

9/2/90  
None

ETHICAL REVIEW COMMITTEE, ICDDR, B.

Principal Investigator Drs. K. M. A. Aziz Trained Investigator (if any)

Application No. 90-007 (Rev) Supporting Agency (if Non-ICDDR, B)

Title of Study Socioeconomic, demographic, and cultural factors related to patients at [unclear] Project status: (X) New Study ( ) Continuation with change ( ) No change (do not fill out rest of form)

Circle the appropriate answer to each of the following (if Not Applicable write NA)

- 1. Source of Population:
  - (a) Ill subjects Yes No
  - (b) Non-ill subjects Yes No
  - (c) Minors or persons under guardianship Yes No
- 2. Does the study involve:
  - (a) Physical risks to the subjects Yes No
  - (b) Social Risks Yes No
  - (c) Psychological risks to subjects Yes No
  - (d) Discomfort to subjects Yes No
  - (e) Invasion of privacy Yes No
  - (f) Disclosure of information damaging to subject or others Yes No
- 3. Does the study involve:
  - (a) Use of records, (hospital, medical, death, birth or other) Yes No
  - (b) Use of fetal tissue or abortus Yes No
  - (c) Use of organs or body fluids Yes No
- 4. Are subjects clearly informed about:
  - (a) Nature and purposes of study Yes No
  - (b) Procedures to be followed including alternatives used Yes No
  - (c) Physical risks Yes No
  - (d) Sensitive questions Yes No NA
  - (e) Benefits to be derived Yes No NA
  - (f) Right to refuse to participate or to withdraw from study Yes No
  - (g) Confidential handling of data Yes No
  - (h) Compensation &/or treatment where there are risks or privacy is involved in any particular procedure Yes No

- 5. Will signed consent form be required:
  - (a) From subjects Yes No
  - (b) From parent or guardian (if subjects are minors) Yes No
- 6. Will precautions be taken to protect anonymity of subjects Yes No
- 7. Check documents being submitted herewith to Committee:
  - \_\_\_ Umbrella proposal - Initially submit a overview (all other requirements will be submitted with individual studies).
  - \_\_\_ Protocol (Required)
  - \_\_\_ Abstract Summary (Required)
  - \_\_\_ Statement given or read to subjects on nature of study, risks, types of questions to be asked, and right to refuse to participate or withdraw (Required)
  - \_\_\_ Informed consent form for subjects
  - \_\_\_ Informed consent form for parent or guardian
  - \_\_\_ Procedure for maintaining confidentiality
  - \_\_\_ Questionnaire or interview schedule \*
- \* If the final instrument is not completed prior to review, the following information should be included in the abstract summary:
  - 1. A description of the areas to be covered in the questionnaire or interview which could be considered either sensitive or which would constitute an invasion of privacy.
  - 2. Examples of the type of specific questions to be asked in the sensitive areas.
  - 3. An indication as to when the questionnaire will be presented to the Cttee. for review.


(PTO)

I agree to obtain approval of the Ethical Review Committee for any changes involving the rights and welfare of subjects before making such change.

90-007 (Rev)  

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2/5/90

- 1a. PRINCIPAL INVESTIGATORS : Dr. K.M.A. Aziz  
Dr. Abbas Bhuiya  
Dr. M. Yunus  
Dr. M. Strong
- 1b. COLLABORATING INVESTIGATOR : None
2. TITLE OF PROJECT : Socioeconomic, demographic, and  
cultural factors related to  
patients at Matlab Diarrhoea  
Treatment Centre: An epidemiological  
and ethnomedical analysis
3. STARTING DATE : As soon as the protocol is approved.
4. DATE OF COMPLETION : 14 months from starting date.
5. TOTAL BUDGET REQUESTED : US\$ 52,750.00
6. FUNDING SOURCE :
7. DIRECTOR, ICDDR,B :   
Professor Demissie Habte  
This protocol has been approved  
by the Community Health Division

## AIMS OF PROJECT

### a) General aims:

1. To investigate the factors associated with the overall diarrhoeal mortality trend among the children under five years of age in Matlab in relation to knowledge and availability of ORS in the community, and access to free treatment at Matlab Diarrhoea Treatment Centre.

### b) Specific aims and hypotheses:

1. To study prospectively the socioeconomic, demographic, and cultural factors influencing the decision in seeking or not seeking treatment for children with diarrhoea at Matlab DTC.

It is expected that children from lower socioeconomic household and uneducated parents are less likely to attend the DTC for treatment of their children.

It is expected that children of parents with traditional ways of recognition, classification, and beliefs about causes of diarrhoea are more likely to adhere to traditional home remedies.

2. To examine the use pattern of ORS at home and its influence in the decision of seeking or not seeking medical help from the DTC.

It is assumed that the use of ORS at home level does not correspond the biomedical requirements for the treatment of diarrhoea. Reliance on such use of ORS results in not attending or delay in attending the DTC.

3. To examine the trends in DTC admissions during the period of 1966-1989 with respect to economic condition of household, education of parents, proximity to DTC, residence in terms of ICDDR,B interventions, sex and birth order of children. These will be compared with the distribution of children in similar time period in the community to identify the level of representation in the DTC from different groups with respect to the above variables.

It is assumed that children of lower economic group, uneducated parents, distant villages, non-intervention area, female sex, and higher birth order are less likely to be brought to the DTC.

### c) Significance

Over the years since the establishment of Matlab DTC in 1964 mainly epidemiological information have been collected and analysed. Little attention has been given to the socio-economic and cultural aspects of the management of diarrhoea. By combining epidemiological and anthropological methods of data collection and analysis this study

will make an attempt to contribute in areas leading to development of interventions aiming at efficient use of DTC and improved diarrhoea management at the home level through behavioral modifications.

#### ETHICAL IMPLICATIONS:

This study will not involve any specimen collection from the study subjects. In-depth open-ended interview based on selected topics will be conducted among the caretakers of under five years old diarrhoea patients. Informations will be sought which are usually shared among the household members and are not considered private. However, informed consent will be obtained prior to the interview and observation.

### D. BACKGROUND, RESEARCH PLAN AND BIBLIOGRAPHY

#### D(a). BACKGROUND

Matlab DTC of International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) has been serving a population of around 200,000 defined geographically at Matlab *Upazila* which is under a prospective Demographic Surveillance System (DSS) since 1966. Uptil now there have been more than 40,000 admissions of under five year old diarrhoeal cases from the DSS in the DTC receiving free treatment. In addition to treatment in the DTC, ORS was introduced and promoted by ICDDR,B at the community level for home treatment of diarrhoea since 1979 (Yunus and Chakraborty 1979; Snyder et al. 1982). During 1982 clinical management of diarrhoea has been extended to the community through establishment of three community operated treatment centres (Baqui et al. 1984). In spite of efforts on effective management of diarrhoea at home and clinic, trends in diarrhoeal mortality has not shown any diminishing tendency (Shaikh et al. 1990), rather an upward trend was observed for acute watery diarrhoea among the infants (Fauveau et al. 1990). Under the above circumstances it is imperative to understand the underlying socioeconomic, demographic, and cultural factors associated with such a trend in diarrhoeal mortality.

Identification of risk factors without a grass-root view of the victim's daily life fails many a times to offer adequate explanation of the events that follow. Such grass-root views in the context of diarrhoea were studied in rural India (Indian Market Research Bureau 1990) by offering the most detailed and in-depth information. By observing and participating fully in the life of people being studied by the epidemiologist, the anthropologist is trained to record the details of day-to-day events and family relations, to elicit local attitudes, beliefs and values and to take notice of larger socioeconomic forces which impinge on the community. Together, these grassroot insights into the culture enable the anthropologist to evaluate social inputs in terms of their relative importance as determinants of treatment seeking behavior.

To gain such an understanding a combination of epidemiological and anthropological methods of study is considered appropriate and will be

adopted in the proposed study. Between epidemiology and anthropology there exists theoretical and methodological affinities. Fleck and Ianni (1958) observed that a common meeting ground for the two disciplines rested on the concept of multiple causation of disease. In sharp contrast to the widely accepted "Doctrine of Specific Etiology", this new approach maintained that getting sick depends upon a complex interaction of many variables - one of which is the disease agent (Dubos 1965). Other factors in this "causal network," as Dunn (1975) has labeled it, include the host's general metabolic state and immune response, the political and economic environment, and cultural beliefs and practices. These multiple factors or "insults" impinge directly on an individual or group causing its level of health to risk and fall accordingly (Audy 1971; Dunn 1976). To stay healthy, there is a need of balancing these multiple factors.

Exposure to a pathogen does not necessarily result in infection, infection is not always sufficient to cause illness, and the impact that illness has on the overall health of an individual is not a constant (Audy 1971). When one or more insults outweighs the coping ability of the individual or group, the scale is tipped in favor of disease. A true appraisal of human illness, Fleck and Ianni argue, must "consider all elements of the environment and, must focus upon man, the host, rather than upon the parasite which invades him." The theoretical underpinnings of this multi-factorial approach have been more fully developed by, among others, Audy (1971), Dubos (1959, 1965), May (1960), and Armelagos et al. (1978).

Alland (1966), however, argues that the dictum which includes all human behaviour in disease analysis, is overwhelming, vague and non-directional. In sharpening this model, two anthropologists have constructed a scheme which allow the investigator to dissect any broad behavioral category into discrete, manageable units for analysis. Dunn (1976) bases his classification of a behavior on three criteria; (1) it either enhances or undermines one's health; (2) it is a deliberate or non-deliberate health action; (3) it is influenced by the community or outside of it.

It is important to consider how ethnomedicine has contributed to the epidemiology of diarrhoeal diseases. Yoder (1989) in a paper on cultural conceptions of illness has identified concepts and research methods from medical anthropology and ethnography. Medical anthropologists have made efforts to study the health beliefs and behaviors which exist outside the mainstream of medicine. Ethnomedicine is the formalized area of such study. Hughes defines the term as "those beliefs and practices relating to disease which are the products of indigenous cultural development and not explicitly derived from the conceptual framework of modern medicine" (1969:87). The ethnomedical study investigates "the popular health culture" of the members of a society (Polgar 1962).

In an attempt to review, systematically, the major contributions of ethnomedicine to the epidemiology of infectious diseases, the field could be divided into three areas, such as, disease recognition, etiology and management. It is expected that a focus on each of these components would throw light on perceptions and practices in relation

to diarrhoea management at the community level.

*Community Recognition of Infectious Diseases:* Working within the limited framework of its own historical health experiences, every culture is responsible for creating a process with which to recognize and classify illnesses. Clearly the entire folk decision-making process must be viewed in a cultural context. Cultures regularly are called upon to differentiate between serious dysfunctions and those that are minor, transient, or "natural". Diarrhoeal ailments of childhood and conditions that are endemic or regularly prevalent in an area are often explained as "natural". They may be treated with home remedies or, in many cases, go untreated. Of particular interest to the epidemiologist is that word of such illnesses may never reach beyond the boundary of the victim's rural home - and rarely outside the village.

The seasonal diarrhoeas are regarded by the Zulu people as illnesses that "just happen" and thus require no outside intervention or consultation by local healers (Ngubane 1976).

The human body has many ways of telling an individual that he/she is suffering from infection and that a special kind of attention is required to rid the body of disease. The first step in curing the ills of a community is, clearly, to first recognize the popular conceptions upon which a people base their recognition of a disease, then negotiate an acceptable approach.

When measles victims contract diarrhea in rural Bangladesh, mothers choose not to administer the often life-saving oral rehydration therapy available to their child in the belief that the body is actually flushing out unwanted impurities (Shahid 1983:153). They commonly make an effort to hasten the eruption of measles based on a similar theory that the rash, held inside the intestines, must surface in order to properly cleanse the body. External applications of *nim* and *lai* leaves are used while patients are forced to ingest both *nim* and *karala* leaves (Shahid 1983).

Among the villagers of northeastern Brazil there exists a popular conception that the lung is connected directly to the intestinal tract. As a result, mucous and blood in the stool are not recognized as indicators of serious enteric infection, but rather of the inevitable release of mucal build-up in the lungs. Rather than seeking medical attention for the diarrhoea, mothers choose to treat their infant's cold (Nations 1982).

The community definition and recognition of a condition as "serious" can reveal a number of clues to the epidemiologist about the widely shared views of the disease.

*Community Etiology of Disease:* Belief systems of a culture influence the second step in the decision-making process as well: what is the causative agent cited for the illness and how should it be treated? Western industrial countries with belief systems based in "scientific-technological" values offer treatment such as anti-helminthic drugs, insecticides, and surgery directed at biological

agents of disease. The traditional cultures, with different ideological input, attribute parasitic disease to imbalances in the equilibrium of a healthy body, soul loss, movement of real or imaginary parts of the body from their normal position, magical origins, or the "will of God", to name a few. Treatment, in keeping with these basic beliefs, is directed at specific "culture-bound" agents and can be understood only in light of the accepted etiology.

Few ethnomedical studies specifically deal with childhood diarrhoea in terms of the folk decision-making process. In South India (Lozoff et al, 1975) beliefs about the cause of childhood diarrhea among medical personnel and Indian families differ significantly. Open-ended interviews with fifty-six families in Vellore, India revealed that the most common folk explanation for diarrhea was "heat in the body", producing stools with froth, pus or blood. Severe dehydration was conceived as an entirely independent condition caused by ritual impurity or pollution. As a result, popular treatments for diarrhea and dehydration require either a rebalancing of the hot-cold equilibrium, or ritual purification of the child's body, respectively. The authors argue that modern rehydration therapy must be adjusted to meet the essential requirements of both folk and biomedical belief systems (Lozoff et al. 1975).

*Community Treatment of Disease:* Just as etiologies differ drastically between cultures, so too do the treatments chosen to free the affected individual from illness. The attitudinal system of the endemic population determines to whom the patient will go for treatment, the type of treatment accepted, preventive measures followed, and the success of intervention on the part of extra-community medical systems. In the light of the above mentioned conceptual frameworks the proposed study would attempt to investigate the ethnomedical aspects of diarrhea management keeping in view the socioeconomic and cultural conditions.

#### (B) RESEARCH PLAN:

Specific aims No. 1 and 2 will be addressed through collecting prospective data following anthropological and epidemiological approaches.

Four hundred and fifty under five years old children will be selected from patients admitted to DTC during June to December 1990. They will be considered as index cases for this study.

Admitted patients will be stratified into two categories by type of diarrhoea, such as watery diarrhoea and dysenteric diarrhoea. A random selection of three index cases will be made daily from the admitted patients of which two will be with diarrhoea and the other with dysentery. A total of 450 index cases will be studied. The selected cases will be from the Matlab DSS area and from some pre-selected villages outside DSS area. The outside villages will be selected on the basis of proximity to Matlab for convenience of field work.

For each index case two comparable cases (within two weeks of occurrence) from neighbourhood matched by diarrhoea type will be selected through house to house search. The first two such cases will be included in the study. The selection of two cases per index case will allow a study of the commonness of the practices.

While the cases are in the hospital an indepth open-ended interview will be carried out among the caretakers regarding the actions taken by them since the onset of the episode in relation to child care, perceptions and practices in relation to hygiene and diarrhoea management, and decision of bringing the child to DTC following the queries as in Appendix A. A similar interview will also be carried out in the homes among the caretakers of the comparable cases and the caretakers of the index cases who did not make any visit to the DTC during the stay of the patients concerned.

The proposed indepth interview and observation schedules will be standardized through pre-testing by undertaking focus group discussions, and observations. A total of 15 focus groups drawing five from each of the three areas (MCH-FP, comparison, and outside DSS) will be organized for this purpose. Similarly, 15 pre-test observations will be organized at the home and 5 at the DTC for the same purpose. The average time spent with each group will be about one hour. Questions asked will be always open-ended and will be scheduled to progress from general to specific within sessions. The topics of enquiry will be similar to that of interview and observation schedules proposed to be used in care-taker interviews and caretaker child interaction observation proposed in this study (Appendix A and B).

After the return of the index cases to their homes, their caretakers who did not make any visit to the DTC will be observed for six hours for recording child care, hygienic and diarrhoea management practices on selected topics as per guidelines in Appendix B. A similar observation will also be made for caretakers of the comparable cases.

For addressing specific aim number three the study will utilise information on all the DTC admissions of children under five years of age numbering about 40,000. Available information includes information on symptoms at the time of admission indicating the level of severity on arrival at the DTC, thus identifying who are reporting to the DTC at the early stage of the disease and who are arriving late in the DTC complicating the patient management. In addition to these information on age at admission, type of diarrhoea at admission (i.e. acute watery and dysentery), use of ORT prior to admission, pathogens isolated, and the outcome of treatment will be taken into consideration.

Further to the data available in the DTC socioeconomic indicators will be identified through dwelling area and its construction material, occupation of father, land owned by the household, parental education obtainable from the periodic censuses of ICDDR,B.

Demographic factors will include household size, family type and structure, birth order, age, and sex of the patients available from



the Matlab Demographic Surveillance System (DSS).

**Analysis Plan:**

The data analysis will involve both quantitative and qualitative methods. The retrospective data will be amenable to quantitative methods and the prospective data will be amenable to qualitative methods. The ethnomedical information obtained through qualitative method will be useful in explaining the questions on hows, and whys raised by epidemiological analysis of retrospective data.

The linkages of DTC data with the closest census and DSS informations will be made by using the mainframe computer. The DTC data over time will be analysed by using cross tabulations and frequency distributions with respect to the listed variables in the research plan.

The analysis of the in-depth interview and observational data will be made by following the anthropological descriptive methods. These data will be further analysed with the quantitative data generated from the DTC cases and comparable neighbourhood cases.

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## ABSTRACT

This study will investigate the factors associated with the overall diarrhoeal mortality trend during 1966-1989 among the children under five years of age in Matlab in relation to knowledge and availability of ORS in the community, and access to free treatment at Matlab Diarrhoea Treatment Centre (DTC). It will analyse data on a sample of Matlab DTC patients with respect to economic condition of household, education of parents, proximity to DTC, residence in terms of ICDDR,B interventions, sex and birth order of children. It will also analyse data on child care, hygienic and diarrhoea management practices collected prospectively from comparable cases in the community. In this study both in-depth interviewing and direct observational method will be used over a period of eight months covering 1350 cases. This study will be helpful in areas leading to development of interventions aiming at efficient use of DTC and improved diarrhoea management at the home level through behavioral modifications.

10. (C) REFERENCES:

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BUDGET SUMMARY

months effective May, 1990

	<u>Amount (US\$)</u>
Personnel SFRO, 1 FRO, SHA, 6 HA)	43,500
Lab Water Transport	1,500
entry-boat	550
tionery	500
vel and per diem	1,000
<hr/>	
al cost (for 8 months)	47,050

months effective January, 1991

Personnel (One DMO)	3,000
puter service	2,000
tionery	200
ort writing and Publication	500
<hr/>	
al cost (for 6 months)	5,700

and Total: US\$:52,750



12. FLOW CHART 1

INVOLVEMENT OF FIELD WORKERS FOR A PERIOD OF 8 MONTHS

Coding of DTC clinical Data from 1966 to 1975. Work on about 20,000 patient sheets will require 195 man days.

Linking of clinical data with demographic and socioeconomic information through mainframe computer: 50% of 40,000 data on <5-year old cases from DTC will be linked

Interview of 450 index cases in the DTC over a period of 8 months. 1 hour per interview will require 66 man days.

Observation and interview of 450 index cases in the home over a period of 8 months. One interview and observation will require one Working day. Total requirement 450 man days.

Observation and Interview of 900 comparable cases in the community spread over a period of 8 months. One interview and observation will require one working day. Total requirement 900 man days.

Data entry and analysis in PC will require 120 man days.

Classification of ethnomedical information will require 30 man days of supervisors.

The field study will require 320 man days of supervisors.



### 13. TASK OF PRINCIPAL INVESTIGATORS

1. Dr. K.M.A. Aziz

Implementation and analysis of ethnomedical part

2. Dr. Abbas Bhuiya

Computer linkage and quantitative analysis

3. Dr. M. Yunus

Implementation and analysis of clinical and epidemiological part

4. Dr. M. Strong

Computer linkage planning and analysis

APPENDIX A

INTERVIEW SCHEDULE FOR MOTHER/CARETAKER OF THE CHILDREN BELOW FIVE YEARS OF AGE

Information of the child:

- 1. Name of child: -----
- 2. Regn. No. :-----
- 3. CID No.:-----
- 4. Date of birth: -----
- 5. Sex: Boy/Girl
- 6. Birth order: -----

Information of the mother/caretaker:

- 7. Name : -----
- 8. Regn. No. : -----
- 9. CID No.: -----
- 10. Age of : -----
- 11. Education: ---- years completed
- 12. No. of living underfive children: -----
- 13. Family type: -----
- 14. Family structure: -----
- 15. Marital status: -----
- 16. Household size: -----

Information of the father/guardian:

- 17. Name: -----
- 18. Regn. No. : -----
- 19. CID No.: -----
- 20. Age of : -----
- 21. Education: ---- years completed
- 22. Primary occupation: -----
- 23. Land owned: ----- in decimal
- 24. Construction materials and local measurements: -----
- 25. Area of residence: MCH-FP, Comparison, Outside DSS

26. Name the variety of loose motions occurring among children under five years of age.

- a.
- b.
- c.
- d.
- e.
- f.

27. Specify symptoms associated with each of these:

Symptoms related to :

- a.
- b.
- c.
- d.
- e.
- f.

28. Specify symptoms that will warrant referral of the patient to a source outside home:

A. Village practitioner:

- a.
- b.
- c.
- d.
- e.
- f.

B. DTC:

- a.
- b.
- c.
- d.
- e.
- f.

29. Symptoms during this episode: \_\_\_\_\_  
\_\_\_\_\_

30. How do you differentiate between serious diarrhoea episode and those that are minor and transient?  
-----  
-----
31. Who advises regarding measures to be taken during diarrhoea?  
-----  
-----
32. Specify the measures?  
-----  
Specify at what stage of diarrhoea such advice is given?  
-----  
-----
33. Possible causes related to :
- |    |    |
|----|----|
| a. | b. |
| c. | d. |
| e. | f. |
34. Causes related to this episode:  
-----  
-----
35. Treatments related to :
- |    |    |
|----|----|
| a. | b. |
| c. | d. |
| e. | f. |
36. Treatment adopted during this episode:  
-----  
-----
37. Traditional and home remedies used during this episode:  
-----  
-----
38. Specify reasons for using home remedies:  
-----  
-----
39. Medical treatment used during this episode:  
-----  
-----
40. Specify reasons for seeking medical treatment:  
-----  
-----

41. Oral rehydration therapy used during this episode:

-----  
-----

42. Specify reasons for using ORS:

43. When treatment should begin in the case of:

- a. b.
- c. d.
- e. f.

44. Treatment is not required in the case of:

- a. b.
- c. d.
- e. f.

45. Possible preventive measures related to :

- a. b.
- c. d.
- e. f.

46. How this episode could be prevented:

-----  
-----

47. Possible consequences associated with :

- a. b.
- c. d.
- e. f.

48. Consequences associated with this episode:

-----  
-----

49. Feeding practices of breastfed (fully / partially) babies during illness in relation to:

- a. b.
- c. d.
- e. f.

50. Feeding practices adopted during this episode: -----  
-----
51. Feeding practices of fully weaned babies during illness in relation to:
- a. b.
  - c. d.
  - e. f.
52. Feeding practices adopted during this episode: -----
53. Feeding practices of breastfed babies during convalescent stage in relation to:
- a. b.
  - c. d.
  - e. f.
54. Feeding practices adopted during convalescing stage of this episode: -  
-----
55. Feeding practices of weaned babies during convalescent in relation to:
- a. b.
  - c. d.
  - e. f.
56. Feeding practices adopted during convalescing stage of this episode: -  
-----
57. Date of onset of loose motion:
58. Date of reporting to the DTC:
59. Duration of loose motion :
- . Those recovered: -----
- If not recovered, duration on the day of visit by ICDDR,B staff: -----
60. For DTC patient, give details of circumstances that led to the referral: -----

61. Was there any delay in bringing the child to the DTC? -----  
The reasons for delay? -----
62. Who advised to take the child to DTC? -----
63. How the transfer of patient to the DTC was managed? -----  
-----
64. Who visited the child at the DTC? Specify the relationship with the  
child? -----
65. For patients not taken to the DTC:  
Why the patient was not considered for transfer to the DTC?  
-----  
-----
66. Is there any possibility of transferring the patient to DTC?  
-----
67. How do you view the stool of a baby and an adult?  
-----
68. Where do you dispose the faeces of children?  
-----  
Why do you dispose it there?  
-----

Signature of the Interviewer: -----

Time required: -----

Date of interview: -----

APPENDIX B

OBSERVATION OF BEHAVIOURAL AND MANAGEMENT FACTORS AT HOME BETWEEN THE CHILD AND ITS CARE TAKERS IN RELATION TO DIARRHOEAL DISEASES

1. Name of child: -----
2. Registration no.: -----
3. CID No.: -----
4. Symptoms that are apparent in the case:
  - A. Behavioural symptoms:
    - a) Level of restlessness:
    - b) Level of physical weakness:
    - c) Frequency and duration of crying:
    - d) Sudden flaring of mood:
  - B. Physical symptoms:
    - a) Consistency, colour, and frequency of stools:
    - b) Frequency of vomiting and behaviour associated with it:
    - c) Odour of stool:
    - d) Lack of appetite:
    - e) Thirst:
  - C. Level of dehydration:
  - D. Type of diarrhoea:  
DTC diagnosis: -----  
Field diagnosis (by observer): -----
  - E. Status of urination:
5. Mother's/caretaker's actions related to the specific symptoms:
6. Who advises regarding measures to be taken during diarrhoea?
7. Specify the measures adopted: -----
8. Specify at what stage of diarrhoea such measures are adopted:



9. Description of treatment(s) offered to the child:

10. Any practitioners consulted?

Type of practitioners: -----

Actions by the practitioners: -----

11. Traditional and home remedies offered to the child:

12. Any rituals performed? -----

Description of rituals: -----

13. Use of ORT: -----

14. Ingredients used in preparing the ORT: -----

15. How the ORT is prepared: -----

16. Quantity and frequency of ORT intake: -----

17. Feeding practices: -----

18. Breastfeeding frequency and duration: -----

19. Food preparation practices: -----

20. If transfer to DTC takes place:

How it was managed? -----

21. Is mobility restricted? ----- How? -----

22. The condition of environment where the child moves?

23. Is child washed? When? How? What parts of the body? By whom?

24. Does mother/caretaker(s) wash hands? When? How?

25. Level of hygiene in preparing food/drink:

26. Ingredients of food/drink:

27. Quantity given to the child: -----

28. Frequency of intake: Food ----- Drink -----

29. Level of hygiene in serving food/drink:  
-----

30. Hygiene of hand/spoon at the time of feeding the child:  
-----

31. Level of hygienic protection of stored food/drink:  
-----

32. How are the soil clothes or diapers treated?  
-----

Washed? How? -----

Where? -----

33. Where the stool of the child is disposed?  
-----

Waiting time of stool disposal: -----

34. Sources of water:

Drinking: ----- Cooking: -----

Washing: -----

Signature of the observer: -----

Timing of observation:

Starts at: ----- Ends at: -----

Date of observation: -----