

ETHICAL REVIEW COMMITTEE, ICDDR,B.

69

Principal Investigator Barbara Stoll
Application No. 81-028 (P)
Title of Study Pilot project to follow-up surveillance patients with Shigella and other dysentery disease

Trainee Investigator (if any) _____
Supporting Agency (if Non-ICDDR,B) _____
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
 - (d) Sensitive questions Yes No
 - (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 NA

- 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 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)
 - 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.

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

Barbara Stoll
Principal Investigator

Trainee

81-028CP
rec'd 2/7/81

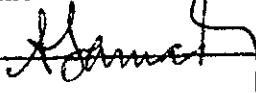
SECTION I - RESEARCH PROTOCOL

- 1) Title: Pilot project to follow-up
Surveillance patients with
shigella and other dysentery
diseases.
- 2) Principal Investigator: Dr. Barbara Stoll
Co-investigators: Dr. Imdadul Huq
Dr. Gerald Keusch
- 3) Starting Date: As soon as approved.
- 4) Completion Date: Four months after starting.
- 5) Total Direct Cost: \$ 2,316.00
- 6) Scientific Program Head:

This protocol has been approved by the

Signature of Scientific Program Head :

Date :

Disease Transmission Working Group


26-6-81

7) Abstract Summary:

Dysentery symptoms and shigella infections are important problems in Bangladesh. This pilot project will begin to study two groups of surveillance outpatient children in depth - those who come to the clinic complaining of dysentery and those whose stool cultures are positive for shigella - to begin to understand the course of initially uncomplicated outpatient shigella and dysentery, the subsequent complications and the changes in nutritional status over time.

SECTION II - RESEARCH PLAN

A. Introduction

1. Objective

The objective of this project is to study two groups of surveillance outpatient children in greater depth - (1) those who come to the clinic complaining of dysentery and (2) those whose cultures are positive for shigella (both dysentery and non-dysentery presentations) - to begin to understand the course of initially uncomplicated shigella and dysentery (i.e., disease not requiring hospitalization), the subsequent complications, and the changes in nutritional status over time.

Background

Shigella is a common and severe diarrheal disease in Bangladesh. We have reviewed Dacca Hospital Surveillance data for 1980 and have found shigella to be the second most common isolate in patients over 2 years of age - isolated from approximately 12 percent of all patients. Surveillance patients with shigella were more likely to present with stool blood, stool mucus, abdominal pain and fever than non-shigella patients. Fewer children with shigella were breast fed and there was a trend for patients with shigella to be more malnourished. Approximately one-third of Dacca Hospital Surveillance patients complained of dysentery. Of these, almost one-half had shigella. Two-thirds had shigella, salmonella, campylobacter or ameba, but one-third had no etiologic agent found.

There is no routine follow-up of surveillance patients. The clinical course and outcome of outpatients who come to ICDDR,B complaining of dysentery and of those who are later found to have shigella is not well defined. This pilot project will begin to study these patients in depth.

B. Specific Aims

1. To follow out patient children who come to ICDDR,B complaining of dysentery and/or are found to have shigella to better define what happens to these mild-moderately ill patients after they leave the clinic.
2. To look for specific known complications of shigella and any intercurrent illnesses in these children.
3. To look at nutritional status at onset of disease and weekly thereafter for one month.
4. To look for shigella toxin in the stools of these children.
5. To look at the serologic response to shigella in these children.
6. To determine if some "non-shigella" dysentery cases are really missed shigella (i.e., toxin and/or sero positive, but culture negative).

C. Methods

All surveillance children between 2 and 10 years of age who come to ICDDR,B complaining of acute dysentery (acute defined as 3 days or less; dysentery defined as stool with blood+ /or mucus) will be entered into the study at the time of initial visit. Patients whose stool cultures are positive for shigella will be entered into the study after their initial visit, as soon as results of stool culture are known. New patients will be entered into the study until 50 patients with shigella have been found (i.e., about 3-4 months). Routine surveillance data and specimens will be collected. In addition, an aliquot of stool will be obtained and processed for shigella toxin as described below and a fingerstick blood sample will be obtained for shigella antibodies. A field worker will visit the home of a shigella patients as soon as the culture result is known, to explain the nature of the study, to obtain stool and blood samples and to question the patient about the course of disease. If the patient is still ill, he or she will be brought back to ICDDR,B, will be examined by the principal investigator, and appropriate therapy will be given. All study patients will be visited in their homes by a field worker weekly for one month. At each visit information will be collected on course of disease, complications, intercurrent illness, subsequent care and medication usage, food intake and nutritional status (height, weight, arm circumference). At 3-4 weeks following the initial hospital visit a second fingerstick blood sample will be obtained (convalescent sera).

If a patient is still ill at the time of any home visit, a repeat R/S for stool culture will be done and the patient will be brought back to the principal investigator at ICDDR,B for care.

Procedures

Stool samples will be processed as follows: A 10% stool suspension in normal saline will be prepared. The sample will be centrifuged and the supernatant will be passed through a Millipore filter. The filtered supernatant will then be lyophilized. The lyophilized specimen will be sent to Dr. Gerald Keusch for shigella toxin determination.

A fingerstick blood sample will be obtained. 100 μ l of blood will be mixed in 1 cc normal saline. Shigella type-specific antibody determinations will be performed by Dr. Gerald Keusch.

D. Significance

Dysentery symptoms (shigella and non-shigella) and shigella infections (dysentery or watery diarrhea) are important problems in Bangladesh. The clinical course and outcome of Bangladeshi children with these diseases is not well defined. This study will begin to learn more about the course of disease, complications, and changes in nutritional status over time in these children.

E. Facilities Required

1. No new office or lab space is required.
2. Personnel - 4 field workers 100% x 4 months
1 lab technician 30% x 4 months
3. Hospital support - none.
4. Logistical support - transport to and from patients' homes for 4 follow-up visits will be needed.
5. Equipment - none new.

F. Collaborative Arrangements

Dr. Gerald Keusch, Professor of Medicine, Tufts Medical School, Boston, Massachusetts, will perform stool shigella toxin and serum antibody determinations and will be a full collaborator in this project.

Abstract Summary

1. Patients studied will be outpatient surveillance study patients between 2 and 10 years of age with dysentery and/or shigella. Dysentery and shigella are common problems in this age group, but the course of disease in these Bangladeshi children is not well known.
2. There are no risks to patients only mild discomfort from fingerstick blood drawing.
3. NA.
4. The confidentiality and anonymity of patients will be safeguarded. All records will be kept by the principal investigator. Patients will be referred to by number only, rather than name.
5. After the nature of the study is explained to parents or guardians, a consent form, in Bengali, will be obtained.
6. An approximately 5-10 minute interview will take place at the initial hospital visit and at 4 subsequent home visits.
7. The potential benefits to be gained by patients are a) more accurate diagnosis b) good follow-up c) improved care. Society in general will gain by a better understanding of these medical problems.
8. One stool sample and 2 fingerstick blood samples will be obtained from each study patient.

SECTION III - BUDGET

A. Detailed Budget

1. Personnel Services

<u>Name</u>	<u>Position</u>	<u>% time</u>	<u>Incremental Salary</u>	
			<u>Taka</u>	<u>Dollar</u>
Dr. B. Stoll	Scientist	20% x 4 mo	-	-
Dr. I. Huq	"	5% x 4 mo	-	-
Dr. G. Keusch	"	-	-	-
4 field assistants		100% x 4 mo	20,000	
1 lab technician		30% 4 mo	1,410	
<u>Subtotal</u>			21,410	

2. Supplies and materials

<u>Item</u>	<u>Unit cost</u>	<u>Taka</u>	<u>Dollar</u>
Stool lyophilization	10 Tk. X 100	1,000	
Miscellaneous forms		500	

3. Equipment: none.

4. Patient hospitalization: none.

5. Outpatient care - non extra.

6. ICDDR,B transport

120 days x 30 miles x 3 =	10800 taka
120 days x 8 hours x 3.5 =	3360 taka
	<u>14160 taka</u>

7. Travel and Transportation: none.
8. Transportation of things: none.
9. Rent, communication, utilities: none.
10. Printing, publication: none.
11. Other contractual services: none.
12. Construction, renovation, alterations: none.

B. Budget Summary

<u>Category</u>	<u>Taka</u>	<u>Dollar</u>
1. Personnel	21,410	
2. Supplies and Materials	1,500	
3. Equipment		
4. Patient hospitalization		
5. Outpatient care		
6. ICDDR,B Transport	14,160	
7. Travel and Transportation		
8. Transportation of things.		
9. Rent, Communication, utilities		
10. Printing publication		
11. Other contractual services		
12. Construction, renovation, alterations		

Sub total Tk. 37,070

\$ 2,316

Consent Form

The type of illness your child has is a common problem in Bangladesh. Your child is not very very sick with his/her illness at this time. Some children improve quickly, while others continue to have diarrhea/dysentery, don't eat well and develop other complications. The course of your child's illness in Bangladeshi children is not well known. This project will study children with your child's illness in depth.

Today, we will ask you some special questions about your child's illness and will take a stool sample and fingerstick blood sample from your child. These samples are to help us diagnose exactly what kind of illness your child has. In addition, a fieldworker will visit you in your home every week for one month to find out if your child is still ill or if he/she is well and to weigh and measure your child. At 3-4 weeks we will repeat the fingerstick blood sample.

If your child is still ill at the time of any home visit, he/she will be brought back to ICDDR,B, will be examined by a physician and therapy will be given.

If you do not wish to participate in this study or if you choose to withdraw at anytime, your child will still receive the same good care at ICDDR,B.

If you understand the nature of the study and are willing to participate, please sign below.

Patient or Guardian

Investigator

আনুষ্ঠানিক উদ্বৃত্তায় গবেষণা কেন্দ্র, বাংলাদেশ

সন্মতি পত্র

বর্তমানে এই গবেষণা কেন্দ্র কলেরা ও বিভিন্ন প্রকার উদ্বৃত্তায় রোগের উন্নততর চিকিৎসা উদ্ভাবনের জন্য গবেষণা চালিয়ে যাচ্ছে। এই রোগ বাংলাদেশের বিশেষ করে বাচ্চাদের এক সমস্যা হিসাবে দেখা দিচ্ছে। অনেক বাচ্চা ভুতি ডাড়াডাড়া তাল হয়ে উঠে আবার অনেক জটিল রোগে আক্রান্ত হয়ে পড়ে। আপনার বাচ্চাও যদি এই রোগে আক্রান্ত হয়ে থাকে তাহলে এই গবেষণা আপনার বাচ্চার রোগ নির্ণয় গভীরতার সংগে লক্ষ রাখবে।

এই গবেষণার ব্যাপারে আপনার কাছে কতগুলি প্রশ্ন জিজ্ঞাসা করা দরকার এবং নিম্নলিখিত পরীক্ষার ব্যাপারে আপনার সহযোগিতার একান্ত প্রয়োজন হবে।

১। আপনার বাচ্চার পায়ুখানা ও আংগুল থেকে কয়েক ফোটা রক্ত পরীক্ষার জন্য নেওয়া হবে যাচেকরে আপনার বাচ্চার রোগ নির্ণয় সহজতর হয়।

২। আমাদের একজন স্বেচ্ছা কর্মী প্রতি সপ্তাহে একবার করে একমাস পর্যন্ত আপনার সংগে আপনার বাড়ীতে যাবে ও বাচ্চার ওজন ও মাপ নেবে এবং প্রতি সপ্তাহে আংগুল থেকে কয়েক ফোটা রক্ত নিয়ে পরীক্ষা করবে।

এরপরও যদি বাচ্চা তাল হয়ে না উঠে তাহলে স্বেচ্ছা কর্মী বাচ্চাকে আমাদের হাসপাতালে নিয়ে আসবে এবং চিকিৎসক তার প্রয়োজনীয় চিকিৎসা করবে।

যদি আপনি এই গবেষণায় অংশগ্রহণ করতে না চান বা আপনি এই গবেষণায় অংশগ্রহণ করলেও আপনাকে ইচ্ছা করলে যে কোন সময় গবেষণা পরিত্যাগ করতে পারেন। তাতে সুভাবিক চিকিৎসার কোন এমটি হবে না।

আপনি এই গবেষণায় অংশগ্রহণ করতে চাইলে দয়া করে নিম্নে স্বাক্ষর করুন।

গবেষকের স্বাক্ষর

রোগী বা অভিভাবকের স্বাক্ষর

তারিখ

SHIGELLA QUESTIONNAIRE - INITIAL VISIT

Study Number — — — (1-3)
Card Number — (4)
Name _____
Patient Number — — — — — (5-10)

ILLNESS: 0 = No, 1 = Yes, 2 = Not known

Before this present illness :

Have you had dysentery before in the past month? — (11)
Have you had watery diarrhoea before in the past month? — (12)
Have you had measles in the past month? — (13)
Have you had any other illness in the past month? — (14)
If yes, to any of the above questions, have you received any medications for these illnesses? — (15)
Any antibiotic? — (16)
Name of antibiotic _____

Present illness :

Is this your first visit to ICDDR,B for this illness? — (17)
Have you been to any other medical facility for this illness? — (18)
If yes where _____
Have you taken an antibiotic for this illness? — (19)
If yes, name of antibiotic _____
If yes, for how many days? — — (20-21)
With your present illness have you suffered any of the following :
Rectal prolapse — (22)
Convulsion — (23)
Cough — (24)
Nasal discharge — (25)
Joint pain-arthritis — (26)
Conjunctivitis — (27)
Headache — (28)

DIET:

Is your appetite, 0 = normal, 1 = decreased
2 = increased, 3 = not known — (29)

What does your usual diet include? — — — — —
Breast milk — (30)
Cow's milk — (31)
Powdered milk — (32)
Tea — (33)
Barley — (34)
Flour water gruel — (35)
Rice powder and milk — (36)

Bread	—	(37)
Rice	—	(38)
Dhal	—	(39)
Vegetable	—	(40)
Fruit	—	(41)
Fish	—	(42)
Meat	—	(43)
Other _____	—	(44)

Household :

How many people live in your house?	— —	(45-46)
How many children live in your house?	— —	(47-48)
How many rooms are there in your house?	— —	(49-50)
If anyone else in home is ill, who _____		
How old are children who live in your house _____		

SHIGELLA QUESTIONNAIRE - HOME VISIT

Study Number — — — (1-3)
Card Number — (4)
Name _____
Patient Number — — — — — (5-10)
Date — — — — — (11-16)

ILLNESS 0 = No, 1 = Yes, 2 = Not known

Are you completely well now? — (17)
If no, do you still have the same illness
(diarrhoea/dysentery) for which you went to ICDDR,B — (18)
If no, did your first illness improve, but do you
now have another episode of diarrhoea/dysentery? — (19)
If still ill, do you have :
watery diarrhoea — (20)
Stool blood — (21)
Stool mucus — (22)
Abdominal cramps — (23)
Tenesmus — (24)
Fever — (25)
Vomiting — (26)

Since you were last seen at ICDDR,B or by a field worker,
have you had any of the following :
Rectal prolapse — (27)
Convulsion — (28)
Cough — (29)
Nasal discharge — (30)
Joint pain arthritis — (31)
Conjunctivitis — (32)
Nightblindness — (33)
Headache — (34)
Other _____ — (35)

Since you were last seen at ICDDR,B, or by a field worker,
have you :
Returned to ICDDR,B for care? — (36)
Received any medications at ICDDR,B — (36)
Name of medications _____
Gone to another facility for medical care? — (38)
If yes, where _____
If yes, have you received any medications? — (39)
Names of medications _____
Would you return to ICDDR,B for care with your next
diarrhoeal illness? — (40)
If no, why not? _____
If you are still sick and have not returned to
ICDDR,B why not? _____

DIET

Is your appetite, 0 = normal, 1 = decreased
2 = increased 3 = not known — (41)

What have you been eating since last visit?

- Breast milk — (42)
- Cow's milk — (43)
- Powdered milk — (44)
- Tea — (45)
- Barley — (46)
- Flour water gruel — (47)
- Rice powder and milk — (48)
- Bread — (49)
- Rice — (50)
- Dhal — (51)
- Vegetable — (52)
- Fruit — (53)
- Fish — (54)
- Meat — (55)
- Other _____ — (56)

Nutritional Status

- Height — — — (57-59)
- Weight — — — (60-62)
- Arm circumference — — — (63-65)

Laboratory

- R/S done _____
- Blood drawn _____