Attachment 1.

Date 14 July 1988

ETHICAL REVIEW COMMITTEE, ICDDR,B.

18/7/89

Principal Investigator Drs.M.R.Islam/A.N.Alam

Trainee Investigator (if any)

Application No. 88-018

Supporting Agency (if Non-ICDDR,B)

Title of Study "Comparative efficacy of pivmecillinam and oral gentamicin with nalidixic acid in the treatment of acute ~~shigellosis in children~~".

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).

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
   (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
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.

(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.

Islam

Principal Investigator

Trainee

SECTION I - RESEARCH PROTOCOL

1.	Title	:	Comparative efficacy of pivmecillinam and oral gentamicin with nalidixic acid in the treatment of acute shigellosis in children.
2.	Principal Investigators	:	Drs. M.R. Islam and A.N. Alam
	Consultants	:	Dr. Dilip Mahalanabis and Dr. H.K.M.A. Hye
3.	Starting date	:	August 15, 1988
4.	Completion date	:	2 years from initiation of the study.
5.	Total direct cost	:	US$ 99277.00
	Source of fund	:	To be submitted
6.	Scientific Programme	:	This protocol has been approved by the Clinical Sciences Division.

Dilip Mahalanabis

Signature of the Associate Director,
Clinical Sciences Division

Date: 18.7.88

7. Abstract Summary:

A double blind randomised clinical trial has been proposed to evaluate the efficacy and safety of 3 different drugs (a) Pivmecillinam - a Penicillanic acid derivative in a dose of 50 mg/kg/d and gentamicin an aminoglycoside in a dose of 25 mg/kg/d both given orally in 4 equal divided doses in the treatment of acute shigellosis of less than 3 days duration in children of both sexes without having history of taking any known effective drug within this period. Effectiveness will be compared with that of Nalidixic acid which would be used as control drug in a dose of 60 mg/kg/d. Both clinical and bacteriological cure will be compared on 75 study children (25 in each group). Patients will remain in the hospital for 6 days. During hospitalization period, regular physical examination, frequencies and character of stool output will be evaluated 8 hourly and rectal swab and stool culture will be done daily for Shigella spp. Patient will be considered clinically cured if he/she is afebrile, passing soft stool without any mucous or blood on day 5 or earlier and bacteriologically cured if same organism could not be isolated from stool or rectal swab cultured on day 3 or any subsequent study days.

8. Reviews:

(a) Chairman, Research Review Committee: ----------

(b) Chairman, Ethical Review Committee: ----------

(c) Director, ICDDR,B: ----------

SECTION II - RESEARCH PROTOCOL

A. INTRODUCTION:

1. General Objectives

The objectives of this study is to evaluate oral gentamicin and pivmecillinam in the treatment of shigellosis of children aged 1-8 years. The control group of patients will be treated with nalidixic acid.

2. Background:

Of the 15 million deaths occurring each year in children under five years in the developing world approximately 4 million are associated with diarrhoea. Based on studies by ICDDR,B Dhaka and extrapolating them to world wide figures it has been estimated that approximately 0.7 to 0.8 million deaths occur in children under 5 from dysentery each year. These estimates are based almost entirely on data obtained from Bangladesh. Comparable data are not available from other parts of the world. A fatality rate of 1.2% has been reported for endemic shigellosis in the Matlab, Bangladesh treatment facility (Black et al 1980). At the Dhaka Treatment Centre of ICDDR,B mortality rate in patients with shigellosis were 3.5% for those under 1 year of age and 0.3% for all other ages including adults (Stoll et al 1982). However mortality rates as high as 6% have been reported during epidemics of shigella dysenteriae type 1 (Rogerie et al 1986, Huppertz et al 1986). The primary negative effect on the health of children who do not die from dysentery is a worsening of their nutritional status (Black et al 1984).

Basic supportive therapy for shigella dysentery includes use of ORS and early feeding which is similar for all diarrhoeal illness. Clinical dehydration, however, is not frequently seen with dysentery; when it occurs it may result in an adverse outcome (Struelens et al 1985). Antibiotics are the cornerstone of treatment for shigellosis. Eradication of these large bowel invasive organisms shortens the clinical illness substantially. A large number of antibiotics have been studied in the therapy of shgiellosis.

The antibiotic therapy of shgiellosis has undergone marked changes over the years, because of increasing resistance of shigella organisms to the antibiotics used (Murray 1986). Tetracyclines were the first widely used antibiotics (Pickering et al 1978) and could be used in single (2.5 gram) or multiple doses (over a 3-5 day period). Ampicillin was the next to be widely used, because of the resistance to tetracycline developed by the Shigella (Haltelin et al 1973; Haltelin 1972; Gilman et al 1981; Kabir et al 1984). This drug could also be used in a single dose in children over 4 years of age (Gilman et al 1981) or in multiple doses over a 5 day period. Trimethoprim-Sulfamethoxazole (TMP-SMX) was later used (Nelson et al 1976, Yunus et al 1982) as ampicillin resistant Shigella appeared. When resistance to all three antimicrobials (tetracycline, ampicillin, TMP-SMX) became more widespread, particularly during an epidemic of Shigella type 1 in Central Africa, nalidixic acid (NA) began to be used although controlled studies of its efficacy were scanty.

Early studies of efficacy of NA were reported in 1965 (Moorehead & Perry, 1965); later studies by Haltelin et al (1973) showed that NA had little effect on the course of the disease. Later studies (Hansen et al, 1981; Projari et al 1986), neither of which was carefully controlled showed NA to be better than a placebo but less effective than norfloxacin, used for comparison (Salam et al in press). At the present time NA is being widely used in patients harboring resistant Shigella. In a recent study in ICDDR,B Drs. Salam and Bennish showed that a quinolone derivative i.e. ciprofloxacin to be highly effective in adults with shigellosis. Newer quinolones however have not been licensed for use in children because of its ability to cause arthropathy in immature animals in a number of different species.

Mecillinam and pivmecillinam

Recently mecillinam a penicillanic acid derivative with a substituted amidino group in the sixth position has been introduced. It is active against gram negative bacteria including ampicillin resistant strains of E. coli. Mecillinam is not active orally and is given by mouth as pivmecillinam which is hydrolyzed to mecillinam on absorption. Pivmecillinam is a white crystalline powder with a bitter taste and very soluble in water. Adverse effects are the same as those for benzyl penicillin. Pivmecillinam is well absorbed from the gastrointestinal tract and is rapidly hydrolyzed in tissues and blood to the active drug mecillinam. The presence of food in the stomach

does not appear to have significant effect on absorption. Peak plasma concentrations of mecillinam of upto 5 µg/ml have been achieved one to two hours after a 400 mg dose of pivmecillinam. Plasma half life from about one to 1.4 hours have been reported. About 45% of a dose may be excreted in the urine as mecillinam mainly within the first 6 hours of a dose. The usual dose of pivmecillinam is 400 mg of pivmecillinam hydrochloride 4 times daily. Children may be given 40 mg of pivmecillinam base per kg body weight daily. The hydrochloride is used in tablets and a base in suspension for oral use. An earlier study in adults at ICDDR,B Dhaka (Kabir et al, 1984) showed pivmecillinam to be highly effective in acute shigellosis. Pivmecillinam is now the first line drug for shigellosis at Teknaf field station where most shigellae isolates are resistant to usual antibiotics including nalidixic acid. Because of a different mechanism of action (it appears to bind different proteins than other penicillins), it shows significant synergism when utilised concurrently with other beta-lactum abtibiotics (Cleeland Squares 1983).

Gentamicin

Gentamicin, an aminoglycoside, is an important agent for the treatment of many serious gram negative bacillary infections. It is used systemically (intramuscularly or intravenously); the recommended intramuscular dose for adults is 3-5 mgm per kg per day and in children under 2 years 7.5 mgm per kg per day. Neonates requrie higher doses and a daily dose upto 12 mgm per kg per day has been

recommended for them with severe infections. When used systemically in high doses it can cause nepthrotoxicity and ototoxicity. Gentamicins are highly polar cations. They are thus very poorly absorbed in the intestinal tract. Less than 1% of a dose is absorbed following either oral or rectal administration. It is not metabolized in intestinal tract and can be quantitatively recovered in the faeces after an oral dose. Absorption of gentamicin from the gastrointestianl tract however may be increased somewhat in dysentery (Cox CE. Gentamicin. Medical Clinics of North America, 1970, 54, 1305-1315). Oral gentamicin is extensively used for shgiellosis in China. Anecdotal evidence from China suggests that it is highly effective. Most strains of Shigella isolates are sensitive to gentamicin. Three years ago WHO promoted a controlled clinical trial of gentamicin in shigellosis in Shanghai, China. However, no reports or results were obtainable from the investigators which probably largely reflects their lack of experience in conducting controlled clinical trials. Oral gentamicin was used in acute E. coli enteritis in infants in a dose of 12.5 mg per lb body weight (Valman & Wilmers, 1969). In a similar condition 4 mg/kg/day was used along with intramuscular injection 2 mg/kg/day for 5 days with dramatic and rapid response in 83 of 90 infants (Coe, Zie & Leary 1971). In this study we propose to use gentamicin orally at a dose of 30 mg per kg per day in divided doses for five days. Amount of gentamicin absorbed from such a dose should be insignificant and therefore there

should not be any systemic side effects. It may be noted that gentamicin has been used orally at a dose of 50 mg per kg per day in infants with chronic diarrhoea (Hill, Mann & Bowie 1980).

3. Rationale

Presently Shigella isolates at Dhaka Treatment Centre of ICDDR,B are mostly resistant to the usual antibiotics such as tetracycline, Ampicillin and TMP-SMX. The only available drug to which most of the isolates are still sensitive is nalidixic acid which is a drug of choice for treatment. It should however be noted that most isolates at Teknaf Treatment Centre of ICDDR,B are already resistant to nalidixic acid and there is a clear trend of increasing resistance to NA of the isolates of shigellae from Dhaka Treatment Centre. It is therefore a high priority to evaluate other available and licensed drugs which are likely to be highly affective against shigellosis.

B. THE SPECIFIC OBJECTIVES

1. To determine whether pivmecillinam at a dose of 50 mg per kg per day in four divided doses for 5 days is as effective as nalidixic acid at a dose of 60 mg per kg per day in four divided doses for 5 days.

2. To determine whether oral gentamicin at a dose of 30 mg per kg per day in four divided doses for 5 days is as effective as nalidixic acid at a dose of 60 mg per kg per day in four divided doses for 5 days.

3. To record side effects if any of the two test drugs.

C. METHODS OF PROCEDURE

1. Inclusion criteria:

- Patients aged 1-8 years of both sexes with history of bloody diarrhoea of less than 72 hours duration and who have more than 20 pus cells per high power field on stool microscopy.

2. Exclusion criteria:

- Patients who took drugs during current illness which are potentially effective against shigella disease (i.e. TMP-SMX, ampicillin, nalidixic acid); if they took drugs which are known to be ineffective (e.g. tetracycline, metronidazole) then they will be included.

- Patients with additional and obvious systemic illness (e.g. pneumonia, meningitis etc.)

- Children with merasmus and kwasirorkwor (on ethical ground).

3. Outcome evaluated

We will evaluate both the clinical and bacteriologic response to therapy. Clinical response will be judged on the basis of the patient's last day of hospitalization, and will be graded as follows:

Resolution of illness:

1. No watery stools
2. < 3 stools in total for the 24 h period
3. Afebrile (<37.8 ^{o}C)
4. No abd. pain/tenderness

Moderate improvement:

1. Up to 2 watery stools
2. < 6 stools in total for the 24 h period
3. Afebrile ($< 37.8^{o}$ C)
4. Slight abd. pain/tenderness

Failure: Presence of any of the following:

1. > 3 watery stools
2. > 10 stools in total for the 24 h period
3. Febrile ($> 37.8^{o}$ C)
4. Marked abd. pain/tenderness.

A patient will be considered bacteriologically cured if Shigella cannot be isolated from a day 3 stool or rectal swab sample, and cannot be isolated from any subsequent stool or rectal swab sample. It is expected that 95% of the patients should be negative for culture by day 3 if the drug is effective.

We will also compare a number of other clinical outcomes, besides stool frequency on each of the six study days every 8 hourly and the presence of physical signs or symptoms such as abdominal pain or tenderness. The duration of anorexia or WBC's on stool microscopic examination will be recorded. Anorexia can be assessed from respective food intake chart and the patients or mothers subjective assessment.

4. Sample size estimate:

In this study either study group will be compared with a control receiving nalidixic acid. We do not propose to

undertake multiple comparisons.

a. sample size based on bacteriological "cure": from previous studies we expect that 95% of the patients on nalidixic acid should be negative on stool culture by day three. For a "new" drug to be eligible for consideration we assume that stool culture on a new drug should be negative by day three in at least 75% of patients and the sample size should be large enough to detect a difference if stool culture negativity is 75% or less at a significance level of <.05 and with a power of 80%. Since we are not interested to detect whether the study drug is better than 95% effective compared to the standard drug a one sided test should be adequate. With this criteria the calculated sample size is 25 patients in each group. Assuming that 60% of the patients selected for this study will have postive Shigella isolates in the stool the sample size for each group is 42. Considering a dropout rate of 8 in each group the total sample size is estimated at 50 in each group which leads to a total of 150 patients for the study.

(b) sample size estimated by clinical "cure": it is expected that 95% of the patients on nalidixic acid should be clinically cured by day 5. For a "new" drug to be eligible to be considered for use against shigellosis at least 75% or more of the patients should be clinically cured by day 4. Based on similar

considerations as above the sample size estimate is approximately the same. Therefore the total sample size for the study will be 150 patients.

5. Baseline examination

A baseline history and examination will be obtained to determine the subject's eligibility for inclusion in the trial and to collect relevant data prior to beginning the study that will allow:

1. comparison of the study groups after randomization and,
2. description of the study population to determine whether the results obtained can be compared with those from other trials.

The baseline history and examination will include identification of patient, a description of symptoms prior to admission and the duration, details of any treatment given for the illness, a description ofthe feeding status prior to admission, a description of the stool prior to admission, results of the physical examination including the state of hydration and nutrition, and results of stool microscopy which is a part of inclusion criteria. The above information will be recorded on pre-designed and pre-tested forms.

6. Informed consent

If the patient is found to be eligible for inclusion into the study an informed consent will be obtained.

7. Allocation to Treatment Groups

The subjects will be randomly allocated to treatment groups using methods that avoid bias. The two test drugs and the

standard drug would be packaged in identical bottles. The medicines will be identical in appearance, flavor and weight. The bottles will be arranged in a sequence of the two drugs and the standard drug that corresponds to the randomisation and then numbered sequentially. The randomisation sequence code will be according to a randomisation list prepared using block randomisation technique with a variable block length of three and six to avoid selection bias. The randomisation list will contain more subjects than the estimated sample size to allow for patients that leave the study prematurely. The label on the bottles will contain only the name of the study and the serial number of the patient for which the bottle should be used. As an example when a new subject is selected for study e.g., the 15th patient, he/she will be assigned the bottle with a serial number 15. Master randomisation lists will be prepared by a responsible and appropriately trained person who is not otherwise associated with the study and will be kept safely in two independent places. The concentration of these drugs will be adjusted in such a way that will permit administration of all three drugs as ml/kg body weight.

8. Case management

Drug treatment will commence after obtaining baseline data which will include history, physical examination, stool and rectal swab for culture, stool microscopy, admission blood sample, weight and height/length. Patients will be treated

with ORS if he/she has signs of dehydration. Food will be offered appropriate for age at regular intervals commencing within 4 hours after admission. Medicine will be administered orally every six hours for five days. Medicines will be dispensed in a syrup form. Patients will receive pivmecillinam 12.5 mg per kg body weight six hourly or gentamicin 7.5 mg per kg body weight six hourly or nalidixic acid 15 mg per kg body weight six hourly for 5 days.

Drugs will be provided free of cost by Leo Pharmaceuticals of Denmark, Opsonin and Ambee Pharmaceuticals of Bangladesh.

9. Withdrawals from the study

If a patient leaves the hospital before the end of the study, data upto the point of leaving will be considered in the analysis. If a patient develops a complication which prevents the planned treatment to continue the patient will be withdrawn from the study, e.g. HUS (who may require transfer to another hospital), paralytic ileus, septicemia, need for parenteral antibiotics, pneumonia, meningitis etc. Data upto the limit of withdrawal will be considered in the analysis.

10. Organization of the trial

Patients will be selected from those attending outpatient and admitted to study ward if they fulfill inclusion criteria. The PI's with the assistance of a full time medical officer will take care of the patient. Eight-hourly evaluation will be recorded on a predesigned form. Patients will be admitted from among those seen in the morning upto

11 a.m. to enable a convenient 8-hourly schedule and facilitate recording of relevant events.

Number of stools will be recorded using open diaper. Blood in the stool will be noted as they occur on a tally sheet and summarised.

Summary of procedures

On admission

1. Stool microscopy for RBC's pus cells and parasites and stool culture for Shigella species, Salmonella species, Campylobacter jejuni, V cholerae, plessiomonas Shigelloides and aeromonas hydrophila.
2. Rectal swab culture for Shigella species.
3. Blood for total and differential white blood cell counts, microhematocrit.
4. Serum electrolytes, cretinine, SGPT, C-reactive protein.
5. Blood culture
6. Urine analysis

Day - 2

1. Summarise clinical findings and number of stools and their character on an 8-hourly basis. Each stool will be characterized.
2. Rectal swab and stool cutlure for Shigella

Day - 3

1. Summarise clinical features, number of stools and their character on an 8-hourly basis. For characterization of stool, standard methods will be used like watery/mucoid/mucoid+blood etc.

2. Rectal swab and stool culture for Shigella

3. Blood sample for antibiotic level determination four hours after the morning dose of medicine, microhematocrit and serum electrolytes and c-reactive protein.

Day - 4

Same as under day 3 except for blood sample.

Day - 5

Same as on day 4 and stool for M.E.

Record summary response e.g. disease resolved, improved, or failed.

Day - 14

Patient will be requested to come back for a followup clinical assessment and rectal swab culture for Shigella spp.

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ABSTRACT SUMMARY FOR E.R.C.

This study comprises a comparative clinical trial of three different drugs (a) Pivmecillinum; (b) Oral Gentamicin and (c) Nalidixic acid in the treatment of acute Shigellosis in children aged 1-8 years of age. 75 patients; 25 in each group, will be studied. One group will receive oral Pivmecillinum, second group will receive oral Gentamicin and the third group will receive Nalidixic acid which will serve as control.

A detailed medical history and clinical information data, stool and rectal swab culture will be taken on admission and daily until the study is over. Small amount of blood will be needed on day 1 and day 4 for various investigations which will not cause any harm to the patient.

Any patient who is judged to have failed treatment at the end of five study days will be treated with full course of known effective drugs.

All data will be recorded and computerized using an anonymous study number for analysis.

Signed informed consent will be obtained from the parents or legal guardians prior to enrollment to the study.

Each study patient will get best possible care available in our centre. If the study is successful, it will enable us to find out alternative drugs for the treatment of acute shigellosis in children. The major benefit however will accure to the society.

CONSENT FORM

Your child is suffering from bloody dysentery. This disease can be serious and can lead to adverse consequence if not treated properly. Available medicines are gradually becoming resistant in this condition. This led us to look for alternative and effective drugs which can be used for the treatment of this dreadful disease. Hence, we have planned to undertake a study to determine the effectiveness of 3 different drugs, Gentamicin, Pivmecillinum and Nalidixic acid, previously used in the treatment of bloody dysentery in adults. If you agree to participate in the study, your child will receive one of the above three drugs for 5 days by lottery so your child will not remain without medicine. Seven days will be required to complete the study and every day stool samples and rectal swabs will be taken for culture. About 5 ml of blood will be taken on admission and about 2 ml will be drawn on 4th day after admission for various investigations. This amount of blood will not effect your child's health except for little pain at the time of drawing, rather it will help us to ensure that your child has not developed any complication. This will also help us to determine the response of the treatment.

However, neither you, nor we, will know which drug your child had received until the study is over. All appropriate measures will be taken to treat your child. Your cooperation in allowing your child to participate in the study, will help us to find an effective alternative drug for the treatment of bloody dysentery (shigellosis).

You are free to decide to join the study or not. Even if your do not wish to participate or withdraw at any time from the study, your child will receive the usual and standard treatment offered to any child admitted into the treatment centre.

If you wish to know the results of any of the tests done during the study, these will be provided to you as and when available.

If you agree to offer your child to participate in the study, please put your signature or thumb impression blow.

Signature of Investigator

Signature of/LTI of the guardian.

Date: ---

Signature of the witness

Date: ---

আন্তর্জাতিক উদরাময় গবেষনা কেন্দ্র, বাংলাদেশ

রক্ত আমাশয়ে তিনপ্রকার ঔষধের তুলনামূলক কার্যকারীতা গবেষনা

সম্মতি পত্র

সুধী,

আপনার সন্তান রক্ত আমাশয়ে ভুগছে। সঠিক সময়ে এবং সঠিক চিকিৎসা না হলে এরোগে মারাত্মক আকার ধারন করতে পারে। এরোগে বর্তমানে ব্যবহৃত ঔষধগুলো ক্রমেই তাদের কার্যকারীতা হারাচ্ছে। এরূপ পরিস্থিতিতে কার্যকর বিকল্প ঔষধ খুঁজে বের করা অতি জরুরী। এরোগে, প্রাপ্তবয়স্কদের ক্ষেত্রে, জেন্টামাইসিন, সিপ্রোফ্লোক্সাসিন, ও ন্যালিডিক্সিক এসিড এ তিনটি ঔষধ ব্যবহারে সুফল পাওয়া গেছে। আমরা বর্তমানে শিশুদের ক্ষেত্রে এ তিনটি ঔষধের তুলনামূলক কার্যকারীতা নির্নয়ে উদ্যোগী হয়েছি। এ গবেষনায় অংশনিলে **সমান সম্ভাবনায়**, আপনার সন্তান এ তিনটি ঔষধের যেকোন একটি পাবে। অর্থাৎ সে কিছুতেই ঔষধ থেকে বঞ্চিত হবেনা। তবে আপনার সন্তান ঠিক কোন ঔষধটি পেলো তা এ গবেষনা কার্যক্রম শেষ হবার আগে আপনারা বা আমরা কেউই জানতে পারবোনা। গবেষনার প্রয়োজনে রুগীকে সাতদিন হাসপাতালে ভর্তি থাকতে হবে, এবং এর প্রতিদিনই সে জীবানু এরোগের কারন, তা নিশ্চিত হলো কিনা জানার জন্যে, আঙ্গুলে সুতা লাগানো সরু পরীক্ষা কাঠির (সোয়াব) মাধ্যমে রুগীর মলাশয় থেকে সামান্য পরিমানে পরীক্ষা সামগ্রী নিতে হবে। চিকিৎসার সহায়তা ও রুগীর অবস্থা নির্নয়ের জন্যে, ভর্তির দিনে পাঁচ সি: সি: (এক চা চামচের সম পরিমান) এবং চতুর্থদিনে আরোও দুই সি: সি: (আধা চা চামচেরও কম) রক্ত শিরা থেকে পরীক্ষার জন্যে নিতে হবে। রক্ত নেবার সময় সুঁচের সামান্য ব্যথা ছাড়া এতে করে রুগীর কোন ক্ষতির সম্ভাবনা নেই।

ভর্তি থাকাকালীন সময়ে রুগীর উপযুক্ত চিকিৎসা করা হবে। এ গবেষনায় আপনার সন্তানের অংশগ্রহন করা বা না করা সম্পূর্নভাবে আপনার ইচ্ছাধীন। অংশগ্রহন না করলেও রুগী এ হাসপাতালের প্রচলিত সুচিকিৎসা পাবে। অংশগ্রহনের পরেও যেকোন সময়ে আপনি আপনার সম্মতি প্রত্যাহার করতে

করতে পারবেন এবং তাতে করে রুগী তার স্বাভাবিক চিকিৎসা থেকে বঞ্চিত হবেনা। আপনি চাইলে রুগীর বিভিন্ন পরীক্ষাদির ফলাফল (জানা থাকলে) আপনাকে জানানো হবে।

আপনি আপনার সম্মতি দানের মাধ্যমে, এ কঠিন রোগের উপযুক্ত ঔষধ খুঁজে বের করার আমাদের প্রচেষ্টায় অমূল্য অবদান রাখতে পারেন। এ কার্যক্রমে আপনার সন্তানের অংশগ্রহনে স্বেচ্ছায় রাজী থাকলে, আপনি অনুগ্রহ করে নীচের নির্দিষ্ট স্থানে আপনার স্বাক্ষর অথবা বাম বৃদ্ধাঙ্গুলির ছাপ দিন।

আপনার সহযোগীতার জন্যে ধন্যবাদ।

গবেষকের স্বাক্ষর :
তারিখ :

অভিভাবকের স্বাক্ষর/
টিপসই :
তারিখ :

স্বাক্ষীর স্বাক্ষর :
তারিখ :

ICDDR,B
1988 BUDGET PROPOSAL (IN US $)

DIVISION NAME: Clinical Sciences Division
PROTOCOL/BRANCH NAME:
NAME OF P. I./BRANCH HEAD/DIVISIONHEAD: DR. ISLAM & DR ALAM
BUDGET NO. STARTING DATE: 1.7.1988
PROTOCOL NO: COMPLETION DATE: 30.6.1990
DONOR NAME: GRANT AMOUNT:

EXPENSE CATEGORY			Column A	Column B	Column C
A/C Code	Description	Refer to Page No.	Actual Jan.-	Estim. Whole	Proposed
3100	Local Salaries	02			48300
3200	Intl. Salaries	08			0
3300	Consultants	14			0
3500	Travel Local	15			0
3600	Travel Intl.	16			0
3700	Supplies & Mat.	18			4600
4000	Other Costs	19			500
4800	Inter Deptl. Ser.	21			42327
	Total Direct Operating Cost		0	0	95727
0300	Capital Expenditure (P.22)				3550
	TOTAL DIRECT COST		0	0	99277

Reviewed by Budget Office
18-7-88

Description	No. of Positions	No. of Man Months	$ Amount
A. Direct Project/Protocol/ Branch Staff at 01.01.1988 (Source: Page 3)	0	0	0
Add:			
B. New Recruitments (Source: Page 4)	3	48	24300
C. Staff allocated from other area (Source: Page 5)	1	12	24000
(i) Sub Total	4	60	48300
Less:			
D. Separations (Source: Page 6)	0	0	0
E. Staff allocated to other area (Source: Page 7)	0	0	0
(ii) Sub Total	0	0	0
(i) - (ii) TOTAL	4	60	48300

NEW RECRUITMENT (LOCAL STAFF) - 1988

Job Title	A Level	B Start Date	C No. of positns	D No. of Man Mnth	E Rate Per Month	F=(D x E) $ Amount
1. Medical Officer	NO-A		1	24	650	15600
2. Research Officer	GS-5		1	12	400	4800
3. Data Entry Tech.	GS-4		1	12	325	3900
4.						0
5.						0
6.						0
7.						0
8.						0
9.						0
10.						0
11.						0
12.						0
13.						0
14.						0
15.						0
16.						0
17.						0
18.						0
19.						0
20.						0
21.						0
22.						0
23.						0
24.						0
25.						0
26.						0
27.						0
28.						0
29.						0
TOTAL			3	48		24300

Job Title	A Level	B Budget Code Of Other Area	C No.of Positn	D No.of Man Months	E Rate Per Month	F=(D x E) $ Amount
1. Dr. N.R. Islam	NO-E	10 01 11		12	2000	24000
2.						0
3.						0
4.						0
5.						0
6.						0
7.						0
8.						0
9.						0
10.						0
11.						0
12.						0
13.						0
14.						0
15.						0
16.						0
17.						0
18.						0
19.						0
20.						0
21.						0
22.						0
23.						0
24.						0
25.						0
26.						0
27.						0
28.						0
29.						0
TOTAL			0	12		24000

A/C Code	Item Description	$ Amount
3701	Drugs (used for medicationin the hospitals and field stations)	
3702	Glassware (bottle, beaker, cylinder, petridish, aluminium seal, slides stopper, tube etc.)	1000
3703	Hospital Supplies (bandage, gauge blade, bowl, catheter, cotton, needle syringe, solution, leukoplast, towel etc.)	1300
3704	Stationery and Office Supplies (Battery, book register, binders, files, pencil, fastener, paper, ribbon, stapler etc.)	
3705	Chemicals and Media (Acid, reagent dextrose, sodium, bactoagar etc.)	
3706	Materials for Uniform (Cloth, button etc required for making uniforms)	
3707	Fuel, Oil and Lubricants (Diesel, mobil, petrol, kerosene etc.)	
3708	LaboratoSry Supplies (Aluminium foil, bag blade, brush, cap, container, X-ray etc.)	
3709	Housekeeping SUpplies (Aerosol, battery, wiping cloth, duster, lock and key etc.)	
3710	Janitorial Supplies (Bleaching powder, brush, detol, detergent, insecticide, soap etc.)	
3811	Tools and Spares (Automobile spares, tyres, tubes, battery, stores required for maintenance services etc.)	
3712	Non-stock Supplies (Materials not normally kept in stock and purchased only against specific requisitions)	2300
	Sub Total	4600
3713	Freight and other charges (Add 30% to above sub total)	
	TOTAL	4600

A/C Code	Item Description	$ Amount
3800	Repairs and Maintenance (Maintenance and repairs of vehicles, equipments, furniture and building)	
3900	Rent, communication and utilities (Postage, telephone, telegram, electricity etc.)	
4100	Bank charges	
4200	Legal and Professional Expenses (Professional membership fee, legal fee, audit fee etc.)	
4300	Printing and Publication (Printing of forms, books, journals, reprints etc.)	500
4400	Hospitality and Doantion (Guest house accommodation, donations, hospital food, lunch, refreshment etc.)	
4500	Service Charges (porter, labour, washing, laundry and other misc. expenditure)	
4600	Staff Development and Training (Training course fee, training materials, stipend, scholarship, subsistance paid to the staff)	
	TOTAL	500

A/C Code	Service Area	$ Amount
4801	Computer	1250
4802	Transport Dhaka	1150
4803	Transport Matlab	
4804	Water Transport Matlab	
4805	Transport Teknaf	
4806	Xerox and Mimeograph	100
4807	Pathology	1475
4808	Microbiology Tests	12996
4809	Biochemistry	3495
4810	X-Ray	200
4811	I.V. Fluid	
4812	Media	
4813	Patient Hospitalization study	21561
4814	Animal Research	
4815	Medical Illustration	50
4817	Telex	
4818	Out Patient Care	
4819	Maintenance Charges	
4820	Vehicle Maintenance Charges	
4821	Library Service Charges	
4822	Staff Clinic Charges - Dhaka	50
4823	Staff Clinic Charges - Matlab	
4824	Bacteriology Test	
4830	Transport Subsidy	
	TOTAL	42327

Item Description	Manufacturer	No.of Units	Cost+Freight $ Amount
1. Table top digital balance		1	1500
2. File cabinet			200
3. Deep freezer (to be shared by other project)			1850
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
TOTAL			3550