

Attachment 1.

Date 15 April 1981

M. Shafiqul Islam

Dr. Md. Yunus

Principal Investigator Abbas Bhuiya

Trainee Investigator (if any) _____

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Application No. 81-017(P)

Supporting Agency (if Non-ICDDR,B) _____

Title of Study Socio-economic differences of Diarrhoeal Morbidity and Mortality in selected Villages of Rural Bangladesh (limited study).

Project status:

- 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).

Source of Population:

- (a) Ill subjects Yes No
- (b) Non-ill subjects Yes No
- (c) Minors or persons under guardianship Yes No

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

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

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 N.A.
- (d) Sensitive questions Yes No N.A.
- (e) Benefits to be derived Yes No
- (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 N.A.

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:

- N.A. Umbrella proposal - Initially submit an 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)
- N.A. Informed consent form for subjects
- N.A. Informed consent form for parent or guardian
- Procedure for maintaining confidentiality
- N.A. 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.

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

M. Shafiqul Islam

Abbas Bhuiya

REF
WI 407.JB2
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1981

81-017(P)
Rec'd.
23.4.81.

SECTION I - RESEARCH PROTOCOL

1. Title: Socio-economic differentials of Diarrhoeal Morbidity and Mortality in selected Villages of Rural Bangladesh (limited study).
2. Principal Investigator: M. Shafiqul Islam
3. Co-investigators: Dr. Md. Yunus & Abbas Bhuiya
4. Starting date: April 1981
5. Completion date: September 1981
6. Total direct cost: US \$1,800
7. Scientific Program Head:

This protocol has been approved by the Community Services Research Working Group.

*Signature of Scientific Program Head: A. R. J.

Date: 16/4/81

*This signature implies that the Scientific Program Head takes responsibility for the planning, execution and budget for this particular proposal.

8. Abstract Summary:

This study will investigate the socio-economic differentials of diarrhoeal attack and death in a population of 20,000 in 12 villages of Matlab Demographic Surveillance System for the year 1975 and 1976. The study will be based on already collected data linking several data sources: diarrhoea incidence in tubewell and water study villages of 1975 and 1976, hospital admission records, field death report and SES information from the 1974 census of those villages. Incidence of diarrhoea morbidity and mortality will be related to occupation and education of household head, highest education, per capita living

space, source of water, and distance of latrine from used water source, use of fixed latrine and water pot after defaecation. Other areas of inquiry will be duration of hospital stay, waiting time between onset of diarrhoea and hospital admission and the distance between residence and hospital according to socio-economic status. Main research support will be needed in respect of coding data by linking the various sources, punching and computation of results. Statistical assistance will be required to test the level of significance of the results obtained.

9. Reviews: (leave blank)

- a) Ethical Review Committee: _____
- b) Research Review Committee: _____
- c) Director: _____
- d) BMRC: _____
- e) Controller/Administrator: _____

ABSTRACT SUMMARY - PARTICULAR ITEMS

1. Not applicable
2. Not applicable
3. Not applicable
4. Information will be used and analysed as a whole wherein there will be no scope to identify individuals.
5. Not applicable
6. Not applicable
7. No benefits to the individual in particular but will provide information about diarrhoeal incidence and fatality in different socio-economic status of society. Results obtained will be useful for national policy makers for control and eradication of diarrhoea in Bangladesh.
8. The study requires use of hospital records, diarrhoea surveillance data collected in selected villages and census data.

SECTION II - RESEARCH PLAN

A. INTRODUCTION

Diarrhoeal diseases accounted for 16 to 20 percent of all deaths in different rural areas of Bangladesh in the recent years.¹⁻⁴

A study carried out in Matlab demographic surveillance area reported diarrhoea incidence of 75 per 1,000 population.⁵ Another contemporary survey carried out all over rural Bangladesh reported 47 diarrhoeal cases per 1,000 population for a week preceeding survey.⁶

Little is known about the socioeconomic differentials of morbidity and mortality of diseases in general and of diarrhoeal diseases in particular although millions of people in Bangladesh suffer from this disease and die early in life. One recent study carried in Matlab area has documented significant socioeconomic differentials in mortality rate.⁷ Another study has described the time of onset of diarrhoeal incidence.⁸

B. SPECIFIC AIMS

1. To estimate overall incidence of diarrhoeal morbidity and mortality according to occupation and education of head of households and highest education in households.
2. To estimate diarrhoeal morbidity and mortality according to per capita living space.
3. To quantify diarrhoeal morbidity and mortality by source of water.
4. To quantify diarrhoeal morbidity and mortality by distance of latrine from used water source.
5. To assess diarrhoeal morbidity and mortality by use of fixed latrine by majority household members.

6. To assess diarrhoeal morbidity and mortality by use of water pot after defaecation by majority household members.
7. To know diarrhoeal morbidity by duration of hospital stay according to SES.
8. To know diarrhoeal morbidity by waiting time between onset of diarrhoea and hospital admissions according to SES.
9. To know the diarrhoeal morbidity by distance between patients' home and hospital according to SES.
10. To know diarrhoeal mortality occurring in the homes according to SES.

C. METHOD OF PROCEDURE

Data of diarrhoeal incidence of 1975-76 tubewell and water study villages, hospital records, hospital charts and field death reports will be matched with SES data of 1974 census to get the total number of diarrhoeal incidence and deaths. Based on these record linkages, tabulations will be made for diarrhoea morbidity and or mortality rates according to the following variables:

1. occupation of head
2. education of head
3. highest education in household
4. per capital living space
5. source of water
6. distance of latrine from used water source
7. use of fixed latrine by majority members
8. use of water pot after defaecation by majority members
9. duration of hospital stay according to SES
10. distance of hospital from home according to SES
11. field deaths according to SES
12. diarrhoea attack according to family size
13. diarrhoea deaths according to family size

D. SIGNIFICANCE

The abnormally high diarrhoeal attack rate which causes thousands of death to rural population has been a matter of great concern to public health administrator in Bangladesh. The results obtained from analysis of results of this study will separate out the population groups which are at greater risk of attack and death from those who are at less risk. The results will be useful to national policy makers to undertake suitable policy decisions to control and eradicate diarrhoeal diseases in Bangladesh.

E. FACILITIES REQUIRED

Personnel : Research Associate, Coder, Secretary,
Statistical Assistance, etc.

Data Management : Key punching and computer facilities

Supplies : Stationeries, IBM cards, printing, etc.

F. COLLABORATIVE ARRANGEMENT

None

REFERENCES

1. Ruzicka, L.T. and Chowdhury, A.K.M.A. Demographic surveillance system - Matlab, Vol.3, 1974. Cholera Research Laboratory, Dacca, Bangladesh, March 1978.
2. Ruzicka, L.T. and Chowdhury, A.K.M.A. Demographic surveillance system - Matlab, Vol.4, 1975. Cholera Research Laboratory, Dacca, Bangladesh, March 1978.
3. Ruzicka, L.T. and Chowdhury, A.K.M.A. Demographic surveillance system - Matlab, Vol.5, 1976. Cholera Research Laboratory, Dacca, Bangladesh, March 1978.
4. Chowdhury, S.A. and Khan, A.H. Causes of Death, Companiganj, Bangladesh, 1975-78. Evaluation Unit Report No.03. Christian Commission for Development in Bangladesh, 1978.
5. Curlin, G.T., Aziz, K.M.A. and Khan, M.R. The influence of drinking tubewell water on diarrhoea rates in Matlab thana, Bangladesh. Working Paper No.1, Cholera Research Laboratory, Dacca, Bangladesh, June 1977.
6. Skoda, J.D., Mendis, J.B. and Chia, M. A survey in Rural Bangladesh on diarrhoeal morbidity, water usage and related factors. UNICEF and WHO, Dacca, Bangladesh, First Report, June 1977.
7. D'Souza, S., Bhuiya, A. and Rahman, M. Socio-economic Differentials in Mortality in a Rural Area of Bangladesh. Scientific Report No.40, ICDDR,B, Dacca, Bangladesh, November 1980.
8. Khan, M. Hours of Onset of Cholera Classical and Eltor and Diarrhoea. Scientific Report No.39, ICDDR,B, Dacca, Bangladesh, August 1980.

SECTION III - BUDGET

A. Detailed Budget

1. Personnel Services:

<u>Name</u>	<u>Position</u>	<u>% effect</u>	<u>No. of days</u>	<u>Annual Salary (Tk)</u>	<u>Project Requir.</u>	
					<u>Taka</u>	<u>Dollar</u>
M. Shafiqul Islam	Assistant Scientist	40	130	101,760	-	-
Dr. Md. Yunus	Acting Head, MS	5	130	103,296	2,582	-
Abbas Bhuiya	Research Associate	20	130	60,032	6,003	-
To be named	1 Coding Assistant	100	44	21,872	3,701	-
To be named	2 Data Entry Tech.	100	6 each	21,872	505	-
To be named	1 Programmer	25	40	52,028	2,001	-
To be named	1 Secretary/Typist	10	130	46,304	2,316	-
				Sub-total	17,108	

2. Supplies and Materials:

Stationery					500	-
IBM cards (5,000)					-	19.00

3. Equipment: None

4. Patient Hospitalization: None

TakaDollar5. Out-patient transport: None6. ICDDR,B transport: None7. Travel and Transport of persons: None8. Transport of Things: None9. Rent, Communication and Utilities: None10. Printing and Reproduction:

Mimeography

300

-

Xerox

100

-

Special reproduction

50

-

Cover printing and binding

250

-

Sub-total 700

11. Other contractual services:

Computer charges (10 hours)

10,000

-

12. Construction, renovation and alterations: None13. Miscellaneous: None

(iii)

B. Budget Summary
FY 1981

<u>Category</u>	<u>Taka</u>	<u>Dollar</u>
1. Personnel services	17,108	-
2. Supplies	500	19.00
3. Equipment	-	-
4. Hospitalization	-	-
5. Out-patients	-	-
6. ICDDR,B, transport	-	-
7. Travel, person	-	-
8. Transportation, thing	-	-
9. Rent/communication	-	-
10. Printing and reproduction	700	-
11. Contractual services	10,000	-
12. Consturction	-	-
13. Miscellaneous	-	-
	<u>28,308</u>	<u>19.00</u>
	=====	=====
TOTAL		

GRAND TOTAL in US Dollar 1,799.38, say \$1,800: conversion
Rate \$1 = Tk. 15.90