)	0 (0.0)	
6. Uttar Pradesh	336	29 (8.6)	256 (76.2)	51 (15.2)	0 (0.0)	72 (21.4)	216 (64.3)	45 (13.4)	3 (0.9)	54 (16.1)	226 (67.3)	55 (16.4)	1 (0.3)	71 (21.1)	197 (58.6)	67 (19.9)	1 (0.3)	
7. Total:	902	43 (4.8)	696 (77.2)	161 (17.8)	2 (0.2)	157 (17.4)	608 (67.4)	123 (13.6)	14 (1.5)	86 (9.5)	632 (70.1)	182 (20.2)	2 (0.2)	134 (14.9)	557 (61.8)	208 (23.1)	3 (0.3)	

Figures in parenthesis are the percentages

Note: Percentages are calculated on the basis of Col.3.

Summary

The following conclusions can be drawn from the data presented in this chapter :

- i) The knowledge of health workers regarding the signs to assess the diarrhoeal patients, especially in the case of dehydrated children, is low in almost all the States and the lowest in Rajasthan, i.e., hardly 2 per cent.
- ii) Only about 40 per cent of the health workers advise mothers/caretakers how to prevent diarrhoea.
- iii) The knowledge about the correct preparation of ORS solution is low among the health workers, especially in Orissa (40.4%) and Rajasthan (46.1%).
- iv) The knowledge about the correct quantity of ORS solution requirement is also low among the health workers in all the States especially in Rajasthan and Orissa (about 42 per cent).
- v) More than 50 per cent of the health workers do not advise mothers/caretakers to stop bottle-feeding during diarrhoea. i.e., they do not advise mothers/caretakers to give milk to children with cup and spoon during diarrhoea in case of those children who were bottlefed before diarrhoea.
- vi) Only a small percentage (12 per cent) of health workers advise mothers to increase breast feeding during diarrhoea.
- vii) Less than 50 per cent of the health workers advise mothers/caretakers to increase other fluids during diarrhoea. There are only 4.3 per cent of such health workers in Rajasthan.
- viii) Only a small fraction of health workers advise mothers/caretakers to increase solid foods after the diarrhoea stops.

Recommendations

The observations made above reveal that the knowledge of the health workers about ORT is not satisfactory in almost all the six States under study. It may be pointed out that one-time training in management of diarrhoea is not sufficient at all. Such training should be repeated to the extent possible. The agencies/persons responsible for imparting training in management of diarrhoea should have follow-up programmes to ensure retention and application of knowledge by the health workers. However, the States found deficient in the areas listed above require special attention.

CHAPTER 6

MEDICAL OFFICERS' KNOWLEDGE OF ORT

6.1 Training in management of diarrhoea

In order to assess the knowledge of ORT among medical officers, 406 medical officers representing Primary Health Centres, Dispensaries, District Hospitals and Medical Colleges were interviewed. Their statewise distribution is given in Table 6.1. This Table also shows the data regarding special training for management of diarrhoea received by them. Maharashtra has about 44 per cent of medical officers who have received the special training while Tamil Nadu has 38 per cent such medical officers. In Rajasthan more than 90 per cent medical officers have not received any special training in management of diarrhoea.

Table 6.1: Medical officers who received special training in management of diarrhoea

S.No.	State	No. of medical officers	Received training
1.	Haryana	62	18 (29.0)
2.	Maharashtra	27	12 (44.4)
3.	Orissa	33	7 (21.2)
4.	Rajasthan	21	2 (9.5)
5.	Tamil Nadu	111	42 (37.8)
6.	Uttar Pradesh	152	49 (32.2)
Total :		406	130 (32.0)

Figures in parenthesis are the percentages

6.2 Knowledge about signs to assess the diarrhoeal patients

Table 6.2 shows that about 3/4th of the medical officers were aware of eight or more signs to assess the diarrhoeal patients. The percentage of such medical officers is about 87 in Tamil Nadu followed by Maharashtra (81.5 %). Table 6.3 gives the distribution of the medical officers indicating knowledge of different signs to assess the diarrhoeal patients. About 90 per cent of the medical officers also mention that they take temperature of the children at the time of assessing the diarrhoeal cases (Table 6.4). About 37 per cent of the medical officers say that they weigh the children, if possible, and about 20 per cent report that measles/immunization status is also ascertained at the time of assessing the diarrhoeal cases.

Table 6.2: Medical officers recognising eight or more signs of diarrhoea illness

S.No.	State	No. of medical officers	Recognised eight or more signs	Recognised less than eight signs
1.	Haryana	62	42 (67.7)	20 (32.3)
2.	Maharashtra	27	22 (81.5)	5 (4.9)
3.	Orissa	33	26 (78.8)	7 (21.2)
4.	Rajasthan	21	15 (71.4)	6 (28.6)
5.	Tamil Nadu	111	96 (86.5)	15 (13.5)
6.	Uttar Pradesh	152	103 (67.8)	49 (32.2)
Total :		406	304 (74.9)	102 (25.1)

Figures in parenthesis are the percentages

Table 6.3: Signs and symptoms for assessment of patients of diarrhoea by medical officers

S.No.	State	No of medical officers	Diarrhoea stools/day	Vomiting	Thirst	Urine	Condition of child	Skin pinch	Sunken eyes	Mouth/tongue/dry/wet	Tears/absent/present	Pulse rate	Fontanelle sunken (In infants)	Respiratory rate
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Haryana	62	62 (100.0)	42 (67.7)	4 (6.5)	14 (22.6)	42 (67.7)	60 (96.8)	58 (93.5)	56 (90.3)	2 (3.2)	40 (64.5)	40 (14.2)	2 (3.2)
2	Maharashtra	27	26 (96.3)	21 (77.8)	8 (29.7)	17 (63.0)	20 (74.1)	25 (92.6)	22 (81.5)	22 (81.5)	8 (29.6)	22 (81.5)	18 (66.7)	11 (40.7)
3	Orissa	33	31 (94.0)	31 (94.0)	12 (36.4)	27 (81.8)	20 (60.6)	28 (84.8)	31 (93.9)	31 (93.9)	2 (6.1)	22 (66.7)	24 (72.7)	11 (33.3)
4	Rajasthan	21	21 (100.0)	10 (47.6)	5 (23.8)	6 (28.6)	17 (80.9)	17 (80.9)	19 (90.5)	13 (61.9)	3 (14.3)	10 (47.6)	18 (85.7)	2 (9.5)
5	Tamil Nadu	111	111 (100.0)	103 (92.8)	42 (37.8)	82 (73.9)	86 (77.5)	109 (98.2)	102 (91.9)	98 (88.3)	58 (52.3)	75 (67.6)	92 (82.9)	41 (36.9)
6	Uttar Pradesh	152	150 (98.7)	107 (70.4)	57 (37.5)	90 (59.2)	109 (71.7)	142 (93.4)	137 (90.1)	132 (86.8)	7 (4.6)	98 (64.5)	90 (59.2)	52 (34.2)
Total :		406	401 (98.8)	314 (77.3)	128 (31.5)	236 (58.9)	294 (72.4)	381 (93.8)	369 (90.9)	352 (86.7)	80 (19.7)	267 (65.8)	282 (69.5)	119 (29.3)

Figures in parenthesis are the percentages

Note : Percentages are calculated on the basis of Col.3.

Table 6.4: Assessment of patients with diarrhoea by medical officers: additional measures mentioned by doctors

S. No.	State	No. of medical officers	Take temperature	Weight if possible	Check measles/immunization status
1	2	3	4	5	6
1.	Haryana	62	62 (100.0)	20 (32.3)	6 (9.7)
2.	Maharashtra	27	20 (74.1)	8 (29.6)	8 (29.6)
3.	Orissa	33	18 (54.5)	14 (42.4)	4 (12.1)
4.	Rajasthan	21	15 (71.4)	6 (28.6)	3 (14.3)
5.	Tamil Nadu	111	90 (81.1)	62 (55.9)	38 (34.2)
6.	Uttar Pradesh	152	119 (78.3)	41 (27.0)	20 (13.2)
Total :		406	324 (79.8)	151 (37.2)	79 (19.4)

Figures in parenthesis are the percentages

6.3 Knowledge about preparation of ORS solution

Table 6.5 shows that about 62 per cent of the medical officers know how to prepare ORS solution correctly. While over 80 per cent in Tamil Nadu know how to prepare ORS solution correctly, the percentages of such medical officers are 77.4 and 71.4 in Haryana and Rajasthan respectively. It is only in Maharashtra and Uttar Pradesh where less than 50 per cent of medical officers possess this knowledge whereas in Orissa such cases are about 58 per cent. As the medical officers are also the facilitators for training the paramedical staff under them or located in their area, it is expected that all the medical officers should possess the correct knowledge of preparation of ORS solution.

Table 6.5: Distribution of medical officers knowing how to prepare ORS solution

S.No.	State	No. of medical officers	Know correctly
1	2	3	4
1.	Haryana	62	48 (77.4)
2.	Maharashtra	27	12 (44.4)
3.	Orissa	33	19 (57.6)
4.	Rajasthan	21	15 (71.4)
5.	Tamil Nadu	111	89 (80.2)
6.	Uttar Pradesh	152	69 (45.4)
Total :		406	252 (62.1)

Figures in parenthesis are the percentages

6.4 Knowledge about ORS ingredients

Table 6.6 shows that over 80 per cent of the medical officers know about all the four ingredients of ORS, i.e., Glucose, Sodium, Potassium, and Bicarbonate/Citrate. This high percentage of correct knowledge may be attributed to the fact that they mostly use one brand of ORS, i.e., government ORS based on the WHO formula having all the above mentioned four ingredients. Moreover, the description of the ingredients is also printed on the ORS packets. Conversely it could be also their theoretical knowledge of ORS based on WHO formula.

Table 6.6: Knowledge of ORS ingredients among medical officers

S.No.	State	No. of medical officers	Knowledge of all four ingredients	Knowledge of less than four ingredients
1	2	3	4	5
1	Haryana	62	58 (93.5)	4 (6.5)
2	Maharashtra	27	21 (77.8)	6 (22.2)
3	Orissa	33	21 (63.6)	12 (36.4)
4	Rajasthan	21	19 (90.5)	2 (9.5)
5	Tamil Nadu	111	81 (73.0)	30 (27.0)
6	Uttar Pradesh	152	127 (83.6)	25 (16.4)
Total:		406	327 (80.5)	79 (19.5)

Figures in parenthesis are the percentages

6.5 Estimation of ORS solution requirement

About 56 per cent of the medical officers are able to specify correct quantity of ORS solution required by the children with diarrhoea (Table 6.7). This percentage is quite low (28.6%) in Rajasthan as compared to other five States where it is around 50 per cent and above.

Table 6.7: Estimation of ORS solution requirement

S. No.	State	No. of medical officers	Mentioned correctly	Not mentioned correctly
1	2	3	4	5
1.	Haryana	62	32 (51.6)	30 (48.4)
2.	Maharashtra	27	19 (70.4)	8 (29.6)
3.	Orissa	33	16 (48.5)	17 (51.5)
4.	Rajasthan	21	6 (28.6)	15 (71.4)
5.	Tamil Nadu	111	53 (47.7)	58 (52.3)
6.	Uttar Pradesh	152	100 (65.8)	52 (34.2)
Total		406	226 (55.7)	180 (44.3)

Figures in parenthesis are the percentages

6.6 Estimation of IV fluid requirement

The knowledge about estimation of IV fluid required by severely dehydrated children is very low among medical officers. Table 6.8 shows that in Rajasthan none of the medical officers knows about correct quantity of IV fluid required by the severely dehydrated children. In Haryana it is only 6.4 per cent whereas it is over 40 per cent in Maharashtra and Orissa. This is a matter of great concern because on account of severe dehydration the children generally become so weak that they are not able to take anything. It is, therefore, in such cases that the drip of IV fluid becomes essential. But given the level of knowledge of the medical officers, the chances of IV fluid given to such children is very low.

Table 6.8: Estimation of IV fluid requirement

S.No.	State	No. of medical officers	Correct knowledge about quantity of IV fluid	Incorrect knowledge about quantity of IV fluid	Don't know
1	2	3	4	5	6
1.	Haryana	62	4 (6.4)	44 (71.0)	14 (22.6)
2.	Maharashtra	27	12 (44.5)	10 (37.0)	5 (18.5)
3.	Orissa	33	14 (42.4)	14 (42.4)	5 (15.2)
4.	Rajasthan	21	0 (0.0)	20 (95.2)	1 (4.8)
5.	Tamil Nadu	111	38 (34.2)	48 (43.3)	25 (22.5)
6.	Uttar Pradesh	152	43 (28.3)	99 (65.1)	10 (6.6)
Total		406	111 (27.3)	235 (57.9)	60 (14.8)

Figures in parenthesis are the percentages

6.7 Knowledge regarding the correct advice about feeding during diarrhoea

Table 6.9 shows the type of advice given by medical officers to mothers/caretakers regarding feeding their children during diarrhoea. Eighty six per cent of the medical officers mention that breast feeding should be continued as usual during diarrhoea. About 60 per cent are of the opinion that quantity of other fluids should also be increased during diarrhoea. More than 55 per cent mention that the solid foods should be given as usual. In respect of bottle

feeding, 49 per cent are of the opinion that bottle feeding should be stopped whereas about 37 per cent are of the view that bottle feeding should be continued as usual during diarrhoea.

In Tamil Nadu, the percentage of medical officers who are of the opinion that other fluids should be increased during diarrhoea is quite high (88.3%). The percentage of such doctors is about 67 in Uttar Pradesh whereas in Orissa no medical officer says that the quantity of other fluids should be increased during diarrhoea.

Table 6.9: Type of advice given to mothers/caretakers regarding feeding during diarrhoea

S. No.	State	No. of health workers	Breast Feeding				Bottle Feeding				Other Fluids				Solid Feeds			
			Stop	Decrease	Continue as usual	Increase	Stop	Decrease	Continue as usual	Increase	Stop	Decrease	Continue as usual	Increase	Stop	Decrease	Continue as usual	Increase
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1.	Haryana	62	0 (0.0)	4 (6.5)	58 (93.5)	0 (0.0)	32 (51.6)	10 (16.1)	20 (32.3)	0 (0.0)	0 (0.0)	0 (0.0)	34 (54.8)	28 (45.2)	0 (0.0)	4 (6.5)	32 (51.6)	26 (41.9)
2.	Maharashtra	27	0 (0.0)	2 (7.4)	19 (70.4)	6 (22.2)	11 (40.7)	3 (11.1)	10 (37.0)	3 (11.1)	0 (0.0)	1 (3.7)	14 (51.9)	12 (44.4)	7 (25.9)	3 (11.1)	15 (55.6)	2 (7.4)
3.	Orissa	33	1 (3.0)	1 (3.0)	31 (93.9)	0 (0.0)	12 (36.4)	1 (3.0)	19 (57.6)	1 (3.0)	1 (3.0)	3 (9.1)	29 (87.9)	0 (0.0)	13 (39.4)	3 (9.1)	17 (51.5)	0 (0.0)
4.	Rajasthan	21	0 (0.0)	1 (4.8)	19 (90.5)	1 (4.8)	17 (81.0)	0 (0.0)	4 (19.0)	0 (0.0)	1 (4.8)	0 (0.0)	16 (76.2)	4 (19.0)	0 (0.0)	0 (0.0)	17 (81.0)	4 (19.0)
5.	Tamil Nadu	111	5 (4.5)	1 (0.9)	101 (91.0)	4 (3.6)	68 (61.3)	1 (0.9)	39 (35.1)	3 (2.7)	0 (0.0)	2 (1.8)	11 (9.9)	98 (88.3)	31 (27.9)	9 (8.1)	70 (63.1)	1 (0.9)
6.	Uttar Pradesh	152	7 (4.6)	9 (5.9)	121 (79.6)	15 (9.9)	59 (38.8)	19 (12.5)	60 (39.5)	14 (9.2)	0 (0.0)	9 (5.9)	41 (27.0)	102 (67.1)	25 (16.4)	41 (27.0)	74 (48.7)	12 (7.9)
7.	Total	406	13 (3.2)	18 (4.4)	349 (86.0)	26 (6.4)	199 (49.0)	34 (8.4)	152 (37.4)	21 (5.2)	2 (0.5)	15 (3.7)	145 (35.7)	244 (60.1)	76 (18.7)	60 (14.8)	225 (55.4)	45 (11.1)

Figures in paranthesis are the percentages

Note: Percentages are calculated on the basis of Col. 3.

6.8 Knowledge regarding correct advice about feeding after diarrhoea stops

Table 6.10 indicates that over 80 per cent of the medical officers are of the opinion that breast feeding, bottle feeding and other fluids should be continued as usual after diarrhoea stops. In the case of solid foods, over 3/4th of the medical officers are of the view that this should also be continued as usual after diarrhoea stops.

Table 6.10: Type of advice given to mothers/caretakers regarding feeding after diarrhoea stops

S. No.	State	No. of medical officers	Breast Feeding			Bottle Feeding			Other Fluids			Solid Feeds		
			Decrease	Continue as usual	Increase	Decrease	Continue as usual	Increase	Decrease	Continue as usual	Increase	Decrease	Continue as usual	Increase
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	Haryana	62	0 (0.0)	62 (100.0)	0 (0.0)	0 (0.0)	62 (100.0)	0 (0.0)	0 (0.0)	56 (90.3)	6 (9.7)	0 (0.0)	52 (83.9)	10 (16.1)
2.	Maharashtra	27	1 (3.7)	23 (85.2)	3 (11.1)	5 (18.5)	19 (70.4)	3 (11.1)	3 (11.1)	16 (59.3)	8 (29.6)	2 (7.4)	17 (63.0)	8 (29.6)
3.	Orrisa	33	0 (0.0)	33 (100.0)	0 (0.0)	10 (30.3)	22 (66.7)	1 (3.0)	1 (3.0)	28 (84.8)	4 (12.1)	1 (3.0)	26 (78.8)	6 (18.2)
4.	Rajasthan	21	0 (0.0)	20 (95.2)	1 (4.8)	4 (19.0)	17 (81.0)	0 (0.0)	1 (4.8)	19 (90.5)	1 (4.8)	0 (0.0)	21 (100.0)	0 (0.0)
5.	Tamil Nadu	111	0 (0.0)	94 (84.7)	17 (15.3)	3 (2.7)	97 (87.4)	11 (9.9)	3 (2.7)	91 (82.0)	17 (15.3)	3 (2.7)	71 (64.0)	37 (33.3)
6.	Uttar Pradesh	152	5 (3.3)	142 (93.4)	5 (3.3)	18 (11.8)	126 (82.9)	8 (5.3)	22 (14.5)	122 (80.3)	8 (5.3)	18 (11.8)	125 (82.2)	9 (5.9)
Total :		406	6 (1.5)	374 (92.1)	26 (6.4)	40 (9.8)	343 (84.5)	23 (5.7)	30 (7.6)	332 (81.8)	44 (10.8)	24 (5.9)	312 (76.9)	70 (17.2)

Figures in parenthesis are the percentages

Note: percentages are calculated on the bases of Col.3.

6.9 Knowledge regarding advice about prevention of diarrhoea

Table 6.11 shows that more than 93 per cent of the medical officers advise the mothers/caretakers that drinking water should be clean and it should be boiled before use. From 52.7 per cent to 73.6 per cent tell the mothers/caretakers that hands should be washed with soap after defaecation, food should always be kept covered, and kitchen should be kept clean. These precautions would help the mothers/caretakers in preventing diarrhoea, specially among children.

Table 6.11: Type of advice give to mothers/caretakers regarding prevention of diarrhoea

S. No.	State	No. of medical officers	Drinking water should be boiled/clean	Wash hand (with Soap) after defaecation	Wash hand (with Soap) before food preparation	Keep food covered	Keep food preparation area clean	Use latrine for defaecation	Immunize child for measles
1	2	3	4	5	6	7	8	9	10
1.	Haryana	62	62 (100.0)	56 (90.3)	58 (93.5)	42 (67.7)	12 (19.4)	0 (0.0)	10 (16.1)
2.	Maharashtra	27	25 (92.6)	4 (14.8)	15 (55.6)	9 (33.3)	0 (0.0)	3 (11.1)	3 (11.1)
3.	Orissa	33	30 (90.9)	6 (18.2)	18 (54.5)	20 (60.6)	14 (42.4)	6 (18.1)	1 (3.1)
4.	Rajasthan	21	16 (76.2)	16 (76.2)	19 (90.5)	7 (33.3)	16 (76.2)	0 (0.0)	0 (0.0)
5.	Tamil Nadu	111	109 (98.2)	99 (89.2)	98 (88.3)	101 (91.0)	101 (91.0)	39 (35.1)	9 (8.1)
6.	Uttar Pradesh	152	136 (89.5)	89 (58.6)	53 (34.9)	120 (79.0)	71 (46.7)	8 (5.3)	5 (3.3)
Total :		406	378 (93.1)	270 (66.5)	261 (64.3)	299 (73.6)	214 (52.7)	56 (13.8)	28 (6.9)

Figures in parenthesis are the percentages

Note : Percentages are calculated on the basis of Col.3

6.10 Knowledge about management of diarrhoea at home

About 55 per cent of the medical officers know about all the three essential aspects of home management of diarrhoea (Table 6.12). These three aspects are - giving more fluids, continuing solid foods/breast feeding (for infants) and seeking medical help in case of dehydration or in case of blood in stools. Tamil Nadu with 83.8 per cent ranks first as far as the knowledge regarding all the three aspects of home management of diarrhoea is concerned. Rajasthan ranks as the lowest with only 4.8 per cent. Such a low percentage of government doctors with knowledge of home management of diarrhoea presents a very poor state of affairs.

Table 6.12: Case management of diarrhoea at home: percentage of medical officers giving correct advice

S.No	State	No. of medical officers	Mentioned all aspects	Mentioned few aspects	Did not mention any aspect
1	2	3	4	5	6
1	Haryana	62	48 (77.4)	14 (22.6)	0 (0.0)
2	Maharashtra	27	5 (18.5)	21 (77.8)	1 (3.7)
3	Orissa	33	18 (54.5)	15 (45.5)	0 (0.0)
4	Rajasthan	21	1 (4.8)	17 (80.9)	3 (14.3)
5	Tamil Nadu	111	93 (83.8)	18 (16.2)	0 (0.0)
6	Uttar Pradesh	152	59 (38.8)	91 (59.9)	2 (1.3)
Total :		406	224 (55.2)	176 (43.3)	6 (1.5)

Figures in parenthesis are the percentages.

Summary

From the data presented in this chapter, the following observations are made:

- i) Sixty-eight per cent of the medical officers have not received the special training in management of diarrhoea. In Rajasthan only 9.5 per cent of the medical officers have received such special training.
- ii) The overall percentage of medical officers knowing about preparation of ORS solution correctly is about 62 whereas in Maharashtra and Uttar Pradesh it is less than 50 per cent.
- iii) The percentage of medical officers with correct knowledge about quantity of ORS solution requirement is quite low in Rajasthan (28.6 %) whereas average for all the six States is about 56 per cent.
- iv) The percentage of medical officers knowing about correct estimation of IV fluid requirement is very low. In Rajasthan no medical officer knows about the correct estimation of IV fluid requirement whereas in Haryana such percentage is only 6.4
- v) The knowledge about increasing breast feeding is low among the medical officers.
- vi) More than 50 per cent of the medical officers do not advise the mothers/caretakers to stop bottle feeding during diarrhoea, i.e., they do not advise the mothers/caretakers to give milk to those children with spoon and cup during diarrhoea who were taking milk with bottle before diarrhoea.
- vii) Not a single medical officer in Orissa gives advice to mothers/caretakers that other fluids should be given in more quantity to children during diarrhoea.
- viii) Only a small fraction of the medical officers in Rajasthan (5%) and in Maharashtra (19%) give advice regarding the home management of diarrhoea.

Recommendations

The main responsibility lies with the medical officers in our country for solving the diarrhoeal problem. The observations made above indicate that the extent of knowledge about ORT among medical officers is grossly inadequate. Medical officers also play the role of facilitators for training the paramedical staff. Therefore, the level of knowledge of medical officers about ORT must be complete which is at present wanting among large percentage of medical officers. It is, therefore, recommended that the Ministry of Health and Family Welfare should emphasise in organising workshops and orientation courses to equip the medical officers with full knowledge of ORT. It will, in turn, enable them to impart required knowledge to their paramedical staff to tackle the diarrhoeal problem in a much better way. However, the States found deficient in this regard require special emphasis at the time of workshops or orientation courses.

CHAPTER 7

PRIVATE PRACTITIONERS' KNOWLEDGE OF ORT

A substantial percentage of rural and urban population go to private practitioners for treatment. If the private practitioners are motivated properly, they can definitely help in solving the diarrhoeal problem to a great extent.

In order to assess the contribution of private practitioners in tackling the problem of diarrhoeal cases 424 private practitioners were interviewed in six States. A battery of questions were asked to assess their knowledge in respect of handling different aspects of diarrhoeal disease.

It may be mentioned that the Indian Medical Association (IMA) has recognized the role of GPs (General Practitioners) and has started a special drive for giving orientation to private practitioners in the management of diarrhoea. The IMA has already given orientation to about 31,000 private practitioners. There is need to carry out a separate evaluation of the private practitioners already trained by IMA so that the impact of the orientation programme can be assessed.

7.1 Knowledge about signs to assess the diarrhoeal patients

There are twelve major signs or symptoms through which the children under five years of age can be assessed for diarrhoea.

Table 7.1 indicates that the percentage of private practitioners is very low as far as recognition of atleast eight signs of diarrhoea is concerned. This Table also shows that the percentage of such private practitioners is about 3 in Haryana, Tamil Nadu and Uttar Pradesh. However, these percentages are 28 and 23 in Rajasthan and Maharashtra respectively. This low knowledge (9.4%) may be attributed to the fact that special training for management of diarrhoea might not have been given to the private practitioners as the same is being imparted to medical officers in government health facilities.

Table 7.1: Private practitioners recognising eight or more signs of diarrhoeal illness

S.No.	State	No. of Private Practitioners	Recognised eight or more signs	Recognised less than eight signs
1.	Haryana	29	1 (3.4)	28 (96.6)
2.	Maharashtra	56	13 (23.2)	43 (76.8)
3.	Orissa	18	2 (11.1)	16 (88.9)
4.	Rajasthan	53	15 (28.3)	38 (71.7)
5.	Tamil Nadu	102	3 (2.9)	99 (97.1)
6.	Uttar Pradesh	166	6 (3.6)	160 (96.4)
Total:		424	40 (9.4)	384 (90.6)

Figures in parenthesis are the percentages

Statewise percentages of private practitioners recognizing different signs of diarrhoea are given in Table 7.2. Over 80 per cent of the private practitioners recognise the signs like stools per day, skin pinch and sunken eyes. In addition to 12 major signs for assessing the diarrhoea of children below five, the private practitioners also look for other symptoms such as taking temperature of children, etc. The data regarding additional symptoms are presented in Table 7.3. Private practitioners from Maharashtra and Uttar Pradesh in some cases also get the stool examined.

Table 7.2: Signs recognised by the private practitioners regarding diarrhoea

S. No.	State	No. of private practitioners	Stools per day	Vomiting	Thirst	Urine	Condition of child	Skin Pinch	Sunk- en eyes	Mouth/ Tongue (Dry/ Wet)	Tears absent/ present	Pulse rate	Fontan- elle sunken (In infants)	Respi- ratory rate
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	Haryana	29	29 (100.0)	20 (69.0)	2 (6.9)	8 (27.6)	25 (86.2)	25 (86.2)	27 (93.1)	27 (93.1)	3 (10.3)	18 (62.1)	6 (20.7)	3 (10.3)
2.	Maharashtra	56	47 (83.9)	40 (71.4)	13 (23.2)	14 (25.0)	17 (30.4)	46 (82.1)	41 (73.2)	30 (53.6)	4 (7.1)	23 (41.1)	20 (35.7)	3 (5.4)
3.	Orissa	18	18 (100.0)	10 (55.6)	9 (50.0)	10 (55.6)	10 (55.6)	10 (55.6)	13 (72.2)	14 (77.8)	1 (5.6)	10 (55.6)	6 (33.3)	6 (33.3)
4.	Rajasthan	53	53 (100.0)	18 (34.0)	7 (13.2)	5 (9.4)	41 (77.4)	41 (77.4)	36 (67.9)	27 (50.9)	5 (9.4)	9 (17.0)	7 (13.2)	1 (1.9)
5.	Tamil Nadu	102	102 (100.0)	95 (93.1)	21 (20.6)	69 (67.6)	77 (75.5)	93 (91.2)	91 (89.2)	77 (75.5)	35 (34.3)	67 (65.7)	75 (73.5)	31 (30.4)
6.	Uttar Pradesh	166	166 (100.0)	111 (66.9)	62 (37.3)	64 (38.6)	114 (68.7)	134 (80.7)	138 (83.1)	127 (76.5)	1 (0.6)	97 (58.4)	52 (31.3)	51 (30.7)
Total :		424	415 (97.9)	294 (69.3)	114 (26.9)	170 (40.1)	284 (67.0)	349 (82.3)	346 (81.6)	302 (71.2)	49 (11.6)	224 (52.8)	166 (39.2)	95 (22.4)

Figures in parenthesis are the percentages.

Note: Percentages are calculated on the basis of Col. 3.

Table 7.3: Assessment of diarrhoea by private practitioners: additional measures mentioned by private practitioners

S.No.	State	No. of private practitioners	Take temperature	Weigh if possible	Check measles immunization	Abdomen Examination	Malnutrition	Stool Examination	Drugs given or not
1	2	3	4	5	6	7	8	9	10
1.	Haryana	29	28 (96.6)	7 (24.1)	0 (0.0)	2 (6.9)	1 (3.4)	0 (0.0)	1 (3.4)
2.	Maharashtra	56	53 (94.6)	42 (75.0)	25 (44.6)	4 (7.1)	0 (0.0)	11 (19.6)	9 (16.1)
3.	Orissa	18	15 (26.8)	6 (10.7)	0 (0.0)	3 (5.4)	4 (7.1)	4 (7.1)	0 (0.0)
4.	Rajasthan	53	39 (73.6)	10 (18.9)	7 (13.2)	0 (0.0)	5 (9.4)	0 (0.0)	0 (0.0)
5.	Tamil Nadu	102	83 (81.4)	42 (41.2)	33 (32.4)	19 (18.6)	27 (26.5)	4 (3.9)	3 (2.9)
6.	Uttar Pradesh	166	158 (95.2)	22 (13.3)	14 (8.4)	46 (27.7)	45 (27.1)	44 (26.5)	7 (4.2)
Total :		424	376 (88.7)	129 (30.4)	79 (18.6)	74 (17.5)	82 (19.3)	63 (14.9)	20 (4.7)

Figures in parenthesis are the percentages.

Note: Percentages are calculated on the basis of Col. 3.

(Some private practitioners have given more than one answer).

7.2 Knowledge about treating children with diarrhoea having no dehydration

Table 7.4 indicates that most of the private practitioners (91%) use drugs for treating simple diarrhoeal cases. This is a matter of great concern because drugs are not normally given to children with simple diarrhoea. However, about 59 per cent and 44 per cent of the practitioners also recommend ORS and SSS respectively for simple diarrhoeal cases. In Tamil

Nadu about 75 per cent of the practitioners are of the opinion that breast feeding should be continued during diarrhoea. In Haryana percentage of such practitioners is 62.1. Breast feeding during diarrhoea is not at all recommended by any practitioner in Rajasthan. It is rather a very serious problem, particularly because breast feeding needs to be actually increased in case of infants during diarrhoea.

Table 7.4: Treatment of children with diarrhoea (without dehydration)

S.No.	State	No. of private practitioners	ORS	SSS	Continue breast feeding (infants only)	Continue solid foods	Drugs
1	2	3	4	5	6	7	8
1.	Haryana	29	22 (75.7)	26 (89.7)	18 (62.1)	18 (62.1)	20 (69.0)
2.	Maharashtra	56	28 (50.0)	18 (32.1)	12 (21.4)	11 (19.6)	54 (96.4)
3.	Orissa	18	12 (66.7)	10 (55.6)	7 (38.9)	3 (16.7)	18 (100.0)
4.	Rajasthan	53	15 (28.3)	0 (0.0)	0 (0.0)	0 (0.0)	53 (100.0)
5.	Tamil Nadu	102	67 (65.7)	71 (69.6)	76 (74.5)	34 (33.3)	82 (80.4)
6.	Uttar Pradesh	166	108 (65.1)	61 (36.7)	38 (22.9)	17 (10.2)	159 (95.8)
Total :		424	252 (59.4)	186 (43.9)	151 (35.6)	83 (19.6)	386 (91.0)

Figures in parenthesis are the percentages.

Note: Percentages are calculated on the basis of Col. No.3.

7.3 Knowledge about treating diarrhoeal children with some dehydration

Most of the private practitioners recommend drugs for diarrhoeal children under 5 years of age having some dehydration (Table 7.5). Majority of the private practitioners are also of the opinion that ORS should be given to the children having some dehydration. The percentage of private practitioners recommending IV fluid is very low. Table 7.5 also indicates that the percentage of private practitioners in Tamil Nadu recommending 'continuation of breast feeding' during diarrhoea is quite high (76.5%). Advice to increase breast feeding is almost non-existent in all the States. They do not recommend breast feeding to continue in Rajasthan. This percentage is very low in Maharashtra and Uttar Pradesh.

Table 7.5: Treatment of children with diarrhoea having some dehydration

S. No.	States	No. of private practitioners	ORS	SSS	Continue breast feeding (infants only)	Continue solid foods	Drugs	No Treatment	IV fluid
1	2	3	4	5	6	7	8	9	10
1.	Haryana	29	26 (89.7)	22 (75.9)	15 (51.7)	15 (51.7)	22 (75.7)	1 (3.4)	11 (37.9)
2.	Maharashtra	56	38 (67.8)	21 (37.5)	8 (14.3)	9 (16.1)	51 (91.1)	1 (1.8)	8 (14.3)
3.	Orissa	18	14 (77.8)	10 (55.6)	7 (38.9)	3 (16.7)	18 (100.0)	0 (0.0)	1 (5.6)
4.	Rajasthan	53	51 (96.2)	8 (15.1)	0 (0.0)	0 (0.0)	47 (88.7)	0 (0.0)	0 (0.0)
5.	Tamil Nadu	102	88 (86.3)	72 (70.6)	78 (76.5)	39 (38.2)	79 (77.5)	4 (3.9)	18 (17.6)
6.	Uttar Pradesh	166	145 (87.3)	64 (38.6)	41 (24.7)	22 (13.3)	156 (94.0)	1 (0.6)	37 (22.3)
Total :		424	362 (85.4)	197 (46.5)	149 (35.1)	88 (20.8)	373 (88.0)	7 (1.7)	75 (17.7)

*Figures in parenthesis are percentages.
Percentages are calculated on the basis of Col. 3.*

7.4 Knowledge about treating children with severe dehydration

More than 56 per cent of the private practitioners are of the view that they would treat the children having severe dehydration by giving IV fluid (Table 7.6). This is high in Tamil Nadu and Haryana (72.5% and 65.5% respectively) and very low (16.7%) in Orissa. However, about 17 per cent have mentioned that they would admit the children for IV fluid and ORT in their clinics. Only 1.9 per cent of the private practitioners say that they would give drugs to severely dehydrated children. However, about 41 per cent indicate that they would refer the cases of severely dehydrated children to other clinics, hospitals, etc. where IV fluid facility is available. It means that these private practitioners do not have IV fluid facility at their clinics. In brief, adding columns 4 through 8 (Table 7.6), we find that the knowledge of IV fluid requirement among private practitioners seems to be quite satisfactory.

Table 7.6: Treatment of children with diarrhoea having severe dehydration

S. No.	State	No. of private practitioners	Admit for IV and ORT	Admit for IV only	Refer with IV in transit	Refer with ORT in transit	Refer without IV or ORT in transit	Drugs
1	2	3	4	5	6	7	8	9
1.	Haryana	29	3 (10.3)	16 (55.2)	1 (3.4)	2 (6.9)	7 (24.1)	0 (0.0)
2.	Maharashtra	56	7 (12.5)	14 (25.0)	2 (3.6)	8 (14.3)	24 (42.9)	1 (1.8)
3.	Orissa	18	3 (16.7)	0 (0.0)	0 (0.0)	9 (50.0)	5 (27.7)	1 (5.6)
4.	Rajasthan	53	17 (32.1)	7 (13.2)	1 (1.9)	28 (52.8)	0 (0.0)	0 (0.0)
5.	Tamil Nadu	102	30 (29.4)	44 (43.1)	5 (4.9)	17 (16.7)	6 (5.9)	0 (0.0)
6.	Uttar Pradesh	166	13 (7.8)	87 (52.4)	1 (0.6)	22 (13.3)	37 (22.3)	6 (3.6)
Total :		424	73 (17.2)	168 (39.6)	10 (2.4)	86 (20.3)	79 (18.6)	8 (1.9)

Figures in parenthesis are percentages.

7.5 Knowledge about preparation of ORS solution

Table 7.7 shows that in Tamil Nadu the percentage of private practitioners who could prepare the ORS solution correctly is quite satisfactory as compared to other States under study. It is about 80 per cent in Tamil Nadu. Even Rajasthan with 57 per cent may be considered as unsatisfactory because being doctors all of them are supposed to have correct knowledge of preparation of ORS solution.

Table 7.7 : Private practitioners knowing how to prepare ORS solution

S.No.	State	No. of private practitioners	Know correctly	Do not know correctly
1.	Haryana	29	11 (37.9)	18 (62.1)
2.	Maharashtra	56	2 (3.6)	54 (96.4)
3.	Orissa	18	3 (16.7)	15 (83.3)
4.	Rajasthan	53	30 (56.6)	23 (43.3)
5.	Tamil Nadu	102	81 (79.4)	21 (20.6)
6.	Uttar Pradesh	166	59 (35.5)	107 (64.5)
Total :		424	186 (43.9)	238 (56.1)

Figures in parenthesis are the percentages.

Situation in Maharashtra (with about 97 per cent) and Orissa with about 83 per cent of the private practitioners not knowing how to prepare the ORS solution correctly appears to be very alarming.

Table 7.8 shows the observations made by the investigators when the private practitioners mentioned about the different aspects of the preparation of ORS solution.

Table 7.8 : Observations on preparation of ORS solution by private practitioners

S.No.	State	No. of private practitioners	Clean container mentioned	Clean water mentioned	Correct amount of water mentioned	ORS completely dissolved mentioned	Correct amount of powder used mentioned
1	2	3	4	5	6	7	8
1.	Haryana	29	29 (100.0)	29 (100.0)	11 (37.9)	26 (89.7)	11 (37.9)
2.	Maharashtra	56	3 (5.4)	33 (58.9)	27 (48.2)	4 (7.1)	27 (48.2)
3.	Orissa	18	8 (44.4)	16 (88.9)	4 (22.2)	9 (50.0)	6 (33.3)
4.	Rajasthan	53	46 (86.8)	46 (86.8)	30 (56.6)	46 (86.8)	31 (58.5)
5.	Tamil Nadu	102	96 (94.1)	96 (94.1)	81 (79.4)	97 (95.1)	81 (79.4)
6.	Uttar Pradesh	166	97 (58.5)	131 (78.9)	83 (50.0)	100 (60.2)	79 (47.5)
Total :		424	279 (65.8)	351 (82.8)	236 (55.7)	282 (66.5)	235 (55.4)

Figures in parenthesis are the percentages.

Note : Percentages are calculated on the basis of Col. 3

7.6 Knowledge about ORS ingredients

There are four ingredients of ORS as per WHO formula. Table 7.9 indicates that only 43 per cent of the private practitioners have knowledge of all the four ingredients of ORS. However, in Tamil Nadu more than 50 per cent of private practitioners possess this knowledge. Only 3 per cent private practitioners do not know about any of the ingredients of ORS. The distribution of private practitioners regarding the knowledge of each ingredient of ORS is given in Table 7.10.

Table 7.9 : Knowledge of ORS ingredients among private practitioners

S.No.	State	No. of private practitioners	Knowledge of all four ingredients	Knowledge of less than four ingredients	Do not know
1.	Haryana	29	11 (37.9)	18 (62.1)	0 (0.0)
2.	Maharashtra	56	20 (35.7)	34 (60.7)	2 (3.6)
3.	Orissa	18	5 (27.8)	13 (72.2)	0 (0.0)
4.	Rajasthan	53	9 (17.0)	41 (77.3)	3 (5.7)
5.	Tamil Nadu	102	53 (52.0)	44 (43.1)	5 (4.9)
6.	Uttar Pradesh	166	84 (50.6)	79 (47.6)	3 (1.8)
Total :		424	182 (42.9)	229 (54.0)	13 (3.1)

Figures in parenthesis are percentages.

Table 7.11: Estimation of ORS solution requirement

S.No.	State	No. of private practitioners	Mentioned correctly	Not mentioned correctly	Do Not Know
1.	Haryana	29	12 (41.4)	16 (55.2)	1 (3.4)
2.	Maharashtra	56	37 (66.1)	15 (26.8)	4 (7.1)
3.	Orissa	18	8 (44.4)	9 (50.0)	1 (5.6)
4.	Rajasthan	53	22 (41.5)	26 (49.0)	5 (9.5)
5.	Tamil Nadu	102	34 (33.3)	56 (54.9)	12 (11.8)
6.	Uttar Pradesh	166	90 (54.2)	60 (36.2)	16 (9.6)
Total:		424	203 (47.9)	182 (42.9)	39 (9.2)

Figures in parenthesis are percentages

7.8 Knowledge regarding the correct advice about feeding during diarrhoea

Table 7.12 indicates that most of the private practitioners advise mothers to continue breast feeding as usual during diarrhoea. The percentage of such private practitioners is over 80 in Haryana, Orissa and Tamil Nadu. Only 2.4 per cent of the private practitioners are of the opinion that breast feeding should be increased during diarrhoea and about 10 per cent stated that it should be stopped.

More than 50 per cent of the private practitioners in all the States under study, except Maharashtra, have indicated that bottle feeding should be stopped during diarrhoea.

It is interesting to note that more than 83 per cent of the private practitioners in Tamil Nadu are of the opinion that other fluids should be given in more quantity to children during diarrhoea. Next to Tamil Nadu is Uttar Pradesh where the percentage of such practitioners is 56. However, there are no such cases in Orissa indicating thereby a low level of knowledge in this regard among the private practitioners in this State.

In Rajasthan about 85 per cent of the private practitioners are of the opinion that solid feeds should be continued as usual to the children during diarrhoea. Next to Rajasthan are Haryana and Tamil Nadu where the percentage of such practitioners is about 73 and 65 respectively. Haryana is the only State where the practitioners are of the view that solid feed should not be stopped or decreased during diarrhoea. Hence, it is clear from the Table that proper knowledge about feeding during diarrhoea is very low in all the States.

Table 7.12 : Type of advice given to mothers/caretakers regarding feeding during diarrhoea

S. State No.	No. of private practitioners	Breast Feeding				Bottle Feeding				Other Fluids				Solid Feeds				
		Stop	Decre-ase	Conti-nue as usual	Incre-ase	Stop	Decre-ase	Conti-nue as usual	Incre-ase	Stop	Decre-ase	Conti-nue as usual	Incre-ase	Stop	Decre-ase	Conti-nue as usual	Incre-ase	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Haryana	29	0 (0.0)	3 (10.3)	26 (89.7)	0 (0.0)	17 (58.6)	7 (24.1)	5 (17.2)	0 (0.0)	0 (0.0)	0 (0.0)	20 (69.0)	9 (31.0)	0 (0.0)	0 (0.0)	21 (72.4)	8 (27.6)	
2. Maharashtra	56	4 (7.1)	15 (26.8)	35 (62.5)	2 (3.6)	18 (32.1)	20 (35.7)	17 (30.4)	1 (1.8)	3 (5.4)	16 (28.6)	16 (28.6)	21 (37.5)	18 (32.1)	18 (32.1)	17 (30.4)	3 (5.4)	
3. Orissa	18	1 (5.6)	1 (5.6)	16 (88.8)	0 (0.0)	9 (50.0)	1 (5.6)	8 (44.4)	0 (0.0)	2 (11.1)	0 (0.0)	16 (88.0)	0 (0.0)	8 (44.4)	3 (16.7)	7 (38.9)	0 (0.0)	
4. Rajasthan	53	6 (11.3)	10 (18.9)	34 (64.2)	3 (5.6)	34 (64.2)	10 (18.9)	8 (15.1)	1 (1.9)	5 (9.4)	5 (9.4)	40 (75.5)	3 (5.7)	1 (1.9)	6 (11.3)	45 (84.9)	1 (1.9)	
5. Tamil Nadu	102	11 (10.8)	9 (8.8)	82 (80.4)	0 (0.0)	53 (52.0)	9 (8.8)	39 (38.2)	1 (1.0)	0 (0.0)	5 (4.9)	12 (11.8)	85 (83.3)	31 (30.4)	4 (3.9)	66 (64.7)	1 (1.0)	
6. Uttar Pradesh	166	22 (13.3)	33 (19.9)	106 (63.9)	5 (3.0)	83 (50.0)	42 (25.3)	37 (22.3)	4 (2.4)	3 (1.8)	19 (11.5)	51 (30.7)	93 (56.0)	48 (28.9)	44 (26.5)	71 (42.8)	3 (1.8)	
Total :	424	44 (10.4)	71 (16.7)	299 (70.5)	10 (2.4)	214 (50.5)	89 (21.0)	114 (26.9)	7 (1.7)	13 (3.1)	45 (10.6)	155 (36.6)	211 (49.8)	106 (25.0)	75 (17.7)	227 (53.5)	16 (3.8)	

Figures in parenthesis are the percentages.

Note: Percentages are calculated on the basis of Col. 3

7.10 Knowledge regarding advice about prevention of diarrhoea

More than 90 per cent of the private practitioners are of the opinion that drinking water should be clean and it should be boiled before use (Table 7.14). The other important advice given to mothers/caretakers by private practitioners for preventing diarrhoea are washing hands with soap after defaecation and before preparing food, keeping the food covered, keeping the kitchen clean, and maintenance of general cleanliness.

Table 7.14: Type of advice given to mothers/caretakers regarding prevention of diarrhoea

S.No.State	No. of private practitioners	Drinking water should be boiled/clean	Wash hands (with soap) after defaecation	Wash hands (with soap) before food preparation	Keep food covered	Keep food preparation area clean	Immunize child for measles	Maintain Cleanliness/ personal Hygiene surroundings and home clean/ Bottle should be sterilized	Avoid unhygienic food	Give balanced diet	Mother should take balanced diet	Prevent Consumption of mud/ clay	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Haryana	29	29 (100.0)	27 (93.1)	26 (89.7)	13 (44.8)	4 (13.8)	0 (0.0)	7 (24.1)	8 (27.6)	1 (3.4)	0 (0.0)	0 (0.0)	
2. Maharashtra	56	45 (80.4)	6 (10.7)	12 (21.4)	16 (28.6)	3 (5.4)	0 (0.0)	24 (42.9)	37 (66.1)	18 (32.1)	4 (7.1)	0 (0.0)	
3. Orissa	18	16 (88.9)	3 (16.7)	8 (44.4)	8 (44.4)	5 (27.8)	1 (5.6)	3 (16.7)	1 (5.6)	2 (11.1)	0 (0.0)	1 (5.6)	
4. Rajasthan	53	44 (83.0)	22 (41.5)	29 (54.7)	10 (18.9)	40 (75.5)	2 (3.8)	4 (7.5)	1 (1.9)	5 (9.4)	0 (0.0)	1 (1.9)	
5. Tamil Nadu	102	99 (97.1)	91 (89.2)	92 (90.2)	84 (82.4)	78 (76.5)	4 (3.9)	15 (14.7)	13 (12.7)	3 (2.9)	0 (0.0)	0 (0.0)	
6. Uttar Pradesh	166	160 (96.4)	64 (38.6)	49 (29.5)	115 (69.3)	53 (31.9)	7 (4.2)	74 (44.6)	51 (30.7)	27 (16.3)	6 (3.6)	17 (10.2)	
Total:	424	393 (92.7)	213 (50.2)	216 (50.9)	246 (58.0)	183 (43.2)	14 (3.3)	127 (29.1)	111 (26.2)	56 (13.2)	10 (2.4)	19 (4.5)	

Figures in parenthesis are the percentages.

Note : Percentages are calculated on the basis of Col. 3

7.11 Knowledge regarding advice about management of diarrhoea at home

There are mainly three aspects of case management of diarrhoea at home, i.e., more fluids should be given, breast feeding (for infants)/solid foods should be given as usual, and medical help should be sought in case of dehydration or when blood is noticed in the stools. It is expected that mothers/caretakers should be told about all the above aspects of case management of diarrhoea at home.

Table 7.15 shows that only in Tamil Nadu and Haryana, the percentage of private practitioners who give advice on all the above three aspects is 73.4 and 69 respectively. There is not even a single private practitioner in Rajasthan who mentions all the three aspects. The percentage of such practitioners is about 44 and 33 in Orissa and Uttar Pradesh respectively whereas in Maharashtra the percentage of such cases is as low as 13.

Table 7.15: Case management of diarrhoea at home: percentage of private practitioners giving correct advice

S.No.	State	No. of private practitioners	Mentioned all three aspects	Mentioned less than three aspects	Did not mention any aspect
1.	Haryana	29	20 (69.0)	9 (31.0)	0 (0.0)
2.	Maharashtra	56	7 (12.5)	42 (75.0)	7 (12.5)
3.	Orissa	18	8 (44.4)	10 (55.6)	0 (0.0)
4.	Rajasthan	53	0 (0.0)	49 (92.5)	4 (7.5)
5.	Tamil Nadu	102	75 (73.5)	26 (25.5)	1 (1.0)
6.	Uttar Pradesh	166	55 (33.1)	110 (66.3)	1 (0.6)
Total :		424	165 (38.9)	246 (58.0)	13 (3.1)

Figures in parenthesis are the percentages

Summary

Based on data presented in this chapter, the following observations can be made:

- i) The knowledge of private practitioners regarding the signs for assessing the diarrhoeal patients is very poor in all the States.
- ii) Use of drugs for diarrhoea without dehydration and also diarrhoea with some dehydration is very high in all the States.
- iii) The situation in Rajasthan is somewhat alarming as far as the treatment of simple diarrhoea and diarrhoea with some dehydration is concerned. No private practitioner recommends breast feeding and solid foods.
- iv) Correct knowledge about preparation of ORS solution is very low in Maharashtra, Orissa, Uttar Pradesh and Haryana.
- v) Knowledge regarding correct estimation of the quantity of ORS solution required for diarrhoeal patients is low in Tamil Nadu, Haryana, Rajasthan, and Orissa.
- vi) Private practitioners do not advise increase in breast feeding during diarrhoea in all the States.
- vii) A large number of private practitioners do not advise to stop bottle feeding during diarrhoea in all the States, i.e., they do not advise mothers/caretakers that milk should be given with cup and spoon to those children during diarrhoea who were taking milk in bottle before diarrhoea.
- viii) Except in Tamil Nadu and Uttar Pradesh, advice to increase other fluids during diarrhoea is found very low.
- ix) Advice regarding home management of diarrhoea is not given by private practitioners in Rajasthan. However, percentage of such private practitioners is low in Maharashtra, Uttar Pradesh and Orissa whereas the situation in Haryana and Tamil Nadu seems to be better.

Recommendations

Considering health care system in our country, the private practitioners have a major role to play in solving the diarrhoeal problem in the country. However, the observations made above reveal that the level of knowledge of the private practitioners about ORT is very low in almost all the six States under study. It is therefore recommended that the Government of India should launch an orientation programme throughout the country to equip the private practitioners with the requisite knowledge of ORT to implement the programme effectively. However, the States found deficient in the areas listed above (summary section) require special emphasis at the time of orientation.

CHAPTER 8

PHARMACISTS' KNOWLEDGE OF ORT

The pharmacists can also play a major role in tackling the diarrhoeal problem. It has been observed that many people go to them with a request to give something for controlling the diarrhoea of their children. Whatever little knowledge the pharmacists have about management of diarrhoea, they give medicines and ORS to the customers even without doctor's prescription. If orientation is given to pharmacists for diarrhoea management, they can do a lot in controlling the diarrhoeal problem. To assess the situation, in all 362 pharmacists representing different sample units were interviewed and their knowledge about ORT and commercial ORS packets was accordingly tapped.

8.1 Knowledge about ORS ingredients

Table 8.1 shows that majority of the pharmacists do not know about all the four ingredients of ORS. Around 48 per cent of pharmacists in Haryana know about all the ingredients followed by 35.1 per cent in Uttar Pradesh. The percentage of such pharmacists is much below 30 in other States, i.e., 14.6 through 27.8 per cent.

Table 8.1 Knowledge of ORS ingredients among pharmacists

S.No.	State	No. of pharmacists	Knowledge of all four ingredients	Knowledge of less than four ingredients
1	2	3	4	5
1.	Haryana	23	11 (47.8)	12 (52.2)
2.	Maharashtra	36	10 (27.8)	26 (72.2)
3.	Orissa	18	5 (27.8)	13 (72.2)
4.	Rajasthan	55	9 (16.4)	46 (83.6)
5.	Tamil Nadu	82	12 (14.6)	70 (85.4)
6.	Uttar Pradesh	148	52 (35.1)	96 (64.9)
Total :		362	99 (27.3)	263 (72.7)

Figures in parenthesis are the percentages

The distribution of pharmacists having the knowledge about each ingredient of ORS is given in Table 8.2. This Table shows that about 90 per cent of the pharmacists have mentioned Glucose and Sodium whereas 70 and 33 per cent have mentioned about Potassium and Bicarbonate/Tricitrate respectively.

Table 8.2: Knowledge of each ORS ingredients among pharmacists

S.No.	State	No. of pharma- cists	Glucose	Sodium	Pota- ssium	Bicar- bonate/ Tricitrate	Chlo- ride
1	2	3	4	5	6	7	8
1.	Haryana	23	21 (91.3)	23 (100.0)	16 (69.6)	8 (34.8)	14 (60.9)
2.	Maharashtra	36	33 (91.7)	36 (100.0)	29 (80.6)	17 (47.2)	1 (2.8)
3.	Orissa	18	18 (100.0)	17 (94.4)	9 (50.0)	5 (27.8)	0 (0.0)
4.	Rajasthan	55	52 (94.5)	48 (87.3)	45 (81.8)	3 (5.5)	11 (20.0)
5.	Tamil Nadu	82	72 (87.8)	67 (81.7)	44 (53.7)	14 (17.1)	13 (15.9)
6.	Uttar Pradesh	148	142 (95.9)	147 (99.3)	111 (75.0)	74 (50.0)	35 (23.6)
Total :		362	338 (93.4)	338 (93.4)	254 (70.2)	121 (33.4)	74 (20.4)

Figures in parenthesis are the percentages

Note : Percentage are calculated on the basis of Col.3.

8.2 Explaining about the preparation of ORS to customers

Table 8.3 shows that almost all the pharmacists say that they explain to customers how to prepare ORS solution.

Table 8.3: Distribution of pharmacists explaining to customers how to prepare ORS solution

S.No.	State	No.of pharmacists	Explain
1.	Haryana	23	23 (100.0)
2.	Maharashtra	36	36 (100.0)
3.	Orissa	18	18 (100.0)
4.	Rajasthan	55	55 (100.0)
5.	Tamil Nadu	82	75 (91.5)
6.	Uttar Pradesh	148	145 (98.0)
Total		362	352 (97.2)

Figures in parenthesis are the percentages

8.3 Knowledge about the preparation of ORS solution

Table 8.3 shows that almost all the pharmacists explain to customers about the preparation of ORS solution but Table 8.4 indicates that only 40.6 per cent know how to prepare the ORS solution correctly. The percentage of pharmacists knowing the correct preparation of ORS solution is as high as 69 in Rajasthan followed by Tamil Nadu (57.3%) whereas it is as low as 22 per cent in Orissa.

Table 8.4: Pharmacists knowledge about ORS preparation

S.No.	State	No.of pharmacists	Explained correctly	Explained incorrectly
1.	Haryana	23	8 (34.8)	15 (65.2)
2.	Maharashtra	36	9 (25.0)	27 (75.0)
3.	Orissa	18	4 (22.2)	14 (77.8)
4.	Rajasthan	55	38 (69.1)	17 (30.9)
5.	Tamil Nadu	82	47 (57.3)	35 (42.7)
6.	Uttar Pradesh	148	41 (27.7)	107 (72.3)
Total :		362	147 (40.6)	215 (59.4)

Figures in paranthesis are the percentages.

Note: Pharmacists did not prepare the ORS solution. They only explained to the investigators how to prepare it.

The distribution of pharmacists possessing knowledge of different components for the preparation of ORS solution is given in Table 8.5. While explaining the preparation of ORS solution, about 84 per cent have mentioned that clean water should be used and about 69 per cent have mentioned the use of clean container. The percentage who have mentioned about the correct amount of water and ORS is 55, whereas about 65 per cent have mentioned that ORS should be dissolved completely.

Table 8.5 :Distribution of Pharmacists possessing knowledge of preparation of ORS

S.No.	State	No. of pharmacists	Clean container mentioned	Clean water mentioned	Correct amount of water mentioned	ORS completely dissolved mentioned	Correct amount of powder mentioned
1	2	3	4	5	6	7	8
1.	Haryana	23	21 (91.3)	21 (91.3)	9 (39.1)	15 (65.2)	9 (39.1)
2.	Maharashtra	36	8 (22.2)	14 (38.9)	21 (58.3)	9 (25.0)	21 (58.3)
3.	Orissa	18	4 (22.2)	16 (88.9)	7 (38.9)	10 (55.6)	8 (44.4)
4.	Rajasthan	55	54 (98.2)	55 (100.0)	38 (69.1)	53 (96.4)	38 (69.1)
5.	Tamil Nadu	82	74 (90.2)	72 (87.8)	49 (59.8)	71 (86.6)	50 (61.0)
6.	Uttar Pradesh	148	88 (59.5)	127 (85.8)	75 (50.7)	77 (52.0)	74 (50.0)
Total :		362	249 (68.8)	305 (84.3)	199 (55.0)	235 (64.9)	200 (55.2)

Figures in parenthesis are the percentages

Note: Percentages are calculated on the basis of Col.3.

8.4 Advice for home management of diarrhoea

Table 8.6 indicates the types of advice given by pharmacists to customers regarding the home management of diarrhoea. From 21 per cent to 25 per cent of the pharmacists have mentioned that they advise regarding the use of home fluids, balanced diet and commercial ORS. About 47 per cent advise that if the diarrhoea is not controlled at home, medical help should be sought. There are only 0.8 per cent who mention that breast feeding should be continued during diarrhoea.

Table 8.6: Advice given by pharmacists regarding home management of diarrhoea

S.No.	State	Number of pharmacists	Boiled water should be given to the child	Commercial ORS	Home made fluids	If not controlled seek medical help	Give balanced diet	Give SSS	Maintain better hygienic condition	Continue breast feeding
1	2	3	4	5	6	7	8	9	10	11
1.	Haryana	23	17 (73.9)	20 (87.0)	3 (13.0)	6 (26.1)	9 (39.1)	2 (8.7)	1 (4.3)	0 (0.0)
2.	Maharashtra	36	9 (25.0)	4 (11.1)	2 (5.6)	21 (58.3)	6 (16.7)	8 (22.2)	2 (5.6)	0 (0.0)
3.	Orissa	18	5 (27.8)	0 (0.0)	8 (44.4)	6 (33.3)	2 (11.1)	3 (16.7)	3 (16.7)	0 (0.0)
4.	Rajasthan	55	3 (5.5)	13 (23.6)	8 (14.5)	4 (7.3)	5 (9.1)	4 (7.3)	0 (0.0)	0 (0.0)
5.	Tamil Nadu	82	11 (13.4)	2 (2.4)	27 (32.9)	19 (23.2)	37 (45.1)	8 (9.8)	7 (8.5)	2 (2.4)
6.	Uttar Pradesh	148	18 (12.2)	53 (35.8)	29 (19.6)	115 (77.7)	21 (14.2)	11 (7.4)	2 (1.4)	1 (0.7)
Total :		362	63 (17.4)	92 (25.4)	77 (21.3)	171 (47.2)	80 (22.1)	36 (9.9)	15 (4.1)	3 (0.8)

Figures in parenthesis are the percentage

Note: Percentages are calculated on the basis of col.3.

8.5 Advice regarding prevention of diarrhoea

Table 8.7 shows that about 60 per cent of the pharmacists give advice to their customers regarding prevention of diarrhoea. Percentage of such pharmacists is as high as 87 in Haryana followed by Tamil Nadu (70%), Uttar Pradesh and Maharashtra (About 60% each), whereas it is as low as 32.7 per cent in Rajasthan.

Table 8.7 : Advice on prevention of diarrhoea

S.No.	State	No. of pharmacists	Give advice	Do not give any advice
1	2	3	4	5
1.	Haryana	23	20 (87.0)	3 (13.0)
2.	Maharashtra	36	21 (58.3)	15 (41.7)
3.	Orissa	18	7 (38.9)	11 (61.1)
4.	Rajasthan	55	18 (32.7)	37 (67.3)
5.	Tamil Nadu	82	57 (69.5)	25 (30.5)
6.	Uttar Pradesh	148	9 (60.8)	0 58 (39.2)
Total :		362	213 (58.8)	149 (41.2)

Figures in parenthesis are the percentages.

As far as the type of advice is concerned, 45 per cent mention that unhygienic food and dirty water should not be given to the children (Table 8.8). About 15 per cent have mentioned that proper hygienic conditions should be maintained in the house.

Table 8.8: Type of advice given to mothers/caretakers regarding prevention of diarrhoea

S.No.	State	Number of pharmacists	Proper hygienic condition	Avoid unhygienic food and dirty water	Advice balanced diet	Immunization should be done at right time and right intervals
1	2	3	4	5	6	7
1.	Haryana	23	9 (39.1)	11 (47.8)	4 (17.4)	0 (0.0)
2.	Maharashtra	36	2 (5.6)	17 (47.2)	2 (5.6)	0 (0.0)
3.	Orissa	18	4 (22.2)	5 (27.8)	1 (5.6)	1 (5.6)
4.	Rajasthan	55	8 (14.5)	7 (12.7)	3 (5.5)	0 (0.0)
5.	Tamil Nadu	82	8 (9.8)	47 (57.3)	7 (8.5)	0 (0.0)
6.	Uttar Pradesh	148	23 (15.5)	70 (47.3)	32 (21.6)	0 (0.0)
Total:		362	54 (14.9)	163 (45.0)	49 (13.5)	1 (0.3)

Figures in parenthesis are the percentages

Note: Percentages are calculated on the basis of Col.3.

8.6 Maximum sale of ORS packets

The pharmacists were asked to identify the month(s) in which the sale of ORS was maximum during the last six months from the date of survey. The percentages of pharmacists mentioning June and July as the months for maximum sale of ORS are 34 and 27.9 respectively (Table 8.9). About 78 per cent of the pharmacists in Haryana have mentioned that in June the sale of ORS packets is the highest followed by Rajasthan (47.3%) and Uttar Pradesh (37.2%). About 39 per cent of the pharmacists in Orissa have mentioned that July is the month in which the sale of ORS is maximum whereas about 42 per cent have mentioned the month of August in Maharashtra.

Table 8.9: Pharmacists' opinion regarding the months in which the ORS sale was maximum

S.No.	State	No. of pharma- cists	March	April	May	June	July	Aug	Sep	Oct	Don't know
1	2	3	4	5	6	7	8	9	10	11	12
1.	Haryana	23	0 (0.0)	0 (0.0)	0 (0.0)	18 (78.3)	5 (21.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
2.	Maharashtra	36	1 (2.8)	1 (2.8)	5 (13.9)	4 (11.1)	6 (16.7)	15 (41.7)	4 (11.1)	0 (0.0)	0 (0.0)
3.	Orissa	18	0 (0.0)	2 (11.1)	0 (0.0)	4 (22.2)	7 (38.9)	4 (22.2)	1 (5.6)	0 (0.0)	0 (0.0)
4.	Rajasthan	55	1 (1.8)	0 (0.0)	2 (3.6)	26 (47.3)	17 (30.9)	8 (14.5)	0 (0.0)	0 (0.0)	1 (1.8)
5.	Tamil Nadu	82	3 (3.7)	1 (1.2)	1 (1.2)	16 (19.5)	19 (23.2)	12 (14.6)	20 (24.4)	10 (12.2)	0 (0.0)
6.	Uttar Pradesh	148	5 (3.4)	9 (6.1)	12 (8.1)	55 (37.2)	47 (31.8)	10 (6.8)	7 (4.7)	2 (1.4)	1 (0.7)
Total:		362	10 (2.8)	13 (3.6)	20 (5.5)	123 (34.0)	101 (27.9)	49 (13.5)	32 (8.8)	12 (3.3)	2 (0.6)

Figures in parenthesis are the percentages

Note: Percentages are calculated on the basis of Col.3

8.7 Fastest moving ORS

Table 8.10 shows that over 93 per cent of the pharmacists say that fastest moving ORS is electral. All the pharmacists in Haryana mention about it. Only Orissa is far behind with 55.6 per cent where other brands are more popular.

Table 8.10 : Distribution of pharmacists opinion about the fastest moving ORS

S.No.	State	No.of pharmacists	Electral	Others
1.	Haryana	23	23 (100.0)	0 (0.0)
2.	Maharashtra	36	33 (91.7)	3 (8.3)
3.	Orissa	18	10 (55.6)	8 (44.4)
4.	Rajasthan	55	53 (96.4)	2 (3.6)
5.	Tamil Nadu	82	78 (95.1)	4 (4.9)
6.	Uttar Pradesh	148	140 (94.6)	8 (5.4)
Total :		362	337 (93.1)	25 (6.9)

Figures in parenthesis are the percentages.

Note: Others include Relyte, Electrobian, Spedral, F.D.C., Regulyte, Medilyte, E-lyte, Bactolyte, Dextolyte

8.8 Reasons for the highest sale of fast moving ORS

There are mainly three reasons, according to pharmacists, for the highest sale of fast moving ORS; firstly that the product is well known and in more demand (63%), secondly, the taste is good (33.4%), and thirdly it is prescribed by the doctors (22.9%) (Table 8.11). Only 7.5 per cent mention that the price is low. But in Orissa the percentage of such pharmacists is 28.

Table 8.11: Reasons for highest sale of commercial ORS (Fastest moving ORS)

S.No.	State	No. of pharma-cists	More demand	Taste is good	Well known product	Prescri-bed by doctors	Give strength/ effectiveness	Low price
1	2	3	4	5	6	7	8	9
1.	Haryana	23	8 (34.8)	7 (30.4)	8 (34.8)	7 (30.4)	0 (0.0)	0 (0.0)
2.	Maharashtra	36	3 (8.3)	1 (2.8)	28 (77.8)	10 (27.8)	0 (0.0)	2 (5.6)
3.	Orissa	18	2 (11.1)	1 (9.1)	4 (22.2)	9 (50.0)	0 (0.0)	5 (27.8)
4.	Rajasthan	55	0 (0.0)	44 (80.0)	19 (34.5)	6 (10.9)	1 (1.8)	2 (3.6)
5.	Tamil Nadu	82	8 (9.8)	14 (17.1)	31 (37.8)	31 (37.8)	5 (6.1)	7 (8.5)
6.	Uttar Pradesh	148	32 (21.6)	54 (36.5)	84 (56.8)	20 (13.5)	6 (4.1)	11 (7.4)
Total :		362	53 (14.6)	121 (33.4)	174 (48.1)	83 (22.9)	12 (3.3)	27 (7.5)

Figures in parenthesis are the percentages

Note: Percentages are calculated on the basis of Col.3.

Summary

The following observations are made from the data presented in this chapter:

- i) Almost all the pharmacists explain to customers how to prepare ORS solution but as high as 60 per cent do not know themselves how to prepare ORS solution correctly.
- ii) No pharmacist advises the customers that breast feeding should be increased during diarrhoea.
- iii) No pharmacist advises the customers that the solid food should be given to children as usual during diarrhoea.
- iv) More than 93 per cent of the pharmacists have mentioned that Electral is the fastest moving ORS.

Recommendations

The pharmacists are also required to join the main stream for tackling the problem of diarrhoea . Special attention of the Ministry of Health and Family Welfare is invited in this regard. If proper training is given to them, they can contribute a lot in tackling the diarrhoeal problem in the country. They should be asked to display neatly written charts in local languages about management of diarrhoea at prominent places so that the customers can see them whenever they visit the shops.

CHAPTER 9

ASSESSMENT OF SUPPLIES AND FACILITIES AT HEALTH FACILITIES

To evaluate the success of ORT programme in any area it is required to assess the knowledge of the personnel working at the health facilities, as well as the beneficiaries. It is also essential to know in detail about different aspects of the health facilities, i.e., assessment and supplies related to ORT programme. In order to acquire knowledge about facilities we have collected data broadly at two levels of health facilities, i.e., sub-health centres and health facilities above the level of sub-centres, e.g., Hospital, Medical College, Taluka Hospital (Sub-District Hospital), etc. The data on different aspects of ORT at both the levels of health facilities are presented below:

I. HIGHER LEVEL OF HEALTH FACILITIES

In all, data from 212 higher level facilities were collected from six States under the study.

9.1. Supply of ORS packets

Table 9.1 shows that there has never been a shortage in supply of ORS packets in 44 per cent of the health facilities, whereas in the case of 30 per cent there has always been a shortage. However, in about 26 per cent the facilities have experienced shortage only sometimes.

Table 9.1: Supply of ORS packets

S.No.	State	No.of health facili- ties	Shortage		
			Never	Some times	Always or most of the time
1	2	3	4	5	6
1.	Haryana	4	4 (100.0)	0 (0.0)	0 (0.0)
2.	Maharashtra	19	12 (63.2)	4 (21.1)	3 (15.8)
3.	Orissa	23	7 (30.4)	4 (17.4)	12 (52.2)
4.	Rajasthan	7	4 (57.1)	2 (28.6)	1 (14.3)
5.	Tamil Nadu	91	38 (41.7)	26 (28.6)	27 (29.7)
6.	Uttar Pradesh	68	29 (42.6)	18 (26.5)	21 (30.9)
Total :		212	94 (44.3)	54 (25.5)	64 (30.2)

Figures in parenthesis are the percentages.

Haryana is the only State where the health facilities (only 4 facilities were visited) have never witnessed any shortage in the supply of ORS packets, followed by Maharashtra (63.2%) and Rajasthan (57.1%).

At the time of survey it was found that in 31 per cent of the health facilities ORS packets were not stored properly and 9 per cent facilities did not have the ORS packets at all (Table 9.2). Table also shows that some ORS packets were found damaged in 41 per cent of the health facilities, and in 2.3 per cent all the packets were found damaged. Therefore, storing of ORS packets requires special attention.

Table 9.2: Storage of ORS packets

S. No.	State	No. of health facilities	Stored		Do not have ORS packets	ORS packets found damaged or spoiled		
			Properly	Improperly		None	Some	All
1	2	3	4	5	6	7	8	9
1	Haryana	4	4 (100.0)	0 (0.0)	0 (0.0)	4 (100.0)	0 (0.0)	0 (0.0)
2	Maharashtra	19	7 (36.8)	12 (63.2)	0 (0.0)	9 (77.4)	10 (52.6)	0 (0.0)
3	Orissa	23	10 (43.5)	8 (34.8)	5 (21.7)	9 (39.2)	8 (34.8)	1 (4.3)
4	Rajasthan	7	7 (100.0)	0 (0.0)	0 (0.0)	6 (85.7)	1 (14.3)	0 (0.0)
5	Tamil Nadu	91	62 (68.1)	29 (31.9)	0 (0.0)	37 (40.7)	50 (54.9)	4 (4.4)
6	Uttar Pradesh	68	37 (54.4)	17 (25.0)	14 (20.6)	37 (54.4)	17 (25.0)	0 (0.0)
Total :		212	127 (59.9)	66 (31.1)	19 (9.0)	102 (48.1)	86 (40.6)	5 (2.3)

Figures in parenthesis are the percentages.

9.2. Health education material on diarrhoea

Table 9.3 shows that about 47 per cent of the health facilities never have the shortage in supply of health education material on diarrhoea. However, 21 per cent of the health facilities have shortage sometimes, whereas 32 per cent have always witnessed the shortage. This Table also shows that about 50 per cent display the health education material. As far as the distribution of health education material on diarrhoea is concerned, only in 24.1 per cent health facilities it is distributed to the patients visiting the facility.

Table 9.3: Health education materials

S. No.	State	No. of health facilities	Shortages of health education material			Health education material displayed		Health education material distributed to patients	
			Never	Sometimes	Always	Yes	No	Yes	No
1	2	3	4	5	6	7	8	9	10
1	Haryana	4	3 (75.0)	1 (25.0)	0 (0.0)	3 (75.0)	1 (25.0)	3 (75.0)	1 (25.0)
2	Maharashtra	19	9 (47.4)	8 (42.1)	2 (10.5)	10 (52.6)	9 (47.4)	5 (26.3)	14 (73.7)
3	Orissa	23	9 (39.1)	2 (8.7)	12 (52.1)	13 (56.5)	10 (43.4)	4 (17.4)	19 (77.6)
4	Rajasthan	7	6 (85.7)	1 (14.3)	0 (0.0)	7 (100.0)	0 (0.0)	5 (71.4)	2 (28.6)
5	Tamil Nadu	91	35 (38.5)	17 (18.7)	39 (42.9)	42 (46.2)	49 (53.8)	13 (14.3)	78 (85.7)
6	Uttar Pradesh	68	37 (54.4)	15 (22.1)	16 (23.5)	29 (42.7)	39 (57.3)	21 (30.9)	47 (69.1)
Total :		212	99 (46.7)	44 (20.8)	69 (32.6)	104 (49.1)	108 (50.9)	51 (24.1)	161 (75.9)

Figures in parenthesis are the percentages.

Note: Percentages are calculated on the basis of col.3.

9.3 Availability of written guidelines for assessment and treatment of diarrhoea / dehydration

Table 9.4 indicates that only 38 per cent of the health facilities have the-written guidelines. In Rajasthan, all the health facilities have the written guidelines followed by Haryana (75%). In other states about 50 per cent have the guidelines while in Tamil Nadu such facilities are only 17.6 per cent. Table also shows that in 31 per cent of the health facilities, the guidelines were shown to the investigators at the time of survey. In Rajasthan 86 per cent facilities have shown the guidelines followed by Haryana (75%). In Tamil Nadu this percentage is only 12.1.

Table 9.4 :Written guidelines on assessment/treatment of diarrhoea/dehydration at health facilities

S.No.	State	No. of health facilities	Guidelines shown to Investigator		
			Shown	Not shown	Do not have guidelines
1	2	3	4	5	6
1	Haryana	4	3 (75.0)	0 (0.0)	1 (25.0)
2	Maharashtra	19	8 (42.1)	2 (10.5)	9 (47.4)
3	Orissa	23	12 (52.2)	1 (4.3)	10 (43.5)
4	Rajasthan	7	6 (85.7)	1 (14.3)	0 (0.0)
5	Tamil Nadu	91	11 (12.1)	5 (5.5)	75 (82.4)
6	Uttar Pradesh	68	25 (36.8)	7 (10.3)	36 (52.9)
Total :		212	65 (30.7)	16 (7.5)	131 (61.8)

Figures in parenthesis are the percentages.

9.4. Use of drugs for diarrhoea

Table 9.5 indicates that in almost all the health facilities drugs are used for diarrhoea. Most commonly used drugs at the health facilities are Sulpha drugs, Furoxone, Metronidazole, Kaolin+Pectin / Pectokab, Septran, Tetracycline, Gentamycin, Ampicillin, Campicillin, Chlorostrep, Di-Hydroquinoline, Chloramphenicol/Chloromycetin, Entrokam, Kaltin with Neomycin and Walamycin (Table 9.6).

Table 9.5: Health facilities using drugs for diarrhoea

S.No.	State	No.of health facilities	Yes	No
1	2	3	4	5
1	Haryana	4	4 (100.0)	0 (0.0)
2	Maharashtra	19	19 (100.0)	0 (0.0)
3	Orissa	23	23 (100.0)	0 (0.0)
4	Rajasthan	7	7 (100.0)	0 (0.0)
5	Tamil Nadu	91	88 (96.7)	3 (3.3)
6	Uttar Pradesh	68	68 (100.0)	0 (0.0)
Total :		212	209 (98.6)	3 (1.4)

Figures in parenthesis are the percentages.

Table 9.6: Most commonly used drugs for treatment of diarrhoea at health facilities

S.No.	State	No. of health facilities	Furoxone	Metro-nidazole (D.H.Q.)	Sulpha-Drugs (D.H.Q.)	DI-Hydroquinoline	Tetra-cycline	Kaolin+Pectin/Factokab	Trimoxazole	Kaltin with neomycin	Chloro-strep mycin	Wala-mycin	Genta-mycin	Sept-ran	Ampi-cillin/Campicilin	Entro-kam	Chlo-ramphenicol/Chloromycetin
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	Haryana	4	4 (100.0)	1 (25.0)	1 (25.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (25.0)	2 (50.0)	2 (50.0)	1 (25.0)	0 (0.0)	0 (0.0)	1 (25.0)
2	Maharashtra	19	18 (94.7)	6 (31.6)	13 (68.4)	0 (0.0)	3 (15.8)	8 (42.1)	0 (0.0)	1 (5.3)	0 (0.0)	0 (0.0)	1 (5.3)	2 (10.5)	2 (10.5)	0 (0.0)	1 (5.3)
3	Orissa	23	6 (26.1)	9 (39.1)	19 (82.6)	1 (4.3)	11 (47.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (4.3)
4	Rajasthan	7	1 (14.3)	4 (57.1)	7 (100.0)	6 (85.7)	1 (14.3)	0 (0.0)	1 (14.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (14.3)	0 (0.0)	0 (0.0)	0 (0.0)
5	Tamil Nadu	91	18 (19.8)	32 (35.2)	53 (58.2)	5 (5.5)	18 (19.8)	30 (33.0)	16 (17.6)	6 (7.6)	14 (15.4)	7 (7.7)	19 (20.9)	29 (31.9)	18 (19.8)	0 (0.0)	15 (16.5)
6	Uttar Pradesh	68	38 (55.9)	32 (47.1)	37 (54.4)	6 (8.8)	5 (7.4)	26 (38.2)	3 (4.4)	7 (10.3)	7 (10.3)	1 (1.5)	7 (10.3)	9 (13.1)	4 (5.9)	17 (25.0)	0 (0.0)
Total:		212	85 (40.1)	84 (39.6)	130 (61.3)	18 (8.5)	38 (17.9)	64 (30.2)	20 (9.4)	14 (6.6)	22 (10.4)	10 (4.7)	29 (13.7)	42 (19.8)	24 (11.3)	17 (8.0)	18 (8.5)

Figures in parenthesis are the percentages.

Note: Percentages are calculated on the basis of col.3.

9.5. Type of IV fluids used for treating diarrhoeal dehydration

In most of the health facilities the normal Saline is used for treating the diarrhoeal dehydration (Table 9.7). In 3/4th of the health facilities in Haryana Dextrose and normal Saline are used. Electrolyte MPN, IV Metroxidazole and Calcium Chloride are only used in Uttar Pradesh to the extent of 11.8 per cent, 7.4 per cent and 1.5 per cent respectively. In 52 per cent of the health facilities in Orissa Glucose Saline is used.

Table 9.7: Type of I.V. fluids used at the health facilities for diarrhoeal dehydration

S.No	State	No. of health facilities	No Res- ponse	Dext- rose	Normal Saline	Isoly- te - P	Ringer- lyte solu- tion	Elect-IV rolyte	metro- nidazole M.P.N.	Calci- um glu- conate	Sodi- um chlor- ide	Lac- lyte M & P	Glucose Saline
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Haryana	4	0 (0.0)	3 (75.0)	3 (75.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
2	Maharashtra	19	0 (0.0)	18 (94.7)	15 (78.9)	0 (0.0)	7 (36.8)	0 (0.0)	0 (0.0)	0 (0.0)	6 (31.6)	0 (0.0)	1 (5.3)
3	Orissa	23	0 (0.0)	6 (26.1)	22 (95.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	12 (52.2)
4	Rajasthan	7	0 (0.0)	4 (57.1)	7 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
5	Tamil Nadu	91	3 (3.3)	22 (24.2)	83 (91.2)	9 (9.9)	4 (4.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
6	Uttar Pradesh	68	5 (7.5)	48 (70.6)	49 (72.1)	11 (16.2)	1 (1.5)	8 (11.8)	5 (7.4)	1 (1.5)	5 (7.4)	7 (10.3)	3 (4.4)
Total :		212	8 (3.8)	99 (46.7)	179 (84.4)	20 (9.4)	12 (5.7)	8 (3.8)	5 (2.4)	1 (0.5)	11 (5.2)	7 (3.3)	16 (7.5)

Figures in parenthesis are the percentages.

Note: Percentages are calculated on the basis of Col.3.

9.6 Facilities having weighing scale/machine

It is surprising to note from Table 9.8 that even small items like weighing scale is not found in as many as 1/4th of the health facilities. Of course, this is a small item but its utility is quite big in the health facilities. Therefore, every health facility is supposed to have this. In Orissa and Uttar Pradesh about 35 per cent of the health facilities do not have the weighing scale/machine.

Table 9.8 Health facility having weighing scale

S.No.	State	No.of health facilities	Having weighing scale	Do not have weighing scale
1	2	3	4	5
1	Haryana	4	4 (100.0)	0 (0.0)
2	Maharashtra	19	18 (94.7)	1 (5.3)
3	Orissa	23	15 (65.2)	8 (34.8)
4	Rajasthan	7	7 (100.0)	0 (0.0)
5	Tamil Nadu	91	68 (74.7)	23 (25.3)
6	Uttar Pradesh	68	45 (66.2)	23 (33.8)
Total :		212	157 (74.1)	55 (25.9)

Figures in parenthesis are the percentages.

9.7. ORT Corner and other facilities

The concept of separate ORT Corner at the health facility is not known in most of the health facilities as this is evident from Table 9.9. As high as 82 per cent of the health facilities do not have ORT Corner. There is not even a single health facility with ORT Corner in Maharashtra and Rajasthan.

Table 9.9 : About ORT Corner and other facilities at health facilities

S.No.	State	No. of health facilities	ORT Corner	Adequate space for treatment	Sufficient furniture for giving Oral Rehydration Therapy	Facilities for washing hands of mothers	Facilities of latrines for patients
1	2	3	4	5	6	7	8
1	Haryana	4	2 (50.0)	2 (50.0)	2 (50.0)	4 (100.0)	4 (100.0)
2	Maharashtra	19	0 (0.0)	0 (0.0)	0 (0.0)	6 (31.6)	11 (57.9)
3	Orissa	23	3 (13.0)	2 (8.7)	1 (4.3)	10 (43.5)	8 (34.8)
4	Rajasthan	7	0 (0.0)	0 (0.0)	0 (0.0)	6 (0.0)	7 (100.0)
5	Tamil Nadu	91	14 (15.4)	11 (12.1)	11 (12.1)	70 (76.9)	68 (74.7)
6	Uttar Pradesh	68	19 (27.9)	18 (26.4)	19 (27.9)	45 (66.2)	40 (58.8)
Total :		212	38 (17.9)	33 (15.6)	33 (15.6)	141 (66.5)	138 (65.1)

Figures in parenthesis are percentages.

Note : Percentages are calculated on the basis of Col.3.

Table 9.9 also shows that about 1/3rd of the health facilities do not have facilities for mothers/caretakers to wash their hands and about 35 per cent do not have the latrine facility for the patients.

II. SUB-CENTRE

Data regarding the assessment of supplies and facilities at the sub-centres were collected from 224 sub-centres. Respondents were mainly ANMs and MPH(M). The collected data relate to the supply of ORS packets, health education material on diarrhoea, etc.

9.8 Supply of ORS packets

Table 9.10 shows that about 44 per cent of the sub-centres always face the problem of shortage of ORS supply. Only 14.7 per cent of the sub-centres always have ORS packets where as 41.5 per cent of the sub-centres face the problem of shortage of ORS sometimes. The overall situation regarding the supply of ORS packets to sub-centres is quite alarming. This fact is also supported with the data presented in Table 9.11 where it is shown that more than 45 per cent of the sub-centres did not have the ORS packets at the time of survey and it was also found that about 22 per cent did not store ORS packets properly. The situation in Uttar Pradesh was still worse where more than 75 per cent sub-centres did not have the ORS packets at all followed by Rajasthan (51.1%). Out of 123 sub-centres which had ORS packets at the time of survey, it was found that in about 40 per cent sub-centres some or all the ORS packets were found damaged (Table 9.11).

Table 9.10: Supply of ORS packets

S.No.	State	No.of sub-centres	Shortage of ORS Packets		
			Never	Some times	Always or most of the time
1.	Haryana	11	4 (36.4)	5 (45.5)	2 (18.2)
2.	Maharashtra	37	5 (13.5)	16 (43.3)	16 (43.2)
3.	Orissa	8	3 (37.5)	2 (25.0)	3 (37.5)
4.	Rajasthan	43	7 (16.3)	13 (30.2)	23 (53.5)
5.	Tamil Nadu	39	10 (25.7)	27 (69.2)	2 (5.1)
6.	Uttar Pradesh	86	4 (4.6)	30 (34.9)	52 (60.5)
Total :		224	33 (14.7)	93 (41.5)	98 (43.8)

Figures in parenthesis are percentages.

Table 9.11: Storage of ORS packets

S. No.	State	No. of sub-centres	Stored		Do not have ORS packets	ORS packets found damaged		
			Properly	Improperly		None	Some	All
1	Haryana	11	5 (45.5)	5 (45.5)	1 (9.0)	3 (27.3)	7 (63.6)	0 (0.0)
2	Maharashtra	37	23 (62.2)	8 (21.6)	6 (16.2)	27 (73.0)	4 (10.8)	0 (0.0)
3	Orissa	8	2 (25.0)	3 (37.5)	3 (37.5)	4 (50.0)	0 (0.0)	1 (12.5)
4	Rajasthan	43	15 (34.9)	6 (14.0)	22 (51.1)	15 (34.9)	5 (11.6)	1 (2.3)
5	Tamil Nadu	39	17 (43.6)	18 (46.2)	4 (10.2)	15 (38.4)	20 (51.3)	0 (0.0)
6	Uttar Pradesh	86	12 (14.0)	9 (10.4)	65 (75.6)	10 (11.6)	7 (8.1)	4 (4.7)
Total :		224	74 (33.0)	49 (21.9)	101 (45.1)	74 (33.0)	43 (19.2)	6 (2.7)

Figures in parenthesis are the percentages

9.9 Supply of health education material

Table 9.12 shows that only 4 per cent sub-centres have not received the health education material at all. About 70 per cent of the sub-centres face the problem of shortage of health education material either sometimes or most of the time. Only 50 per cent of the sub-centres display the health education material at the centres whereas 75 per cent do not distribute such material to their patients. The government is required to pay more attention to this aspect. People should be made aware of the magnitude of the problem of diarrhoea and its possible cure by displaying the health education material at the sub-centres as well as at other important public places and also by distributing the pamphlets, etc. on diarrhoea to the target population.

Table 9.12: Health education material on diarrhoea

S. No.	State	No of sub-centres	Shortages of health education material				Health material displayed			Health material distributed to patients		
			Never	Some Times	Always or Most of the Time	Not App-licable	Yes	No	NA	Yes	No	NA
1.	Haryana	11	8(72.7)	1 (9.1)	1 (9.1)	1 (9.1)	4(36.4)	6(54.5)	1(9.1)	1(9.1)	9(81.8)	1(9.1)
2.	Maharashtra	37	6(16.2)	16 (43.3)	15 (40.5)	0 (0.0)	20(54.1)	17(45.9)	0(0.0)	13(35.1)	24(64.9)	0(0.0)
3.	Orissa	8	0(0.0)	2 (25.0)	0 (0.0)	6 (75.0)	1(12.5)	1(12.5)	6(75.0)	0(0.0)	2(25.0)	6(75.0)
4.	Rajasthan	43	8(18.7)	17 (39.5)	17 (39.5)	1 (2.3)	23(53.5)	19(44.2)	1(2.3)	5(11.6)	37(86.0)	1(2.3)
5.	Tamil Nadu	39	20(51.3)	16 (41.0)	3 (7.7)	0 (0.0)	22(56.4)	17(43.6)	0(0.0)	8(20.5)	31(79.5)	0(0.0)
6.	Uttar Pradesh	86	16(18.6)	32 (37.2)	37 (43.0)	1 (1.2)	43(50.0)	42(48.8)	1(1.2)	20(23.2)	65(75.6)	1(1.2)
Total :		224	58(25.9)	84 (37.5)	73 (32.6)	9 (4.0)	113(50.4)	102(45.6)	9(4.0)	47(21.0)	168(75.0)	9(4.0)

Figures in parenthesis are the percentages

Note: *NA = S.Cs. do not get health education material

9.10 Use of drugs for diarrhoea

Drugs are used for diarrhoea in more than 3/4th of the sub-centres (Table 9.13). In Orissa drugs are used for diarrhoea in all the sub-centres whereas in Uttar Pradesh these are used in less than 50 per cent sub-centres. However, in all other States the use of drugs for diarrhoea is more than 90 per cent at the sub-centres. In Haryana, Orissa and Tamil Nadu almost all the sub-centres use sulpha drugs for diarrhoeal treatment whereas the use of sulpha drugs in Maharashtra and Rajasthan is the lowest, i.e., 10.8 per cent and 18.6 per cent respectively (Table 9.14). On the other hand, in Uttar Pradesh about 49 per cent of the sub-centres use sulpha drugs. The other drugs used for diarrhoea at the sub-centres are Furoxone, Pectin and Kaolin, Dina-quin. In Orissa the Entrobi-quinol drug is used upto the extent of 62.5 per cent. In Rajasthan in more than 3/4th of the sub-centres, Dina-quin drug is used (Table 9.14).

Table 9.13: Use of drugs for diarrhoea at sub-centres

S.No.	State	No. of Sub-centres	Yes	No
1	Haryana	11	10 (90.9)	1 (9.1)
2.	Maharashtra	37	34 (91.9)	3 (8.1)
3.	Orissa	8	8 (100.0)	0 (0.0)
4.	Rajasthan	43	40 (93.0)	3 (7.0)
5.	Tamil Nadu	39	38 (97.4)	1 (2.6)
6.	Uttar Pradesh	86	42 (48.8)	44 (51.2)
Total:		224	172 (76.8)	52 (23.2)

Figures in parenthesis are percentages

Table 9.14 Most commonly drugs used for diarrhoea at sub-centres

S.No.	State	No of sub-centres	Sulpha Drugs	Furoxone and Kaolin	Pectin	Dina-quin	Depen-dal	Entrokam Syrup	Entrobi-quinol	Metroni-dazole	Spasman-done	Baral-gan/Bardase
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Haryana	11	11 (100.0)	3 (27.3)	2 (18.2)	0 (0.0)	1 (9.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
2.	Maharashtra	37	4 (10.8)	22 (2.7)	15 (40.5)	9 (24.3)	0 (0.0)	0 (0.0)	0 (0.0)	1 (2.7)	6 (16.2)	0 (0.0)
3.	Orissa	8	8 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	5 (62.5)	1 (12.5)	0 (0.0)	0 (0.0)
4.	Rajasthan	43	8 (18.6)	2 (4.7)	1 (2.3)	33 (76.7)	2 (4.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	5 (11.6)
5.	Tamil Nadu	39	39 (100.)	0 (0.0)	7 (17.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (5.1)	0 (0.0)	0 (0.0)
6.	Uttar Pradesh	86	42 (48.8)	3 (3.5)	1 (1.2)	2 (2.3)	0 (0.0)	4 (4.7)	1 (1.2)	0 (0.0)	0 (0.0)	0 (0.0)
Total :		224	111 (41.3)	30 (13.4)	26 (11.6)	44 (19.6)	3 (1.4)	4 (1.8)	6 (2.7)	4 (1.8)	6 (2.7)	5 (2.2)

Figures in parenthesis are the percentages.

Note: Percentages are calculated on the basis of Col.3.

9.11 Weighing machine / scale

It is interesting to note from Table 9.15 that more than 53 per cent of the sub-centres do not have the weighing machine. This is a minor item but its utility is very significant. Each sub-centre is supposed to have it. Why all the sub-centres do not have it is a matter to be probed. Either the weighing machines have gone out of order or these were not supplied to these sub-centres at all.

Table 9.15: Sub-centres having weighing machine / scale

S.No.	State	No. of sub-centres	Have weighing scale	Do not have weighing scale
1.	Haryana	11	8 (72.7)	3 (27.3)
2.	Maharashtra	37	20 (54.1)	17 (45.9)
3.	Orissa	8	3 (37.5)	5 (62.5)
4.	Rajasthan	43	14 (32.6)	29 (67.4)
5.	Tamil Nadu	39	35 (89.7)	4 (10.3)
6.	Uttar Pradesh	86	25 (29.1)	61 (70.9)
Total :		224	105 (46.9)	119 (53.1)

Figures in parenthesis are percentages.

9.12 Written guidelines for assessment and treatment of diarrhoea/dehydration

More than 50 per cent of the sub-centres do not have the written guidelines (Table 9.16). In only 35.3 per cent sub-centres, these guidelines were shown to the investigators at the time of survey. In Rajasthan and Haryana 90.9 per cent and 97.7 per cent respectively do not have the written guidelines. In Tamil Nadu about 62 per cent of the sub-centres have written guidelines followed by Orissa (50%).

Table 9.16: Written guidelines on assesment and treatment ofdiarrhoea/dehydration at sub-centres

S.No.	State	No.of sub-centres	Guidelines shown to the Investigator		
			Shown	Not Shown	Do not have written guidelines
1.	Haryana	11	1 (9.1)	0 (0.0)	10 (90.9)
2.	Maharashtra	37	13 (35.1)	5 (13.5)	19 (51.4)
3.	Orissa	8	4 (50.0)	0 (0.0)	4 (50.0)
4.	Rajasthan	43	1 (2.3)	0 (0.0)	42 (97.7)
5.	Tamil Nadu	39	24 (61.6)	13 (33.3)	2 (5.1)
6.	Uttar Pradesh	86	36 (41.9)	8 (9.3)	42 (48.8)
Total :		224	79 (35.3)	26 (11.6)	119 (53.1)

Figures in parenthesis are the percentages

9.13 Referring of diarrhoeal cases

In more than 3/4th of the sub-centres, diarrhoeal cases are referred to other hospitals for treatment (Table 9.17). In Orissa almost all the sub-centres refer cases followed by Uttar Pradesh (94.2%) and Maharashtra (89.2%).

Table 9.17: Referral of diarrhoeal cases by sub-centres

S.No.	State	No. of sub-centres	Referral of Cases	
			Yes	No
1.	Haryana	11	7 (63.6)	4 (36.4)
2.	Maharashtra	37	33 (89.2)	4 (10.8)
3.	Orissa	8	8 (100.0)	0 (0.0)
4.	Rajasthan	43	25 (58.1)	18 (41.9)
5.	Tamil Nadu	39	22 (56.4)	17 (43.6)
6.	Uttar Pradesh	86	81 (94.2)	5 (5.8)
Total :		224	176 (78.6)	48 (21.4)

Figures in parentehsis are the percentages.

9.14 Maintenance of records of diarrhoeal patients under 5 years

In 58 per cent of the sub-centres the records in respect of diarrhoeal patients under 5 years are maintained (Table 9.18). Table also shows that the maintenance of records is much better in Tamil Nadu (82.1 %) followed by Uttar Pradesh (64 %) and Maharashtra (60 %). The situation in Orissa is still very bad as only 12.5 per cent of the sub-centres maintain records. Maintaining records about diarrhoea illness should be made compulsory because the magnitude of the diarrhoeal illness in different parts of the country can only then be assessed properly.

Table 9.18: Maintenance of records at the sub-centres

S.No.	State	No.of sub centres	No.of sub- centres maintaing records
1	2	3	4
1.	Haryana	11	4 (36.4)
2.	Maharashtra	37	22 (59.4)
3.	Orissa	8	1 (12.5)
4.	Rajasthan	43	16 (37.2)
5.	Tamil Nadu	39	32 (82.1)
6.	Uttar Pradesh	86	55 (64.0)
Total :		224	130 (58.0)

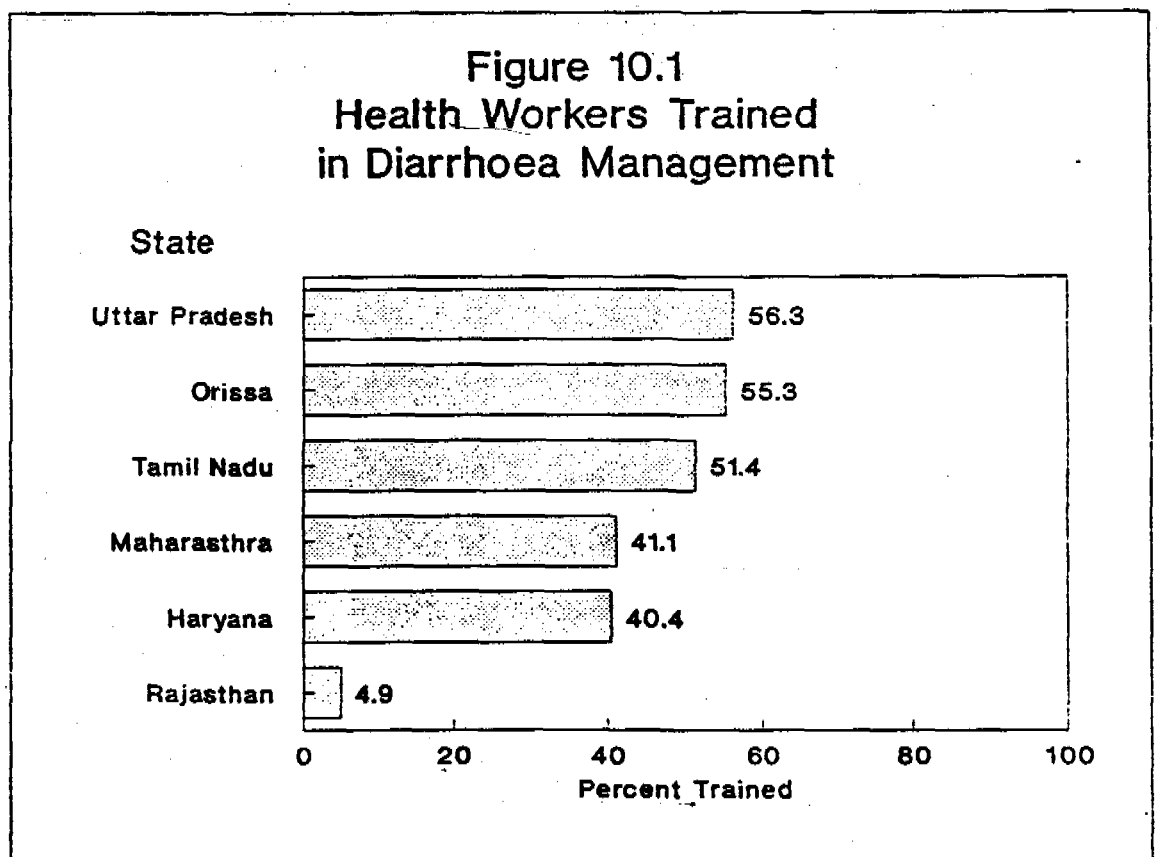
Figures in parenthesis are percentages.

CHAPTER 10

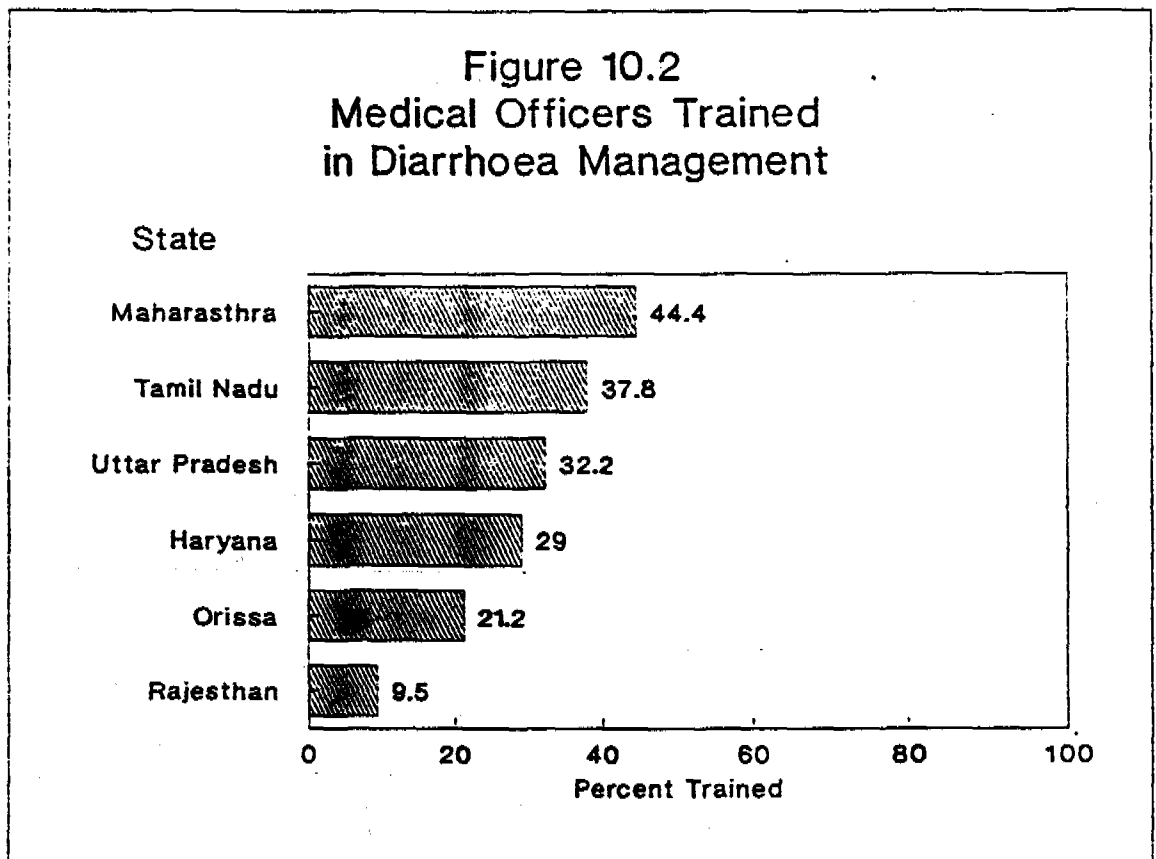
SUMMARY RESULTS OF SURVEYS OF HEALTH PROVIDERS and HEALTH FACILITIES*

10.1. Training

Fewer than 60 per cent of the health workers (Figure 10.1) and 50 per cent of the medical officers (Figure 10.2) interviewed reported that they had received special training in management of diarrhoea. The level of training appeared to be lowest in the State of Rajasthan, where fewer than five per cent of the health workers and ten per cent of the medical officers reported that they had been trained.



* - Health Providers - health workers, medical officers, private practitioners and pharmacists
- Health Facilities - large health facilities and sub-centres.



10.2. Assessment of diarrhoeal illness

Health workers, medical officers, and private practitioners were asked what steps they took to assess a child with diarrhoea; the responses to this open-ended question included both symptoms to inquire about in the history, such as thirst, and signs to look for during the examination, such as skin turgor and presence or absence of tears. Those medical officers and private practitioners who spontaneously mentioned eight out of the twelve signs and symptoms listed were considered to have answered the question correctly. However, in the case of health workers those who mentioned three out of six signs and symptoms listed were considered to have answered the question correctly.

Knowledge of eight or more signs or symptoms of dehydration on the part of the medical officers (Figure 10.4) was high, ranging from 86.5 per cent in Tamil Nadu to 67.7 per cent in Haryana. However, health workers' knowledge was found very poor (Figure 10.3); fewer than half of the 902 health workers interviewed in any State mentioned eight or more signs of dehydration, and in Rajasthan, the State which ranked lowest in this question, only two per cent of the health workers mentioned eight or more signs of dehydration. The overall

performance of the private practitioners was also very poor (Figure 10.5); it was highest in Rajasthan, where 28.3 per cent of the practitioners could identify eight or more signs, and lowest in Tamil Nadu, where less than three per cent of the practitioners could answer correctly.

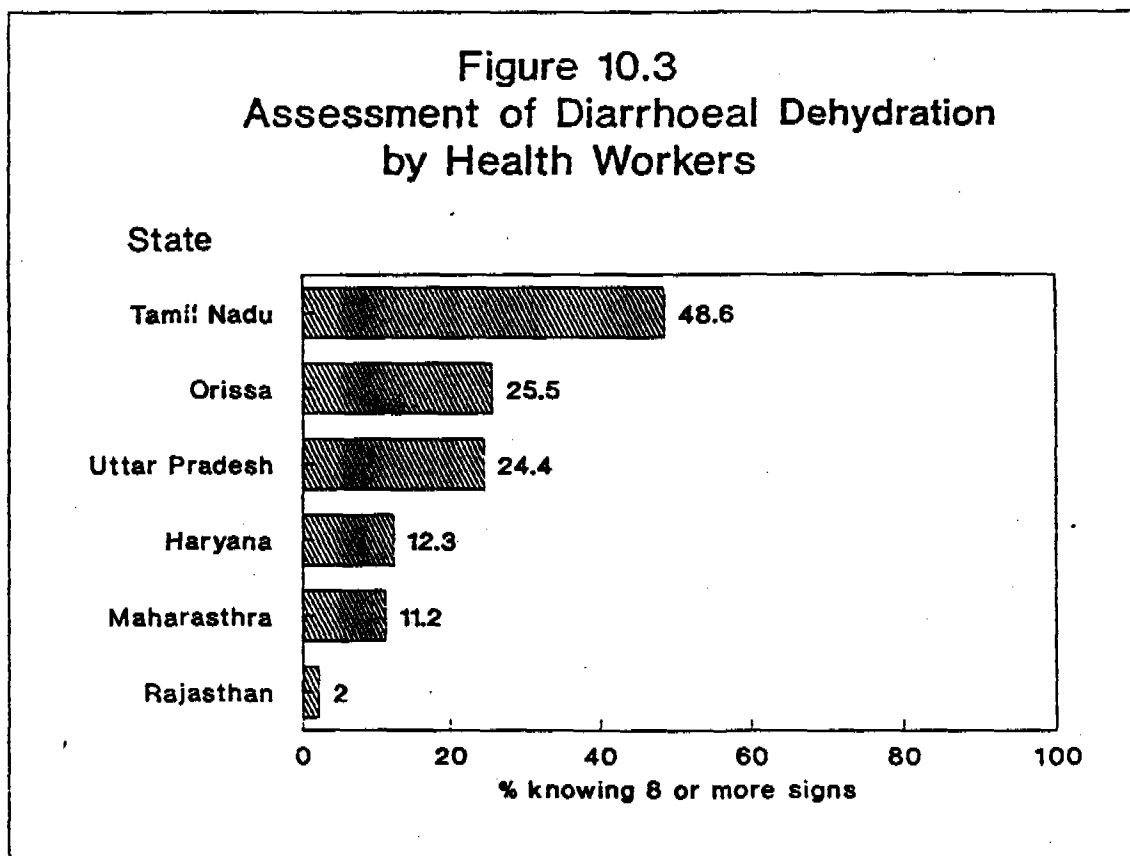


Figure 10.4
Assessment of Diarrhoeal Illness
by Medical Officers

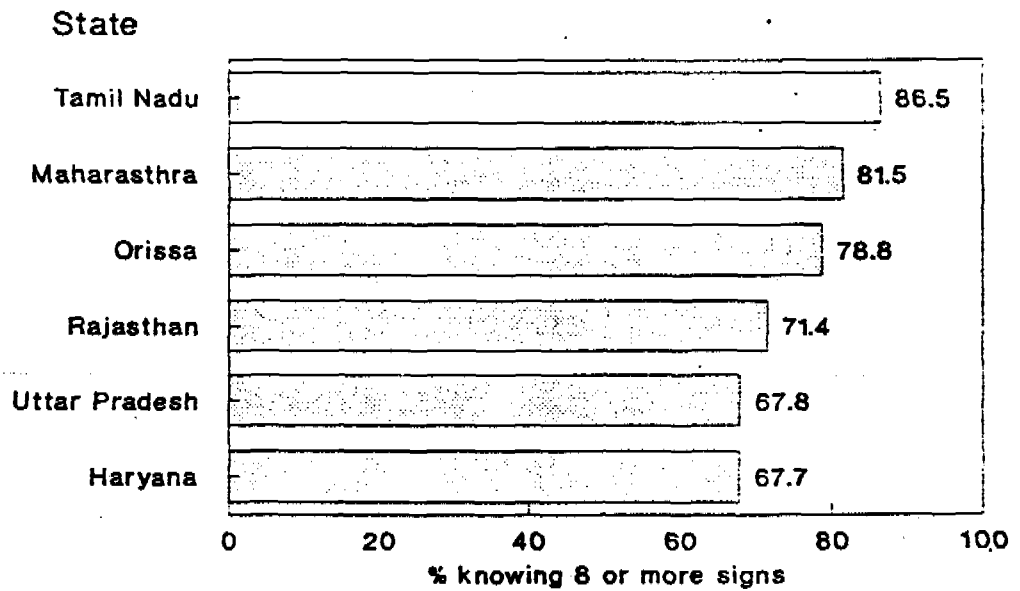
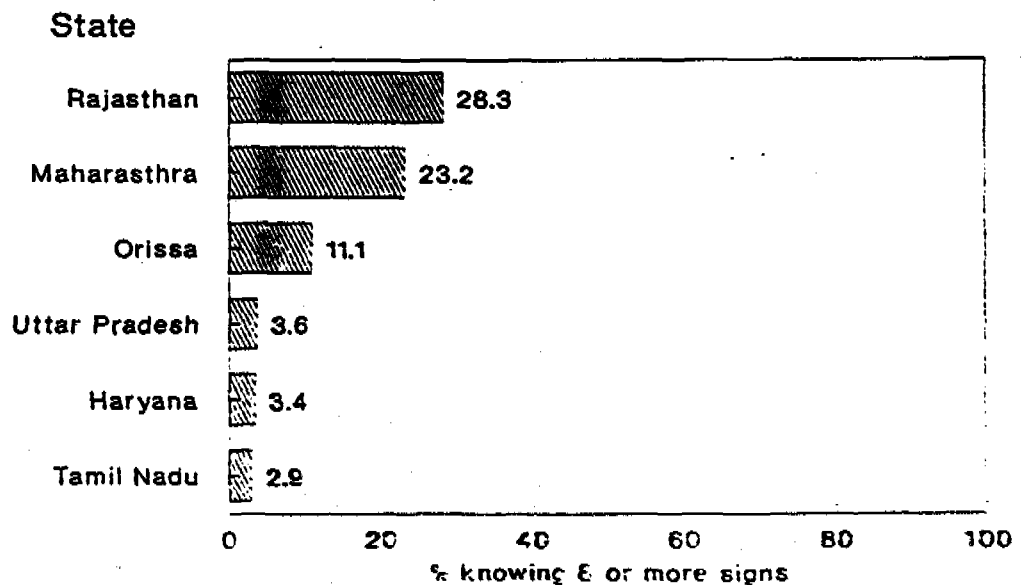


Figure 10.5
Assessment of Diarrhoeal Illness
by Private Practitioners



10.3. Estimation of ORS requirements

Health workers, medical officers and private practitioners were asked to estimate how much ORS they would give to a one year old baby weighing seven kilograms with some dehydration during the first four to six hours of treatment. They were permitted to refer to a table or chart to answer the question if they wished. There were two correct answers to this question: "400-600 ml" or "as much as the child can take."

Maharashtra was the State which ranked highest in providing responses by medical officers (70.4%) (Figure 10.8) and private practitioners (66.1%) (Figure 10.6). In Haryana, the highest-ranking State among health workers, (59.6%) and Rajasthan (53%), the performance of health workers was superior to that of the medical officers (Figures 10.7 and 10.8).

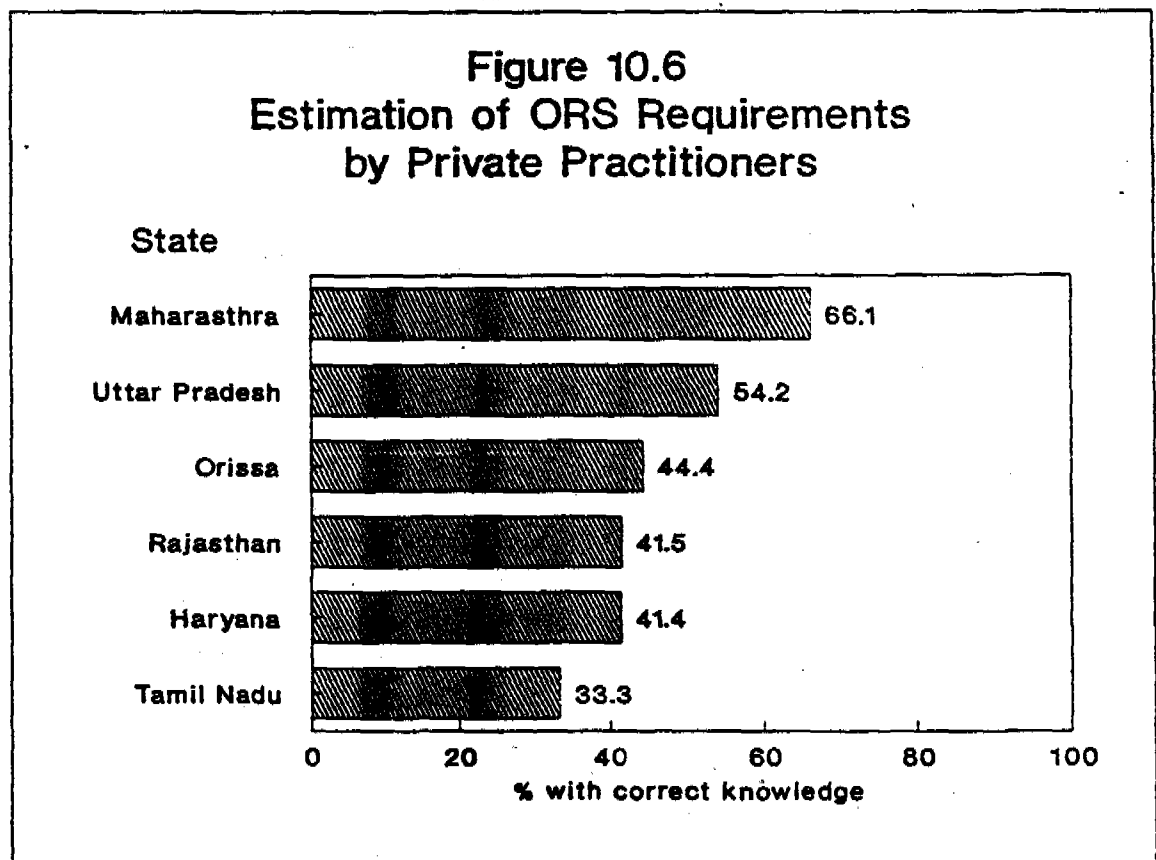


Figure 10.7
Estimation of ORS Requirements
by Health Workers

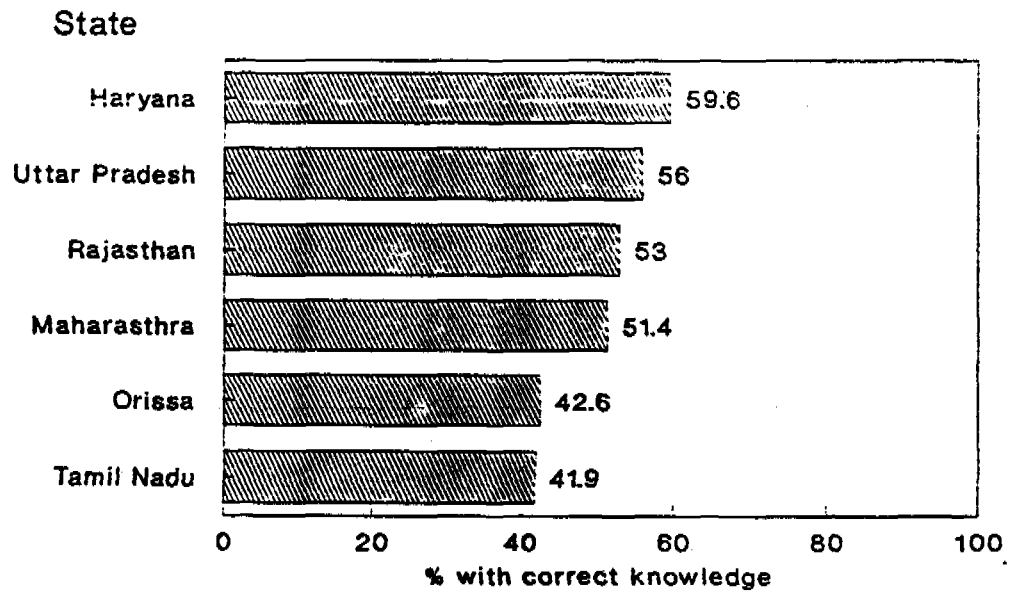
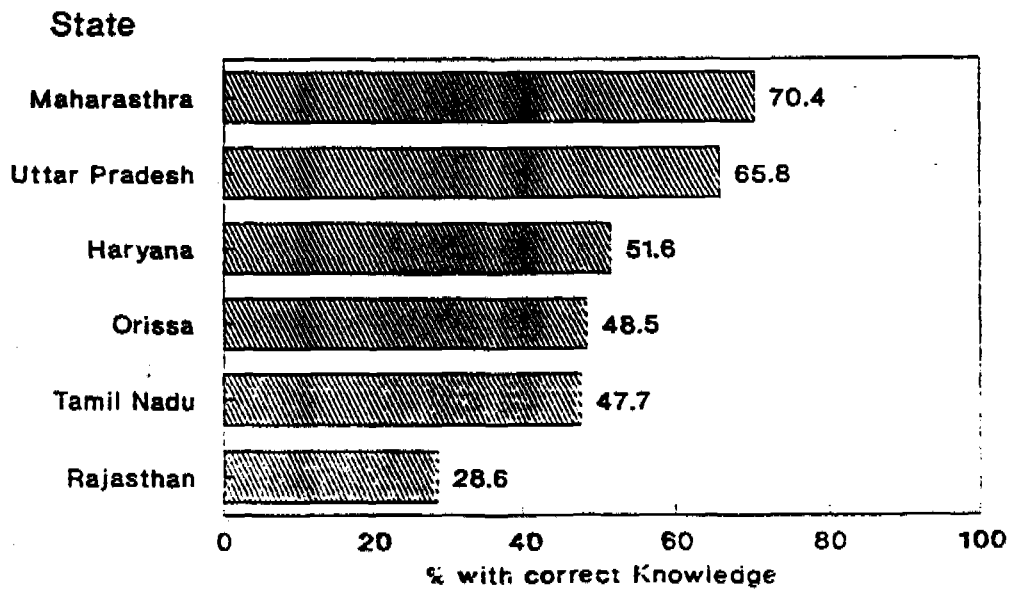


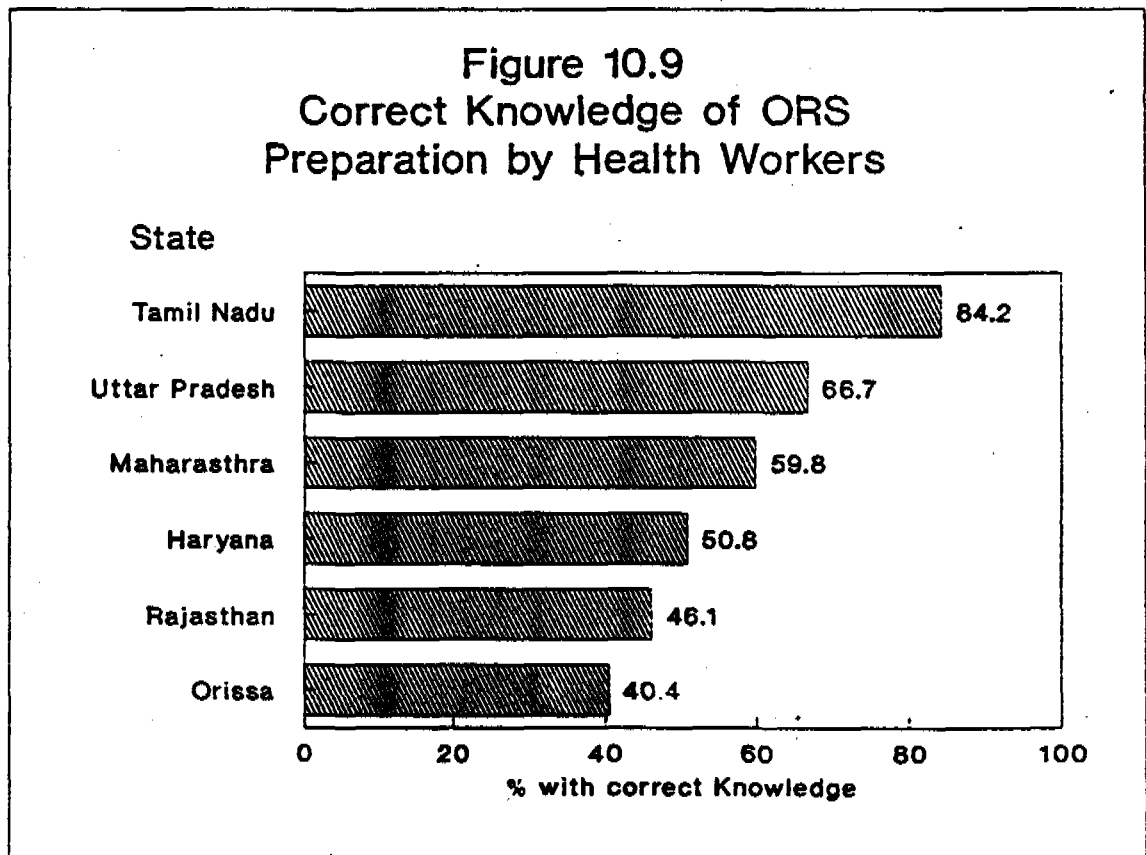
Figure 10.8
Estimation of ORS Requirements
by Medical Officers



10.4. Correct ORS preparation

Health workers were asked to demonstrate how to prepare ORS solution whereas medical officers were asked to demonstrate or explain how to prepare ORS solution, using the government brand (one litre packet) ORS. It was found that most of the medical officers only explained the preparation of ORS solution to the investigators. Private practitioners and pharmacists were asked to only explain preparation of ORS solution to the interviewer as they would explain to the mother of a child with diarrhoea. These providers explained how to prepare a commercial brand with which they were familiar; some of these brands are mixed with one litre of water while others call for mixing a glassful of ORS at a time.

Between 40.4 per cent and 84.2 per cent of health workers (Figure 10.9) and 44.4 per cent to 80.2 per cent of medical officers (Figure 10.10) knew how to prepare ORS correctly; Tamil Nadu was the State with the largest percentage of health workers, medical officers, and private practitioners (79.4%) answering this question correctly. In general,



private practitioners (Figure 10.11) and pharmacists (Figure 10.12) did not perform well on this question; in four of the six States surveyed (Orissa, Maharashtra, Uttar Pradesh and Haryana) fewer than 40 per cent of these providers could explain correctly how to prepare ORS.

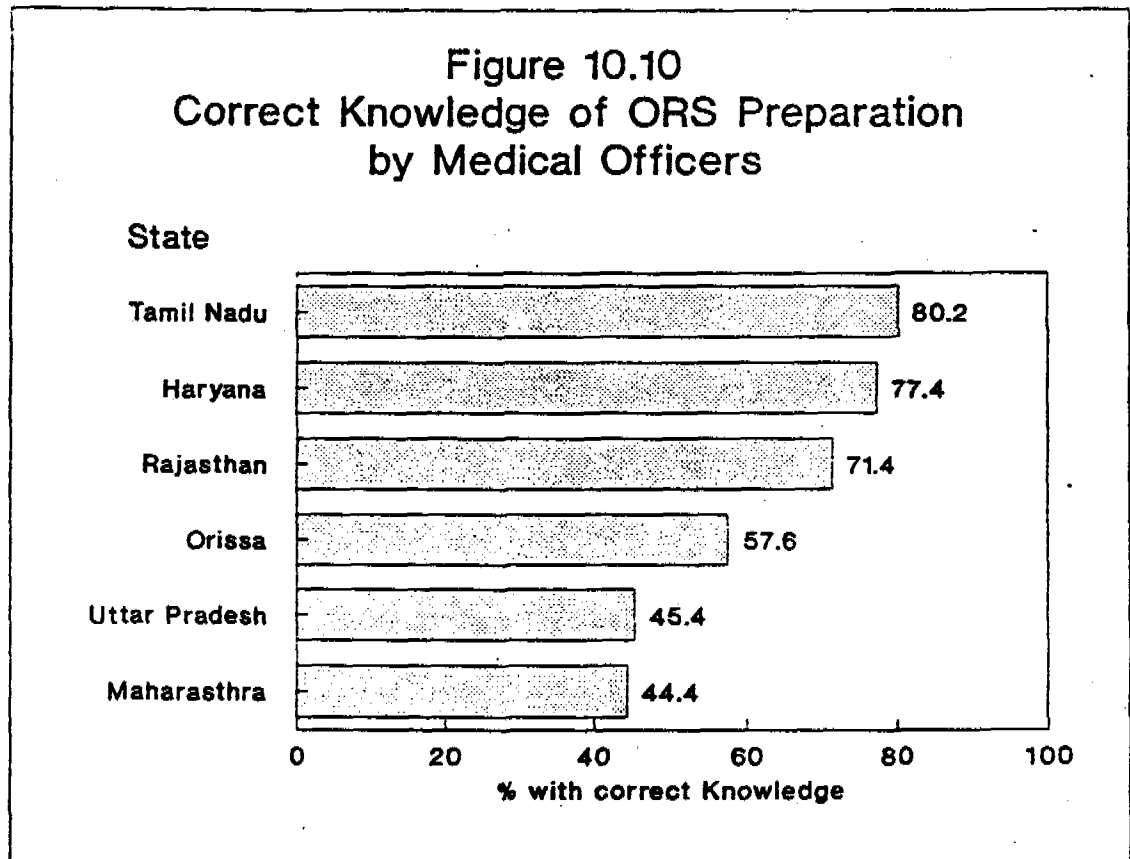


Figure 10.11
Correct Knowledge of ORS
Preparation by Private Practitioners

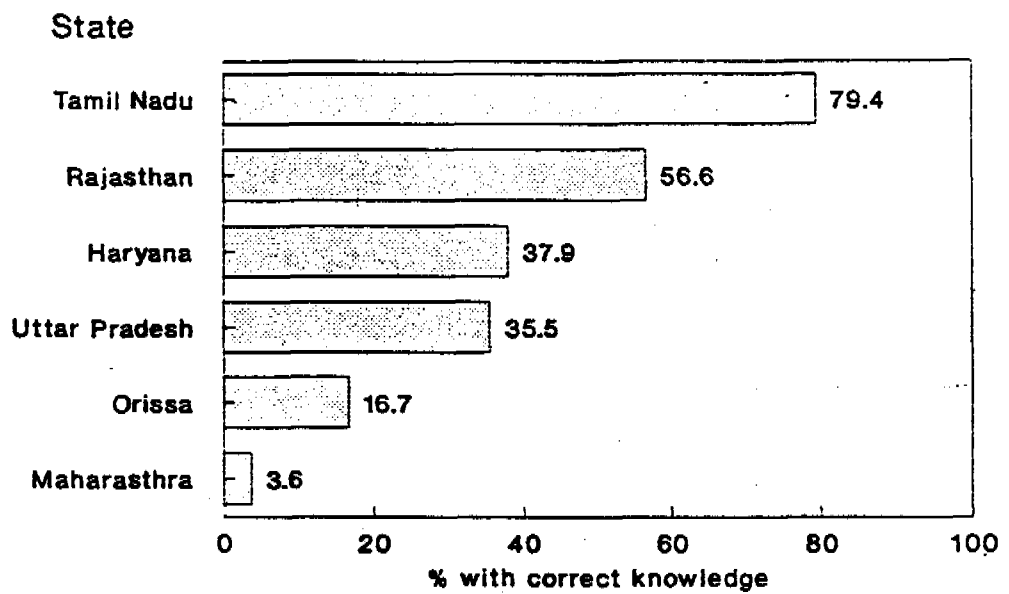
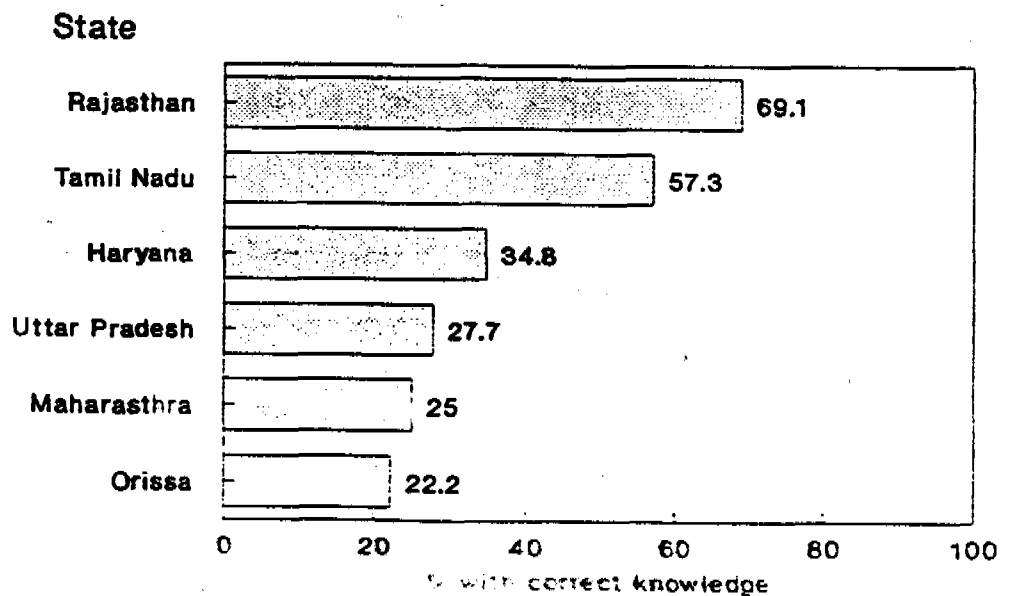


Figure 10.12
Correct Knowledge of ORS
Preparation by Pharmacists



10.5. Feeding during diarrhoea

a. Continued Breastfeeding. The percentage of medical officers (Figure 10.14) who say that they advise mothers to continue breastfeeding their children during diarrhoea is higher in every State than the percentage of health workers (Figure 10.13) advising continued breastfeeding. The percentage of private practitioners reporting that they advise continued breastfeeding ranges from 89.7 per cent in Haryana to 62.5 per cent in Maharashtra (Figure 10.15).

b. Continued Feeding. The percentage of medical officers and health workers advising continued breastfeeding is higher in every State than the percentage of these providers advising continued feeding during diarrhoea (solid/semi-solid foods). The rates of continued feeding did not correspond closely with the rates of continued breastfeeding in the six States. The percentage of health workers stating that they advocated continued feeding ranged from a high of 61.4 per cent in Haryana to a low of 19.1 per cent in Orissa. (It is interesting to note that Orissa is also the State with the lowest continued feeding rate in the household survey).

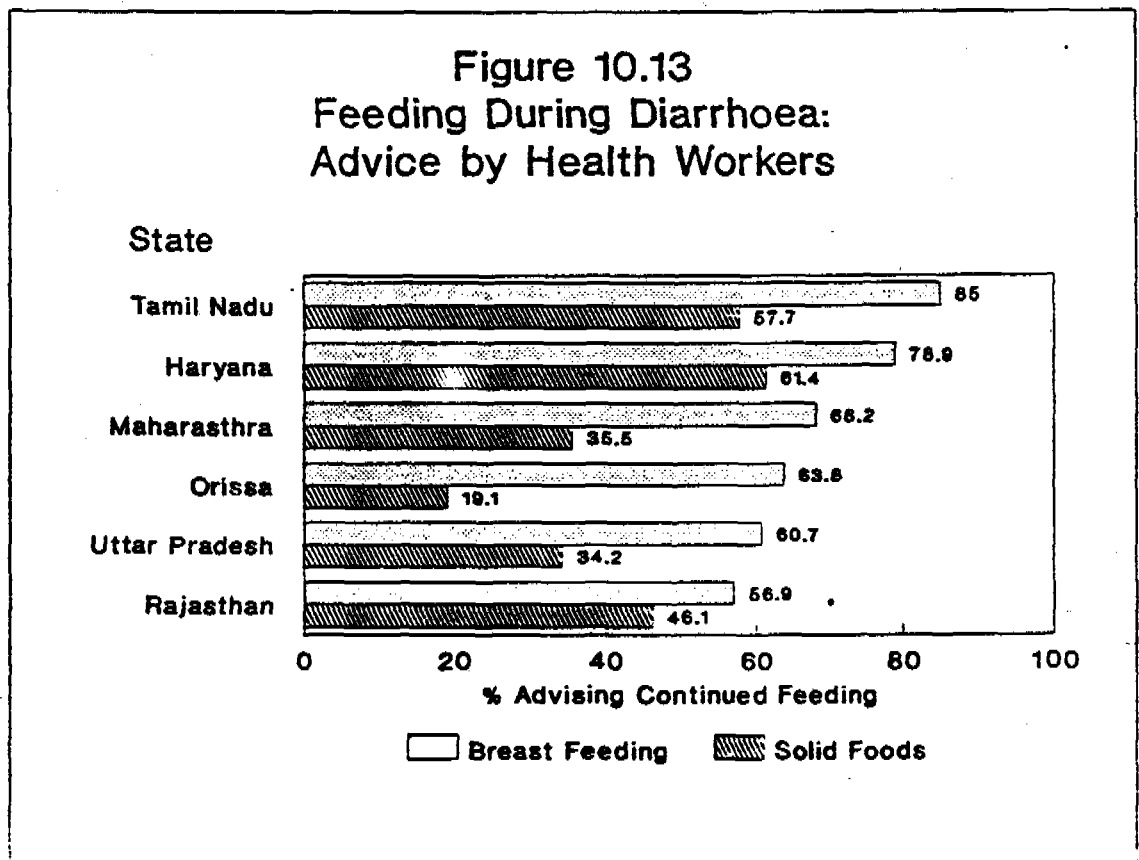


Figure 10.14
Feeding During Diarrhoea:
Advice by Medical Officers

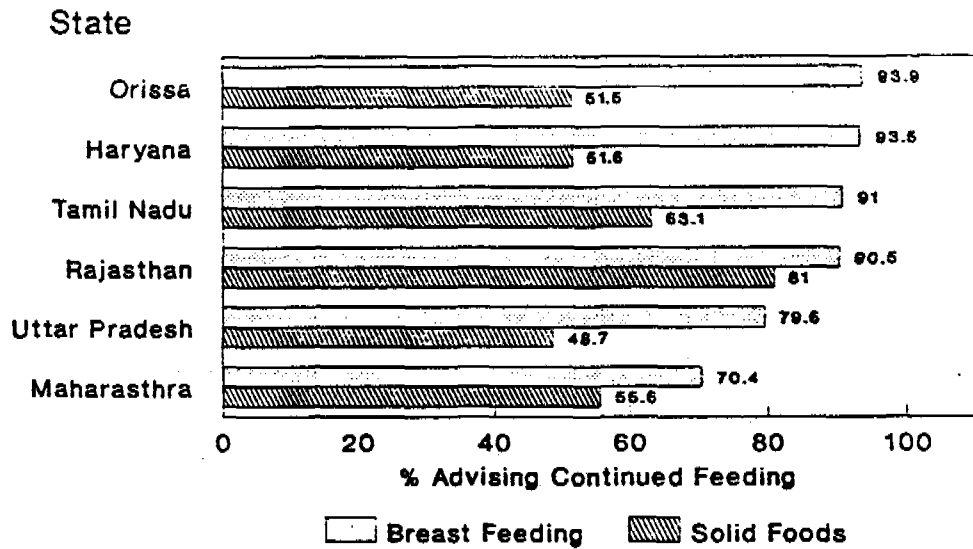
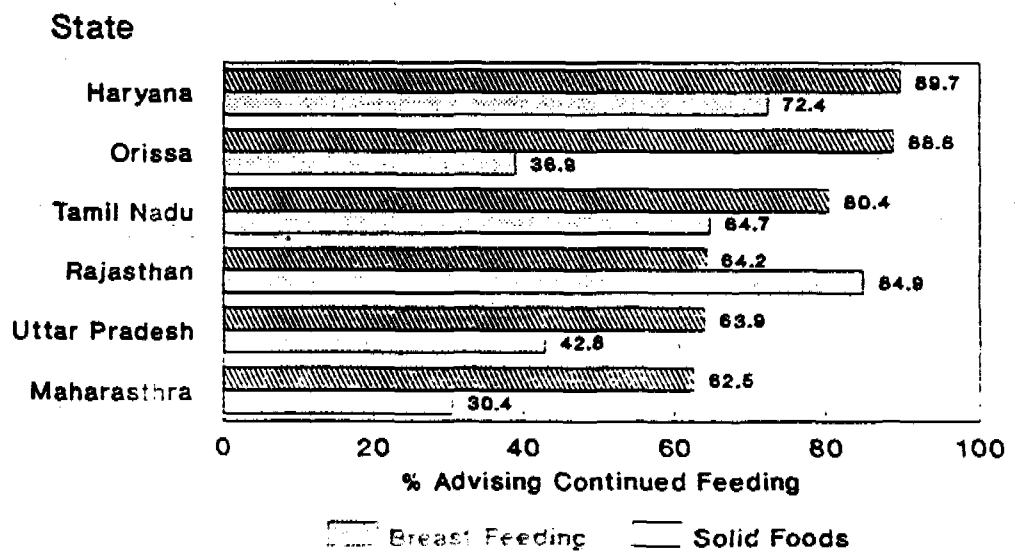


Figure 10.15
Feeding During Diarrhoea:
Advice by Private Practitioners



10.6. Increasing fluids during diarrhoea

Health workers, medical officers, and private practitioners were all asked if they advised mothers to give increased fluids when their children had diarrhoea. There was a wide variation in the pattern of responses to this question. Tamil Nadu was the State with the highest percentage of health providers stating that they advocated increased fluids; 67.2 per cent health workers (Figure 10.17), 88.3 per cent of medical officers (Figures 10.18), and 83.3 per cent of private practitioners (Figure 10.16) stated that they gave this advice to mothers. (It is surprising, therefore, to find that Tamil Nadu is the State with the lowest increased fluid rate in the household survey).

The State ranking lowest in response to this question was Orissa, where none of the 33 medical officers or 18 private practitioners interviewed said that they advised increase in fluids; only two of the 47 health workers interviewed in Orissa said that they gave this advice.

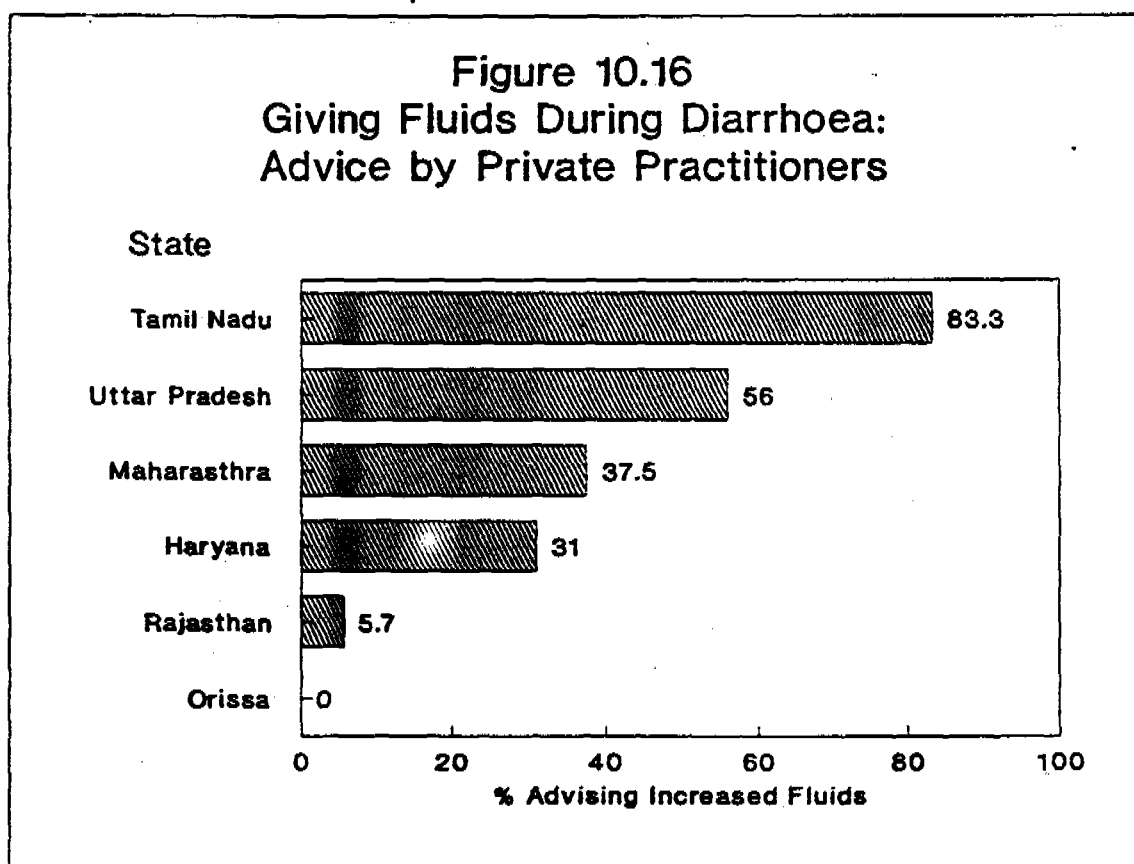


Figure 10.17
Giving Fluids During Diarrhoea:
Advice by Health Workers

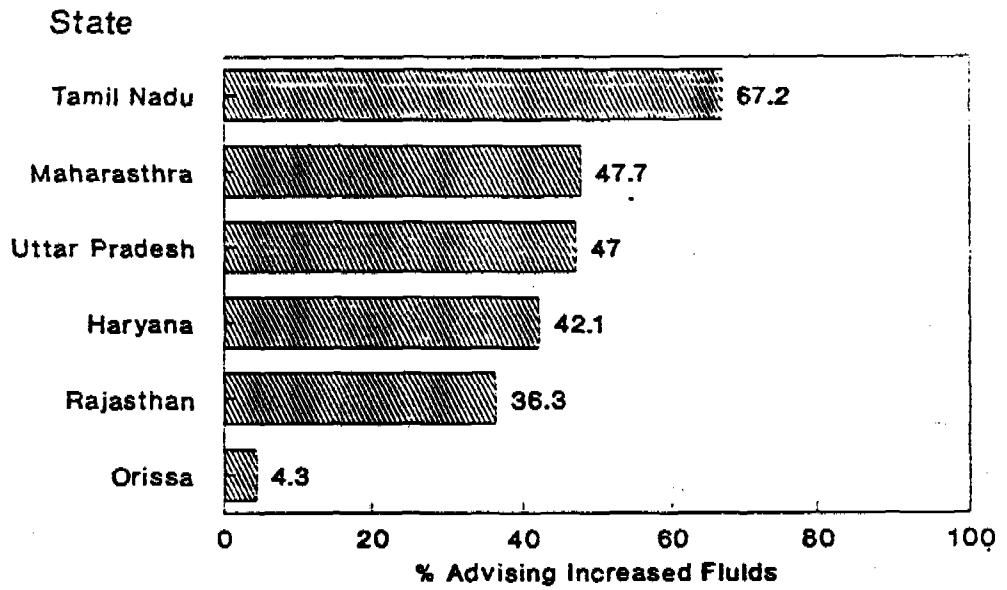
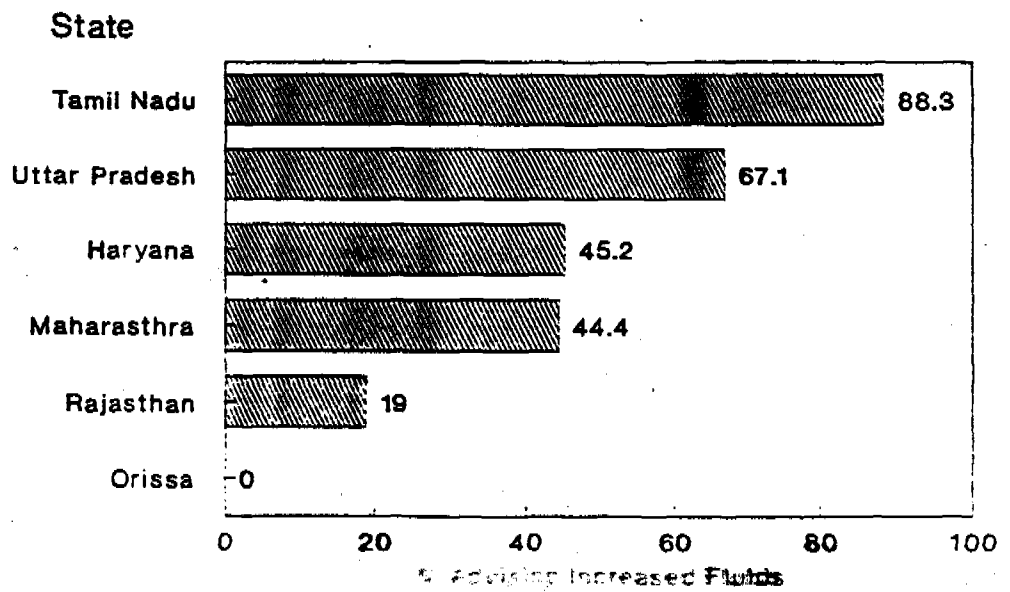
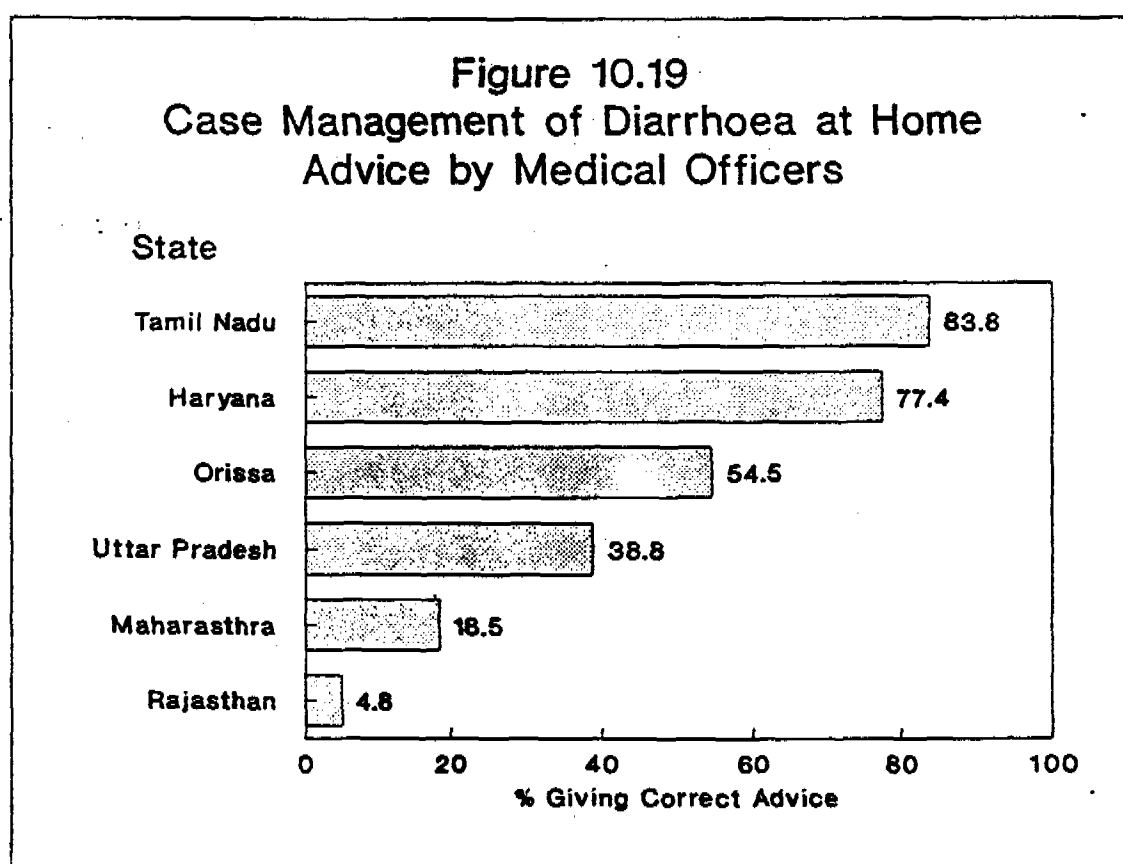


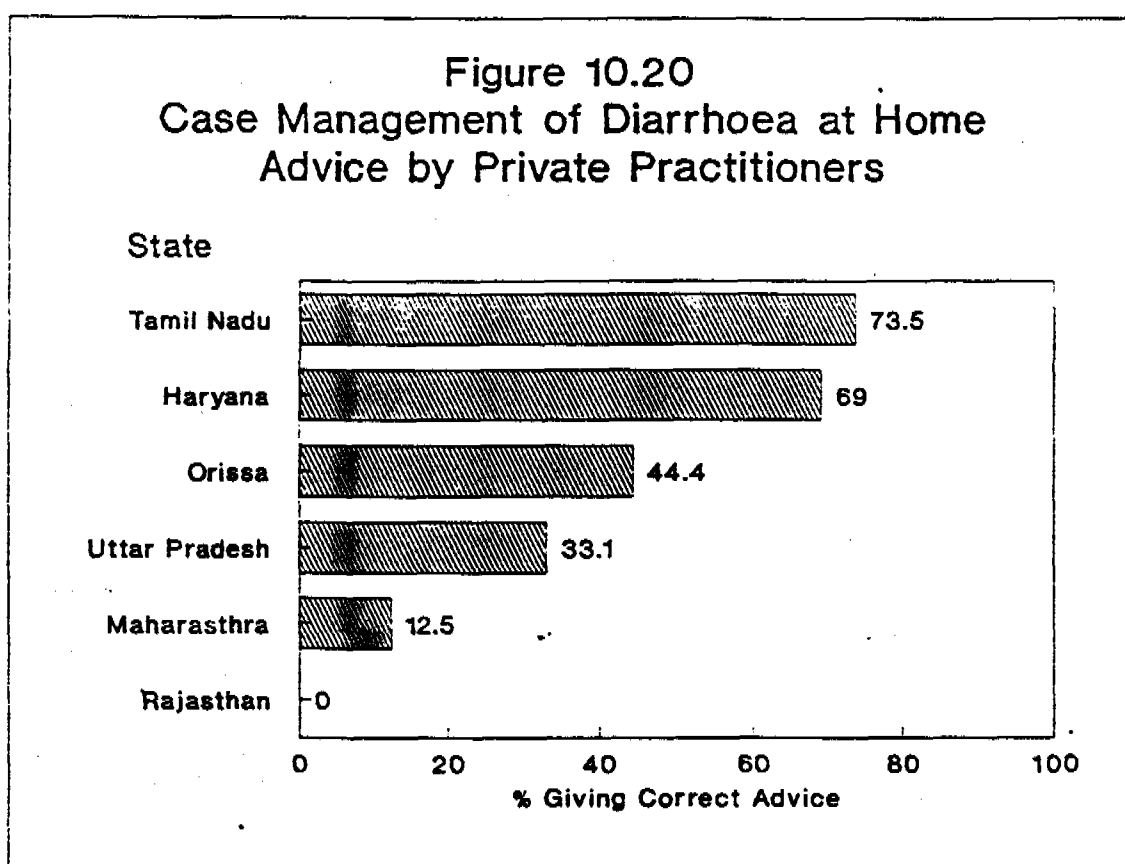
Figure 10.18
Giving Fluids During Diarrhoea:
Advice by Medical Officers



10.7. Case management of diarrhoea in the home

Medical officers and private practitioners were asked what mothers should be told about treating diarrhoea at home in the future. Correct answers to this open-ended question were those which included all of the following: continued breastfeeding (or continued feeding, for older infants and children), giving increased fluids, and advice about when the mother should seek medical help (in case of blood in the stools, in case of dehydration, etc.). There was wide variation among the States in the responses to this question, but the pattern of responses was remarkably similar between medical officers and private practitioners within the same State. The State with the highest percentage of providers giving correct advice was Tamil Nadu, where 83.8 per cent of medical officers (Figure 10.19) and 73.5 per cent of private practitioners (Figure 10.20) mentioned all the three aspects of case management of diarrhoea in the home. The State with the lowest response rate was Rajasthan, where only 4.8 per cent of medical officers and none of the 53 private practitioners interviewed mentioned all the three aspects of case management.





10.8. ORS supplies at health facilities

Health facilities were visited by both sets of interviewers working on the survey; a sampling of medical colleges, district hospitals, community health centres and primary health centres was visited by the doctor-interviewers, while the more peripherally-located sub-centres, each of which serving on an average a population of 5000, were visited by the team of investigators alongwith supervisor who also conducted the household survey.

It is very difficult to generalize about the findings reported from the larger health centres (Figure 10.21), because they represent a mixed group of institutions, except to say that the States with reported shortages of ORS in large health facilities did not necessarily have shortages at the lowest units, i.e., the sub-centres (Figure 10.22). It is discouraging to note that the States with a large number of health facilities reporting chronic shortages of ORS - Orissa, Uttar Pradesh and Rajasthan - are States which manufacture ORS for commercial use.

On the spot checking of ORS supplies at health centres during the survey showed that sub-centres were more likely to have exhausted their stocks of ORS than larger health centres (Figure 10.23). Also the States reporting chronic shortages of ORS at health facilities and sub-centres tended to be those that were also short of ORS on the day of the survey.

Surveyors found that larger health centres in two of the six States had a high percentage of damaged and spoiled packets (Figure 10.24): Tamil Nadu (87%) and Maharashtra (53%). Haryana was the only State with a large percentage of damaged or spoiled packets reported in sub-centres.

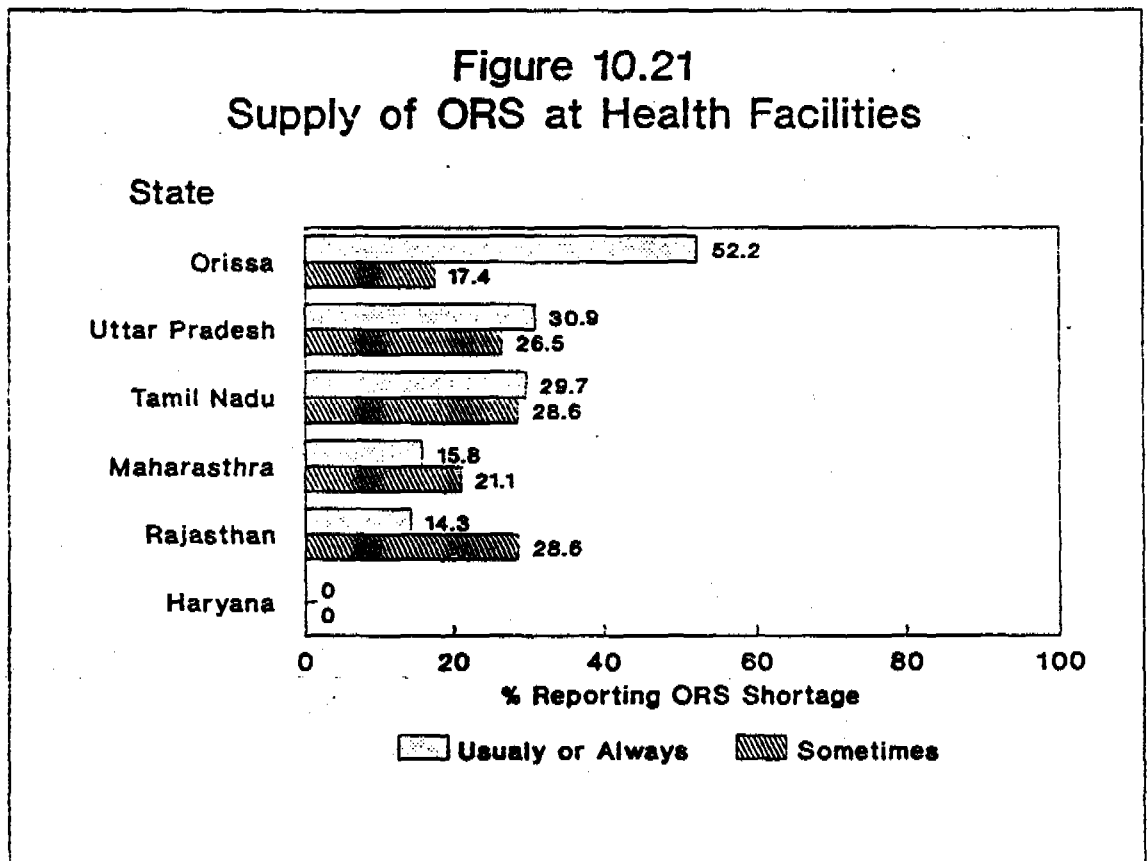


Figure 10.22
Supply of ORS at Subcentres

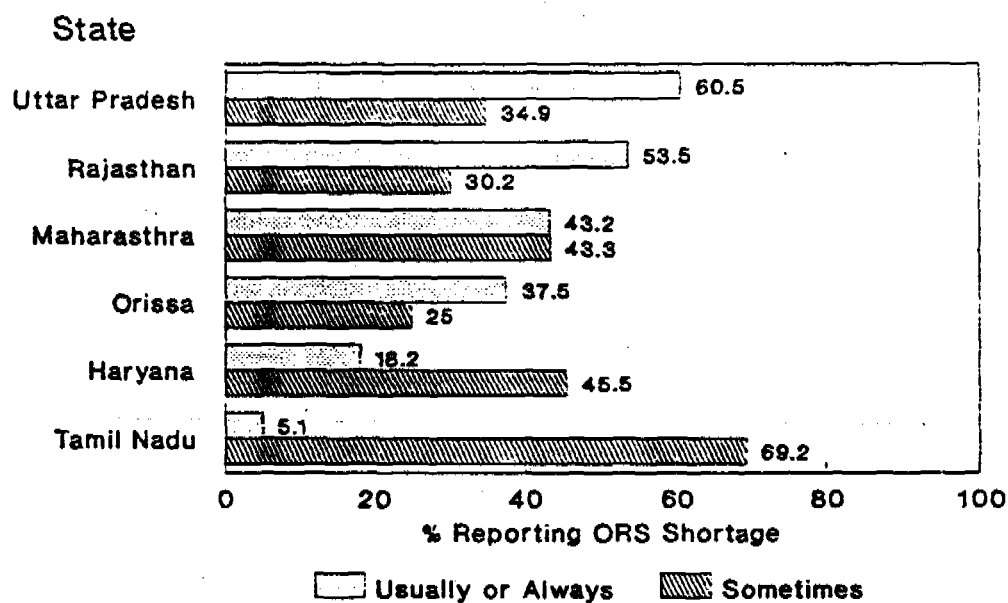


Figure 10.23
Spot Check of ORS Supply at Health Facilities and Subcentres

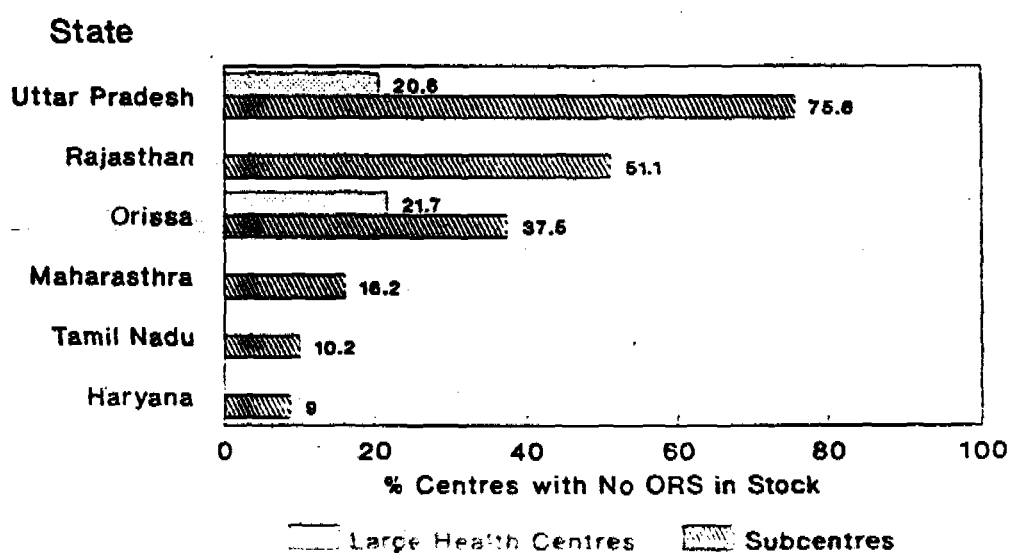
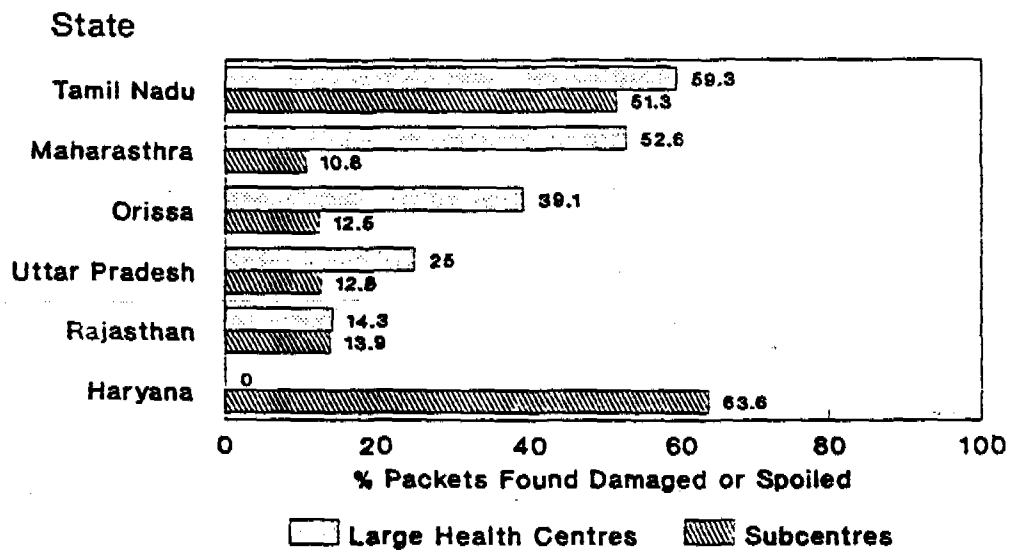
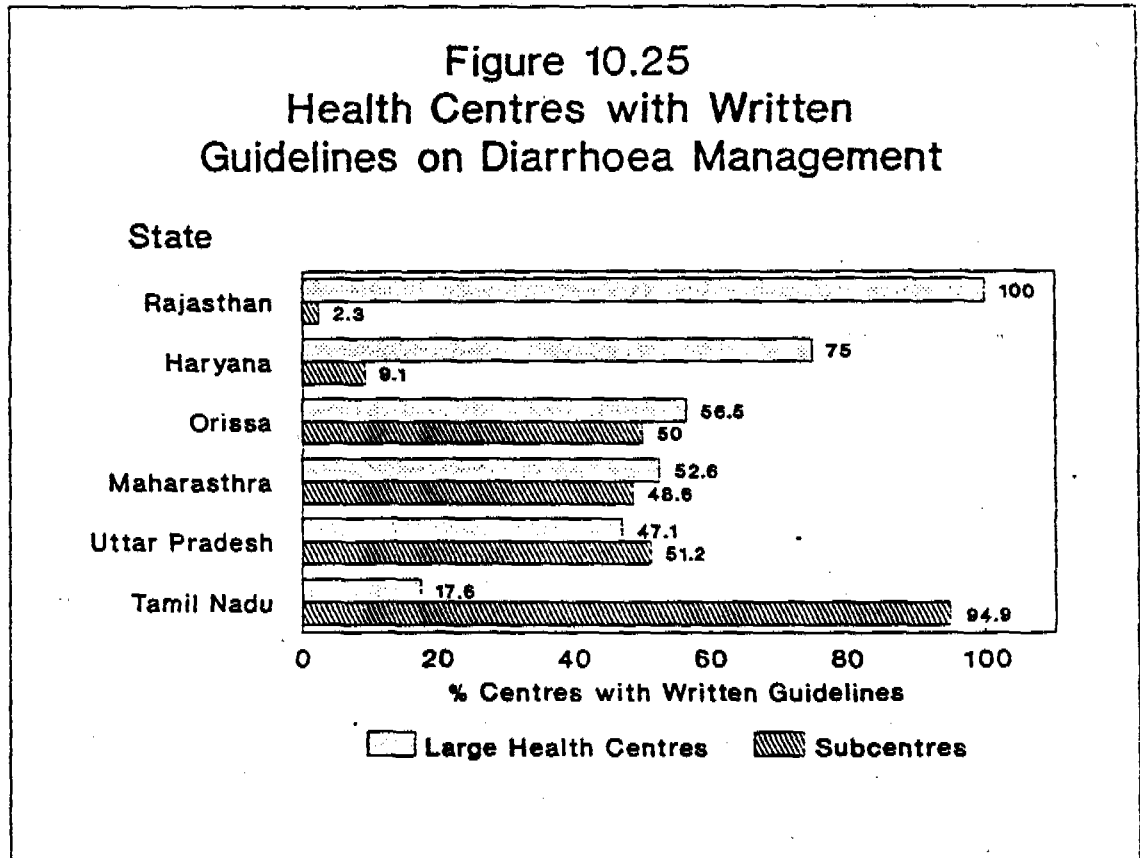


Figure 10.24
Storage of ORS Packets at
Health Facilities and Subcentres



10.9. Health Centres with written guidelines on diarrhoea management :

The States that provided their large health centres with written guidelines were not necessarily those that supplied the guidelines to sub-centres; there was no State in which a high percentage of both health centres and sub-centres were found to be having written guidelines. (Figure 10.25)



ANNEXURE 1

ESTIMATED DEATH RATES BY STATE FOR CHILDREN 0-4 YEARS
FOR THE YEAR 1984 FOR RURAL INDIA (IN DESCENDING ORDER)

STATE NAME	DEATH RATE per 1000	STRATA
1. Uttar Pradesh	66.9	1st
2. Madhya Pradesh	58.7	2nd
3. Rajasthan	55.2	
4. Orissa	49.4	
5. Bihar	48.8	3rd
6. Gujarat	45.0	
7. Assam	41.4	
8. Harayana	40.4	4th
9. West Bengal	35.5	
10. Maharashtra	31.9	
11. Tamil Nadu	31.8	
12. Jammu and Kashmir	31.8	5th
13. Karnataka	31.1	
14. Andhra Pradesh	29.9	
15. Himachal Pradesh	29.3	
16. Punjab	28.0	
17. Kerala	8.8	
ALL INDIA	46.2	

Source: S.R.S. of R.G.I.

7. Total No. of Staff at different levels:

Type of Staff	Distt. Hospital	Sub-Distt. Hospital	Dispensary	FHC	Total	
	Sanc- tion- ed on	In pos- iti- ed on	Sanc- tion- ed on	In pos- iti- ed on	Sanc- tion- ed on	In pos- iti- ed on

-Medical
Officer

Para-Medical:

-Nurses

-Block
Extension
Educator

-LHV/FHN

-A.N.Ms

-MPHW (Male)

B. Total No. of cases of Diarrhoea in Children under 5 yrs. and No. of deaths in this age-group due to diarrhoea in the last 3 years:

<u>Year</u>	<u>No. of cases</u>	<u>No. of Deaths</u>
1987-88	_____	_____
1986-87	_____	_____
1985-86	_____	_____

Note:- If these data are not available, state reasons for non-availability, would it be possible to collect this?

Note:- Collect the data available for the population as a whole if data for under 5 children is not available.

9. ORT Training

Type of Staff	Year			
	1986	1987	1988	Before 1986
Medical Officer				
Nurses				
Block Extn. Education				
LHV/PHN				
ANM				
MPHW(M)				
Total				

10. O.R.S. Details:

- i) Estimated requirement per year? _____
- ii) Which brand of ORS is being used? _____
- iii) What is the packet size used? _____
- iv) How much ORS is distributed during last quarter of the year? _____
- v) What is the frequency of distribution of ORS to districts?
 - 1. Monthly
 - 2. Quarterly
 - 3. Six monthly
 - 4. Annually
 - 5. Other (specify) _____
- vi) Details of ORS procured/distributed during the last three years

Year	ORS	
	Procured	Distributed
1987-88		
1988-89		
1989-90		

vii) Please give names and addresses of manufactures of ORS (Including small scale industries) using WHO formula in your state?

viii) How much ORS your state would like to keep to fight Diarrhoea Epidemic?

11. Expenditure under the following heads (1987-88)

<u>Items</u>	<u>Expenditure in Rs.</u>
i) Training	_____
ii) ORS	_____
iii) Health education	_____
iv) Staff	_____
v) PDL	_____
vi) Contingency	_____

12. Health Education Material prepared and used till now?

<u>Material</u>	<u>No. of Items</u>	
	<u>prepared</u>	<u>used</u>
i) Booklets	_____	_____
ii) Films	_____	_____
iii) Posters	_____	_____
iv) Flip charts	_____	_____
v) Radio Programme	_____	_____
vi) TV Programme	_____	_____
vii) Puppet shows	_____	_____
viii) Plays	_____	_____
ix) Songs	_____	_____
x) Any other (Specify)	_____	_____

INTERVIEWER: Please collect one or two copies of each of the

13. According to you what are the five major bottlenecks in carrying out this programme in your state?

14. What are the five major remedial measures would you suggest to overcome these problems?

Name of Interviewer _____

Signature of Interviewer _____

Date of Interview _____

Checked by _____ Date of checking _____

(151)

SCHEDULE-2

Time Now: _____

Date: _____

COUNCIL FOR SOCIAL DEVELOPMENT

53 Lodi Estate, New Delhi-110003

REVIEW OF ON GOING ORT PROGRAMME

SPONSORED BY MINISTRY OF HEALTH AND FAMILY WELFARE AND WHO

**SCHEDULE FOR MEDICAL OFFICER:
MEDICAL COLLEGE/DISTRICT HOSPITAL/
TALUKA HOSPITAL/CHC/PHC/DISPENSARY**

0	2	
3		1. State Name : 1. Haryana 2. Maharashtra 3. Orissa 4. Rajasthan 5. Tamil Nadu 6. Uttar Pradesh
4		2. District Name : _____
6		3. Block Name : _____
8		4. Type of Health Facility : 1. Medical College Hospital 2. District Hospital 3. Taluka Hospital 4. CHC 5. PHC (Block Level) 6. 30,000 PHC (Additional PHC) 7. Dispensary 8. Other (Specify) _____
		5. Name and Address of Health Facility _____ _____
9		6. Name of Medical Officer _____
11		6.1. Age _____
13		7. Have you been trained in management of diarrhoea? 1. Yes 2. No (If yes)
14		7.1. When? _____
16		7.2. Where? 1. District level 2. HFWTC 3. Other (Specify) _____
17		7.3. How many days' training _____
19		7.4. Type of training: 1. Theory only 2. Theory and hands on training 3. Theory and case demonstration

8. Ask the following open-ended questions. Do not read the responses given below. Encircle appropriate response codes only when the respondent mentions any of these symptoms and signs.

8.1. If a child is brought to you with the complaint that he or she has diarrhoea, how do you assess the patient?

8.1.1. What do you ask about?

20

21

22

23

24

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37

1. Diarrhoea (Stools/day)

2. Vomiting

3. Thirst

4. Urine

8.1.2. What do you look for when you examine?

1. Condition of child

2. Skin pinch

3. Sunken eyes

4. Mouth/Tongue (dry or wet)

5. Tears present or absent

6. Pulse rate

7. Fontanelle sunken
(in Infants)

8. Respiratory rate

8.1.3. What else do you do?

1. Take temperature

2. Weigh if possible

3. Check measles immunization
status

4. Other (specify) _____

9.1. How do you treat a child with diarrhoea who is not dehydrated?

(Do not read the responses given below. Encircle appropriate option(s) only when mentioned by the respondent).

- | | | | |
|----|--------------------------|----|-----------------------------------|
| 38 | <input type="checkbox"/> | 1. | ORS |
| 39 | <input type="checkbox"/> | 2. | S.S.S. |
| 40 | <input type="checkbox"/> | 3. | Other Home Fluids (specify) _____ |
| 41 | <input type="checkbox"/> | 4. | Continue Breast feeding |
| 42 | <input type="checkbox"/> | 5. | Continue Solid Foods |
| 43 | <input type="checkbox"/> | 6. | Drugs |
| 44 | <input type="checkbox"/> | 7. | No Treatment |
| 45 | <input type="checkbox"/> | 8. | Other (specify) _____ |
| 46 | <input type="checkbox"/> | | |
| 47 | <input type="checkbox"/> | | |

9.2. How do you treat a child with diarrhoea who has some dehydration?

(Do not read the responses given below. Encircle appropriate option(s) only when mentioned by the respondent).

- | | | | |
|----|--------------------------|----|-----------------------------------|
| 48 | <input type="checkbox"/> | 1. | ORS |
| 49 | <input type="checkbox"/> | 2. | S.S.S. |
| 50 | <input type="checkbox"/> | 3. | Other Home Fluids (specify) _____ |
| 51 | <input type="checkbox"/> | 4. | Continue Breast Feeding |
| 52 | <input type="checkbox"/> | 5. | Continue Solid Foods |
| 53 | <input type="checkbox"/> | 6. | Drugs |
| 54 | <input type="checkbox"/> | 7. | No Treatment |
| 55 | <input type="checkbox"/> | 8. | I.V. Therapy |
| 56 | <input type="checkbox"/> | 9. | Other (specify) _____ |
| 57 | <input type="checkbox"/> | | |
| 58 | <input type="checkbox"/> | | |

9.3 How do you treat a child with diarrhoea having severe dehydration?
(Do not read the responses given below. Encircle appropriate option(s) when mentioned by the respondent).

59	<input type="checkbox"/>
60	<input type="checkbox"/>
61	<input type="checkbox"/>
62	<input type="checkbox"/>
63	<input type="checkbox"/>
64	<input type="checkbox"/>
65	<input type="checkbox"/>

1. Admit for IV and ORT
2. Admit for IV only
3. Refer with IV in transit
4. Refer with ORT in transit
5. Refer without IV or ORT in transit
6. Other (Specify) _____

10. How do you mix ORS? (Respondent should be requested to demonstrate preparation of ORS, if possible)

66	<input type="checkbox"/>
67	<input type="checkbox"/>
68	<input type="checkbox"/>
69	<input type="checkbox"/>
70	<input type="checkbox"/>
71	<input type="checkbox"/>

Check following items:	Yes	No	* Remarks by the Investigator
i) Demonstrated	1	2	
ii) Clean container used/mentioned	1	2	
iii) Clean water used/mentioned	1	2	
iv) Correct amount of water used/mentioned	1	2	
v) Entire packet used/mentioned	1	2	
vi) ORS completely dissolved-seen/mentioned	1	2	

72	<input type="checkbox"/>	<input type="checkbox"/>
74	<input type="checkbox"/>	<input type="checkbox"/>
* 76	<input type="checkbox"/>	<input type="checkbox"/>
78	<input type="checkbox"/>	<input type="checkbox"/>

10.1. If the litre measure is not available what advice do you give for the preparation of ORS solution?

11. Could you please tell me, what are the ingredients of ORS?

- 80 1. Glucose
- 81 2. Sodium
- 82 3. Potassium
- 83 4. Bicarbonate/tricitrate
- 84 5. Others (specify) _____
- 85

12. How much ORS would you give to a 1 year old 7 kg baby with some dehydration during the first 4-6 hours of treatment?

- 86 1. _____ ml
- 90 2. As much as child will take
- 90 3. Any other (specify) _____
- 90 9. Don't know

91 12.1 (If answered in ml) Are any guidelines used to calculate the amount?

- 1. Yes 2. No 9. Not Applicable

92 12.2 (If yes) What guidelines were used?

- 1. WHO
- 2. National Diarrhoea Programme
- 3. Personal
- 4. From Training Programme
- 5. Other (Specify) _____
- 9. Not Applicable

13. Do you decide how much IV fluid should be given to a child?

- 93 1. Yes 2. No

(If No. Go to Q.No.14)

13.1 How much IV fluid would you give to a 1 year old 7 kg baby with severe dehydration during the first 3 hours of treatment?

94

1. _____ ml 2. Don't know _____

98

3. Other (Specify) _____ 9. Not Applicable

13.2 (If answered in ml) Are any guidelines used to calculate the amount?

99

1. Yes 2. No 9. NA

13.3 (If yes) What guidelines were used?

100

- 1. WHO 2. National Diarrhoea Programme
- 3. Personal 4. From Training Programme
- 5. Others (specify) _____

14. Do you refer diarrhoea cases to any other hospital?

101

1. Yes 2. No

14.1. (If yes) What are the reasons for referral?

102

103

126

15. When do you give drugs for a diarrhoea patient under 5 years?

Name of Drug

Indication

11

16

21

26

31

36

16. In your opinion what advice should be given regarding feeding during diarrhoea and after diarrhoea in a child under 5 years?

16.1. During Diarrhoea

(Read out all Items below one by one)

	Item	Stop	Decrease	Continue as usual	Increase	Other (Specify)
41	1. Breast feeding	1	2	3	4	
42	2. Bottle feeding	1	2	3	4	
43	3. Other fluids	1	2	3	4	
44	4. Solid feeds	1	2	3	4	

16.2. After Diarrhoea

(Read out all items below one by one)

	Item	Decrease	Continue as usual	Increase	Other (Specify)
45	1. Breast feeding	1	2	3	
46	2. Bottle feeding	1	2	3	
47	3. Other fluids	1	2	3	
48	4. Solid feeds	1	2	3	

17. What advice should be given to mothers about preventing diarrhoea in future?

(Do not read the responses given. Encircle appropriate option(s) only when mentioned by the respondent).

- 49 1. Drinking water should be boiled/clean
- 50 2. Wash hands (with soap) after defaecation
- 51 3. wash hands (with soap) before food preparation
- 52 4. Keep food covered
- 53 5. Keep food preparation area clean
- 54 6. Use latrine for defaecation
- 55 7. Immunize child for measles
- 56 8. Other (specify) _____
- 57
- 58

18. What should mothers be told about treating diarrhoea at home in future?

(Do not read the responses given. Encircle appropriate option(s) only when mentioned by the respondent).

- 59 1. Give more fluids
- 60 2. Continue breastfeeding (For infants)
- 61 3. Continue solid foods
- 62 4. Look for signs of dehydration
- 63 5. Look for blood in stools
- 64 6. Seek medical help immediately
- 65 7. Give ORS
- 66 8. Other (specify) _____
- 67
- 68

Time completed: _____

Name of Investigator: _____

Signature of Investigator: _____

Checked by: _____ Date of Checking: _____

Time Now: _____

Date: _____

COUNCIL FOR SOCIAL DEVELOPMENT

53 Lodi Estate, New Delhi 110003

REVIEW OF ON GOING ORT PROGRAMME

SPONSORED BY MINISTRY OF HEALTH AND FAMILY WELFARE AND WHO

SCHEDULE FOR HEALTH WORKER (PARAMEDICAL)

1	0	3
---	---	---

3	
---	--

1. State Name: 1. Haryana 2. Maharashtra 3. Orissa
 4. Rajasthan 5. Tamil Nadu 6. Uttar Pradesh

4		
---	--	--

2. District Name : _____

6		
---	--	--

3. Block Name : _____

8	
---	--

4. Type of Health Facility:

- | | |
|-----------------------------|--------------------------------|
| 1. Medical College Hospital | 2. District Hospital |
| 3. Taluka Hospital | 4. CHC |
| 5. PHC (Block Level) | 6. 30,000 PHC (Additional PHC) |
| 7. Dispensary | 8. Others (Specify) _____ |

4.1. Name & Address of Health Facility: _____

9		
---	--	--

5. Sub-Centre Name : _____

11			
----	--	--	--

6. Name of Health Worker _____

14		
----	--	--

6.1. Age of Health Worker _____

16		
----	--	--

7. Type of health worker (Designation) _____

8. If a child is brought to you with diarrhoea what questions do you ask about the diarrhoeal illness?

(Do not read the responses given below. Encircle appropriate response code only when the respondent mentions any of these symptoms and signs)

यदि आपके पास दस्त से बीमार बच्चा लाया जाये तो आप दस्तों के बारे में क्या प्रश्न पूछते हैं
(कृपया नीचे लिखे उत्तर न पढ़ें। केवल उत्तरदाता द्वारा बताये गये उत्तरों को ही घेरे के चिन्ह से घेरे)

- | | | |
|----|--|---|
| 18 | | 1. Duration of diarrhoea
दस्त की अवधि |
| 19 | | 2. No. of stools in 24 hrs
24 घंटों में दस्तों की संख्या |
| 20 | | 3. Colour of stool or bloody stool
दस्त का रंग/खुनी दस्त |
| 21 | | 4. Consistency of loose or watery stool
लगभग पतली/पानी जैसा दस्त |
| 22 | | 5. Child has fever
बच्चे को बुखार |
| 23 | | 6. Child has other illness
बच्चे को अन्य दूसरा रोग |
| 24 | | 7. Other (Specify) _____
अन्य (स्पष्ट करें) |
| 25 | | |
| 26 | | |
| 27 | | |

9. Some children get dehydrated during diarrhoea. Do you ask the mother any questions to help you decide if the child is dehydrated?

कुछ बच्चों को दस्त लगने से शरीर में पानी का कमी हो जाता है। क्या आप माँ से कुछ ऐसे प्रश्न पूछते हैं जिनके द्वारा आपको निर्णय लेने में मदद मिले कि बच्चे में पानी का कमी हो गयी है ?

- | | | |
|----|--|-----------------------------------|
| 28 | | 1. Yes 2. No |
|----|--|-----------------------------------|

9.1 (If yes) What questions do you ask?

(Do not read the responses given below. Encircle appropriate response code only when the respondent mentions any of these responses)

(यदि हाँ) आप क्या प्रश्न पूछते हैं ?

(कृपया उत्तर न पढ़ें। उत्तरदाता द्वारा बताये गये उत्तरों को ही घेरे के चिन्ह से घेरे)

29	<input type="checkbox"/>
30	<input type="checkbox"/>
31	<input type="checkbox"/>
32	<input type="checkbox"/>
33	<input type="checkbox"/>
34	<input type="checkbox"/>
35	<input type="checkbox"/>

1. No. of stools per day
प्रतिदिन दस्तों की संख्या
2. Amount of vomiting
उल्टी की मात्रा
3. Thirst (is child demanding water frequently)
प्यास (क्या बच्चा फनी जल्दी-जल्दी मांगता है)
4. Decreased or no urine
मेशाब नहीं या कम हो गया
5. Other (Specify) _____
अन्य (स्पष्ट करें)

10. What do you look for when you examine the child to help you decide if he/she is dehydrated?

(Do not read the responses given below. Encircle appropriate response code only when the respondent mentions any of these responses)

जब आप बच्चों का जांच करते हैं तो आप क्या देखते हैं जिससे कि आपको यह फैसला करने में सहायता मिलती है कि बच्चों में पानी की कमी हो गयी है

(कृपया उत्तरदाता द्वारा बताये गये उत्तरों पर ही घेरे के चिन्ह से घेरे)

36	<input type="checkbox"/>
37	<input type="checkbox"/>
38	<input type="checkbox"/>
39	<input type="checkbox"/>
40	<input type="checkbox"/>
41	<input type="checkbox"/>
42	<input type="checkbox"/>
43	<input type="checkbox"/>
44	<input type="checkbox"/>
45	<input type="checkbox"/>
46	<input type="checkbox"/>

1. Child drowsy/listless
बच्चा सुस्त/अर्ध चेतन है
2. Absence of tears
आँखों में पानी की कमी
3. Sunken eyes
धसी हुई आँखें
4. Dry mouth/tongue
सूखा मुँह या जुवान
5. Rapid breathing
जल्दी-जल्दी सांस
6. Skin pinch goes back slowly
चमड़ी खींचने पर धीरे धीरे वापिस जाना
7. Rapid pulse
नाड़ी का तेज चलना
8. Fontanelle sunken
पंसा हुआ तट्टू (सिर के ऊपर का हिस्सा)
9. Other (Specify) _____
अन्य (स्पष्ट करें)

11. What advice do you give the mother when you see a child with diarrhoea and there is no dehydration?

(Do not read the responses given below. Encircle appropriate response code only when the respondent mentions any of these responses)

आप देखते हैं कि बच्चे को दस्त की शिकायत है पर पानी की कमी नहीं है, ऐसी हालत में आप माँ को क्या सलाह देते हैं ?

(नीचे दिये गये उत्तर न पढ़ें । केवल बताये गये उत्तरों को ही घेरे के चिन्ह से घेरे)

- | | | |
|----|--|--|
| 47 | | 1. Advice on ORT
ओ. आर. टी. की सलाह |
| 48 | | 2. Advice on home fluids (increase amount, frequency, type of fluids)
घर पर प्राप्त तरल पदार्थ (मात्रा बढ़ाये, बार-बार दें, तरह-तरह के तरल पदार्थ दें) |
| 49 | | 3. Advice on diet (continue feeding, type of food)
खाने-पीने की सलाह (खाना चालू रखना, किस तरह का खाना देना) |
| 50 | | 4. Advice to give extra food after diarrhoea stops
दस्त बन्द हो जाने के बाद और भोजन देने की सलाह । |
| 51 | | 5. Continue breast feeding
माँ का दूध बराबर पिलाते रहें |
| 52 | | 6. Advice on proper weaning practices
खान-पान में सफाई रखने की सलाह |
| 53 | | 7. Advice on when to bring child back (signs of dehydration)
पानी की कमी के लक्षण नजर आने पर बच्चे को दुबारा लाने की सलाह |
| 54 | | 8. Advice on how to prevent diarrhoea (hygiene, clean food, clean water, disposal of stools)
दस्त की रोकथाम के बारे में सलाह (जैसे सफाई रखना, स्वच्छ भोजन, साफ पानी और बच्चे की टट्टी फेंकने की सही व्यवस्था) |
| 55 | | 9. Other (Specify) _____
अन्य (स्पष्ट करें) |
| 56 | | |
| 57 | | |
| 58 | | |

12. How do you treat a child with diarrhoea and some dehydration?
(Do not read the responses given below. Encircle appropriate response code only when the respondent mentions any of these responses)

आप दस्त से पीड़ित तथा पानी की मामूली कमी से पीड़ित बच्चे का किस तरीके से इलाज करते हैं ?

(कृपया उत्तर न पढ़ें)

59

1. Send home with ORS
ओ. आर. एस. के साथ घर भेजना
2. Detain for ORT at least for one hour
ओ. आर. टी. के लिये कम से कम एक घन्टा रोकना
3. Refer
अस्पताल भेजना
4. Admit
भर्ती करना
5. Other (Specify) _____
अन्य (स्पष्ट करें)

13. Do you decide how much ORS should be given to a child?

बच्चे को कितना ओ. आर. एस. देना चाहिए,
क्या इसका निर्णय आप स्वयं लेते हैं ?

1. Yes
2. No

60

(If No, Go to Q.No.14)

- 13.1 (If Yes) How much ORS would you give to a 1 year old 7 kg baby with some dehydration during the first 4-6 hours of treatment?

(यदि हाँ) एक वर्ष का बच्चा जिसका वजन 7 किलो है और जिसको मामूली पानी की कमी हो गयी है, उसे 4-6 घन्टे के इलाज में कितना ओ. आर. एस. घोल देंगे?

61

1. _____ ml

65

2. As much as child will take
उतना जितना बच्चा ले सके
3. Any other (Specify) _____
अन्य (स्पष्ट करें)
9. Don't know
जानकारी नहीं

13.2 (If answered in ml) Are any guidelines used to calculate the amount?

(यदि उत्तर मि. ली. में) ओ. आर. एस. कितनी मात्रा में देना है क्या इसके लिये आप किसी मार्ग-दर्शिका/तालिका का प्रयोग करते हैं ?

66

1. Yes 2. No 9. Not applicable

13.3 (If yes) What guidelines do you use?

(यदि हाँ) आप किसकी बनाई मार्ग-दर्शिका/तालिका का प्रयोग करते हैं ?

67

1. WHO
विश्व स्वास्थ्य संगठन
2. National Diarrhoea
राष्ट्रीय डायरिया
3. Personal
व्यक्तिगत
4. From Training Programme
प्रशिक्षण सामग्री से (प्रोग्राम)
5. Other (Specify) _____
अन्य (स्पष्ट करें)
9. Not applicable
लागू नहीं

14. What do you do with a child with diarrhoea having severe dehydration?

(Do not read the responses given below. Encircle appropriate response code only when the respondent mentions any of these responses)

जब बच्चे के शरीर में काफी पानी की कमी हो जाती है तो उस हालत में आप क्या करते हैं ? (उत्तरों को न पढ़ें)

68

1. Admit for IV and ORT
आई. वी. तथा ओ. आर. टी. के लिये भर्ती
2. Admit for IV only
केवल आई. वी. के लिये भर्ती
3. Refer with IV in transit
रास्ते में आई. वी. प्रबन्ध के साथ अस्पताल भेजना
4. Refer with ORT in transit
रास्ते में ओ. आर. टी. प्रबन्ध के साथ अस्पताल भेजना
5. Refer without IV or ORT in transit
रास्ते में आई. वी. तथा ओ. आर. टी. प्रबन्ध के बिना अस्पताल भेजना
6. Other (Specify) _____
अन्य (स्पष्ट करें)

15. Do you decide how much IV fluid should be given to a child?
 बच्चे को कितना आई. वी. घोल देना चाहिए, क्या इसका निर्णय आप स्वयं लेते हैं ?

69

1. Yes 2. No 3. Others (Specify) _____

(If No, Go to Q.No.16)

15.1 (If yes) How much IV fluid would you give to a 1 year old 7 kg baby with severe dehydration during the first 3 hours of treatment?

एक वर्ष का बच्चा, जिसका वजन 7 किलो है और जिसमें पानी का काफी कमी हो गया है उसे पहले तीन घंटों के इलाज में, आप कितना आई. वी. घोल देंगे ?

70

1. _____ ml

74

2. Don't know

3. Other (Specify) _____

9. Not applicable

15.2 (If answered in ml) Are any guidelines used to calculate the amount?

(यदि उत्तर मि. ली. में) आई. वी. घोल कितनी मात्रा में देना है क्या इसके लिये आप किसी मार्ग-दर्शिका/तालिका का प्रयोग करते हैं ?

75

1. Yes 2. No 9. NA

15.3 (If yes) What guidelines do you use?

(यदि हाँ) आप किसको बनायी मार्ग-दर्शिका/तालिका का प्रयोग करते हैं ?

76

1. WHO
दुनियाँ स्वास्थ्य संगठन
2. National Diarrhoea
राष्ट्रीय डायरिया
3. Personal
व्यक्तिगत
4. From Training Programme
प्रशिक्षण कार्यक्रम से
5. Other (Specify) _____
अन्य (स्पष्ट करें)
9. NA

16. Do you ever give drugs for a diarrhoea patient under 5 years?

दस्त लगे पाँच वर्ष के बच्चे को क्या आप कोई दवा देते हैं ?

77

1. Yes 2. No

(If No, Go to Q.No. 16.2)

16.1 (If yes) Which diarrhoea cases do you give drugs?

(Do not read the responses given below. Encircle appropriate response code only when the respondent mentions any of these responses). Write name of drug(s) recommended in column next to circled answer.

(यदि हाँ) किस तरह के दस्त में आप दवा देते हैं ? (नीचे दिये गये उत्तरों को न पढ़ें, जिन उत्तरों पर निशान लगायें, कृपया यदि दवा दी गयी हो तो उसके सामने दवा का नाम भी लिखें)

Name of Drug

78	<input type="checkbox"/>	1. Bloody diarrhoea खूनी दस्त	_____
86	<input type="checkbox"/>	2. Watery diarrhoea पतली दस्त	_____
94	<input type="checkbox"/>	3. Persistent diarrhoea न रुकने वाले दस्त	_____
102	<input type="checkbox"/>	4. Depends on stool sample दही के नमूने के आधार पर	_____
110	<input type="checkbox"/>	5. Cholera (suspect) हंजे की शंका	_____
118	<input type="checkbox"/>	6. Second diagnosis requiring drugs दूसरी जाँच में दवा की आवश्यकता	_____
14	<input type="checkbox"/>	7. All cases of Diarrhoea सब प्रकार के दस्तों में	_____
22	<input type="checkbox"/>	8. Other (Specify) अन्य (स्पष्ट करें)	_____
30	<input type="checkbox"/>	9. Not Applicable लागू नहीं	_____

16.2. (If No to Q.No.16) Please specify the reasons
कृपया कारण स्पष्ट करें

38		
40		

17. Please show me how you prepare ORS? (Should be requested to demonstrate preparation of ORS)
कृपया आप ओ. आर. एस. घोल बना कर दिखायें।

Check following items :

		Yes	No	*Remarks by the Investigator
42	<input type="checkbox"/>	1	2	(i) Clean water used साफ पानी प्रयोग किया
43	<input type="checkbox"/>	1	2	(ii) Clean container used स्वच्छ बर्तन प्रयोग किया
44	<input type="checkbox"/>	1	2	(iii) Entire packet used पूरा पैकेट प्रयोग किया
45	<input type="checkbox"/>	1	2	(vi) ORS completely dissolved ओ. आर. एस. पूरी तरह घुल गया
46	<input type="checkbox"/>	1	2	(v) Were the Respondent's hand clean क्या उत्तरदाता के हाथ स्वच्छ थे
*R 47	<input type="checkbox"/>			

(NOTE FOR THE INVESTIGATOR: POUR THE SOLUTION INTO YOUR MEASURING CONTAINER AND RECORD THE QUANTITY OF FLUID)

49				
----	--	--	--	--

17.1. Quantity of fluid measured by the Investigator _____ (ml.)

53		
----	--	--

17.2. If the litre measure is not available what advice do you give for the preparation of ORS solution?

यदि लीटर-मापक बर्तन नहीं है तो आप ओ. आर. एस. घोल तैयार करने के लिए पानी मापने की क्या सलाह देंगे ?

55		
----	--	--

18. In your opinion, what advice should be given regarding feeding during diarrhoea and after diarrhoea in a child under 5 years.

पाँच वर्ष से कम उम्र के बच्चे को दस्त लगने के दौरान तथा दस्त लगने के बाद आप खान-पान के बारे में क्या सलाह देंगे ?

18.1 During diarrhoea

दस्त के दौरान (एक के बाद एक पढ़ें)

एक के बाद एक पढ़ें

(Read out items one by one)

Item	Stop	Decre- ase	Conti- nue as usual	Incre- ase	Others (specify)
57 <input type="checkbox"/> Breast feeding स्तन-पान कराना/माँ का दूध	1	2	3	4	
58 <input type="checkbox"/> Bottle feeding बोतल का दूध देना	1	2	3	4	
59 <input type="checkbox"/> Other fluids अन्य तरल पदार्थ	1	2	3	4	
60 <input type="checkbox"/> Solid feeds ठोस तरल पदार्थ	1	2	3	4	

18.2 After diarrhoea

दस्त लगने के बाद

एक के बाद एक पढ़ें

(Read out items one by one)

Item	Decre- ase	Conti- nue as usual	Incre- ase	Others (specify)
61 <input type="checkbox"/> Breast feeding स्तन-पान कराना/माँ का दूध	1	2	3	
62 <input type="checkbox"/> Bottle feeding बोतल का दूध देना	1	2	3	
63 <input type="checkbox"/> Other fluids अन्य तरल पदार्थ	1	2	3	
64 <input type="checkbox"/> Solid feeds ठोस तरल पदार्थ	1	2	3	

Training

19. Did you receive any special training in management of diarrhoea?

क्या आपने दस्त की बीमारी के उपचार संबंधित कोई विशेष ट्रेनिंग/प्रशिक्षण प्राप्त किया है ?

1. Yes

2. No

65

(If Yes):

66

19.1 What course ? _____ When? _____

कौन सा पाठ्यक्रम

कब

67

69

19.2 How long was the course? _____

पाठ्यक्रम कितने समय का था ?

71

19.3 Approximately how many cases of diarrhoea did you manage during the course? _____

प्रशिक्षण के दौरान आपने दस्त से पीड़ित कितने बच्चों की देख-रेख की ?

126

 2

Date of Interview: _____

Name of Investigator: _____ Signature: _____

Checked by: _____ Signature: _____

Date of checking: _____

Time finishing : _____ Time taken for interview: _____

COUNCIL FOR SOCIAL DEVELOPMENT

53 Lodi Estate, New Delhi-110003

REVIEW OF ON GOING ORT PROGRAMME

SPONSORED BY MINISTRY OF HEALTH AND FAMILY WELFARE AND WHO

SCHEDULE FOR ASSESSMENT OF SUPPLIES AND FACILITIES

0	4	1. State Name : 1. Haryana 2. Maharashtra 3. Orissa 4. Rajasthan 5. Tamil Nadu 6. Uttar Pradesh
3		
4		2. District Name : _____
6		2.1. Block Name : _____
8		3. Type of Facilities : 01. Medical College 02. Infectious Diseases Hospital 03. District Hospital 04. Dispensary 05. Taluka Hospital 06. CHC 07. PHC (Block Level) 08. PHC 30,000 (Additional PHC) 09. Private Nursing home 10. Other (Specify) : _____
10		3.1. Name and Address of Facility: _____ _____ _____
		4. Name of Respondent: _____
13		4.1. Age of Respondent: _____
15		4.2. Designation of Respondent: _____

5 Facilities		Yes	No		
16	5.1 Is there an ORT corner (separate area where mothers can sit and practise ORT under supervision) (If No, go to 5.2)	1	2		
17	5.1.1 Is there adequate space in the treatment area?	1	2		
18	5.1.2 Is there sufficient furniture for giving Oral Rehydration Therapy?	1	2		
19	5.2 Are there facilities for mothers to wash hands?	1	2		
20	5.3 Are there latrines for patients?	1	2		
6. Equipment/Supplies (9 for N.A.)		Never	Some- times	Always or most times	NA
21	6.1 Do you ever run out of ORS packets/or ORS ingredients?	1	2	3	
	6.2 If there is an ORT corner, do you ever run out of:				
22	- Cups?	1	2	3	9
23	- Spoons?	1	2	3	9
24	- Measuring and mixing utensils?	1	2	3	9
	6.3 If facility provides Intravenous Therapy, do you ever run out of:				
25	- I.V.Fluids	1	2	3	9
26	- Infusion sets?	1	2	3	9
27	6.4 Do you ever run out of stationery for record-keeping?	1	2	3	
28	6.5 If facility receives health education material on diarrhoea, do you ever run out of such material?		2	3	9

7. Are anti-diarrhoeal drugs used at your health facility?

29

30

32

34

36

38

40

42

44

1. Yes 2. No

7.1. (If Yes) please specify the drugs:

1. _____ 2. _____
3. _____ 4. _____
5. _____ 6. _____

46

48

50

52

8. What are the I.V. fluids used in your hospital for treating Diarrhoeal dehydration? (Specify) _____

54

9. Is there a weighing scale that works? 1. Yes 2. No

55

10. Does the facility have written guidelines for assessment and treatment of diarrhoea/dehydration 1. Yes 2. No

56

10.1 (If yes) Please show me the guidelines? 1. Shown 2. Not shown

57

11. Check if ORS/ ORS ingredients are stored properly 1. Properly 2. Improperly 3. Others (Specify) _____

58

11.1 Check if there are any damaged or spoiled ORS packets/ORS ingredients in the Store 1. None 2. Some 3. All 4. Others (Specify) _____

12. Staff

59

12.1 Is there sufficient number of staff to handle diarrhoea cases? 1. Yes 2. No

13. Referral (in case of facility categories 4 to 9 in Q.No.3)

60

13.1 Do you refer cases of diarrhoea? 1. Yes 2. No

61

13.2 (If yes) Are there any problem with referral 1. Yes 2. No 9. NA

62 13.3 (If yes) Specify the problems _____
64

66 14. Do you have Health Education Material on ORT? 1. Yes 2. No
(If yes)

67 14.1 (a) Are they displayed? 1. Yes 2. No 9. NA

68 14.2 (b) Are they distributed to patients? 1. Yes 2. No 9. NA

FOR QUESTION NOS. 15 TO 17 - PLEASE REFER TO THE RECORDS AT THE FACILITY AND RECORD THE FOLLOWING INFORMATION FOR THE LAST 12 CALENDER MONTHS - (WRITE DOWN THE EXACT PERIOD _____)

69 15. Total no. of cases seen _____

74 15.1 Total no. of cases under 5 years _____

79 16. Total no. of cases of diarrhoea seen _____

84 16.1 Total no. of cases of diarrhoea under 5 years _____

88 17 Total no. of diarrhoea cases in which ORS was used _____

92 17.1 Total no. of diarrhoea cases in which IV fluids were used? _____

96 17.2 Total no. of diarrhoea cases in which drugs were used? _____

100 18. Total deaths due to diarrhoea _____

103 18.1 Total deaths due to diarrhoea under 5 years _____

126 Investigator's comments on Record keeping about diarrhoea _____

19. From available case records (clinic cards or daily register) randomly, select 10 cases of diarrhoea of less than 5 years of age seen during the last 3 months and complete as much as possible of the following table:

Case	Dehydration Status recorded			Treatment given at the health facility			
	Yes (Tick if recorded)	(If Yes, write degree)	If other diagnoses besides dehydration (Specify)	1. ORS (Tick if given)	2. IV (Tick if given)	3. Drugs (Tick if given)	(If drugs given, specify)
13-28 1	•	••	••••• (Specify)	•	•	•	•••••
29-44 2							
45-60 3							
61-76 4							
77-92 5							
93-108 6							
109-124 7							
13-28 8							
29-44 9							
45-60 10							

61 20. Is there laboratory facility for identification of the causative organism? 1. Yes 2. No

62 20.1 Is there facility to conduct sensitivity test? 1. Yes 2. No

20.2 (If yes for both the above questions) Write down the two most common organisms isolated.

63

65

Date of Interview: _____

Name of Investigator: _____ Signature: _____

Checked by: _____ Signature : _____

Date of checking : _____

COUNCIL FOR SOCIAL DEVELOPMENT

53 Lodi Estate, New Delhi-110003

REVIEW OF ON GOING ORT PROGRAMME

SPONSORED BY MINISTRY OF HEALTH AND FAMILY WELFARE AND WHO

**SCHEDULE FOR ASSESSMENT OF SUPPLIES AND FACILITIES
(FOR SUB-CENTRE ONLY)**1 3 1. State Name : 1. Haryana 2. Maharashtra 3. Orissa
4. Rajasthan 5. Tamil Nadu 6. Uttar Pradesh4 2. District Name : _____6 3. Block Name: _____8 4. PHC Name: _____10 5. Sub-Centre Name: _____

6. Respondent Name: _____

7. Equipment/Supplies (9 for N.A.)

Never

Some-
timesAlways
or most
times

NA

12 7.1 Do you ever run out of ORS
packets/or ORS ingredients? 1 2 3 913 7.2 If facility receives health
education material on diarrhoea,
do you ever run out of such
health material? 1 2 3 914 7.2.1 Are they displayed 1. Yes 2. No 9. NA

- 15 7.2.2 Are they distributed to patients? 1. Yes 2. No 9. NA
8. Are anti-diarrhoeal drugs used at your health facility?
- 16 1. Yes 2. No
- 17 8.1. (If Yes) please specify the drugs:
- 19 1. _____ 2. _____
- 21 3. _____ 4. _____
- 23 5. _____ 6. _____
- 25
- 27
- 29 9. Is there a weighing scale that works? 1. Yes 2. No
- 30 10. Does the facility have written guidelines for assessment and treatment of diarrhoea/dehydration 1. Yes 2. No
- 31 10.1 (If yes) Please show me the guidelines? 1. Shown 2. Not shown
- 32 11. Check if ORS is stored properly 1. Properly 2. Improperly
3. Do not have ORS
- 33 11.1 Check if there are any damaged or spoiled ORS packets in the store 1. None 2. Some 3. All
9. NA
12. Referral
- 34 12.1 Do you refer cases of diarrhoea? 1. Yes 2. No
- 35 12.2 (If yes) Are there any problems with referral 1. Yes 2. No 9. NA

36		
38		
40		

12.3 (If yes) Specify the problems _____

FOR QUESTION NOS. 13 TO 14 - PLEASE REFER TO THE RECORDS AT THE FACILITY AND RECORD THE FOLLOWING INFORMATION FOR THE LAST 12 CALENDER MONTHS (WRITE THE EXACT PERIOD _____)

42				
----	--	--	--	--

13. Total no. of cases seen _____

46				
----	--	--	--	--

13.1 Total no. of cases under 5 years _____

50				
----	--	--	--	--

14. Total no. of cases of diarrhoea seen _____

54				
----	--	--	--	--

14.1 Total no. of cases of diarrhoea under 5 years _____

Date of Interview: _____

Name of Investigator: _____ Signature: _____

Checked by: _____ Signature : _____

Date of checking : _____

10. Ask the following open-ended questions. Do not read the responses given below. Encircle appropriate response codes only when the respondent mentions any of these symptoms and signs.

10.1 If a Child is brought to you with the complaint that he or she has diarrhoea, how do you assess the patient?

10.1.1 What do you ask about?

- 18 1. Diarrhoea (Stools/day)
- 19 2. Vomiting
- 20 3. Thirst
- 21 4. Urine

10.1.2 What do you look for when you examine?

- 22 1. Condition of Child
- 23 2. Skin pinch
- 24 3. Sunken eyes
- 25 4. Mouth/Tongue (dry or wet)
- 26 5. Tears present or absent
- 27 6. Pulse rate
- 28 7. Fontanelle depression (in Infants)
- 29 8. Respiratory rate

10.1.3 What else do you do?

- 30
- 31 1. Take temperature
- 32 2. Weigh if possible
- 33 3. Check measles immunization status
- 34 4. Other (specify) _____
- 35
- 36
- 37

11. How do you treat a child with diarrhoea who is not dehydrated?

(Do not read the responses given below. Encircle appropriate responses only when the respondent mentions any of these responses)

- 38
- 39
- 40
- 41
- 42
- 43
- 44
- 45
- 46
- 47

- 1. ORS
- 2. S.S.S.
- 3. Other Home Fluids (Specify) _____
- 4. Continue Breast feeding (Infants only)
- 5. Continue Solid Foods
- 6. Drugs
- 7. No Treatment
- 8. Other (specify) _____

11.1 How do you treat a child with diarrhoea who has some dehydration?

(Do not read the responses given below. Encircle appropriate response code only when the respondent mentions any of these responses)

- 48
- 49
- 50
- 51
- 52
- 53
- 54
- 55
- 56
- 57
- 58
- 59

- 1. ORS
- 2. S.S.S.
- 3. Other Home Fluids (Specify) _____
- 4. Continue Breast Feeding (Infants only)
- 5. Continue Solid Foods
- 6. Drugs
- 7. No Treatment
- 8. I.V. Therapy
- 9. Other (specify) _____

11.2 What do you do with a child with diarrhoea having severe dehydration?

(Do not read the responses given below. Encircle appropriate response code only when the respondent mentions any of these responses)

60

- 1. Admit for IV and ORT
- 2. Admit for IV only
- 3. Refer with IV in transit
- 4. Refer with ORT in transit
- 5. Refer without IV or ORT in transit
- 6. Other (Specify) _____

12. Are you aware of Oral Rehydration Salt (ORS)?

61

- 1. Yes 2. No

(If No, go to Q.No.14)

12.1. How do you mix ORS (Govt./Commercial)? (Should be requested to explain preparation of ORS or commercial brand he/she recommends)

62

12.2. If commercial brand write down the name _____

12.3. Check following items and encircle yes if explained correctly

64

i. Clean container mentioned Yes No *Remarks by the Investigator

65

ii. Clean water mentioned 1 2

66

iii. Correct amount of water mentioned 1 2

67

iv. ORS completely dissolved 1 2

68

v. Correct amount of powder used mentioned 1 2

69

12.4. If the litre measure is not available what advise do you give for the preparation of ORS solution?

71

73

75

12.5. What are the ingredients of Oral Rehydration Salt?

77
78
79
80
81
82

1. Glucose
2. Sodium
3. Potassium
4. Bicarbonate/Tricitrate
5. Other (Specify) _____

13. Do you estimate the quantity of ORS that should be given to a child within a particular time period?

83

1. Yes
2. No

(If No, Go to Q.No.14)

13.1 (If yes) How much ORS would you give to a 1 year old 7 kg baby with some dehydration during the first 4-6 hours of treatment?

84
88

1. _____ ml
2. As much as child will take
3. Other (Specify) _____
9. Don't know

13.2 (If answered in ml) Are any guidelines used to calculate the amount?

89

1. Yes
2. No

13.3 (If yes), What guidelines do you use?

90

1. WHO
2. National Diarrhoea Programme
3. Personal
4. From Training Programme
5. Others (Specify) _____

14. When do you give drugs for a diarrhoea patient under 5 years?

	<u>Name of Drug</u>	<u>Indication</u>
91	<input type="checkbox"/>	
96	<input type="checkbox"/>	
101	<input type="checkbox"/>	
106	<input type="checkbox"/>	
111	<input type="checkbox"/>	
116	<input type="checkbox"/>	

126 15. In your opinion what advice should be given on feeding during diarrhoea and after diarrhoea in a child under 5 years?

15.1 During Diarrhoea

(Read out all items below one by one)

	Item	Stop	Decre- ase	Continue as usual	Incre- ase	Other (specify)
14 <input type="checkbox"/>	1. Breast feeding	1	2	3	4	
15 <input type="checkbox"/>	2. Bottle feeding	1	2	3	4	
16 <input type="checkbox"/>	3. Other fluids	1	2	3	4	
17 <input type="checkbox"/>	4. Solid feeds	1	2	3	4	

15.2 After Diarrhoea

(Read out all items below one by one)

	Item	Decrease as usual	Continue as usual	Increase	Other (specify)
18 <input type="checkbox"/>	1. Breast feeding	1	2	3	
19 <input type="checkbox"/>	2. Bottle feeding	1	2	3	
20 <input type="checkbox"/>	3. Other fluids	1	2	3	
21 <input type="checkbox"/>	4. Solid feeds	1	2	3	

16. What advice should be given to mothers about preventing diarrhoea in future?

(Do not read the responses given. Encircle appropriate response code only when the respondent mentions any of these responses)

- 22 1. Drinking water should be boiled/clean
- 23 2. Wash hands (with soap) after defaecation
- 24 3. Wash hands (with soap) before food preparation
- 25 4. Keep food covered
- 26 5. Keep food preparation area clean
- 27 6. Use latrine for defaecation
- 28 7. Immunize child for measles
- 29 8. Other (specify) _____
- 30
- 31

17. What should mothers be told about treating diarrhoea at home in future?

(Do not read the responses given. Encircle appropriate option(s) only when mentioned by the respondent).

- 32 1. Give more fluids
- 33 2. Continue breast feeding
- 34 3. Continue solid foods
- 35 4. Look for signs of dehydration
- 36 5. Look for blood in stools
- 37 6. Seek medical help immediately
- 38 7. Give ORS
- 39 8. Other (specify) _____
- 40
- 41

Date of Interview: _____

Name of Investigator: _____ Signature: _____

Checked by: _____ Signature: _____

Date of checking: _____

COUNCIL FOR SOCIAL DEVELOPMENT

53 Lodi Estate, New Delhi-110003

REVIEW OF THE ON GOING ORT PROGRAMME

SPONSORED BY MINISTRY OF HEALTH AND FAMILY WELFARE AND WHO

SCHEDULE FOR PHARMACIST

1

3

4

6

8

11

14

16

19

22

25

28

31

1. State Name: 1. Haryana 2. Maharashtra 3. Orissa
 4. Rajasthan 5. Tamil Nadu 6. Uttar Pradesh

2. District Name: _____

3. Block Name: _____

4. Ward Name/PHC Name: _____

5. Name of Respondent: _____

5.1. Age: _____

6. Name of Shop: _____

7. When any customer comes to you with a complaint of diarrhoea in a child under 5 years and asks for a remedy, which remedy do you suggest?

7a. Name of Remedy	7b. Please ask the Pharmacist which ones are Oral Rehydration Salt?	
	1. Yes	2. No
(a)	1	2
(b)	1	2
(c)	1	2
(d)	1	2
(e)	1	2
(f)	1	2

8. (If no to all items above) Do you stock Oral Rehydration Salt (ORS)?

34

1. Yes 2. No 9. NA

9. (If No) Would you please give reasons for not stocking the ORS?

35

37

39

10. (If Yes to any item to Q.7b or yes in Q.8 otherwise go to Q.No.11)

10.1 What are the ingredients of Oral Rehydration Salt?

41

(1) Glucose

42

(2) Sodium

43

(3) Potassium

44

(4) Bicarbonate/tricitrate

45

46

(5) Others (specify) _____

10.2. Do you explain to the customers how to prepare ORS Solution (Govt./Commercial)?

47

1. Yes 2. No 9. NA

48

10.3. If commercial brand, write down the name _____

10.4. (If yes) Please explain the preparation of ORS as you would do to the customer.

50

i) Clean container mentioned

Yes 1

No 2

* Remarks by the Investigator

51

ii) Clean water mentioned

1

2

52

iii) Correct amount of water mentioned

1

2

53

iv) ORS completely dissolved mentioned

1

2

54

v) Correct amount of powder mentioned

1

2

55

57

11. What advice should be given to the customers for managing diarrhoea?

59

61

63

12. Do you give any advice on prevention of diarrhoea?

65

1. Yes 2. No

12.1. (If yes) What is the advice?

66

68

70

13. During the last six months, in which month was the sale of ORS maximum?

72

14. Please name the fastest moving ORS for use in diarrhoea (The brand which sells highest)?

74

14.1 Can you give a reason for this

76

78

15. What type of formal training have you received in Pharmacy?

80

82

126 1

Date of Interview: _____

Name of Investigator: _____ Signature: _____

Checked by: _____ Signature: _____

Date of checking: _____

COUNCIL FOR SOCIAL DEVELOPMENT

53 Lodi Estate, New Delhi-110003

REVIEW OF ON GOING ORT PROGRAMME

SPONSORED BY MINISTRY OF HEALTH AND FAMILY WELFARE AND WHO

VILLAGE SCHEDULE

1	0	9	1.	State Name:	1. Haryana	2. Maharashtra	3. Orissa
	3				4. Rajasthan	5. Tamil Nadu	6. Uttar Pradesh
4			2.	District Name	_____		
6			3.	Block Name	_____		
8			4.	PHC Name	_____		
10			5.	Sub-centre Name	_____		
12			6.	Village Name	_____		
			6.1.	Respondent's Name	_____		
13			6.2.	Respondent's Age	_____		
15			6.3.	Respondent's Designation	_____		
17			6.4.	No. of houses in the village	_____		
				गाँव में मकानों की संख्या			
21			6.5.	Population of the village	_____		
				गाँव की जनसंख्या			
26			6.5.1.	Year of Enumeration	_____		
				जन्म-गणना वर्ष			

7. Access to health worker/facilities commonly used by local people (code "00" km. if available within or less than one kilometre from village or else distance in kilometers from the nearest one that is most commonly used).

स्थानीय लोगों के लिये स्वास्थ्य कार्यकर्ता एवं स्वास्थ्य सुविधाओं की सुविधा (यदि वे गाँव में या एक किलोमीटर के अन्दर हों तो 00 भरे अन्यथा नजदीकी सुविधा से दूरी किलोमीटर में लिखें)

	7.1. Health Facility	Distance (km.) (If not in existence write NA)	Is CRS available		
			Yes	No	NA
28	- Untrained Dai अशिक्षित दाई	_____	1	2	9
31	- Trained Dai प्रशिक्षित दाई	_____	1	2	9
34	- Village Health Guide ग्राम स्वास्थ्य रक्षक	_____	1	2	9
37	- Anganwadi Worker आंगनवाड़ी कार्यकर्ता	_____	1	2	9
40	- Female Multi-purpose Health Worker (AMK) नाहिला बहु-उद्देश्य स्वास्थ्य कार्यकर्ता	_____	1	2	9
43	- Male Multi-purpose Health Worker (MPHW) पुरुष बहु-उद्देश्य स्वास्थ्य कार्यकर्ता	_____	1	2	9
46	- Lady health Visitor (Health Assistant Female) लडी हेल्थ विजिटर	_____	1	2	9
49	- Primary Health Centre प्राथमिक स्वास्थ्य केंद्र	_____	1	2	9
52	- Government Hospital/ Dispensary सरकारी अस्पताल/औषधालय	_____	1	2	9
55	- Private hospital/ Clinic प्राइवेट अस्पताल/क्लिनिक	_____	1	2	9
58	- Drug Store ड्रग स्टोर	_____	1	2	9
61	- Registered Medical Practitioner (RMP) रजिस्टर्ड मेडिकल प्रैक्टिसर	_____	1	2	9

7.2. Recreational Facilities

Distance (Km.)
(If not in exist-
ence write NA)

64	<input type="checkbox"/>	<input type="checkbox"/>	- Primary School प्राथमिक पाठशाला	_____
66	<input type="checkbox"/>	<input type="checkbox"/>	- Middle School माध्यमिक पाठशाला	_____
68	<input type="checkbox"/>	<input type="checkbox"/>	- High/Higher Secondary School उच्च/उच्चतर पाठशाला	_____
70	<input type="checkbox"/>	<input type="checkbox"/>	- Non-formal Education Centre अनौपचारिक शिक्षा-केंद्र	_____

7.3. Infrastructural Facilities

72	<input type="checkbox"/>	<input type="checkbox"/>	- Panchayat Ghar पंचायत-घर	_____
74	<input type="checkbox"/>	<input type="checkbox"/>	- Chaupal/Community Centre चौपाल/सामुदायिक केंद्र	_____
76	<input type="checkbox"/>	<input type="checkbox"/>	- Reading Room पढ़नालय	_____
78	<input type="checkbox"/>	<input type="checkbox"/>	- Post-Office पोस्ट ऑफिस (डाकघर)	_____
80	<input type="checkbox"/>	<input type="checkbox"/>	- Electricity बिजली	_____
82	<input type="checkbox"/>	<input type="checkbox"/>	- Motorable Road फरकी सड़क	_____
84	<input type="checkbox"/>	<input type="checkbox"/>	- Bus-Stop बस-स्टॉप	_____
86	<input type="checkbox"/>	<input type="checkbox"/>	- Railway Station रेलवे-स्टेशन	_____

8. Source(s) of water:

	<u>Name of Source</u>	<u>Number</u>	<u>Number of them used for drinking water</u>
88	1. Pond पंखर	_____	_____
92	2. Tank तालाब	_____	_____
96	3. Stream/river झरना/नदी	_____	_____
100	4. Covered well ढका-कुआँ	_____	_____
104	5. Open well with parapet wall जगत्-दार खुला कुआँ	_____	_____
108	6. Step well सिँदियों वाला कुआँ/बावड़ी	_____	_____
13	7. Handpump हैन्डपम्प	_____	_____
19	8. Piped Water (Tap) नल का पानी/नल	_____	_____
25	9. Tube well ट्यूब वेल	_____	_____
29	10. Other (specify) अन्य (स्पष्ट करें)	_____	_____

33	8.1. Whether the water supply is available throughout the year? क्या बारहो महीने पानी मिलता है ?	1. Yes	2. No
34	8.2. Quantity of water supply during summer क्या गर्मियों में पानी की मात्रा कम हो जाती है या पूरी रहती है ?	1. Sufficient	2. Not Sufficient
35	8.3. Quality of water supply during summer गर्मियों में पानी गंदे मिलता है या साफ ?	1. Clean	2. Muddy

9. Drainage system

नालियों की व्यवस्था :

- 36 9.1 Is it 1. Open 2. Covered
क्या ये खुली है ढकी है
- 37 9.2 Is it 1. Kutcha 2. Pucca
क्या ये कच्ची है पक्की है
- 38 9.3 Is it 1. Stagnant 2. Running 3. Other
क्या ये रुकी हुई बहती है (specify) _____
अन्य (स्पष्ट करें)
- 39 9.4 Is it 1. Dug-pit 2. Connected 3. Linked 4. Other
क्या गन्दा पानी खुदे हुये to the with (specify) _____
गड्ढे में जाता है ? kitchen mains अन्य (स्पष्ट करें)
garden बड़ी नाली से
साग-सब्जी के जुड़ा है ?
बाग में जाता है ?
- 40 9.5 Is it maintained 1. Privately 2. Publicly
क्या इसका रख-रखाव निजी सामुहिक
निजी है या सामुहिक है ?
- 41 9.6 How often is it 1. Never 2. Sometimes 3. Regularly
cleansed? कभी नहीं कभी-कभी नियमित
कितनी बार साफ करते हैं ?
- 42 9.7 How often is it 1. Never 2. Sometimes 3. Regularly
treated with कभी नहीं कभी-कभी नियमित
larvicide
किटाणुनाशक औषधि
कितनी बार डालते हैं ?

10. General bathing practices in the village.

गाँव में नहाने की सामान्य व्यवस्था :

- 43 10.1. Do you have community bathing places? 1. Yes 2. No
क्या आपके नहाने की सामुदायिक व्यवस्था है ?
- 44 10.2. (If yes) Is this place close 1. Yes 2. No
to a source of drinking water 3. Same
(यदि हाँ) क्या यह जगह पीने वाले
पानी के स्थान के निकट है ?
- 45 10.3. Do the cattle drink water from 1. Yes 2. No
the same place?
क्या पशु भी उसी जगह से पानी पीते हैं ?
- 46 10.4. Do the cattle bathe at the 1. Yes 2. No
same place?
क्या पशु उसी जगह नहलाये जाते हैं ?

11. What do you call diarrhoea in your local dialect?
आप डायरिया (अतिसार) को अपनी बोली में क्या कहते हैं ?

47

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49

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12. Please suggest places for hoardings/Posters?

51

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डायरिया या अतिसार के विषय में किन-किन जगहों पर बोर्ड व पोस्टर लगाये जाय कृपया अपने सुझाव दें ।

53

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55

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57

--	--

Date of Interview _____

Name of Investigator _____ Signature _____

Checked by _____ Signature _____

Date of checking _____

103 6. Is there any vehicle(s) under the GRT programme?
1. Yes 2. No

104 8.1. (if Yes) Is it in running condition? 1. Yes 2. No

105 9. (If yes) Is it being used to go to districts for training purposes?
1. Yes 2. No

10. (If yes) How many visits were made during last six months? (Refer to Log book)

	Month	Number of visits
106	1. _____	_____
110	2. _____	_____
114	3. _____	_____
118	4. _____	_____
122	5. _____	_____
11	6. _____	_____

11. Is there any facility for preparation of Health Education Material in the institution?

15 1. Yes 2. No

12. (If yes) What items have been prepared? (Get a copy of each).

	List of Items
16	1. _____
18	2. _____
20	3. _____
22	

13. Number of people trained by your institution in OBT so far?

Category of people	Year	No.	Places where training was conducted

13.1. Type of training imparted:

24

1. Theory only 2. Theory and Practice

(If theory and practice) where the practice exposure is given? (Specify the institution) _____

25

26

13.2. In the training what did you use? _____

14. Any problem faced in conducting training? Please give in detail.

28

30

32

34

36

38

126 2

15. What suggestions would you like to make to improve the OBT training programme?

Date of Interview: _____ Name of Investigator: _____

Signature: _____ Checked by: _____

Signature: _____ Date of checking: _____

Time: _____

Date: _____

COUNCIL FOR SOCIAL DEVELOPMENT

53 Lodi Estate, New Delhi-110003

REVIEW OF ON GOING ORT PROGRAMME

SPONSORED BY MINISTRY OF HEALTH AND FAMILY WELFARE AND WHO

HOUSEHOLD SCHEDULE

1	1	0
3		
8		
9		
11		
13		
16		
18		
19		
22		
23		

Identification (from Enumeration Sheet) _____

1. State Name : 1. Haryana 2. Maharashtra 3. Orissa
 4. Rajasthan 5. Tamil Nadu 6. Uttar Pradesh

2. District Name : _____

3. Block Name : _____

4. Ward Name/PHC Name : _____

5. Sub-centre Name : _____

6. Village Name : _____

7. Name of the Respondent: _____

7.1 (If other than mother)
relation to mother : _____

8. Respondent's Age : _____

- 25 9. Respondent's Education:
उत्तरदाता की शिक्षा
1. Illiterate
अनपढ़
 2. Upto Primary
पाँचवीं कक्षा तक
 3. Upto Middle
आठवीं कक्षा तक
 4. Upto Matric/Higher Secondary
दसवीं कक्षा/हायर सेकेंडरी
 5. Upto Graduation
बी. ए. तक
 6. Post-graduate and above
एम. ए. और अधिक
- 26 10. Religion: 1. Hindu 2. Muslim 3. Christian
धर्म
4. Jain 5. Sikh 6. Other (Specify) _____
- 27 11. Caste: 1. Scheduled Caste 2. Scheduled Tribe
जाति
3. Other (Specify) : _____
- 28 12. Type of Family : 1. Nuclear 2. Joint
परिवार का प्रकार इकाई संयुक्त

13. Size of Family : (Record this from Enumeration Sheet)
सदस्यों की संख्या :

		Total कुल	Male पुरुष	Female स्त्री
29	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	13.1. Total Members कुल सदस्य		
35	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	13.2. Married शादीशुदा		
41	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	13.3. Children below 5 Yrs पाँच साल से कम आयु के बच्चे		

14. What is the highest level of education achieved by any male and female member in the family? (Tick separately for male and female)
आपके परिवार में पुरुषों में सबसे अधिक शिक्षा कहाँ तक है ? और महिलाओं की कहाँ तक ?

47

Level of Education	For Male	For Female
3 1. All illiterate सभी अनपढ़		
2. Upto Primary पाँचवी तक		
3. Upto Middle आठवी तक		
4. Upto Matric/ Higher Secondary मैट्रिक/हायर सेकेन्डरी		
5. Upto Graduation बी. ए. तक		
6. Post-graduate and above एम. ए. और अधिक		

15. Who is the main decision maker in the family?
परिवार में मुख्य निर्णायक/कैसला करने वाला कौन है ?

49

1. Self स्वयं 2. Spouse पति/पत्नी 3. Other (Specify) अन्य (विवरण दें)

- 15.1. Educational status of the decision maker:
निर्णायक की शिक्षा

50

1. Illiterate अनपढ़
2. Upto Primary पाँचवी तक
3. Upto Middle आठवी तक
4. Upto Matric/Higher Secondary मैट्रिक/हायर सेकेन्डरी
5. Upto Graduation बी. ए. तक
6. Post-graduate and above एम. ए. और अधिक
9. Don't know जानकारी नहीं

15.2. Main occupation of the decision maker:

निर्णायक (फैसला करने वाले) का मुख्य व्यवसाय :

51

1. No occupation/Unemployed
कुछ काम नहीं करता/बेरोजगार
2. Labour/Agricultural Labour
मजदूर/खेतीहर मजदूर
3. Cultivator
किसान
4. Service
नौकरी
5. Profession
पेफेसर, डाक्टर, बर्काल, आदि
6. Housewife
गृहणी
7. Others (specify) _____
अन्य (विवरण दे)

16. Did any child/children under 5 years suffer from diarrhoea during the last 30 days?

पिछले 30 दिनों में क्या किसी पाँच साल से कम उम्र के बच्चे को दस्त लगे थे?

52

1. Yes 2. No

(If No Go to Q.No.21)

16.1. If 'yes' then ask details as follows:

यदि लगे थे तो उसके बारे में विवरण लें :

Name of Child बच्चे का नाम	Sex 1.M बच्चा 2.F बच्ची	Age (in months) आयु (महीनों में)	When did it start?			
			Last 24 hrs. पिछले 24 घंटों से	Last 14 days पिछले 14 दिनों से	Last 15-30 days पिछले 15/30 दिनों से	More than 30 days ago पिछले 30 दिनों से भी पहले से
53						
60						
67						

ASK Q.NOS 17 TO 20 FOR EACH CHILD WITH DIARRHOEA SEPARATELY
on separate sheet

74		Name of the Child _____ बच्चों का नाम
		17. When the child had diarrhoea, what did you do? (read out the options) जब बच्चों को दस्त लगे थे तो आपने क्या किया ?
		Yes No
75		17.1. Treated at home on your own? घर में ही स्वयम् इलाज किया ?
		1 2
76		17.2. Got the advice of VHG/Health worker and then treated? ग्राम-स्वास्थ्य रक्षक/स्वास्थ्य कार्यकर्ता की सलाह ली ?
		1 2
77		17.3. Went to a Private Practitioner? गैर-सरकारी (प्रिवेट) डाक्टर के पास गये ?
		1 2
78		17.4. Went to the nearest Hospital or PHC? नजदीकी अस्पताल या प्राथमिक स्वास्थ्य-केन्द्र में गये ?
		1 2
		18. What did you give when the child had diarrhoea last? (First record the answers given by the respondent without probing. Then ask for each category ie.18.2 to 18.5 mentioned below) पिछली बार जब बच्चों को दस्त लगे तो आपने उसे क्या दिया ?
		18.1 _____ _____
79		18.2. Home remedies? (Specify) _____ घरेलू इलाज? (विवरण दें)
85		18.3. Home available fluid? (Specify) _____ घर में प्राप्त/उपलब्ध तरल-पदार्थ? (विवरण दें)
91		18.4. Home made fluid? (Specify) _____ घर में बना कर दिया गया तरल-पदार्थ (विवरण दें)
		18.5. Medicine 1. Yes 2. No दवाई
98		(If Yes) Specify the name if possible _____ यदि हाँ तो, दवाई का नाम बतायें (सम्भव हो तो)

19. Has the child had diarrhoea during the last 24 hours (from this time yesterday)?

क्या बच्चे को पिछले 24 घंटों से दस्त लगे हुये हैं ? (कल इसी समय से)

102

1. Yes 2. No

(If No go to Q.No.21)

20 Was the child breastfed before he/she got diarrhoea?

क्या बच्चा दस्त लगने से पहले माँ का दूध पी रहा था ?

103

1. Yes 2. No 3. DK 9. NA

20.1. Are you breastfeeding now or have you stopped giving the child breast milk during diarrhoea?

क्या आप अभी भी बच्चों को अपना दूध पिला रही है या दस्त लगने पर बन्द कर दिया है ?

104

1. Continued 2. Stopped 3. DK 9. NA

20.2. Was the child taking solid or semi-solid foods before the diarrhoea started?

दस्त शुरू होने से पहले क्या बच्चा ठोस या अर्ध-ठोस पदार्थ ले रहा था ?

105

1. Yes 2.No 3. DK 9. NA

20.3. Have you given more, less or same amount of food as before the diarrhoea started, or have you stopped feeding the child during the diarrhoea?

क्या आप बच्चों को उतना ही भोजन दे रही हैं जितना कि दस्त होने से पहले देती थीं, या ज्यादा दे रही हैं या उससे कम या बिलकुल बन्द कर दिया है ?

106

1. More 2. Same 3. Less 4. Stopped 5. DK 6. NA

20.4. Have you given the child anything to drink (other than breastmilk) since this time yesterday (last 24 hours)?

कल इसी समय से अब तक (पिछले 24 घंटों में) क्या आपने बच्चे को अपने दूध के अलावा कुछ अन्य तरल पदार्थ पिलाया है ?

107

1. Yes 2. No 3.DK

(If No or DK go to Q.No.20.6)

20.5. If the mother/caretaker has given any fluid (other than breastmilk) in the last 24 hours, then ask her to name all the fluids she has given including water. Write down the name of each of the fluids.

यदि बच्चे को मात्रा के दूध के अलावा पिछले 24 घंटों में कोई अन्य घोल/तरल पदार्थ (पानी भी) दिया गया हो तो प्रत्येक घोल का नाम बताएँ

108		
110		
112		
114		

20.5.1. Name of Fluid 1 _____

20.5.2. Name of Fluid 2 _____

20.5.3. Name of Fluid 3 _____

20.5.4. Name of Fluid 4 _____

20.6. Was the child drinking fluids other than breastmilk before the diarrhoea started?

क्या बच्चा दस्त लगने के पहले से ही (माँ के दूध के अलावा) कोई (तरल पदार्थ) घोल पी रहा था ?

116	
-----	--

1. Yes 2. No 3. DK

20.7. Since the diarrhoea started, have you given the child more, less or same amount of fluids (other than breastmilk)?

जब से बच्चे को दस्त लगे हैं क्या आप उसे ज्यादा, कम या उतना ही घोल दे रही हैं जितना कि पहले देती थीं ?
(माँ के दूध के अलावा)

117	
-----	--

1. More 2. Same 3. Less 4. DK

21. Do you know what this is used for? (Show Govt. ORS/ Commercial ORS packet and record exact response)

क्या आपको पता है कि यह किस लिये इस्तेमाल किया जाता है ?

118	
-----	--

1. Diarrhoea/Dehydration

2. Don't know

3. Others (Specify) _____

(If don't know go to Q.No.27)

119		
-----	--	--

21.1. If commercial packet write the name _____

यदि व्यावसायिक घोल है तो नाम लिखें

126	1
-----	---

22. From where can you get this packet and how far is the source of supply?

आप यह पैकेट कहाँ से ले सकती हैं और वह स्थान कितनी दूर है ?

	Source	Distance (Write if more than one kilometre otherwise write 00) (km.)
23	1. Health Guide	_____
25	2. Anganwadi worker	_____
27	3. Health worker	_____
29	4. PHC	_____
31	5. Chemist's shop	_____
33	6. Any other (Specify): _____	_____
35	7. Don't know	_____

37 23. Have you ever used it? 1. Yes 2. No
क्या कभी आपने इसका इस्तेमाल किया ? 3. Don't know

(If No or Don't know go to Q.No. 27)

38 24. If you bought this packet how much did you pay for it? 1. Rs. _____ 99. DK
यदि आपने यह पैकेट खरीदा था तो इसके कितने दाम दिये ?

40 24.1. Do you think the price you paid was reasonable?
क्या आप सोचती हैं कि आपने जो दाम दिये, वे उचित थे ?
1. Yes 2. No 9. DK

41 25. Do you know how to prepare a solution using this packet?
क्या आप जानती हैं कि इस पैकेट से घोल कैसे बनाया जाता है ?
1. Yes 2. No 9. NA

(If No, Go to Q.No.27)

26. (If yes) Please show me how you prepare it.
(यदि जानती है) कृपया मुझे बना कर दिखायें ?

Observations on the following in the preparation of ORS:

	Yes	No	* Remarks by the Investigator
42 <input type="checkbox"/>	1	2	26.1. Was the container clean?
43 <input type="checkbox"/>	1	2	26.2. Was the water clean?
44 <input type="checkbox"/>	1	2	26.3. Was the ORS completely dissolved?
45 <input type="checkbox"/>	1	2	26.4. Was the correct amount of powder used?
46 <input type="checkbox"/>	1	2	26.5. Were the Respondent's hands clean?
47 <input type="checkbox"/>			
49 <input type="checkbox"/>			
(NOTE FOR THE INVESTIGATOR: POUR THE SOLUTION INTO YOUR MEASURING CONTAINER AND RECORD THE QUANTITY OF FLUID)			
51 <input type="checkbox"/>			26.6 Quantity of fluid measured by the Investigator _____ (ml.)
55 <input type="checkbox"/>			26.7. How long can you keep the solution for use after it is prepared? तैयार किया हुआ घोल आप कितने समय तक इस्तेमाल के लिये रख सकती हैं ? _____
57 <input type="checkbox"/>	1. Yes	2. No	27. Do you know how to prepare sugar-salt solution? क्या आप चीनी-नमक पानी का घोल बनाना जानती है ?

(If No, Go to Q.No.30)

28. (If yes), Please show me how you prepare it.
(यदि जानती है) कृपया मुझे बना कर दिखायें ?

Observation on the following in the preparation of SSS:

	Yes	No	* Remarks by the Investigator
58 <input type="checkbox"/>	28.1. Was container clean?	1	2
59 <input type="checkbox"/>	28.2. Was water clean?	1	2
60 <input type="checkbox"/>	28.3. Was Sugar and Salt completely dissolved?	1	2
61 <input type="checkbox"/>	28.4. Were Respondent's hands clean?	1	2
62 <input type="checkbox"/>	28.5. Quantity of sugar used	_____	
64 <input type="checkbox"/>	28.6. Quantity of salt used	_____	
R* 66 <input type="checkbox"/>	(Note for Investigator: Pour the solution into your measuring container and record the quantity of fluid)		
68 <input type="checkbox"/>			
70 <input type="checkbox"/>	28.7. Quantity of fluid measured by the Investigator	_____ ml.	
	29. Have you ever used it for diarrhoea? क्या आपने इसे कभी दस्तों के लिये इस्तेमाल किया है ?		
74 <input type="checkbox"/>	1. Yes	2. No	

28. (If yes), Please show me how you prepare it.
(यदि जानती है) कृपया मुझे बना कर दिखाये ?

Observation on the following in the preparation of SSS:

	Yes	No	* Remarks by the Investigator
58 <input type="checkbox"/>	28.1. Was container clean?	1	2
59 <input type="checkbox"/>	28.2. Was water clean?	1	2
60 <input type="checkbox"/>	28.3. Was Sugar and Salt completely dissolved?	1	2
61 <input type="checkbox"/>	28.4. Were Respondent's hands clean?	1	2
62 <input type="checkbox"/>	28.5. Quantity of sugar used	_____	
64 <input type="checkbox"/>	28.6. Quantity of salt used	_____	
R* 66 <input type="checkbox"/>	(Note for Investigator: Pour the solution into your measuring container and record the quantity of fluid)		
68 <input type="checkbox"/>			
70 <input type="checkbox"/>	28.7. Quantity of fluid measured by the Investigator	_____ ml.	
	29. Have you ever used it for diarrhoea? क्या आपने इसे कभी दस्तों के लिये इस्तेमाल किया है ?		
74 <input type="checkbox"/>	1. Yes	2. No	

30. How did you get to know about home management of Diarrhoea?
(Do not read out the options)

आपको दस्त के घरेलू रोकथाम/ईलाज के तरीके की जानकारी कहाँ से मिली ?

75

01. AWW/VHG

06. Radio

77

02. Relative/friends

07. Television

03. Neighbour

08. Newspaper

04. Health Staff

09. Other (Specify) _____

05. Posters

99. DK

31. Which symptoms in diarrhoea make you worried and compel you to seek medical help? (Do not read out options)

दस्तों के दौरान किन्-किन बातों/लक्षणों से आप घबरा जाती हैं और डाक्टरी सहायता लेने के लिये मजबूर हो जाती हैं ?

Symptoms

79

1. passes many stools

कई बार दृष्टी करना

80

2. has sunken eyes

आँखें धस जाना

81

3. is very thirsty

बहुत प्यास लगना

82

4. has fever

बुखार आ जाना

83

5. does not eat or drink well

अच्छी तरह से न खाना-पीना

84

6. is not getting better

हालत में सुधार न होना

85

7. Any other (Specify) _____

अन्य (विवरण दें)

86

87

88

32. What in your opinion causes diarrhoea?

आपके विचार में, किन् कारणों से दस्त लगते हैं ?

90

33. In your opinion what should be done so that your child does not get diarrhoea?
आपके विचार से आपको क्या करना चाहिये, जिससे आपके बच्चे को दस्त न लगे ?

34. How long do you generally breast-feed your child?
बच्चे को कितनी उम्र तक, आप अपना दूध पिलाती हैं ?

_____ Months

35. At what age do you generally introduce food/fluids other than breast milk for the child? _____ Months

बच्चे को तकरीबन/प्रायः किस आयु से, माँ के दूध के अलावा, अन्य पदार्थ खाने को देती है ?

36. In case of serious illness, what mode(s) of transport do you generally use to take the patient to the health facility?

यदि आपके घर में कोई अधिक बीमार हो जाता है तो आप किस साधन/सवारी से उसे अस्पताल ले जाते हैं ?

01. Cart

02. Bicycle

03. Cycle Rickshaw

04. Auto Rickshaw/tempo

05. Tractor

06. Car/Jeep

07. Bus/Train

08. Ferry/Boat

09. Any other (Specify) _____

37. In case your child gets severe diarrhoea in the middle of the night, how will you take the child to the nearest health facility.

यदि आपकी रात को, आपके बच्चे को बहुत अधिक दस्त लग जाते हैं तो आप उसे किस तरह नजदीकी अस्पताल ले जाते हैं ?

37. Does anyone in your family:

क्या आपके परिवार में कोई :

23

37.1. Read Newspaper? 1.Never 2.Occasionally 3.Regularly
अखबार पढ़ता है

24

37.2. Watch Television? 1.Never 2.Occasionally 3.Regularly
टी. वी. देखता है

25

37.3. Listen to Radio? 1.Never 2.Occasionally 3.Regularly
रेडियो सुनता है

26

37.3.1. (If Listen):

Purpose of
listening
Radio?

1. For Music/Songs 2. News

3. Both 9. N.A.

रेडियो सुनने के उद्देश्य :

27

38. Total family income (monthly): Rs. _____

परिवार की कुल मासिक आमदनी

32

39. Land owned (in Acres): Total _____, Cultivable _____

अपनी जमीन (एकड़ में) कुल खेती योग्य भूमि

36

40. Where do you go for latrine?

सौच/(टट्टी) के लिये आप कहाँ जाते हैं ?

40

1. Open/field 2. Bore hole/Dry

3. Hand Flushed 4. W.C.

5. Others (specify) _____

41. How far is the source of drinking water from your house?

पाने का पानी आप कितनी दूर से लाते हैं ?

41

1. _____ metres 2. Others (Specify) _____

45

3. Don't know

42. What do you generally use for hand washing?

हाथ धोने के लिये आप प्रायः क्या प्रयोग करते हैं ?

46

1. Only water 2. Water and ash/mud 3. Water and soap

47		43. Do you have a shed for animals? 1. Yes 2: No क्या आपके पास पशुओं को बांधने के लिये षगुराला है ?
48		43.1. (If yes) Is it यदि है तो क्या यह 1. In the same building 2. Away from the building 9. NA घर की ही चार-दीवारी में है घर के बाहर है लागू नहीं
126	3	

Date of Interview: _____

Name of Investigator: _____ Signature: _____

Checked by: _____ Signature: _____

Date of checking: _____

COUNCIL FOR SOCIAL DEVELOPMENT

53 Lodi Estate, New Delhi-110003

REVIEW OF ON GOING ORT PROGRAMME

SPONSORED BY MINISTRY OF HEALTH AND FAMILY WELFARE AND WHO

HOUSEHOLD ENUMERATION PROFORMA

1	1	1				
3			1. Identification			
8			1.1. State:	1. Haryana	2. Maharashtra	3. Orissa
				4. Rajasthan	5. Tamil Nadu	6. Uttar Pradesh
9			1.2. District H.Q. Town:	_____		
11			1.3. Block/Ward:	_____		
13			1.4. PHC:	_____		
15			1.5. Sub-Centre	_____		
17			1.6. Village/Mohalla:	_____		
19			1.6.1 Hamlet:	_____		
			1.7. House Number:	_____		
			1.8. Name of Head of Household:	_____		
				S.O/W.O	_____	

2. Particulars of usual resident members of household				
		Total	Male	Female
21		2.1. Total Members	_____	_____
27		2.2. Married	_____	_____
33		2.3. Children below 5 years	_____	_____

Date of Interview: _____

Name of Investigator: _____ Signature _____

Checked by: _____ Signature: _____

Date of Checking: _____

ANNEXURE 3

PROFORMA ADMINISTERED BY SUPERVISORS TO CHECK THE WORK OF INVESTIGATORS

District Name:

Block Name:

Village Name:

1. Name of the Mother and Address
2. Whether the child is having
diarrhoea for the last 30 days 1. yes 2. No
3. Whether the child is having
diarrhoea for the last 24 hours 1. Yes 2. No
4. Whether she knows how to prepare ORS 1. Yes 2. No
5. Whether she prepared ORS 1. Yes 2. No
6. Whether she knows how to prepare SSS 1. Yes 2. No
7. Whether she prepared SSS 1. Yes 2. No.

ANNEXURE 4

ADDITIONAL TABLES

(Tables 1 - 6)

Table No.	Description	Page
1	Distribution of villages by source of availability of ORS packets	215
2	Distance of Educational facilities from the village	216
3	No. and type of source of drinking water	217
4	Distribution of villages by availability, quantity and quality of drinking water	218
5	Distribution of villages by drainage system	219
6	Distribution of mothers/caretakers recognising ORS packets	220

Table 1 : Distribution of villages by source of availability of ORS packets

S.No.	State	No. of villages	Untrained Dai	Trained Dai	Village Health Guide	Agnawadi workers	Multi-purpose health worker (ANM)	Multi-purpose health workers (MPIIW Male)	Lady Health visitor	Primary health centre	Govt. Hospital/ dispensary	Private Hospital/ clinic	Drug Store	Registered Medical Practitioner (RMP)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	Haryana	19	0 (0.0)	0 (0.0)	0 (0.0)	6 (31.6)	18 (94.7)	16 (84.2)	13 (68.4)	19 (100.0)	19 (100.0)	1 (5.3)	0 (0.0)	1 (5.3)
2.	Maharashtra	55	3 (5.5)	6 (10.9)	16 (29.1)	8 (14.5)	38 (69.1)	36 (65.5)	15 (27.3)	42 (76.4)	28 (50.9)	13 (23.6)	17 (30.9)	8 (14.5)
3.	Orissa	19	0 (0.0)	3 (15.8)	3 (15.8)	1 (5.3)	10 (52.6)	9 (47.4)	11 (57.9)	18 (94.7)	9 (47.4)	4 (21.1)	16 (84.2)	7 (36.8)
4.	Rajasthan	64	0 (0.0)	1 (1.6)	0 (0.0)	0 (0.0)	41 (64.1)	29 (45.3)	28 (43.8)	62 (96.9)	53 (82.8)	46 (71.9)	56 (87.5)	40 (62.5)
5.	Tamil Nadu	45	2 (4.4)	6 (13.2)	5 (11.1)	1 (2.2)	34 (75.5)	4 (8.9)	37 (82.2)	45 (100.0)	37 (82.2)	16 (35.5)	36 (80.0)	13 (28.9)
6.	Uttar Pradesh	133	0 (0.0)	0 (0.0)	13 (9.6)	3 (2.2)	26 (19.3)	15 (11.1)	18 (13.3)	82 (60.7)	61 (45.2)	66 (48.9)	71 (52.6)	56 (41.5)
Total :		335	5 (1.5)	16 (4.8)	37 (11.0)	19 (5.7)	167 (49.9)	109 (32.5)	122 (36.4)	268 (80.0)	207 (61.8)	146 (43.6)	196 (58.5)	125 (37.3)

(215)

Figures in parenthesis are the percentages

Note : Percentages are calculated on the basis of Col. 3.

Table 2: Distance of educational facilities from the village

S.No.	State	No. of Villages	Primary School			Middle School			High/Higher Secondary School			Non-formal Education Centre		
			Less than 1 km.	1-3 kms.	4+ kms.	Upto 1 km.	2-7 kms.	8+ kms.	Upto 1 km.	2-7 kms.	8+ kms.	Upto 1 km.	2-7 kms.	8+ kms.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.	Haryana	19	15 (78.9)	4 (21.1)	0 (0.0)	12 (63.2)	7 (36.8)	0 (0.0)	7 (36.8)	11 (57.9)	1 (5.3)	19 (100.0)	0 (0.0)	0 (0.0)
2.	Maharashtra	55	52 (94.6)	1 (1.8)	2 (3.6)	29 (52.7)	23 (41.8)	3 (5.5)	21 (38.2)	25 (45.4)	9 (16.4)	53 (96.4)	2 (3.6)	0 (0.0)
3.	Orissa	19	16 (84.2)	3 (15.8)	0 (0.0)	9 (47.4)	10 (52.6)	0 (0.0)	3 (15.8)	12 (63.2)	4 (21.1)	16 (84.2)	3 (15.8)	0 (0.0)
4.	Rajasthan	64	59 (92.2)	3 (4.7)	2 (3.1)	24 (37.5)	32 (50.0)	8 (12.5)	12 (18.8)	31 (48.4)	21 (32.8)	48 (75.0)	12 (18.8)	4 (6.2)
5.	Tamil Nadu	45	40 (88.9)	5 (11.1)	0 (0.0)	22 (48.9)	20 (44.4)	3 (6.7)	22 (48.9)	20 (44.4)	3 (6.7)	45 (100.0)	0 (0.0)	0 (0.0)
6.	Uttar Pradesh	133	105 (78.9)	22 (16.6)	6 (4.5)	77 (57.9)	51 (38.3)	5 (3.8)	62 (46.6)	58 (43.6)	13 (9.8)	120 (97.7)	3 (2.3)	0 (0.0)
Total :		335	287 (85.7)	38 (11.3)	10 (3.0)	173 (51.6)	143 (42.7)	19 (5.7)	127 (37.9)	157 (46.9)	51 (15.2)	311 (92.8)	20 (6.0)	4 (1.2)

Figures in the parenthesis are the percentages

Note: Percentages are calculated on the basis of Col. 3.

Table 3: Number and type of source of drinking water

S. No.	State	No. of villages	Source of drinking water supply																	
			Ponds		Tanks		Streams/Rivers		Covered Wells		Open wells with parapet wall		Step wells		Hand pumps		Piped water (Taps)		Tube Wells	
			Total No.	No. used for drinking water	Total No.	No. used for drinking water	Total No.	No. used for drinking water	Total No.	No. used for drinking water	Total No.	No. used for drinking water	Total No.	No. used for drinking water	Total No.	No. used for drinking water	Total No.	No. used for drinking water	Total No.	No. used for drinking water
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1.	Uttar Pradesh	19	27	1 (3.7)	13	0 (0.0)	4	0 (0.0)	0	0 (0.0)	83	40 (48.2)	0	0 (0.0)	1949	1948 (99.9)	86	85 (98.8)	447	90 (20.1)
2.	Maharashtra	55	6	2 (33.3)	17	2 (11.8)	37	11 (29.7)	3	3 (100.0)	248	196 (79.0)	120	17 (14.2)	308	157 (51.0)	201	186 (92.5)	24	22 (91.7)
3.	Orissa	19	93	82 (88.2)	60	15 (25.0)	16	15 (93.7)	1	0 (0.0)	112	101 (90.2)	0	0 (0.0)	25	18 (72.0)	0	0 (0.0)	75	69 (92.0)
4.	Rajasthan	64	58	8 (13.8)	37	11 (29.7)	26	7 (26.9)	5	5 (100.0)	1027	479 (46.6)	82	59 (71.9)	303	268 (88.4)	200	200 (100.0)	12	12 (100.0)
5.	Tamil Nadu	45	95	1 (1.1)	27	22 (81.5)	15	7 (46.7)	4	0 (0.0)	91	44 (48.4)	1	0 (0.0)	425	288 (67.8)	464	459 (98.9)	11	11 (100.0)
6.	Uttar Pradesh	133	437	0 (0.0)	423	2 (0.5)	44	9 (20.5)	106	95 (89.6)	1534	1206 (78.6)	53	52 (98.1)	8889	7567 (85.1)	21	21 (100.0)	1203	797 (66.2)
Total :		335	716	94 (13.1)	577	52 (9.0)	142	49 (34.5)	119	103 (86.6)	3095	2066 (66.8)	256	128 (50.0)	11899	10246 (86.1)	972	951 (97.8)	1772	1001 (56.5)

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Figures in parenthesis are the percentages

Note : Percentages are calculated on the basis of total No. of each source of drinking water.

Table 4: Distribution of villages by availability, quantity and quality of drinking water

S.No.	State	No. of villages	Whether water supply available throughout the year?		Quantity of water supply during summer		Quality of water supply during summer	
			Yes	No	Sufficient	Not sufficient	Clean	Muddy
1	2	3	4	5	6	7	8	9
1.	Haryana	19	8 (42.1)	11 (57.9)	5 (26.3)	14 (73.7)	8 (42.1)	11 (57.9)
2.	Maharashtra	55	39 (70.9)	16 (29.1)	25 (45.5)	30 (54.5)	37 (67.3)	18 (32.7)
3.	Orissa	19	15 (78.9)	4 (21.1)	0 (0.0)	19 (100.0)	1 (5.3)	18 (94.7)
4.	Rajasthan	64	49 (76.6)	15 (23.4)	23 (35.9)	41 (64.1)	31 (48.4)	33 (51.6)
5.	Tamil Nadu	45	22 (48.9)	23 (51.1)	9 (20.0)	36 (80.0)	15 (33.3)	30 (66.7)
6.	Uttar Pradesh	133	125 (94.0)	8 (6.0)	86 (64.7)	47 (35.3)	101 (77.4)	30 (22.6)
Total :		335	258 (77.0)	77 (23.0)	148 (44.2)	187 (55.8)	195 (58.2)	140 (41.8)

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Figures in parenthesis are the percentages

Note : Percentages are calculated on the basis of Col. 3.

Table 5: Distribution of villages by drainage system *

S.No.	State	No. of villages	Drainage type		Water flow in the drains			Outlet of the drains				Maintenance of drains			Cleaning of drains			Drains treated with larvicide		
			Kucha	Pacca	Stag-nant	Running	Dug-pit	Conne-cted to the kit-chen garden	Linked with mains	Linked with village field	Linked with river/tank	No proper outlet	Privately	Pub-licly	Never	Some-times	Regu-larly	Never	Some-times	Regu-larly
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1.	Haryana	19	14 (73.7)	5 (26.3)	9 (47.4)	10 (52.6)	2 (10.5)	8 (42.1)	9 (47.4)	0 (0.0)	0 (0.0)	0 (0.0)	16 (84.2)	3 (15.8)	4 (21.1)	14 (73.7)	1 (5.3)	11 (57.9)	6 (31.6)	2 (10.5)
2.	Maharashtra	55	50 (90.9)	5 (9.1)	30 (54.5)	25 (45.5)	18 (32.7)	12 (21.8)	8 (14.5)	13 (23.6)	4 (7.3)	0 (0.0)	32 (58.2)	23 (41.8)	24 (43.6)	26 (47.3)	5 (9.1)	25 (45.5)	20 (36.4)	10 (18.2)
3.	Orissa	19	19 (100.0)	0 (0.0)	7 (36.8)	12 (63.2)	8 (42.1)	0 (0.0)	8 (42.1)	2 (10.5)	1 (5.3)	0 (0.0)	19 (100.0)	0 (0.0)	18 (94.7)	1 (5.3)	0 (0.0)	19 (100.0)	0 (0.0)	0 (0.0)
4.	Rajasthan	64	64 (100.0)	0 (0.0)	30 (46.9)	34 (53.1)	11 (17.2)	3 (4.7)	1 (1.6)	36 (56.2)	0 (0.0)	13 (20.3)	43 (67.2)	21 (32.8)	37 (57.8)	27 (42.2)	0 (0.0)	55 (85.9)	9 (14.1)	0 (0.0)
5.	Tamil Nadu	45	45 (100.0)	0 (0.0)	31 (68.9)	14 (31.1)	11 (24.4)	25 (55.6)	6 (13.3)	3 (6.7)	0 (0.0)	0 (0.0)	30 (66.7)	15 (33.3)	28 (62.2)	15 (33.4)	2 (4.1)	36 (80.0)	9 (20.0)	0 (0.0)
6.	Uttar Pradesh	133	129 (97.0)	4 (3.0)	69 (51.9)	64 (48.1)	72 (54.2)	10 (7.5)	16 (12.0)	29 (21.8)	5 (3.8)	1 (0.7)	118 (88.7)	15 (11.3)	49 (36.8)	83 (62.4)	1 (0.9)	101 (75.9)	30 (22.6)	2 (1.5)
Total :		335	321 (95.8)	14 (4.2)	176 (52.5)	159 (47.5)	122 (36.4)	58 (17.3)	48 (14.3)	83 (24.8)	10 (3.0)	14 (4.2)	258 (77.0)	77 (23.0)	160 (47.8)	166 (49.5)	9 (2.7)	247 (73.7)	74 (22.1)	14 (4.2)

Figures in parenthesis are the percentages

Note : Percentages are calculated on the basis of Col. 3.

*Drains in all the villages under study were found uncovered.

Table: 6 Distribution of mothers/caretakers recognising ORS packets

S. No.	State/ District	Rural				Urban				Total			
		Govt. ORS	Comm- ercial ORS	Can't Recognise	Total	Govt. ORS	Comm- ercial ORS	Can't Recognise	Total	Govt. ORS	Comm- ercial ORS	Can't Recognise	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
HARYANA													
01	Ambala	85 (32.7)	44 (16.9)	131 (50.4)	260	45 (9.3)	291 (60.3)	147 (30.4)	483	130 (17.5)	335 (45.1)	278 (37.4)	743
02	Gurgaon	19 (9.9)	55 (28.8)	117 (61.3)	191	12 (4.9)	172 (70.5)	60 (24.6)	244	31 (7.1)	227 (52.2)	177 (40.7)	435
Total:		104 (23.1)	99 (21.9)	248 (55.0)	451	57 (7.8)	463 (63.7)	207 (28.5)	727	161 (13.7)	562 (47.7)	455 (38.6)	1178
MAHARASHTRA													
03	Wardha	81 (42.2)	20 (10.4)	91 (47.4)	192	18 (7.7)	131 (56.0)	85 (36.3)	234	99 (23.2)	151 (35.4)	176 (41.4)	426
04	Amravati	82 (48.2)	22 (12.9)	66 (38.8)	170	46 (7.8)	356 (60.5)	186 (31.6)	588	128 (16.9)	378 (49.9)	252 (33.2)	758
05	Sangli	49 (8.7)	18 (3.2)	495 (88.1)	562	7 (3.6)	77 (39.3)	112 (57.1)	196	56 (7.4)	95 (12.5)	607 (80.1)	758
06	Chandrapur	51 (22.5)	11 (4.8)	165 (72.7)	227	26 (8.8)	85 (28.7)	185 (62.5)	296	77 (14.7)	96 (18.4)	350 (66.9)	523
Total:		263 (22.8)	71 (6.2)	817 (71.0)	1151	97 (7.4)	649 (49.4)	568 (43.2)	1314	360 (14.6)	720 (29.2)	1385 (56.2)	2465
ORISSA													
07	Phulbani	33 (18.3)	13 (7.2)	134 (74.5)	180	27 (18.2)	52 (35.1)	69 (46.7)	148	60 (18.3)	65 (19.8)	203 (61.9)	328
08	Baleswar	17 (12.3)	45 (32.6)	76 (55.1)	138	4 (2.7)	114 (76.0)	32 (21.3)	150	21 (7.3)	159 (55.2)	108 (37.5)	288
Total:		50 (15.7)	58 (18.3)	210 (66.0)	318	31 (10.4)	166 (55.7)	101 (33.9)	298	81 (13.1)	224 (36.4)	311 (50.5)	616

RAJASTHAN													
09	Jaipur	12 (2.9)	86 (21.0)	312 (76.1)	410	121 (16.0)	323 (42.6)	314 (41.4)	758	133 (11.4)	409 (15.0)	626 (53.6)	1168
10	Dundi	8 (2.9)	25 (9.0)	246 (88.1)	279	15 (5.2)	114 (39.6)	159 (55.2)	288	23 (4.1)	139 (24.5)	405 (71.4)	567
11	Bhilwara	6 (2.7)	20 (9.1)	193 (88.2)	219	37 (9.8)	69 (18.2)	273 (72.0)	379	43 (7.2)	89 (14.9)	466 (77.9)	598
12	Dungrapur	55 (11.3)	23 (4.7)	408 (84.0)	486	22 (21.2)	36 (34.6)	46 (44.2)	104	77 (13.1)	59 (10.0)	454 (76.9)	590
Total:		81 (5.8)	154 (11.1)	1159 (83.1)	1394	195 (12.7)	542 (35.5)	792 (51.8)	1529	276 (9.4)	696 (23.8)	1951 (66.8)	2923
TAMILNADU													
13	Salem	91 (26.4)	49 (14.2)	205 (59.4)	345	64 (7.9)	389 (48.1)	356 (44.0)	809	155 (13.4)	438 (38.0)	561 (48.6)	1154
14	Tirunelveli	129 (51.0)	61 (24.1)	63 (24.9)	253	5 (2.0)	157 (64.3)	82 (33.7)	244	134 (27.0)	218 (43.8)	145 (29.2)	497
15	Thanjavur	161 (21.4)	100 (13.3)	492 (65.3)	753	52 (10.9)	353 (73.4)	70 (14.7)	475	213 (17.3)	453 (36.9)	562 (45.8)	1228
Total:		381 (28.2)	210 (15.5)	760 (56.3)	1351	121 (7.9)	899 (58.8)	508 (33.3)	1528	502 (17.5)	1109 (38.5)	1268 (44.0)	2879
UTTAR PRADESH													
16	Basti	20 (4.7)	168 (39.5)	237 (55.8)	425	4 (2.0)	157 (77.0)	43 (21.0)	204	24 (3.8)	325 (51.7)	280 (44.5)	629
17	Barabanki	27 (4.5)	242 (40.3)	332 (55.2)	601	4 (2.6)	116 (74.8)	35 (22.6)	155	31 (4.1)	358 (47.4)	367 (48.5)	756
18	Etawah	33 (11.8)	137 (49.1)	109 (39.1)	279	20 (5.8)	261 (75.2)	66 (19.0)	347	53 (8.5)	398 (63.5)	175 (28.0)	626
19	Barcilly	51 (18.1)	65 (23.1)	165 (58.8)	281	58 (4.7)	890 (71.9)	289 (23.4)	1237	109 (7.2)	955 (62.9)	454 (29.9)	1518
20	Sultanpur	35 (9.6)	144 (39.6)	185 (50.8)	364	2 (3.2)	59 (95.2)	1 (1.6)	62	37 (8.7)	203 (47.6)	186 (43.7)	426
21	Deoria	68 (9.7)	212 (30.2)	421 (60.1)	701	15 (7.4)	152 (74.9)	36 (17.7)	203	83 (9.2)	364 (40.2)	457 (50.6)	904
22	Muradabad	31 (6.2)	170 (33.7)	303 (60.1)	504	32 (2.6)	872 (71.8)	310 (25.6)	1214	63 (3.7)	1042 (60.7)	613 (35.6)	1718
23	Shahjhanpur	15 (13.5)	27 (24.3)	69 (62.2)	111	13 (4.7)	199 (71.8)	65 (23.5)	277	28 (7.2)	226 (58.2)	134 (34.6)	388
24	Bijnor	4 (1.9)	22 (10.5)	184 (87.6)	210	1 (1.1)	49 (52.1)	44 (46.8)	94	5 (1.6)	71 (23.4)	228 (75.0)	304
Total:		284 (8.2)	1187 (34.1)	2005 (57.7)	3476	149 (4.0)	2755 (72.6)	889 (23.4)	3793	433 (6.0)	3942 (54.2)	2894 (39.8)	7269

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Figures in parenthesis are the percentages.