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A COMPARATIVE STUDY OF DIARRHOEAL MORBIDITY AND  
LGS USE PATTERN IN BRAC'S CRP AND NON-CRP AREAS

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## A COMPARATIVE STUDY OF DIARRHOEAL MORBIDITY AND LGS USE PATTERN IN BRAC'S CRP AND NON-CRP AREAS

### Introduction

Diarrhoeal disease is a constant feature of life in the developing countries of the world. Children under age five of those countries are found to suffer from two to five diarrhoeal episodes annually<sup>1</sup>. Diarrhoeal disease is estimated to kill at least 4 to 6 million people of all ages annually in the world<sup>2</sup>. Bangladesh is one of the worst sufferers from this disease. Bangladeshi children of less than 3 years of age were found to suffer an annual 6.8 diarrhoeal episodes<sup>3</sup>. In another study conducted by the Bangladesh Institute of Development Studies (BIDS) in Comapanyganj found that 28 percent of deaths among 0-4 years of age group was due to diarrhoea and dysentery<sup>4</sup>. All these data fairly indicate a widespread prevalence of diarrhoeal disease as a cause of both morbidity and mortality. Miyan rightly pointed out, "with high rate of population growth, lack of hygiene practice in relation to water use and defecation behaviour and shortage of food and health care facilities, it is apprehended that primary causes of mortality in future will be malnutrition and diarrhoeal disease"<sup>5</sup>.

Reducing mortality associated with childhood diarrhoea is one of the most important challenge taken by the Bangladesh Rural Advancement Committee (BRAC). It came forward with a nation wide community based Oral Therapy Extension Programme (OTEP) in 1981 to disseminate information concerning oral therapy in rural Bangladesh. The goal of the programme is to teach at least a woman from each household how to prepare a simple, cheap and safest solution (Lobon-gur-saline) for diarrhoeal diseases.

The first phase of OTEP ended in September 1983. During the period a total of 2.5 million households had been visited by the Oral Replacement Workers (ORW) of the programme. It had covered 113 Upazilas, 1159 unions and 20,668 villages under 18 districts in Bangladesh. With the experiences gained from the first phase, BRAC started its second phase of OTEP in October 1983. In the light of the previous experiences BRAC introduced some additional health education approaches to enhance the usage of Lobon-Gur-Saline (LGS) for diarrhoeal treatment. During Phase-II, OTEP is expected to cover another four million households in 24 districts by June 1986.

In the beginning of the programme (Phase-I) attention was given for modification of individual behaviour towards diarrhoeal treatment, implying that the individual was solely responsible for his plight. But later on, it came to realise that the individuals find it difficult to sustain change unless his social environment changes too. The concentrated Reinforcement Programme (CRP), was therefore designed in OTEP Phase-II as an integrated health approach<sup>6</sup> involving all the family members - as a compliment to the teachings of diarrhoea. The main purpose of incorporating CRP was to promote the effectiveness of LGS treatment. The objectives of CRP<sup>7</sup> are:

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- 1) Treatment of diarrhoeal patients with LGS.
- 2) Creation of female health cadres (gram shebika) to promote health education and support the peoples initiatives.
- 3) To raise public awareness on Primary Health Care (PHC) (personal hygiene and public health).
- 4) Upgrading skills of traditional birth attendents.
- 5) To educate mothers to feed colostrum to new born infants.
- 6) To promote supplementary feeding for infants of age four months and above.
- 7) To impart knowledge on diarrhoeal management and encourage rural medical practioners to treat diarrhoeal patients with LGS.

Decision was taken to bring one union in each Upazila and a team consisting of 3 Programme Organizers (P.O) and four Oral Replacement Workers (ORW) would work in a union for six months. To date CRP has covered 52 Unions in 52 Upazilas. The CRP is expected to cover 30 more unions by June 1985 and an additional 68 unions will be covered by June 1986.

## 2. Objective of the Study

It was expected that the very introduction of CRP would enhance general awareness about LGS which might ultimately help to increase the usage rate of LGS. Therefore, the purpose of this study is to investigate how far this expectation was materialised in the areas where the programme had already been carried out. Some variables related to diarrhoeal morbidity and types of treatments in CRP area will be compared with those of non-CRP area.

## 3. Methodology

### 3.1 Selection of Sample Area

Two sample areas (one from CRP areas and the other from non-CRP areas) were chosen from the OTEP (Brahmanbaria) areas where LGS Programme had been administered about one year before the present survey was conducted. Sample areas were selected purposively.

### 3.2 Sample Size

Some 540 households (about 20 percent of total households) of Maheri union (CRP area) and 550 households (about 18 percent of total households) of Mulgram union (non-CRP area) were selected through simple random sampling method for conducting the survey. Both Maheri and Mulgram unions belong to Kasba Upazila and separated by a distance of about six miles. ( Table-3.1)

Table-3.1: Study-wise Distribution of Studied Households in the CRP and non-CRP areas of Kasba Upazila.

Name of Study	Name of Upazila	Name of Union	No. of Households	Households Surveyed	Period of Survey
CRP	Kasba	Maheri	2700	540	April, 1985
Non-CRP	Kasba	Mulgram	3100	550	May, 1985

### 3.2 Instrument of Data Collection

A standardized structured questionnaire had been developed for the study incorporating the following principal variables.

- 1) Name of the patient
- 2) Age and sex
- 3) Type of disease
- 4) Types of treatments
- 5) Severity of the disease, etc.

### 3.4 Data Collection

Six female interviewers and one male supervisor, who had been working in the research team of evaluation of BRAC's OTEP Phase-II, were deployed for conducting the interviews. They completed the interviews by 6 days (three days for CRP and three days for non-CRP areas). A one day training for the interviewers was organised for orientation of the questionnaire. However, no field training was felt necessary as the interviewers had already been acquainted with this type of field survey. One member of the Research and Evaluation Division (RED) joined with them to impart training and supervise the data collection. The data were then processed manually under the supervision of the Senior Research Economist of RED.

### 4. Limitation

This study has got its limitations as we don't have any base line information of the sample area regarding the LGS usage rate and the pattern of diarrhoeal disease before the CRP was administered. Therefore, it would not be possible to compare pre and post CRP LGS usage rates within the sample area. However, LGS usage rate in the post CRP area can be compared with other non CRP areas to have an idea regarding the effectiveness of CRP, so far LGS use is concerned.

### Findings

#### 5.1. Diarrhoeal Morbidity by Age and Sex

In general, the infants and children are found to suffer from diarrhoea more compared with the adult population. Our findings also support this hypothesis. In the CRP areas, it was found that 55.8

percent of those who experienced diarrhoea were children of 0-4 age and 75.2 percent of those were below 15 years of age. A similar trend was also observed in the non-CRP area. In the non-CRP area, 54.6 percent were children of 0-4 age and 75.0 percent were below age 15. (Tables-5.1 and 5.2) The study reveals that the prevalence of diarrhoea is relatively higher among the males compared to that of the females. Among the male diarrhoeal morbidity cases, in CRP area, 80.7 percent were below age 15 years and the figure for female for the same age group was 68.7 percent. Some 77.7 percent of male diarrhoeal patients in the non-CRP area were below age 15 while the same for female was 72.1 percent.

### 5.2 Diarrhoeal Morbidity and Types of Treatments

A high LGS usage rate was found neither in the CRP nor in the non-CRP area. However, comparatively a better usage rate was found in CRP area. Some 26.0 percent of those who had diarrhoea in CRP area were found to use LGS for diarrhoeal treatment. In CRP area, 31.5 percent of the diarrhoeal patients did not adopt any kind of treatment, 22.1 percent took allopathy, 11.0 percent applied kabiraji, 7.2 percent homeopathy and only 2.2 percent applied other types of treatments (Table-5.3). Although the overall LGS usage rate in CRP area was not very high but among the various types of treatments taken by the patients, LGS was found highest.

Some 14.8 percent of those who had diarrhoea in the non-CRP area were found to use LGS, 17.6 percent took allopathy, 13.9 percent homeopathy, 3.7 percent kabiraji, and 2.8 percent applied other treatments. A maximum 47.2 percent of those who had diarrhoea were found not to adopt any kind of treatment (Table-5.4 and 5.5).

Table-5.5: Distribution of Diarrhoeal Morbidity Cases by Types of Treatments in CRP and non-CRP area, Kasba Upazila, 1985.

Name of Study	No treatment	LGS	Allopathy	Homeopathy	Kabiraji	Others	Total
CRP	57 (31.5)	47 (26.0)	40 (22.1)	13 (2.2)	20 (11.0)	4 (2.2)	181 (100.0)
Non-CRP	51 (47.2)	16 (14.8)	19 (17.6)	15 (13.9)	4 (3.7)	3 (2.8)	108 (100.0)

\* Figures in parentheses indicate percentages.

### 5.3 Diarrhoeal Morbidity and Frequency of Loose Motion

A majority of diarrhoeal patients both male and female were found to have loose motion 2-5 times (Tables 5.6A, 5.6B & 5.7A, 5.7B). About 21 percent of male and 22.9 percent of female in CRP area, 31.4 percent male and 24.0 percent female of non-CRP area who had diarrhoea were found to have loose motions between 2 and 5 times.

#### 5.4 Severity and non-severity of Diarrhoeal Cases

The diarrhoeal morbidity was categorised into two namely, severe and non-severe diarrhoea. If any diarrhoeal patients were unable to continue with the normal movements and regular daily activities, the case was termed as severe and otherwise it was defined as non-severe.

Majority of the people who had diarrhoea in both the studies had non-severe type of diarrhoea. But comparatively more people in non-CRP were found to suffer from severe type of diarrhoea. Some 16.7 percent of male and 9.3 percent of female in non-CRP area were found to have severe type of diarrhoea while 5.1 percent of male and 4.8 percent of female in CRP area had severe diarrhoea [Tables 5.8 and 5.9].

#### 5.5 Diarrhoeal Morbidity and Frequencies of LGS use

Attempts were made to see how many times, LGS were taken by the diarrhoeal patients who adopted it for diarrhoeal treatment. The study shows that the situation was better in CRP area compared to that of the non-CRP area. In CRP area LGS were taken maximum six times by 34.6 percent of male and 52.4 percent of female during the period of diarrhoeal illness. But 54.5 percent of male and 62.5 percent of female in non-CRP area were found to take LGS only once during the period of illness [Tables 5.10 & 5.11].

#### 5.6 Frequency of Loose Motion and LGS use

BRAC health message is that LGS use must begin at the very first episode of loose motion. A general pattern of the frequency of loose motion and LGS use are shown in Tables 5.12 & 5.13. The study does not support that the diarrhoeal treatment by LGS begin with the first episode of diarrhoea. However, majority of the patients, both male (73.0 percent in CRP and 36.4 in non-CRP) and female (61.9 percent in CRP and 62.5 percent in non-CRP) were found to begin treatment with LGS after 2-5 times of loose motion.

#### Summary and Conclusion

The CRP of BRAC began in 1983. The main objective of the programme was to promote the effectiveness of oral saline treatment for diarrhoeal disease. The main purpose of the present study was to investigate how far CRP was effective to increase the LGS usage rate and also to focus on some variables related to diarrhoeal morbidity of the CRP area with that of the non-CRP area.

A total of 540 households (20 percent of total households) of Mahari union (CRP area) and 550 households (about 18 percent of total households) of Mulgram union (non-CRP area) of Kasha Upazila were surveyed. A standardized structured questionnaire was administered to gather information.

It was found in both the areas that the infants and children were worst sufferer from diarrhoea. The study shows that 55.8 percent of those who experienced diarrhoea were children of 0-4 age and 75.2 percent of those below age 15 in CRP area. A similar trend was observed in the non-

CRP area.

Relatively higher usage rate was found in CRP area compared to that of the non-CRP area. LGS usage rate was estimated to be 26.0 percent in CRP area while the same was only 14.8 percent for non-CRP area.

Majority of the diarrhoeal patients in both the areas were found to have loose motion 2-5 times.

In general, most of the diarrhoea episodes were non-severe in type, but comparatively more people in non-CRP area were found to suffer from severe type of diarrhoea.

BRAC's health message is that LGS must be given at the very first episode of loose motion. But the findings of the present study does not support that the diarrhoeal treatment with LGS begin with the first episode of diarrhoea. However, majority of the patients in both the areas were found to begin treatment with LGS after 2-5 times of loose motion.

Table-5.1: Distribution of Diarrhoeal Morbidity by Age and Sex, Maheri Union of Kasba Upazila (CRP area), April 1985

Age	Male	Percentage	Female	Percentage	G.Total	Percentage
0-4	58	59.2	43	51.8	101	55.8
0	14	14.3	13	15.7	27	14.9
1	17	17.3	13	15.7	30	16.6
2	10	10.2	9	10.8	19	10.5
3	11	11.2	3	3.6	14	7.7
4	6	6.1	5	6.0	11	6.1
5-14	21	21.5	14	16.9	35	19.4
15-24	10	10.2	10	12.0	20	11.0
25-44	4	4.1	3	3.6	7	3.9
45+	5	5.1	13	15.7	18	9.9
All Age	98 (54.1)	100.0	83 (45.9)	100.0	181	100.0

\* Figures in parentheses indicate percentages.

Table-5.2: Distribution of Diarrhoeal Morbidity cases by Age and Sex, Mulgram union of Kasba Upazila (non-CRP area), May, 1985.

Age	Male	Percentage	Female	Percentage	G.Total	Percentage
0-4	30	55.6	29	53.7	59	54.6
0	13	24.1	9	16.7	22	20.4
1	3	5.6	6	11.1	9	8.3
2	4	7.4	9	16.7	13	12.0
3	8	14.8	3	5.6	11	10.2
4	2	3.7	2	3.7	4	3.7
5-14	12	22.1	10	18.4	22	20.4
15-24	5	9.3	6	11.1	11	10.7
25-44	5	9.3	3	5.6	8	7.4
45+	2	3.7	6	11.1	8	7.4
All Age	54 (50.0)	100.0	54 (50.0)	100.0	108 (100.0)	100.0

\* Figures in parentheses indicate percentages.

Table-5.3: Distribution of Diarrhoeal Morbidity by Age and Types of Treatments, Maheri Union of Kasba Upazila (CRP area), April 1985

Age	TYPES OF TREATMENTS						Total
	Kabiraji	Homeopathy	Alopathy	LGS	Others	No treatment	
0-4	13 (12.9)	10 (9.9)	21 (20.8)	27 (26.7)	3 (3.0)	27 (26.7)	101 (100.0)
0	3 (11.1)	5 (18.5)	5 (18.5)	5 (18.5)	0 (0.0)	9 (33.4)	27 (100.0)
1	7 (21.9)	4 (12.5)	5 (15.6)	8 (25.0)	2 (6.2)	6 (18.8)	32 (100.0)
2	1 (5.6)	0 (0.0)	6 (33.3)	6 (33.3)	0 (0.0)	5 (27.8)	18 (100.0)
3	0 (0.0)	1 (7.1)	3 (21.5)	4 (28.6)	1 (7.1)	5 (35.7)	14 (100.0)
4	2 (20.0)	0 (0.0)	2 (20.0)	4 (40.0)	0 (0.0)	2 (20.0)	10 (100.0)
5-14	2 (5.7)	1 (2.9)	10 (28.6)	8 (22.8)	0 (0.0)	14 (40.0)	35 (100.0)
15-24	2 (10.0)	1 (5.0)	2 (10.0)	6 (30.0)	1 (5.0)	8 (40.0)	20 (100.0)
25-44	2 (28.6)	0 (0.0)	1 (14.3)	3 (42.8)	0 (0.0)	1 (14.3)	7 (100.0)
45+	1 (5.6)	1 (5.6)	6 (33.3)	3 (16.7)	0 (0.0)	7 (38.8)	18 (100.0)
All age	20 (11.0)	13 (7.2)	40 (22.1)	47 (26.0)	4 (2.2)	57 (31.5)	181 (100.0)

\* Figures in parentheses indicate percentages.



Table-5.4: Distribution of Diarrhoeal Morbidity by Age and Types of Treatment, Mulgram Union of Kasba Upazila (Non-CRP area), May, 1985.

Age	<u>TYPES OF TREATMENTS</u>						Total
	Kabiraji	Homeopathy	Alopathy	LGS	Others	No treatment	
0-4	2 (3.3)	14 (23.0)	11 (18.0)	8 (13.1)	2 (3.3)	24 (39.3)	61 (100.0)
0	-	6 (30.0)	3 (15.0)	3 (15.0)	-	8 (40.0)	20 (100.0)
1	1 (7.2)	3 (21.4)	3 (21.4)	3 (21.4)	1 (7.2)	3 (21.4)	14 (100.0)
2	-	3 (25.0)	3 (25.0)	1 (8.3)	-	5 (41.7)	12 (100.0)
3	1 (9.1)	2 (18.2)	2 (18.2)	-	1 (9.1)	5 (45.4)	11 (100.0)
4	-	-	-	1 (25.0)	-	3 (75.0)	4 (100.0)
5-14	1 (4.5)	1 (4.5)	2 (9.1)	6 (27.3)	-	12 (54.6)	22 (100.0)
15-24	-	-	3 (37.5)	-	1 (12.5)	4 (50.0)	8 (100.0)
25-44	-	-	1 (14.3)	1 (14.3)	-	5 (71.4)	7 (100.0)
45+	1 (10.0)	-	2 (20.0)	1 (10.0)	-	6 (60.0)	10 (100.0)
All age	4 (3.7)	15 (13.9)	19 (17.6)	16 (14.8)	3 (2.8)	51 (47.2)	108 (100.0)

\* Figures in parentheses indicate percentages.

Table-5.6A: Distribution of Diarrhoeal Morbidity by Age, Sex and Frequency of Loose Motion, Maheri Union of Kasba Upazilla, (CRP area), April 1985.

Age	M A L E											Total
	Frequency of Loose Motions											
	1	2-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46+	
0-4	1	7	11	8	5	6	6	2	4	3	5	58
0	1	1	0	1	3	1	1	1	0	1	4	14
1	0	1	4	3	0	3	3	0	3	0	1	18
2	0	1	1	1	1	2	1	0	1	1	0	9
3	0	2	6	1	0	0	1	1	0	1	0	12
4	0	2	0	2	1	0	0	0	0	0	0	5
5-14	0	7	1	1	0	4	4	0	2	1	1	21
15-24	0	4	1	1	3	0	0	0	1	0	0	10
25-44	0	2	1	1	0	0	0	0	0	0	0	4
45+	0	1	3	1	0	0	0	0	0	0	0	5
All	1	21	17	12	8	10	10	2	7	4	6	98
	(1.0)	(21.4)	(17.3)	(12.2)	(8.2)	(10.3)	(10.3)	(2.0)	(7.1)	(4.1)	(6.1)	(100.0)

\* Figures in parentheses indicate percentages.

Table-5.6B: Distribution of Diarrhoeal Morbidity by Age, Sex and Frequency of Loose Motions, Maheri Union of Kasba Upazilla (CRP area), April 1985

Age	F E M A L E											Total
	Frequency of Loose Motions											
	2-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46+		
0-4	6	4	7	9	5	1	0	2	1	8	43	
0	1	2	3	2	1	0	0	1	0	3	13	
1	3	2	1	3	0	1	0	1	1	1	13	
2	2	0	1	1	2	0	0	0	0	3	9	
3	0	0	0	1	1	0	0	0	0	1	3	
4	0	0	2	2	1	0	0	0	0	0	5	
5-14	5	1	4	1	2	0	1	0	0	0	14	
15-24	6	2	1	0	0	0	0	0	0	1	10	
25-44	0	2	0	1	0	0	0	0	0	0	3	
45+	2	7	0	1	1	0	1	0	0	1	13	
All	19	16	12	12	8	1	2	2	1	10	83	
	(22.9)	(19.3)	(14.5)	(14.5)	(9.6)	(1.2)	(2.4)	(2.4)	(1.2)	(12.0)	(100.0)	

\* Figures in parentheses indicate percentages.

Table-5.7A: Distribution of Diarrhoeal Morbidity by Age, Sex and Frequency of Loose Motion, Mulgram Union, Kasba Upazila (Non-CRP area), May 1985.

Age	Frequency of Loose Motions									Total	
	2-5	6-10	11-15	M 16-20	A 21-25	L 26-30	E 31-35	36-40	41-45		46+
0-4	9	3	6	3	4	0	3	0	0	2	30
0	3	0	2	1	2	0	1	0	0	2	11
1	1	0	0	1	2	0	1	0	0	0	5
2	1	1	2	0	0	0	0	0	0	0	4
3	3	1	2	1	0	0	1	0	0	0	8
4	1	1	0	0	0	0	0	0	0	0	2
5-14	4	2	1	3	0	0	1	0	1	0	12
15-24	0	1	1	2	0	0	0	0	0	0	4
25-44	4	1	0	0	0	0	0	0	0	0	5
45+	0	0	1	1	1	0	0	0	0	0	3
All	17 (31.4)	7 (13.0)	9 (16.7)	9 (16.7)	5 (9.3)	0 (0.0)	4 (7.4)	0 (0.0)	1 (1.8)	2 (3.7)	54 (100.0)

\* Figures in parentheses indicate percentages.

Table-5.7B: Distribution of Diarrhoeal Morbidity by Age, Sex and Frequency of Loose Motion, Mulgram Union, Kasba Upazila (Non-CRP area), May 1985.

Age	Frequency of Loose Motions									Total	
	2-5	6-10	11-15	F 16-20	E 21-25	M 26-30	A 31-35	L 36-40	E 41-45		46+
0-4	6	4	4	3	3	2	3	1	0	2	28
0	0	2	1	1	2	0	1	1	0	0	8
1	1	2	1	0	1	1	1	0	0	1	8
2	3	0	1	0	0	1	1	0	0	1	7
3	1	0	1	1	0	0	0	0	0	0	3
4	1	0	0	1	0	0	0	0	0	0	2
5-14	2	4	2	0	1	0	0	0	0	1	10
15-24	1	2	2	0	0	0	0	0	0	2	7
25-44	1	0	0	0	0	1	0	0	0	0	2
45+	3	2	1	0	1	0	0	0	0	0	7
All	13 (24.0)	12 (22.3)	9 (16.6)	3 (5.3)	5 (9.3)	3 (5.6)	3 (5.6)	1 (1.9)	0 (0.0)	5 (9.3)	54 (100.0)

\* Figures in parentheses indicate percentages.

Table-5.8: Distribution of Diarrhoeal Morbidity by Age, Sex and Severity, Maheri Union of Kasba Upazilla (CRP area), April, 1985

Age	Male			Female		
	Severe	Non severe	Total	Severe	Non severe	Total
0-4	2	56	58	2	41	43
0	0	14	14	1	12	13
1	2	15	17	1	12	13
2	0	10	10	0	9	9
3	0	11	11	0	3	3
4	0	6	6	0	5	5
5-14	1	20	21	1	13	14
15-24	1	9	10	0	10	10
25-44	1	3	4	0	3	3
45+	0	5	5	1	12	13
All	5 (5.1)	93 (94.9)	98 (100.0)	4 (4.8)	79 (95.2)	83 (100.0)

\* Figures in parentheses indicate percentages.

Table-5.9: Distribution of Diarrhoeal Morbidity by Age, Sex and Severity, Mulgram Union of Kasba Upazilla (Non-CRP area), May, 1985

Age	Male			Female		
	Severe	Non severe	Total	Severe	Non severe	Total
0-4	8	16	24	3	27	30
0	6	1	7	0	8	8
1	2	1	3	1	7	8
2	0	4	4	2	6	8
3	0	8	8	0	3	3
4	0	2	2	0	3	3
5-14	1	10	11	0	10	10
15-24	0	7	7	1	4	5
25-44	0	8	8	1	1	2
45+	0	4	4	0	7	7
All	9 (16.7)	45 (83.3)	54 (100.0)	5 (9.3)	49 (90.7)	54 (100.0)

\* Figures in parentheses indicate percentages.

TABLE-5.10: Distribution of Diarrhoeal Morbidity by Age, Sex and LGS use, Maheri Union of Kasba Upazila (CRP area), April 1985.

Age	Frequency of LGS used								Total	Frequency of LGS used								Total		
	Not Used	1	2	M	A	L	E	5		6	Not Used	1	2	F	E	M	A		L	E
0-4	43	2	0	1	2	1	9	58	31	0	1	1	0	1	9	43				
0	11	0	0	0	0	0	2	13	10	0	0	0	0	0	3	13				
1	14	0	0	0	0	1	4	19	10	0	0	1	0	1	13					
2	6	0	0	0	1	0	3	10	7	0	0	0	0	0	2	9				
3	8	1	0	1	1	0	0	11	2	0	0	0	0	0	1	3				
4	4	1	0	0	0	0	0	5	2	0	1	0	0	0	2	5				
5-14	16	2	0	1	1	1	0	21	10	0	1	1	1	1	0	14				
15-24	6	1	3	0	0	0	0	10	8	0	0	1	0	0	1	10				
25-44	3	1	0	0	0	0	0	4	2	0	0	0	0	0	1	3				
45 +	4	0	1	0	0	0	0	5	11	1	1	0	0	0	0	13				
All	72	6	4	2	3	2	9	98	62	1	3	3	1	2	11	83				
	(73.5)	(6.1)	(4.1)	(2.0)	(3.1)	(2.0)	(9.2)	(100.0)	(74.7)	(1.2)	(3.6)	(3.6)	(1.2)	(2.4)	(13.3)	(100.0)				

\* Figures in parenthese indicate percentages.

TABLE-5.11: Distribution of Diarrhoeal Morbidity by Age, Sex and LGS use, Mulgram Union of Kasba Upazila (Non-CRP area), May 1985.

Age	Frequency of LGS used								Total	Frequency of LGS used								Total		
	Not Used	1	2	M	A	L	E	5		6	Not Used	1	2	F	A	M	A		L	E
0-4	24	4	2	1	0	0	0	31	25	1	1	1	0	0	0	28				
0	10	2	0	1	0	0	0	13	7	1	0	0	0	0	0	8				
1	2	1	1	0	0	0	0	4	6	0	1	1	0	0	0	8				
2	3	0	1	0	0	0	0	4	8	0	0	0	0	0	0	8				
3	8	0	0	0	0	0	0	8	3	0	0	0	0	0	0	3				
4	1	1	0	0	0	0	0	2	1	0	0	0	0	0	0	1				
5-14	9	1	1	1	0	0	0	12	7	2	1	0	0	0	0	10				
15-24	3	0	0	0	0	0	0	3	5	2	0	0	0	0	0	7				
25-44	4	1	0	0	0	0	0	5	2	0	0	0	0	0	0	2				
45 +	3	0	0	0	0	0	0	3	7	0	0	0	0	0	0	7				
All	43	6	3	2	0	0	0	54	46	5	2	1	0	0	0	54				
	(79.6)	(11.1)	(5.6)	(3.7)	(0.0)	(0.0)	(0.0)	(100.0)	(85.1)	(9.3)	(3.7)	(1.9)	(0.0)	(0.0)	(0.0)	(100.0)				

\* Figures in parenthese indicate percentages.

Table-5.12: Distribution of Diarrhoeal Patient by Age, Sex and Time of Starting LGS Treatment (i.e. after how many times of loose motions LGS were given) Maheri union (Kasba Upazila) April 1985

Age	M a l e							F e m a l e						
	Not used	2-5	6-10	11-15	16-25	26-30	Total	Not used	2-5	6-10	11-15	16-25	26-30	Total
0-4	43	9	3	1	1	1	58	31	9	1	1	1	0	43
0	11	1	0	1	0	1	14	10	2	0	1	0	0	13
1	14	1	3	0	0	0	18	10	2	1	0	0	0	9
2	6	3	0	0	1	0	10	7	2	0	0	0	0	3
3	8	3	0	0	0	0	11	2	0	0	0	1	0	3
4	4	1	0	0	0	0	5	2	3	0	0	0	0	5
5-14	16	4	1	0	0	0	21	10	3	1	0	0	0	14
15-24	6	4	0	0	0	0	10	8	1	0	0	1	0	10
25-44	3	1	0	0	0	0	4	2	0	1	0	0	0	3
45 +	4	1	0	0	0	0	5	11	0	1	0	1	0	13
All	72	19	4	1	1	1	98	62	13	4	1	3	0	83
	(73.5)	(19.4)	(4.1)	(1.0)	(1.0)	(1.0)	(100.0)	(74.7)	(15.7)	(4.8)	(1.2)	(3.6)	(0.0)	(100.0)

\* Figures in parentheses indicate percentages.

Table-5.13: Distribution of Diarrhoeal Patient by Age, Sex and Time of Starting LGS Treatment (i.e. after how many times of loose motions LGS were given) Mulgram Union of Kasba Upazila (Non-CRP area), May 1985

Age	M a l e							F e m a l e						
	Not used	2-5	6-10	11-15	16-25	26-30	Total	Not used	2-5	6-10	11-15	16-25	26-30	Total
0-4	23	3	0	0	0	4	30	26	0	0	0	0	4	30
0	9	2	0	0	0	1	12	6	0	0	0	0	1	7
1	2	1	0	0	0	1	4	7	0	0	0	0	3	10
2	3	0	0	0	0	1	4	8	0	0	0	0	0	8
3	8	0	0	0	0	0	8	3	0	0	0	0	0	3
4	1	0	0	0	0	1	2	2	0	0	0	0	0	2
5-14	9	0	1	0	0	2	12	7	3	0	0	0	0	10
15-24	4	0	0	0	0	0	4	5	2	0	0	0	0	7
25-44	4	1	0	0	0	0	5	1	0	0	0	0	0	1
45 +	3	0	0	0	0	0	3	6	0	0	0	0	0	6
All	43	4	1	0	0	6	54	46	5	0	0	0	4	54
	(79.6)	(7.4)	(1.9)	(0.0)	(0.0)	(11.1)	(100.0)	(83.3)	(9.3)	(0.0)	(0.0)	(0.0)	(7.4)	(100.0)

\* Figures in parentheses indicate percentages.

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Appendix--A

A Survey on Diarrhoeal Episodes and Types of Treatments  
in BRAC's CRP and non-CRP area.

Upazila \_\_\_\_\_ Household No. \_\_\_\_\_

Union \_\_\_\_\_ Village \_\_\_\_\_

Name of Head of Household \_\_\_\_\_

Total regular members: Male \_\_\_\_\_ Female \_\_\_\_\_

From the last \_\_\_\_\_ till now, that is during the last fifteen days, whether any members of this household including children suffered from diarrhoeal disease.

S \_\_\_\_\_

NS \_\_\_\_\_

Yes /  /

No /  /

Line No.	Name of Patient	Age	Sex	What type of disease	Starting date of disease	Reco- vered date	Approx. how many times loose motion occurred	Whether able to do normal work during disease

Type of treatment taken (according to serial) (use code)	If LGS was used		
	How many times LGS was prepared during disease	LGS used after how many time of loose motions	How many times LGS was used.



Name of interviewer: \_\_\_\_\_

Code

Date: \_\_\_\_\_

Kabiraji - 1 Homeopathy -2  
 Alopahy - 3 LGS -4  
 Others - 5  
 No treatment - 0