

Recd. 31st Aug. 77

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SECTION I - RESEARCH PROTOCOL

1. Title : Birth Care Practices and Neonatal Mortality in Teknaf, Rural Bangladesh.
2. Principal Investigator : M. Shafiqul Islam
3. Starting Date : January, 1977
4. Completion Date : July - 1978
5. Total Direct Cost : US \$ 1418.00
6. Abstract Summary : (250 words or less):

This research was undertaken to study the prevailing birth care practices and neonatal mortality in Teknaf Dysentery Project of Cholera Research Laboratory in Chittagong district. The project covers a population of about 60,000 of Teknaf Police station. About 5000 live births and 400 neonatal deaths of 1976 and 1977 collected through routine registration and surveillance will be included. This investigation will describe birth care practices i.e. the type of persons attending women at time of delivery, method of cutting and dressing of the umbilical cord. Detailed analysis will be made of the causes of neonatal deaths. Birth reports and death reports provide data on all these variables. These reports are being collected by teams of male and female field workers during their weekly visits to families. Qualified Field Assistants record every event of morbidity, mortality and birth in specified forms. Field supervisions check their work and verify accuracy of completed forms. Over and above a physician makes routine visit to diagnose the causes of mortality in field. Birth care practices will be classified by education of husband or head of family; causes of neonatal deaths will be classified by birth care practices, age of mother, birth order and age of the neonates at time of death. Results will be presented by cross-tabulations, statistical method of correlation and test of significance will be used to estimate results.

7. Reviews : (Leave Blank)

- a) Research Involving Human Subjects : _____
- b) Research Committee : _____
- c) Director : _____
- d) BMRC : _____
- e) Controller/Administrator : _____

SECTION II - RESEARCH PLAN

A. INTRODUCTION

1. Objective : The purpose of this research will be to investigate the prevailing birth care practices and neonatal mortality in Teknaf Dysentery Project of Cholera Research Laboratory. About 5000 live births and 400 neonatal deaths occurring in this area during the period 1976 and 1977 will be studied. Description of birth care practices will include type of persons attending at time of delivery, method of cutting and dressing of the umbilical cord. Neonatal mortality will be analysed by cause of death, age of mother, birth order and age of neonatal deaths. Birth care practices will be used as independent variables when classified by cause of neonatal death and dependent variables when classified by education of husband or head of families of women.

2. Background : Research works having special bearing on the two issues which will be addressed to in this investigation are few in Bangladesh. Knowledge of neonatal deaths are confined to rates and ratios of total mortality figure. There is hardly any data available on birth care practices.

Our Matlab data showed 71 neonatal deaths per 1000 live births during 1975 and 1976. A preliminary estimate of the present work gave 75 neonatal deaths per 1000 live births in Teknaf project. Neonatal mortality explained 23.1 percent of all deaths and 56.2 percent of all infant deaths.

-3: Rationale : Bangladesh has high fertility and infant mortality rates. Majority of infant deaths occur during neonatal period of infancy. Research describing birth care practices and identifying the major causes of neonatal mortality is crucially important for evaluation of maternity and infant health care facilities available in the country.

B. SPECIFIC AIMS

- i. To describe birth care practices in Teknaf
- ii. To relate birth care practices to neonatal mortality
- iii. To analyse neonatal mortality by cause, age of mother, birth order and age of neonatal infants at time of death.

C. METHOD OF PROCEDURE :

The source of data will be the routine registration of births and deaths introduced in the Teknaf Dysentery Project since May, 1976. All the births and neonatal

deaths of 1976 and 1977 will be included in this study.

Birth reports and death reports contain data on birth care practices and neonatal deaths. These reports are being collected by field workers during their weekly visit to families. Field Assistants complete standard birth report and death report forms and make relevant entries of these events in family visit cards. Their work is checked by Field Supervisors. A physician make special visit to families to diagnose causes of mortality.

D. SIGNIFICANCE:

Infant mortality is very high in Bangladesh and similar developing countries. Majority of these mortality occur in the neonatal period. Some of the causes of mortality like congenital abnormalities and extreme prematurity are incompatible with life. However, many other causes of neonatal mortality are associated with the practices during and immediately after birth. Bangladesh is eager to take up major steps for population control and family planning by limiting fertility and infant mortality rates. Success of national programmes aimed at achieving these goals will largely depend on identification and

evaluation of birth care practices and causes of death of neonatal infants.

E. FACILITIES REQUIRED

It is estimated that this study will be completed by July, 1978. Services of one Statistical Assistant will be required for one month for partial hand sorting and tabulation of data in addition to time spent by Principal Investigator and co-investigators. The data which are being routinely punched will be computerised.

F. COLLABORATIVE ARRANGEMENTS:

None.

SECTION III - BUDGET

A. DETAILED BUDGET

<u>1. PERSONNEL SERVICES</u>				<u>P R O J E C T</u>	
<u>N A M E</u>	<u>POSITION</u>	<u>Percent of effort or number of days</u>	<u>Annual Salary</u>	<u>Requirements</u>	
				<u>TAKA</u>	<u>DOLLAR</u>
Md. Shafiqul Islam	Research Associate	88 days	43,872/-	14,849/-	
M.H. Munshi	Project Manager (Teknaf Project)	7 "	36,384/-	980/-	
M. Mizanur Rahman	Statistical Assistant	10 "	14,605/-	562/-	
-	1 Statistical Assistant	22 "	9,720/-	823/-	
Subtotal, :				17,214/-	-

<u>2. SUPPLIES AND MATERIALS :</u>			<u>P R O J E C T</u>	
<u>I T E M</u>	<u>UNIT COST</u>	<u>QUANTITY</u>	<u>Requirements</u>	
			<u>TAKA</u>	<u>DOLLAR</u>
Pen, Ballpoint, Black	\$ 0.15	4 Each		0.60
Refill, Black	\$ 0.04	16 "		0.64
Pencil, lead No. 1	\$ 0.02	6 "		0.12
Pad, Octave	\$ 0.16	2 "		0.32
Eraser, double, oblong	\$ 0.04	2 "		0.08
Clip, Paper, Gem	Tk.3.75	1 Box	3.75	
Pad, foolscap, plain (100 sheet pad)	\$ 0.36	2 Each		0.72
Pad, foolscap, lined (100 sheet pad)	\$ 0.28	3 "		0.84
Subtotal			3.75	3.32

.....2/-

3. EQUIPMENT

None

4. PATIENT HOSPITALIZATION

None

5. OUTPATIENT CARE

Not applicable

6. CRL TRANSPORT

None

7. TRAVEL AND TRANSPORTATION OF PERSONS

None

8. TRANSPORTATION OF THINGS

None

9. RENT, COMMUNICATION AND UTILITIES

None

10. PRINTING AND REPRODUCTION

I T E M S

Mimeography
Computer Service Charges
Cover printing & binding
Xeroxing
Special reproduction

PROJECT REQUIREMENTS
TAKA DOLLAR

1200/-
2400/-
800/-
200/-
100/-

Sub-total

4700/-

.....3/-

11. OTHER CONTACTUAL SERVICES

None

12. CONSTRUCTION, RENOVATION AND ALTERATIONS

None

B. BUDGET SUMMARY

C A T E G O R Y

	<u>YEAR - 1</u>		<u>YEAR - 2</u>		<u>YEAR - 3</u>	
	<u>TAKA</u>	<u>DOLLAR</u>	<u>TAKA</u>	<u>DOLLAR</u>	<u>TAKA</u>	<u>DOLLAR</u>
1. Personnel	17,214.00					
2. Supplies	3.75	3.32				
3. Equipment	-	-				
4. Hospitalization	-	-				
5. Outpatient	-	-				
6. C.R.L. Transport	-	-				
7. Travel Persons	-	-				
8. Transportation Things	-	-				
9. Rent/Communication	-	-				
10. Printing/Reproduction	4,700.00	-				
11. Contractual Service	-	-				
12. Construction	-	-				
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Total	21,917.75	3.32				
Total \$	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	1,417.37					

Say 1,418.00

Conversion Rate \$ 1.00 = Taka 15.50

ABSTRACT SUMMARY

Title :

BIRTH CARE PRACTICES AND NEONATAL MORTALITY

IN TEKNAF, RURAL BANGLADESH

M. Shafiqul Islam

This research work has been undertaken to study birth care practices and neonatal mortality in Teknaf area of Chittagong district. The first census by CRL was carried out in 1975 in the entire Teknaf thana. Since May 1976 a population of approximately 60,000 has been under constant surveillance of birth, death, migration and morbidity. About 5000 births and 400 neonatal deaths occurring in the area in 1976 and 1977 will be the subjects of this investigation. Specific areas on birth care practices will include the type of persons attending women at time of delivery, methods of cutting and dressing of the umbilical cord. Investigations on neonatal mortality will relate to cause of death, age of mother, birth order and age of neonates at time of death. Birth reports and death reports being completed by teams of male and female field workers during their weekly visits to families contain data on all these variables. Birth care practices will be used as independent variables when classified by cause of neonatal deaths and dependant variables when classified by education of husband or head of families of women.

1. The work will involve about 5,000 live births and 400 neonatal deaths collected through surveillance in Teknaf study area.
2. Not applicable (Data will be collected from routine reports)
3. Not applicable.
4. Data will be kept at personal care so that adequate confidentiality can be maintained. No identifying information will be required to be quoted from reports.
5. Not applicable.
 - a. Not applicable
 - b. Not applicable.
6. Not applicable (Data source will be reporting system).
7. This kind of work will create awareness of better birth care practices which will ensure welfare of mothers and their infants.
8. This work will take help of birth and death reports routinely collected through surveillance in Teknaf Dysentery Project.