INTERNATIONAL CENTRE FOR DIARRHOEAL DISEASE RESEARCH, BANGLADESH
Mail : ICDDR,B, GPO Box 128, Dhaka-1000, Bangladesh
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Fax : 880-2-883116, 886050, 871568, 871686, Cable : Cholera Dhaka

CENTRE
FOR HEALTH AND
POPULATION RESEARCH

18 October 1999

Memorandum

To : Dr. Sharful Islam Khan
Social and Behavioural Sciences Programme
Public Health Sciences Division

From: Professor Mahmudur Rahman
Chairman, Ethical Review Committee (ERC)

Sub : Protocol # 99-023

This has reference to your memo of 18th October 1999 along with a modified copy of your 99-023 entitled "Situation assessment of male to male sex in Chittagong for STD/HIV intervention". I am pleased to inform you that the protocol is hereby approved upon your appropriate addressing of the issues raised by the Committee in its meeting held on 6th October 1999.

Thanking you and wishing you success in running the said study.

copy:- Division Director
Public Health Sciences Division

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CENTRE
FOR HEALTH AND
POPULATION RESEARCH

MEMORANDUM

To — Professor Mahmudur Rahman
Chairman, Ethical Review Committee

Through — Professor Lars Ake Persson
Division Director
PHSD, ICDDR,B

From — Dr. Sharful Islam Khan
SBSP, PHSD

Subject — Response to ERC Chairman for protocol # 99-023

Date — October 18, 1999

In response to your memorandum dated 14 October 1999, we are pleased to inform you that we have incorporated all comments made by the ERC. An account of the changes made in the proposal is presented below:

a) Reference to the matter of strictly following and monitoring the destroying of the tapes:

We sincerely assure our commitment that all tapes will be destroyed after transcribing them and the PI will be responsible to strictly monitor this issue. This has been mentioned in page 14.

b) Reference to holding workshop anonymously with the study populations:

This issue has been reconsidered and incorporated in the proposal (page 17-18)

I hope the project now meets ERC requirement.

Thanking you.

Attachment 1.
(FACSIMILE)

Date 28/9/99

ETHICAL REVIEW COMMITTEE, ICDDR,B **APPROVED COPY**

Principal Investigator MD. SHARFUL ISLAM KHAN Trainee Investigator (if any) _____

Application No. 99-023 Supporting Agency (if Non-ICDDR,B) _____

Title of Study SITUATION ASSESSMENT OF MALE TO MALE SEX IN CHITTAGONG FOR STD/HIV INTERVENTION

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/NA
   (b) Non-ill subjects — Yes No/NA
   (c) Minors or persons under guardianship — Yes No/NA
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.

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

Principal Investigator

Trainee

CHECK-LIST FOR SUBMISSION OF PROPOSALS TO THE RESEARCH REVIEW COMMITTEE (RRC)

[Please tick (✓) the appropriate box]

1. Has the proposal been reviewed, discussed and cleared at the Division level ?

   Yes ☑

   No ☐

   If 'No', please clarify the reasons: _____

2. Has the proposal been peer-reviewed externally ?

   Yes ☑

   No ☐

   If the answer is 'NO', please explain the reasons: _____

3. Has the proposal scope to address gender issues ?

   Yes ☐

   No ☑

   If the answer is 'YES', have these been adequately incorporated in the proposal. Please indicate: _____

4. Has a funding source been identified ?

   Yes ☑

   No ☐

   If the answer is 'YES', please indicate the name of the donor: SDC

5. Whether the proposal is a collaborative one ?

Yes [✓]

No [ ]

If the answer is 'YES', the type of collaboration, name and address of the institution and name of the collaborating investigator be indicated:

Bandhu Social Welfare Society, 106 Kakrail, Dhaka-1000, Bangladesh
Tel: 9339898, 407683
(A letter from the organization is attached)

6. Has the budget been cleared by Finance Division ?

Yes [✓]

No [ ]

If the answer is 'NO', reasons thereof be indicated: _____

7. Does the study involve any procedure employing hazardous materials, or equipments ?

Yes [ ]

No [✓]

If 'YES', fill the necessary form.

September 28, 1999
Date

Signature of the
Principal Investigator

APPLICATION FOR PROJECT REVIEW BY RRC AND ERC

1. Principal Investigator (s) MD. SHARFUL ISLAM KHAN
2. Other Investigators ABBAS BHUIYA, Ph.D.
3. Title of Project SITUATION ASSESSMENT OF MALE TO MALE SEX IN CHITTAGONG FOR STD/HIV INTERVENTION
4. Starting Date NOVEMBER '1999 (if possible before that)
5. Expected Date of Completion October '2000
6. Total Budget Requested $ 50,414.00
7. Funding Source SDC
8. Head of Programme ABBAS BHUIYA, Ph.D.
9. Signature by Division Director

International Centre for Diarrhoeal Disease Research, Bangladesh

RESEARCH PROTOCOL

FOR OFFICE USE ONLY
Protocol No: Date:

RRCApproval: Yes/ No Date:
ERC Approval: Yes/No Date:

1. Title of Project (Do not exceed 60 characters including spaces and punctuation
Situation Assessment of Male to Male Sex in Chittagong for STD/HIV Intervention

2a. Name of the Principal Investigator(s) (Last, Middle, First).	**2b. Position / Title**	**2c. Qualifications**
Khan Islam Sharful	Research Fellow	MBBS, MHSS

3. Name of the Division/ Branch / Programme of ICDDR,B under which the study will be carried out.
Social and Behavioural Sciences Programme (SBSP), PHSD, ICDDR,B, GPO Box 128, Dhaka 1000

4. Contact Address of the Principal Investigator
4a. Office Location: SBSP, PHSD, ICDDR,B

4b. Fax No: +88 02 885060
4c. E-mail: sikhan@icddrb.org; bobby@dhaka.agni.com
4d. Phone / Ext: 870021, 871751-60 Ext: 2238

5. Use of Human Subjects	**5a. Use of Live Animal**	**5b. If Yes, Specify Animal Species**
Yes ☑	Yes ☐	Not applicable
No ☐	No ☑	

6. Dates of Proposed Period of Support *(Day, Month, Year - DD/MM/YY):*
01/11/1999 to 31/10/2000

7. Cost Required for the Budget Period:
7a. Direct Cost ($) 44,223.00 7b. Overhead Cost ($) 6,191.00
7c. Total Cost ($) 50,414.00

8. Approval of the Project by the Division Director of the Applicant

The above-mentioned project has been discussed and reviewed at the Division level as well by the external reviewers. The protocol has been revised according to the reviewer's comments and is approved.

Professor Lars Ake Persson — Name of the Division Director
Signature
30/8 1999 — Date of Approval

9. Certification by the Principal Investigator

I certify that the statements herein are true, complete and accurate to the best of my knowledge. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. I agree to accept responsibility for the scientific conduct of the project and to provide the required progress reports if a grant is awarded as a result of this application.

10. Signature of PI

Date: August 28, 1999

Table of Contents

✓ Check here if appendix is included

PROJECT SUMMARY: Describe in concise terms, the hypothesis, objectives, and the relevant background of the project. Describe concisely the experimental design and research methods for achieving the objectives. This description will serve as a succinct and precise and accurate description of the proposed research is required. This summary must be understandable and interpretable when removed from the main application. (TYPE TEXT WITHIN THE SPACE PROVIDED).

Principal Investigator: **Sharful Islam Khan**

Project Name: **Situation Assessment of Male to Male Sex in Chittagong for STD/HIV Intervention**

Total Budget: **US $ 50,414** Expected Beginning Date: November 01, 1999 Ending Date: October 31, 2000

HIV/AIDS epidemic has already begun in Bangladesh. This is evident in limited scale surveys conducted till date. Bangladesh is generally considered a low prevalence area, however, the real picture is obscure. The National Sentinel Surveillance (both sero and behavioral) with high-risk groups has recently been initiated. The first round of this surveillance has already been completed but the result is not yet published. However, socio-behavioral data collected by ICDDR,B from different populations at different times have clearly shown that the worldwide-recognized sociocultural and behavioral determinants and risk factors for a raid outbreak clearly exist in Bangladeshi society.

Despite social stigma and religious custom against homosexual acts, its existence in Bangladesh has been increasingly apparent from several studies. Male to male sexual interactions have been reported to take place both at commercial and non-commercial settings. However, due to socio-religious stigma, denial and sensitivity, scientific exploration of male to male sexual behaviors has been avoided in Bangladesh. Risky sexual practices of males who have sex with males (MSMs), their life-situations and sociopolitical status have made them vulnerable to getting STD/HIV. The bridging nature of their sexual encounter imposes an added risk in terms of transmitting diseases among female partners. The popular notion of "only heterosexual transmission" of STD/HIV is actually overlooking the holistic and critical dynamics of HIV transmission in a society, especially where male to male sex is seriously stigmatized and hence completely hidden. Considering all these issues, the present research project has been designed to assess the real situation of male to male sex at both commercial and non-commercial settings in the port city of Chittagong, which is considered as the gateway of HIV infections in Bangladesh. The factual data of this project will be utilized with the ultimate goal of designing a culturally sensitive intervention program on male sex workers (MSWs) and if possible on their clients in Chittagong City. In addition, a supportive and enabling environment will be created for future actions by conducting series of advocacy meetings.

Both quantitative and qualitative research methods will be utilized to achieve the study objectives. Capture recapture methods for indirectly estimating the number of floating male sex workers (MSWs) of Chittagong City will be conducted along with a survey to collect background information and sexual behaviors from non-random samples. For in-depth qualitative data, a total of 75 life history interviews will be conducted with MSWs and their clients by snowball sampling. In addition, 25 selected key informants will also be interviewed on the basis of their willingness. Several ethnographic observations will be undertaken to understand other contextual issues. Quantitative data will be analyzed by SPSS for windows. For performing content, contextual and thematic analysis, a qualitative data-analyzing package named dtSearch will be utilized. In addition, these textual data will also be coded and entered in to Microsoft Visual FoxPro for quantitative reflections from qualitative data. As mentioned this study would not only attempt at developing an intervention program based on factual data, but also establishing a policy dialogue with concerned people to create a supportive and enabling environment to work in this field. Therefore, several advocacy meetings, dissemination and design workshops will be organized with studied populations and all other concerned people.

KEY PERSONNEL (List names of all investigators including PI and their respective specialties)

Name	Professional Discipline/ Specialty	Role in the Project
1. Khan Sharful Islam	MBBS, MHSS/ (Health Social Science)	PI
2. Bhuiya Abbas	Ph.D. / Social Scientist	Co-Investigator

DESCRIPTION OF THE RESEARCH PROJECT

Overall Aim:

Male to male sex in Bangladeshi culture is a stigmatized and hidden issue. The existence of which is often denied and overlooked. The national strategic plan for STD/HIV/AIDS has clearly indicated the urgent need for research and intervention on males who have sex with males (MSMs), which includes male sex workers (MSWs) and their clients. In the context of paucity of in-depth information on MSMs, the culturally effective and appropriate intervention programs will be difficult to design and implement. Considering the severity and urgency of the situation in the view of the dynamics of STD/HIV transmission in Bangladesh, this project has been planned to conduct in the port city of Chittagong. The ultimate objective will be gathering factual data for designing culturally sensitive targeted intervention program on MSWs and their clients. In addition, this project will also explore the existing barriers and possible ways for creating a supportive and enabling environment for future intervention programs.

Specific Aims:

Describe the specific aims of the proposed study. State the specific parameters, biological functions/ rates/ processes that will be assessed by specific methods (TYPE WITHIN LIMITS).

1. Indirectly estimate the number of floating MSWs of the Chittagong City area.
2. Collect background general information of MSWs and their clients.
3. Explore the patterns, types and venues of male sex business.
4. Know the operating system and power structure of male sex business.
5. Identify their risk taking behavioral pattern and meaning in the context.
6. Investigate the existing health care facilities for MSMs and identify scope and barriers to improving it.

Background of the Project including Preliminary Observations

Describe the relevant background of the proposed study. Discuss the previous related works on the subject by citing specific references. Describe logically how the present hypothesis is supported by the relevant background observations including any preliminary results that may be available. Critically analyze available knowledge in the field of the proposed study and discuss the questions and gaps in the knowledge that need to be fulfilled to achieve the proposed goals. Provide scientific validity of the hypothesis on the basis of background information. If there is no sufficient information on the subject, indicate the need to develop new knowledge. Also include the **significance and rationale** of the proposed work by specifically discussing how these accomplishments will bring benefit to human health in relation to biomedical, social, and environmental perspectives. **(DO NOT EXCEED 5 PAGES. USE CONTINUATION SHEETS).**

Sexually transmitted diseases (STDs) including HIV have emerged as a worldwide threat in all spheres of human lives and societies. Despite availability of effective treatments for bacterial STDs, the incidence rate is uncontrolled in most countries of the world including Bangladesh. On the other hand, in the absence of vaccine for prevention and cost-effective medicines for complete cure, HIV, the epidemic of the modern time, continues to grow around the world since the first case was detected in 1983. UNAIDS and WHO (1997) have estimated that over 30 million people are living with HIV. More than 90 percent of HIV infected people are living in developing countries and unfortunately most of them are not aware of their infected conditions. The total number of newly HIV infected people was approximately 5.8 million in 1997, which means around 16,000 new HIV infections per day (UNAIDS, 1997). A total of 11.7 million AIDS deaths are estimated since the epidemic began. In India, now 4 million people are living with HIV/AIDS, which makes it the country with the largest number of HIV-infected people in the world. In the next several decades, HIV/AIDS will represent the leading cause of death among young adults in most developing countries.

HIV/AIDS epidemic has already begun in Bangladesh, this is clearly evident in sero-epidemiological survey conducted till date. In the absence of a nationwide well-established surveillance system (the first round of which has recently been completed), Bangladesh is still statistically considered a low prevalence area. However, the real picture is obscure. What is generally available is the government figure, which represents just the tip of the iceberg. Worldwide recognized various behavioral practices and underlying factors for a rapid outbreak clearly exist in Bangladeshi society. In addition, the proximity to high prevalence areas of STD/HIV/AIDS (e.g., Indian states of Manipur, Mizorum and West Bengal) and other regional countries (e.g., Thailand, Myanmar Cambodia) should certainly be considered as an additional threat for the country.

The main international seaport of Bangladesh is situated in Chittagong district, and is connected with seaports of various countries in the region including African and European countries, which are well known for having high HIV prevalence. Therefore it is likely to be one of the important gateways for the entry of STD/HIV into Bangladesh. A study conducted among 198 STD patients in Chittagong found one individual to be HIV positive i.e. a prevalence of 0.5% (Rich et al, 1997).

Like most other countries of South and Southeast Asian regions, in Bangladesh it is generally believed even at policy and program level that the heterosexual transmission of STD/HIV is the only issue to be considered for prevention program if any. With the worldwide emerging panic of HIV/AIDS, scientific discussions on male to male sexual behaviors have received global attention for various risks embedded in its nature. However, Bangladesh is an exception in this respect. Research and interventions on male to male sexual behavior is generally ignored and avoided due to denial *("we do not have homosexual people*

and male sex workers in Bangladesh and therefore this would not be a problem for us"), cultural norms *("male to male sex is Western, not ours' issue")*, religious shame and political sensitivities *("it will destroy our religious morality and image of a Muslim country")*, social stigmatization *("it is a deviant behavior and anti-religion activity, they are certainly bad people")*, invisibility and overlooking *("nobody will suspect our relationship")*, and conventional homophobic norms *("I am afraid of homo-sex, I cannot even imagine how sex is possible among two males, it is awful, I hate them")* (these quotations are taken from existing studies, general dialogues of various people at different levels, from discussions in various meetings and workshops, news paper reports etc.). Therefore the extent and pattern of male to male (homosexual sex) sex and sex with both males and females (bisexual sex) are less understood, ignored and overlooked in the context of STD/HIV transmission, control and prevention in Bangladesh.

In recent days, it has been increasingly apparent from some formal and informal studies that sexual activities among males with a wide range of sexual orientational and behavioral diversities have been existing in Bangladeshi society like most others of the world. Few examples of these kind of studies can be cited here, which have found male to male sexual practices at both commercial and non-commercial settings in Bangladeshi urban and rural societies (Jenkins C, 1998, Khan, S., 1997, Khan, S.I., 1996, Khan, S.I., & Sharmin, T., 1998, Blanchet, T., 1996, Aziz and Meloney, 1985, Masud, Mustaque and Sarkar, 1997, Deep Jupp and Prom, 1997, Rich et all., 1997, Naved, 1996, Choudhury, Arjumand, Maksud and Saha, 1996). In addition, it has to be noted that male to male commercial sex, which is generally thought non-existent in Bangladeshi society, has also been well documented in recently conducted studies in Dhaka and Chittagong (Jenkins, 1998; Khan and Sharmin, 1998 and Masud, Mustaque and Sarkar, 1997).

The ratio of girl and boy street sex workers in Dhaka City was reported 3: 2 in a study conducted by Masud, Mustaque and Sarkar in 1997. The clients of male sex workers represented "all walks of life" but the most common group was from non-working class populations mainly students (Deep Jupp and Prom, 1997) and 34% represented the class of urban professionals (Sarkar, 1997). Sexual venues revealed in those studies include hotels, parks and gardens at nighttime and some other selected places according to clients' choice. Therefore, it is the understandable that male sex trade will certainly affix an added lead to a rapid outbreak of STD/HIV in Bangladesh if its extent and nature is not scientifically explored and understood for an intervention.

A study was conducted by the Social and Behavioural Sciences Programme (SBSP) of ICDDR,B in Dhaka City in collaboration Bandhu Social Welfare Society on MSM population. The project collected 316 in-depth interviews with MSMs. A preliminary analysis has been completed and two papers were presented (Jenkins, 1998; Khan and Sharmin, 1998) in two different international conferences. Only a very few informants in that sample claimed their sexual identity as gay or homosexual. In fact, the variation of self-asserted identity was reported 'fluid' as because numerous combinations were identified. It was noted that they received a few AIDS messages, which said the danger of HIV transmission only persists in case of sex with female prostitutes. They hardly reported condom usage and did not find any reason to use condom with male partners. Most respondents preferred home remedies or other traditional medications for their genital problems. Data of these studies suggest that "despite social disapproval, HIV preventive programmes must proceed to reach these men and boys" (Jenkins, 1998). However, this study did not explore all relevant issues necessary for developing an intervention program. As a pilot project, this study offered the useful insights of methodological issues in conducting research on MSM populations.

Another study was conducted by SBSP in 1998 in Chittagong as phase one of a comprehensive port city intervention with an ultimate aim for developing as a model for port cities along the coast of the Bay of Bengal. The primary populations selected for the study were local and foreign sailors, dock workers, fishermen, sex workers, and a possible contrast rickshaw pullers. This was a qualitative formative study, collected a total of 640 in-depth interviews with targeted populations as mentioned to assess their risk of contracting with HIV. This project took the opportunity to collect some information on MSMs of Chittagong and as such 33 interviews were conducted with MSMs. As a port city, Chittagong demands special attention for STD/HIV prevention activities, which was clearly ascertained in the aforementioned study. The data showed:

> "*.....an extensive clandestine sex trade (both male and female sex) in Chittagong, with an estimated annual value of at least US $10 million to the local economy. About 5,000 'full-time' female sex workers, 1,000 male sex workers and 500 transgender sex workers are complemented by at least 10,000 part-time sex workers, who are women in garment industry." (Jenkins, 1998)*

However, the above figures were not calculated based on any scientific methods of indirectly estimating any hidden populations applied in other countries of the world (Masiru, 1994, Woodward, 1985, Bloor, Leyland and Barnard, 1991). Preliminary observation and discussions with some concerned people including members of the sex-trade helped to make this "preliminary conservative estimate." Therefore the probability of a gross under or over-estimation cannot be ignored. However, collected data have clearly indicated the existence of male to male unprotected sexual interactions both at commercial and non-commercial settings with considerable level of partner change and reported current symptoms of STDs. Delayed STD treatment seeking, poor service facilities and lack of preventive knowledge have made the situation more complex and vulnerable. It was roughly estimated based on reported data that there was a possible demand of about 37,000 clients of sex workers per week and among them average 10 clients per week was reported per male sex worker in contrast to 15 clients per female sex workers per week. Another group named *hijra* (transgender) was also reported to work as sex workers and was involved in anal and oral sex.

However, meanings and reasons underlying these situations and ways to interact and overcome these barriers were not explored specifically. As the main objective of the Chittagong Port Project was to specifically assess the risk taking behavioral context of the port populations, therefore, the issues concerning male to male sex in Chittaging both at commercial and non commercial settings were not substantially explored for designing an intervention. The evidence of trafficking to male sex trade was found but the dynamics and pattern was less understood in existing data. In addition, the power structure of male sex trade, the operating system and the linkage with female sex trade were also inadequately investigated. It is well acknowledged that a targeted intervention is to launch urgently with these hidden and marginalized MSM populations in Chittagong. Prior to that a research project specifically designed to explore in-depth information about MSMs of Chittagong for an STD/HIV intervention by incorporating advocacy and policy issues with all concerned authorities will facilitate the future intervention plan and action. In fact, this project will attempt to achieve these objectives.

Recently the national STD/HIV/AIDS policy of Bangladesh Government has identified the immediate need for research and a separate intervention for homosexually active males in Bangladesh. However, the estimated number of MSWs, the pattern and setting of operating systems and other relevant information on these populations are still inadequate.

A local NGO presently has been working in Dhaka City areas on male sexual health with especial emphasis on males who have sex with males. They did not have any advocacy and policy dialogues before beginning the project. Therefore they have no choice but to operate their activities under the "banner of male sexual health." In addition, the intervention program was not initially designed on scientifically sound research findings. On the other hand, it is quite understandable that at the beginning it was not actually possible to talk about male to male sex explicitly. However, by noticing the activities of researchers and NGO workers, concerned people at different level have at least gradually begun realizing that male to male sex is not completely absent in Bangladesh. Considering all these issues, it is perceived that the time has come to stand scientifically from the public health point of view against the denial and ignorance. Male to male sex will have to be addressed with scientific methods, advocacy meetings, and policy-dialogues. Complacency or activities under the "blanket" cannot protect the country. Researcher and program managers will have to work together in partnership for effective fight against HIV in a culturally sensitive way.

It has been well acknowledged worldwide that the most effective and appropriate strategies to halt HIV transmission must be directed toward modification, alteration or complete removal of risky sexual practices. Therefore, there is no alternative to behavioral intervention by addressing the existing contextual phenomena. Scientific clarification of male to male sexual orientation and practices at both commercial and non-commercial settings especially in the local context are urgently required. It is anticipated that the descriptive and explanatory information on MSMs will help the policy planners, program managers and all other concerned authorities to rethink and reevaluate the present situation with proper understanding. This project indeed will supply the raw materials in order to build a culturally sensitive model intervention program for male sex workers and their clients in Chittagong.

Research Design and Methods

Describe in detail the methods and procedures that will be used to accomplish the objectives and specific aims of the project. Discuss the alternative methods that are available and justify the use of the method proposed in the study. Justify the scientific validity of the methodological approach (biomedical, social, or environmental) as an investigation tool to achieve the specific aims. Discuss the limitations and difficulties of the proposed procedures and sufficiently justify the use of them. Discuss the ethical issues related to biomedical and social research for employing special procedures, such as invasive procedures in sick children, use of isotopes or any other hazardous materials, or social questionnaires relating to individual privacy. Point out safety procedures to be observed for protection of individuals during any situations or materials that may be injurious to human health. The methodology section should be sufficiently descriptive to allow the reviewers to make valid and unambiguous assessment of the project. **(DO NOT EXCEED TEN PAGES, USE CONTINUATION SHEETS).**

Qualitative and quantitative methods will be utilized together to achieve the research objectives. Study area will be the port city of Chittagong. It is expected that the planned activities will be completed within one-year period of time. The time frame for overall activities is shown in Appendix 5 as GANTT Chart.

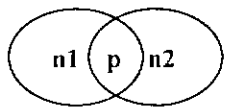
In order to plan and design any intervention and services for floating male sex workers (MSWs), their estimated number is required particularly when the existence of male sex workers in Bangladeshi society is even questioned and subject to skepticism. As these marginalized populations are hidden and difficult to reach, the Capture-Recapture (Larson A., Stevens A., and Wardlaw G., 1994), one of the simple methods for indirectly estimating the size of any hidden population will be applied in this study for estimating the number of MSWs. Measuring any hidden population has always some limitations. Capture-Recapture, though recently has been used to estimate floating sex workers, injecting drug users, however, this method has also some limitations, which result in either under or over estimation. This kind of application of Capture-Recapture was also conducted by CARE Bangladesh to estimate the female floating sex workers of Dhaka City (Abu S. Abdul-Quader, 1997).

The preliminary idea about conducting the capture-recapture survey requires around two to three weeks including primary observations and preparations. During the first few days, the field staffs with the help of guides and peer outreach workers will physically observe the contact venues of Chittagong City and then mapping will be completed. After that they will distribute a mini card to every available and identified male sex worker by the guides and peers. They will be requested to keep the card with them. As the floating male sex workers may move within the city area, therefore, before distributing the card they will be inquired whether they received the it earlier or not. If a sex worker did not receive earlier, then he will be given one. If mentioned that he already received one, then he will be requested to show the card. If someone fails to show, then some techniques will be followed to verify whether he actually received the card or not. This procedure will be conducted at all previously selected venues and 24 hours' coverage will be ensured at those locations if required. In this way, the capture will be completed.

Then the recapture procedure will begin just immediate the following day of the closing of capture process. Another colored card will be utilized for this recapture process. The recapture will be conducted in similar pattern and schedules in terms of same venues at similar days at same timing and same manpower. During distribution of cards this time, the male sex workers will again be inquired whether they had received any cards earlier or not. Those sex workers who received the card during the capture

procedure, will now be given the new colored card and those who did not receive cards at all i.e., completely new face, will be offered both old and new cards. At the end of the whole procedure, the following formula will be used for estimation:

$$N = n1 \times n2/p$$



Where, N = Estimated total size of the population
n1 = Total number of MSWs distributed a card during the capture (first round of distribution)
n2 = Total number of MSWs distributed a card during the second round of distribution
P = Proportion of sex workers (recaptured) in the second round who also received card in the first round

In addition, in order to get the socioeconomic and demographic features and some quantitative basic information on sexual behaviors, a survey questionnaire with both open and close-ended questions will be applied. Opportunistic, accidental and snowball sampling techniques will be utilized.

For qualitative data, life history interviews with 50 floating MSWs and 25 clients (depending on their availability and accessibility) will be conducted by two-way free and frank conversational style based on rapport, assurance and empathy. It has to be mentioned here that the technique will not follow the conventional format of asking questions for answers. A primary list of topics will be prepared (Appendix 3), which will only assist the interviewers to avoid forgetting any important issue. Interviewers will allow enough space and encourage respondents to speak up, discuss and raise any issues of their interest, queries and problems without fear or embarrassing situation.

25 key informants representing the brokers and other relevant components and associates of the power structure and operating system of male sex business will also be interviewed. Moreover, interviews will be conducted with respective health care providers (STD specialists, traditional practitioners) of both government and non-government settings in order to explore the existing health care facilities, barriers and scope to improving it.

Several ethnographic observations will be organized and undertaken to speculate and visualize the sexual contact venues, make-up and clothing of the MSWs, their movements and ways of interaction with clients and other relevant issues. Social mapping will be done for pointing out potential contact venues to work during survey and intervention as well.

Snowball sampling techniques with multiple entry points will be utilized for gathering qualitative data. Interviews will be tape recorded with respondents' verbal permission without their names and other identifying points attached to anywhere to ensure privacy and confidentiality (voluntary consent form both in English and Bangla is attached as appendix 1 & 2).

Two weeks training sessions will be conducted at the project office in Chittagong after finalizing the recruitment of peer-interviewers. They will be trained on quantitative and qualitative research methods, research ethics and human rights, some basic issues of human sexuality, sexual behaviors and

STD/HIV/AIDS. Demonstration on condom use will be given with free samples for token distribution among the MSWs and clients. Furthermore, in order to ensure better performance, the translators will also be trained to acquire skills for understanding and to accommodate the language and concepts that will be emerged in the interview. In addition, one-day training will be given to the data entry personnel.

Advocacy meetings in-groups and at individual level will be arranged at the first month of the project and this will be ongoing during fieldwork to avoid barriers to and gradually creating an enabling environment.

After the completion of preliminary report, series of dissemination and interactive participatory design workshops will be organized with various respective groups and individuals, NGOs, government personnel, donor agencies in order to exchange views and opinions to ultimately design a culturally acceptable and applicable intervention programs. A separate workshop will be arranged with MSMs in order to inform them of their own situation and to get planning and recommendations for future work. It is expected that all these workshops will bring forward all concerned people on board.

Facilities Available

Describe the availability of physical facilities at the place where the study will be carried out. For clinical and laboratory-based studies, indicate the provision of hospital and other types of patient's care facilities and adequate laboratory support. Point out the laboratory facilities and major equipment that will be required for the study. For field studies, describe the field area including its size, population, and means of communications. **(TYPE WITHIN THE PROVIDED SPACE).**

A small field office will be rented in Chittagong for the project period. In addition, during the recent qualitative study with port populations in Chittagong, the PI himself has developed good rapport with different NGOs and other relevant government organizations like hospital authority, Chittagong City Corporation, Police Department, Union leaders and some local influential people. All these will certainly help during this study in Chittagong.

Data Analysis

Describe plans for data analysis. Indicate whether data will be analyzed by the investigators themselves or by other professionals. Specify what statistical softwares packages will be used and if the study is blinded, when the code will be opened. For clinical trials, indicate if interim data analysis will be required to monitor further progress of the study. **(TYPE WITHIN THE PROVIDED SPACE).**

Survey form will be prepared containing both open and closed-ended questions on background information and sexual behavioral issues. Data will be sent to Dhaka office for coding and entering into SPSS for windows for analysis.

On the other hand, tape-recorded in-depth interviews will be translated into English by professional translators of Chittagong to understand the local language. After checking has been completed by the supervisor, these hand-written transcripts will also be sent to Dhaka office on a regular basis for entering into computer packages as text files. For performing content, contextual and thematic analysis, a qualitative data-analyzing package named dtSearch version 5.0 will be utilized. All emerging and reemerging topics will be gathered together to see the meaning and pattern. In addition, these textual data will also be coded and entered in to Microsoft Visual FoxPro package for quantitative reflections from qualitative data. Analysis will be on going and will begin as soon as data are entered into computer since the very beginning. Then the PI will analyze data and prepare final report.

Ethical Assurance for Protection of Human Rights

(Describe in the space provided the justifications for conducting this research in human subjects. If the study needs observations on sick individuals, provide sufficient reasons for using them. Indicate how subject's rights are protected and if there is any benefit or risk to each subject of the study.)

Any research dealing with human life situation should ensure certain professional ethics. In case of sex research, which is very sensitive by its nature, should be conducted with appropriate and strict privacy and confidentiality. We are very much concerned about the issue of protection of the subjects (MSMs) of the study. It may be mentioned here that the PI of this project was also involved in three different studies, where data were collected from MSMs in both Dhaka and Chittagong. Therefore it is expected that the PI has developed satisfactory rapport, understanding and skill to work with these MSM population in a sensitive manner. In addition, considering the vulnerabilities, we have decided to conduct series of advocacy meetings and workshops with all concerned authorities of Chittagong City from the beginning of the project. This advocacy will continue till the end of the project work. It is expected that through advocacy, we would be able to ensure protection of our study subjects from any social and other harassment.

Interviewers and other project staffs will be supervised at a regular basis for their activities, responsibilities and commitments that would be expected to comply with during field work and data handling period. Keeping all issues in mind, this research project is completely committed and devoted to affirm and attain research ethics. The following steps will be strictly followed:

- At first an informant will be thoroughly informed of the study objectives, the purpose and significance of the study, data collecting (using tape recorder) and utilization procedures, and the intimate nature of interview questions.

- As the study populations are hidden and stigmatized, therefore it will even not wise to requesting for written consent, which might destroy faith and rapport as because it would be difficult for them to understand the research ethics in providing written consent. Considering this sensitivity of written consent, as the informants are adults, only verbal affirmation can be considered justifiable to begin an interview. This verbal testimony will also be recorded at the beginning of the interview and only after getting this informed verbal approval, the interview will be conducted and recorded in tapes by using recorder.

- Informants will also be clearly informed about their rights and role in the study. They can stop the interview at any time without any obligations and responsibilities. In addition, they will not be compelled to answer any questions, which they perceive impolite or sensitive.

- Interviews will be held in a private place. Informant's personal choice will be given the top most priority. The project office could be utilized if anyone willingly agreed to come to the office. Interview time will be scheduled according to informant's preference in similar way.

- **No personal, social or address related identifying points would be collected, recorded or attached to any audiocassettes or anywhere else. These tapes will be coded with numbers and date without any identifying points. As we are very much concerned about the sensitivity of the interview questions and answers and as we will have no use of those audiocassettes, therefore, all audiocassettes after transcription and translation will be completely destroyed. The PI will be responsible to organize and strictly monitor the destroying of all audiocassettes.**

- All recorded audiocassettes will be submitted by the interviewer everyday at the project office and these tapes will be coded and locked into a proper place with full security. The local supervisor will be in charge of receiving and handling these audiocassettes.

- A short counseling session on basic knowledge regarding the route and mode of STD/HIV transmission, ways of prevention, proper use of condoms will be offered to each informant at the end of the interview.

- In case of any request from the respondent or if the interviewers feel anyone requires treatment, will offer suggestions on seeking help from appropriate health care providers. Therefore possible arrangements with service providers both at government and non-government setting will be arranged before hand.

Literature Cited

Identify all cited references to published literature in the text by number in parentheses. List all cited references sequentially as they appear in the text. For unpublished references, provide complete information in the text and do not include them in the list of Literature Cited. There is no page limit for this section, however exercise judgment in assessing the "standard" length.

1. Aziz KMA and Meloney C., Life Stages, Gender and Fertility in Bangladesh, ICDDR,B, Dhaka, 1985.

2. Abu S. Abdul-Quader, The Women in Need: The Street-based Sex Workers in Dhaka City (unpublished, 1997)

3. Blanchet, T. Lost Innocence: Stolen Childhood, University Press Ltd, Dhaka, 1996

4. Bloor M, Leyland A, Barnard M, McKeganey. Estimating hidden populations a new method of calculating the prevalence of drug-injecting and non-injecting female street prostitutes. Br J Addict, 1991; 86:1477-1483

5. Choudhury A Yusuf., Arjumand L., Maksud A.K.M., and Saha J. P., *A Rapid Assessment of Health Seeking Behavior in relation to Sexuality Transmitted Disease.* PIACT Bangladesh, Dhaka, 1996.

6. Dee Jupp and Prom PT, *An Analysis of the Present Situation and Needs of the project Target Groups.* Marie Stopes Clinic Society, Bangladesh, 1997

7. Jenkins C., *Varieties of Homosexual Behaviors in Bangladesh.* A paper presented at the 12th World AIDS Conference, Geneva, 1998.

8. Jenkins C., *A situational assessment of the Chittagong port for HIV/STD prevention.* A final report submitted to the Family Health International, Bangkok, 1998

9. Larson A., Stevens A., and Wardlaw G., Indirect Estimates of 'Hidden' Populations: Capture-Recapture Methods to Estimate the Numbers of Heroin Users in the Australian Capital Territory. *Soc. Sci. Med.* Vol. 39. No. 6, pp. 823-831, 1994.

10. Masud A.K.M., Mustaque A.K.M., Sarkar R., *Misplaced Childhood: A short study on the street child prostitutes in Dhaka City*, INCIDIN, Dhaka, 1997.

11. Naved RT., *RTI/STD and Risky Sexual Behavior in a "Conservative" Society.* Working Paper. Save the Children (USA), Bangladesh Field Office, 1996.

12. Khan S. I., *Sexuality and Sexual Behabiors of Male STD patients of Dhaka City.* Master's Thesis submitted to the Faculty of Social Sciences and Humanities, Mahidol University, Thailand, 1996.

13. Khan S., *Perspectives on males who have sex with males in India and Bangladesh*, Naz Foundation, London, 1997.

14. Khan S., *Through a Window Darkly- Males Selling Sex to other Males in India and Bangladesh.* The Naz Foundation, UK, 1997.

15. Khan S I., and Sharmin T., *Programs on males who have sex with males in Bangladesh: Necessity and Barriers*. A paper presentation at the ASCON VIII, organized by ICDDR,B, Dhaka, 1998.

16. Rich, J.D et al. HIV and Syphilis Prevalence in Chittagong, Bangladesh. *AIDS;* April 11(5): 703-4, 1997.

17. Timothy D. Masiru and et al., Estimating the Number of HIV-Infected Injected Drug Users in Bangkok: A Capture-Recapture Method, *American Journal of Public Health,* July 1994, vol. 84, No.7

18. UNAIDS. Implication of HIV variability for transmission: scientific and policy issues. *AIDS*; 11:1-15. 1997

19. Woodward JA, Bonett DG, Brecht ML Estimating the size of a heroin-abusing population using multiple-recapture census, In: Rouse BA, Kozei NJ, Richards LC, eds. *Self-Report Methods of Estimating Drug USe. Meeting Current Challenges to Validity.* National Institute of Drug Abuse Research Monograph 57. Washington, DC: US Dept of Health and Human Services; 1985; 158-171

Dissemination and Use of Findings

Describe explicitly the plans for disseminating the accomplished results. Describe what type of publication is anticipated: working papers, internal (institutional) publication, international publications, international conferences and agencies, workshops etc. Mention if the project is linked to the Government of Bangladesh through a training programme.

The National STD/HIV/AIDS policy of Bangladesh has recognized the existence of male to male sex and the likelihood of its impact on STD/HIV transmission in Bangladesh. The policy calls for much research in this domain to design effective intervention programs for these marginalized populations. Without factual data based information of the local context, appropriate and effective intervention programs will be difficult to design. Targeted interventions with so-called "high-risk" behavioral groups are now widely practised all over the world to halt the rapid transmission of STD/HIV among general populations. In Bangladesh, various programs are now being operated on brothel based and floating female sex workers (FSWs), IDUs etc. However, no large scaled programs are designed specially for male sex workers and their clients especially in Chittagong. Therefore, certainly a gap has been existing in this field in terms of research and actions as well.

In addition, a research should incorporate such scopes in the design, which can facilitate its move to action. Considering that in mind, this research project has been designed not only to collect data but also to initiate dialogues and movements with factual information to creating an enabling and supportive environment for future interventions. The findings of the study will be disseminated as follows:

1) Several one day post-study disseminating and design workshops will be separately arranged with following groups:
   - Policy planners and Program managers of GO and NGOs (local and national)
   - Lawyers,
   - Police and other law enforcing authorities,
   - Journalists,
   - Political and religious leaders,
   - Physicians,
   - Donor agencies

2) We feel that the researcher should go back to the study subjects with their results, especially if the study aims at designing an intervention program where the study populations need to understand their situations in order to actively participate and cooperate with the program activities. For this study, if a supportive environment is not created among male sex workers and if they are not informed about their vulnerability to getting diseases, cooperation will never be achieved during field intervention. Therefore, we have planned to conduct disseminating and design workshops with male sex workers in a completely separate forum as we know they are stigmatized and hidden in the society. The venue of the workshop will be the project office to ensure maximum security. No other participants will be allowed to attend. It has to be mentioned that those who are involved in male sex business are known to each other and they usually maintain a network among themselves. Therefore, only male sex workers and their brokers will

be invited to attend. However, it is important to note that no one will be influenced or forced to attend the workshop. Rather they will be invited and informed about the purpose and nature of participants of the workshop, so that they would be able to take their own decision.

3) Presentations will made in scientific forums of ICDDR,B and outside the Center for dissemination amongst researchers working in this field in Bangladesh.

4) The final report will be translated into Bengali language without using scientific jargon for dissemination among field workers and other concerned people.

5) Newspaper reporting will be organized by press conference.

6) Publication will be arranged as working papers and in peer-reviewed international journal.

Collaborative Arrangements

Describe briefly if this study involves any scientific, administrative, fiscal, or programmatic arrangements with other national or international organizations or individuals. Indicate the nature and extent of collaboration and include a letter of agreement between the applicant or his/her organization and the collaborating organization. **(DO NOT EXCEED ONE PAGE)**

Bandhu Social Welfare Society has been working with male sexual health in Dhaka City with especial emphasis on those males who have sex with males (MSMs). They have outreach programs and clinical services as well. This organization has already developed a good rapport and shown commitment to work with these marginalized populations in Dhaka City. In addition, during our fieldwork in Dhaka in 1998, we received good support from them and have maintained that relationships.

Bandhu has aspiration to start working in Chittagong. Some of their out reach workers have good connections with male sex workers of Chittagong City and two of them already worked during the Chittagong Port Project with satisfactory performance. We have already discussed about these issues with Bandhu, they have expressed their interest and told us providing cooperation in Chittagong (the official letter of Bandhu is included). They will basically help us recruiting peer-interviewers from Chittagong. Data from this study will strengthen Bandhu's intervention work on MSM population. In this respect, beside Bandhu, if any capable self-help group emerges, they would also be considered.

Biography of the Principal Investigator

Give biographical data in the following table for key personnel including the Principal Investigator. Use a photocopy of this page for each investigator.

Name	Position	Date of Birth
Dr. Md. Sharful Islam Khan	Research Fellow, SBSP, PHSD ICDDR,B,; Dhaka, Bangladesh	August 01, 1967

Academic Qualifications (Begin with baccalaureate or other initial professional education)

Institution and Location	Degree	Year	Field of Study
Mahidol University, Thailand	Masters	1997	Health Social Science
Dhaka Medical College	M.B.B.S	1992	Medicine & Surgery

Research and Professional Experience

Concluding with the present position, list, in chronological order, previous positions held, experience, and honours. Indicate current membership on any professional societies or public committees. List, in, chronological order, the titles, all authors, and complete references to all publications during the past three years and to representative earlier publications pertinent to this application. **(DO NOT EXCEED TWO PAGES, USE CONTINUATION SHEETS).**

Curriculum Vitae is attached

Biography of the Co-investigator

Give biographical data in the following table for key personnel including the Principal Investigator. Use a photocopy of this page for each investigator.

Name	Position	Date of Birth
Dr. Abbas Bhuiya	Head, Social and Behavioural Sciences Programme (SBSP), PHSD, ICDDR,B, Dhaka	December 31, 1951

Academic Qualifications

Research and Professional Experience

Concluding with the present position, list, in chronological order, previous positions held, experience, and honours. Indicate current membership on any professional societies or public committees. List, in, chronological order, the titles, all authors, and complete references to all publications during the past three years and to representative earlier publications pertinent to this application. **(DO NOT EXCEED TWO PAGES, USE CONTINUATION SHEETS).**

Curriculum Vitae is attached

Detailed Budget for the Proposal

Project Title: **Situation Assessment of Male to Male Sex in Chittagong for STD/HIV Intervention**

Name of PI: **Sharful Islam Khan**

Protocol Number: Name of Division: **PHSD**

Funding Source: **SDC** Amount Funded (direct): **$ 44,223.00 + Overhead $ 6,191 = $ 50,414**

Starting Date: December 01, 1999 Closing Date: November 31, 2000

Items	Description	Requested amount in US $
Personnel (salary)		
-PI	NOA, Step3 (1 × $ 690/m ×12 months)	8,280.00
-Co-investigator	Salary will be drawn from other fund	----------
-Project coordinator	GS5, Step1 (1 × $ 350/m × 12 months)	4,200.00
-Field Supervisor	GS4 (1 × $ 267/m × 8 months)	2,136.00
-Interviewers	GS4 (3 × $ 10.27/day × 78 days)	2,403.00
-Translators	GS4 (3 × $ 10.27/day × 104 days)	3,204.00
-Data entry personnel/typist	GS2 (3 × $ 189/m × 4 months)	2,268.00
-Outreach workers	GS1 (2 × $ 6.50/day × 78 days)	1,014.00
-Field office attendant	GS1 (1 × $ 169/m × 11 months)	1,859.00
-Guides (incentive)	3 @ $ 4.00/day × 90 days	1,080.00
-Persons for Capture-Recapture survey	7 @ $ 4.00/day × 10 days	280.00
Sub-total		***26,724.00***
Supplies and Materials		
-Audio tapes	(@ $ 1.88 × 150)	282.00
-Batteries	(@ $ 0.75 × 800)	600.00
-Stationery		300.00
-Earphones	(@ $ 5.00 × 8)	40.00
-Condoms		*75*.00
Sub-total		***1,297.00***
Office Expenses		
-Office rental	(@ $ 200.00/m × 12 months)	2,400.00
-Furniture		650.00
-Electricity, water etc.	(@ $ 36.00/m × 12 months)	432.00
-Phone, fax	(@ $ 30.00/m × 12 months)	360.00
-Stationery	(@ $ 25.00/m × 12 months)	300.00

-Miscellaneous		100.00
Sub-total		***4,242.00***
Training, Disseminating and Design Workshops		
-Venue rental	(@ $ 50/day × 12)	600.00
-Refreshment	(@ $ 4.00/person × 25 × 12)	1,200.00
-Equipment rental	(@ $ 20/day × 15)	300.00
-Photocopy		200.00
-Stationery		200.00
-Computer & printing support		760.00
Sub-total		***3,260.00***
Travel, Transportation and Per Diem		
-Local travel in Chittagong including Dhaka-Chittagong-Dhaka trips for the investigators and other project staffs	(Dhaka–Ctg-Dhaka one round trip by air @ $ 60 x total 10 trips for 2 investigators) + Dhaka-Ctg-Dhaka travel by road for other project staffs + local travel in Chittagong	2,250.00
-Per Diems for PI	(@ $ 25/day × 180 days)	4,500.00
-Per Diems for Co-Investigator	(@ $ 60/day × 20 days)	1,200.00
-Per Diems for Project Coordinator	(@ $ 15/day x 50 days)	750.00
Sub-total		***8,700.00***
Total Direct Cost		**44,223.00**
Overhead		**6,191.00**
Grand total		**50,414.00**

Budget Justifications

Please provide one page statement justifying the budgeted amount for each major item. Justify use of man power, major equipment, and laboratory services.

1. A field office will be needed in Chittagong City area for operating all sort of field activities including data preserving in well-protected manner, translation and sending to Dhaka regularly. In addition, this office will also be utilized for a safe and private interviewing space. Therefore, a house will be rented for the project period.
2. As mentioned male sex workers and their clients are stigmatized and hidden, therefore, peer interviewers, MSM out reach workers and guides will be necessary to reach them conveniently. For Capture-Recapture survey, another 7 persons will be recruited for only few days. Professional translators will be required because peer-interviewers are usually unable to translate into English.
3. Due to stigmatized hidden population and the sensitive nature of interview questions, experience suggests that time requirement often overruns than initially allocated. Therefore, time space has given in the design.
4. As in-depth interviews will be tape-recorded, so cassettes (audio) and batteries will be required. The Social And Behavioral Sciences Program already has recorders.
5. Several one-day post-study disseminating and design workshops are planned to organize in convenient venues in Chittagong City area. For this purpose a rental venue will be arranged. All project staffs and invited guests will participate and work together for the whole day. Food and refreshments are culturally practiced to offer in such a gathering.
6. All field project staffs will be required to travel locally within the Chittagong City to reach male sex workers and their clients. Usually to conduct a single interview, it has been noticed earlier that several visits are required for building rapport and getting schedule. When a respondent will come to the project office for interview, his local transportation cost will have to be reimbursed. For conducting key informant interviews with power structure of male sex trade, several visits will be needed. Because these people are much more difficult to convince for an interview. Therefore, this kind of project actually requires sound budget to cover local transport bill. In addition, it has been estimated that around 10 round-trips (Dhaka-Chittagong-Dhaka) will be made by investigators and they will also require cost for local travel in Chittagong.
7. The investigators are Dhaka based and are involved in other activities. Therefore it would be not possible for them to stay full time in Chittagong. They will have to stay together in Chittagong at the beginning and ending of the project. Additionally, their presence will be required at every month according to the felt needs. As the project will deal a very sensitive issue especially in the political and religious context of Chittagong, therefore, it is necessary that one of them will work and supervise the fieldwork in Chittagong alternatively through out the project period. Considering the workload, one project coordinator will be recruited for helping and conforming to various project activities including arranging advocacy meetings, dissemination and design workshops and networking. He will also responsible for overall data management and will work under close supervision of the PI. In addition, he will also conduct some key informant interviews and ethnographic observations. During the ending of the project, the PI and Co-investigator will again be required to stay full time during disseminating and design workshops. Therefore separate money has been allocated to cover per-diem purpose and travel.

Other Support

Describe sources, amount, duration, and grant number of all other research funding currently granted to PI or under consideration. (DO NOT EXCEED ONE PAGE FOR EACH INVESTIGATOR)

The SBSP has technical resources in terms of computer capacity and skilled manpower to supervise quantitative data. In addition, the PI of the present study worked with the qualitative Port Study in Chittagong last year and had developed reasonable acquaintance in Chittagong, which can now be utilized for fieldwork. In addition, the PI worked with MSM populations during his involvement in the national behavioral surveillance, Chittagong port project and Bandhu project in Dhaka during last few years and as such he has developed satisfactory experience to deal with these marginalized populations. It is expected that the second round of behavioral surveillance will begin soon and the PI of this project will play the important role as the coordinator of the surveillance in Dhaka, Chittagong and Sylhet.

ABSTRACT FOR THE ERC

Background

HIV/AIDS epidemic has already begun in Bangladesh. This is evident in limited scale surveys conducted till date. Bangladesh is generally considered a low prevalence area, however, the real picture is obscure. The National Sentinel Surveillance (both sero and behavioral) with high-risk groups has recently been initiated. The first round of this surveillance has already been completed but the result is not yet published. However, socio-behavioral data so far conducted on different populations have clearly shown that the worldwide-recognized sociocultural and behavioral determinants and risk factors for a raid outbreak clearly exist in Bangladeshi society.

Despite social stigma and religious sanction against homosexual acts, its existence in Bangladesh has been increasingly apparent from several studies. Male to male sexual interactions have been reported to take place both at commercial and non-commercial settings. However, due to socio-religious stigma, denial and sensitivity, scientific exploration of male to male sexual behaviors has been avoided in Bangladesh. Risky sexual practices of males who have sex with males (MSMs), their life-situations and sociopolitical status have made them vulnerable to getting STD/HIV. The bridging nature of their sexual encounter imposes an added risk in terms of transmitting diseases among female partners. The popular notion of "only heterosexual transmission" of STD/HIV is actually overlooking the holistic and critical dynamics of HIV transmission in a society, especially where male to male sex is seriously stigmatized and hence completely hidden.

Objectives

Considering all the above issues, the present research project has been designed to assess the real situation of male to male sex at both commercial and non-commercial settings in the port city of Chittagong, which is considered as the gateway of HIV infections in Bangladesh. The factual data of this project will be utilized with the ultimate goal of designing a culturally sensitive intervention program on MSMs of Chittagong City. In addition, a supportive and enabling environment will be created for conducting this research and future intervention as well.

Methods, Procedures and Data Analysis

Both quantitative and qualitative research methods will be utilized to achieve the study objectives. Capture-Recapture method for indirectly estimating the number of floating male sex workers (MSWs) of Chittagong City will be conducted along with a survey to collect background information and sexual behaviors from non-random samples. For in-depth qualitative data, a total of 75 life history interviews will be conducted by using a tape recorder with MSWs and their clients by snowball sampling. In addition, 25 selected key informants will also be interviewed on the basis of their willingness. Several ethnographic observations will be undertaken to understand other contextual issues. Quantitative data will be analyzed by SPSS for windows. For performing content, contextual and thematic analysis, a qualitative data-analyzing package named dtSearch will be utilized. In addition, these textual data will also be coded

and entered in to Microsoft Visual FoxPro for quantitative reflections from qualitative data. In order to create a supportive and enabling environment for continuing this study and future activities, several advocacy meetings, dissemination and design workshops will be organized with studied populations and all other concerned authorities. It is expected that one-year time period will be required to complete all project activities.

Ethical Assurance and Protection of Human Rights

As the populations are hidden and stigmatized, therefore it would be not appropriate for requesting their written consent, which might destroy faith and rapport with the interviewer and rather create confusions and suspicion regarding study purpose. In this situation, as the informants are adults, only verbal affirmation can be considered justifiable to begin an interview. This verbal testimony will be tape-recorded at the beginning of the in-depth interview. Informants will also be clearly informed about their rights and role in the study. They can stop the interview at any time without any obligations and responsibilities. In addition, they will not be compelled to answer any questions, which they perceive impolite or sensitive. Interviews will be held in a private place. Informant's personal choice will be given the top most priority. The project office could be utilized if anyone willingly agree to come to the office. In that case, the transportation cost will be provided. Interview time will be scheduled according to informant's preference in similar way and it is expected that one hour will be required to complete one interview. No personal, social or address related identifying points would be collected, recorded or attached to any audiocassettes or survey forms. These audiocassettes containing in-depth interviews will be coded with numbers and date without any identifying points and will be submitted by the interviewer everyday at the project office. These tapes will be coded and locked into a proper place with full security. The local supervisor will be in charge of receiving and handling these audiocassettes. The PI personally will supervise the procedures and ensure confidentiality of data gathered. These audiocassettes after transcription and translation will be destroyed.

A short counseling session on basic knowledge of STD/HIV, proper use of condoms and psychological issues will be offered to each informant at the end of the interview. In case of any request from the respondent or if the interviewers feel anyone requires treatment, will be offered suggestions on seeking help from appropriate health care providers. Therefore possible referral arrangements with service providers both at government and non-government setting will be arranged before hand. In addition, in order to tackle any social and legal harassment of the MSMs, this study design has incorporated series of advocacy meetings and workshops from the beginning of the project till end with a hope to create a supportive and enabling environment.

APPENDIX 1

International Centre for Diarrhoeal Disease Research, Bangladesh
Voluntary Consent Statement

Title of the Research Project: Situation Assessment of Male to Male Sex in Chittagong for STD/HIV Interventions

Principal Investigator: Sharful Islam Khan

Before recruiting into the study, the study subject must be informed about the objectives, procedures, and potential benefits and risks involved in the study. Details of all procedures must be provided including their risks, utility, duration, frequencies, and severity. All questions of the subject must be answered to his/ her satisfaction, indicating that the participation is purely voluntary. For children, consents must be obtained from their parents or legal guardians. The subject must indicate his/ her acceptance of participation by signing or thumb printing on this form.

As mentioned the informants (male sex workers and their clients) of this study are stigmatized and hidden populations. They feel risk to become open in the society. Therefore the Project should not follow any such procedure, which can create any scope or probability to expose and label them as MSM or MSW in the society, especially when the social and legal harassment issue is there. Therefore it is perceived that the Project should not ask their written consent. In fact, this would be not feasible and justifiable. Rather this can create suspicions among the informants regarding the objective and purpose of the Project. However, they will be asked to say verbally that they have given consent to be interviewed and this verbal approval will be tape recorded before the interview begins. As the informants are adult and not insane, therefore, their verbal testimony can be reasonably considered especially for studying this kind of sensitive issue. Interviewers will be trained to say a standardized introduction verbally in Bangali language in order to inform the interviewee about their rights and privileges.

The introductory note would be as follows:

"We have come to you from ICDDR,B (preferably Cholera Hospital). We are working on STD/HIV/AIDS. Presently we are conducting a study on male to male sexual behaviors. We know that in Chittagong like other district of Bangladesh, male to male sex business has been operating. But these populations do not have facilities to access information about any disease including STD/HIV and they do not have health care facilities as well. They are neglected and marginalized. We need to develop programs for these populations and to help them preventing from STD/HIV. We need your full cooperation and free and honest discussions about the issues. We will discuss about your private lives and sexual behaviors as well. We do not need your name, address or any other particulars, so your name or address will not be collected or recorded anywhere. Therefore you can be completely sure that there will be no need and no chance to identify you after this interview. We will go to private place according to your choice or if you agree we have some arrangements from our side in the project office. You can give us your free time, we have no time pressure. Please be sure, you can stop anytime without any obligation during our discussion if you want. As I mentioned, I have to record our discussions in order to collect your full and intact thoughts and talks. After we translate information from the tape, the tapes will be destroyed. Now if you kindly give us consent, then and only then we can begin our interview. Please say verbally if you agree to talk to us, as we also have to record that verbal approval".

APPENDIX 2

Voluntary Consent Statement in Bengali Language

আমরা আই সি ডি ডি আর, বি (কলেরা হাসপাতাল) থেকে এসেছি। আমরা যৌন বাহিত রোগ এবং এইড্স এর উপর কাজ করছি। বর্তমানে আমরা পুরুষের সাথে পুরুষের যৌন আচরন নিয়ে একটা গবেষনা করছি। আমরা জানি যে, চট্টগ্রাম সহ দেশের অন্যান্য জেলাগুলোতেও পুরুষে পুরুষে যৌন ব্যবসা বহুদিন ধরে চলে আসছে। কিন্তু এই যৌন কর্মে নিয়োজিত ব্যাক্তিদের অসুখ-বিসুখ বিশেষ করে এইড্স রোগ সম্পর্কে শেখার বা জানার সুযোগ নেই। পুরুষ যৌনকর্মীদের স্বাস্থ্য সেবা পাবার কোন সুযোগ সুবিধাও নেই। তারা অবহেলিত জনগোষ্ঠী। যৌন বাহিত রোগ এবং এইড্স থেকে তাদেরকে বাঁচাতে কর্মসূচি হাতে নেয়া অত্যন্ত জরুরী। আমাদের কাজের সফলতার জন্য এ ব্যাপারে আপনার পূর্ণ সহযোগীতা এবং প্রানখোলা আলোচনা খুবই জরুরী। আমরা আপনার ব্যক্তিগত জীবনের কিছু বিষয় এবং যৌন আচরন সম্পর্কে আলোচনা করব। আপনার নাম, ঠিকানা বা অন্য কোন রকম ব্যক্তিগত পরিচিতিমূলক তথ্য আমাদের দরকার নেই। ফলে এই ধরনের কোন তথ্য আমরা সংগ্রহ বা কোথাও রের্কড করবনা। আপনি সম্পূর্ণ নিশ্চিত থাকতে পারেন যে, এই সাক্ষাৎকার গ্রহনের পরে আপনাকে কোনভাবেই চিহ্নিত করা যাবেনা। সাক্ষাৎকার নেয়ার জন্য আমরা আপনার পছন্দনীয় কোন স্থানে যাব,অথবা আপনি সম্মত হলে আমাদের অফিসেও সাক্ষাৎকার নেয়া যেতে পারে। আমাদের দিক থেকে সময়ের কোন চাপ নেই, আপনি আপনার অবসর সময়ে কথা বলতে পারেন। আপনি অবশ্যই আলোচনা চলাকালীন যে কোন সময়ে কথা বলা বন্ধ করে দিতে পারেন। এটা আপনার অধিকার, আপনার দেয়া তথ্য / কথা বার্তা সম্পূর্ণভাবে সংগ্রহ করতে আমাদের আলোচনাকে টেপ রেকর্ড করা দরকার। আপনার দেয়া তথ্যাবলী টেপ থেকে লিপিবদ্ধ করার পর ক্যাসেট গুলো নষ্ট করে ফেলা হবে। এখন, শুধুমাত্র আপনি সম্মতি দেয়ার পরই আমরা সাক্ষাৎকার গ্রহণ শুরু করতে পারি। আপনার এই মৌখিক সম্মতিও আমাদের রেকর্ড করতে হবে, তাই যদি সাক্ষাৎকার দিতে সম্মত হন তাহলে দয়া করে মৌখিক ভাবে বলুন।

APPENDIX 3

QUALITATIVE INFORMATION WILL BE COLLECTED ON THE FOLLOWING TOPICS
(this will work as interview guideline for life history interviews)

No of interview: Date of interview: Interviewer's name code: Place of interview:

Childhood Memories and Family Relations

Childhood memories and relationship among family members, planning about marriage, living conditions, present family connection and relationship, number of members in the family, discussion about other family members' sexuality and sexual behaviors, any memorable incidents relating to sex life.

Sexual Partnerships

Number and types of partners, pattern and partnership timing, duration, social identity of partners, condition of choices/coercion, conditions and rate of change

Sexual Drives, Acts and Meanings

Initiation of male to male sex acts, its history of continuation, first experience of heterosexual sex, history of continuation, frequency of sexual acts, condition of choice/coercion, meaning of sex acts, perception of pleasure, formation of sexual identity, socially conditioned sex drives, sexual fantasies, condom and lubricant using behavior and attitudes

Sexual Health Issues and Services

Personal risk perception of STD/HIV, knowledge and beliefs about STDs/HIV/AIDS, recognition of symptoms, etiological beliefs, history of suffering STDs and current experience, existing treatment facilities especially for anal STDs, discussing environment, counseling system, providers' attitudes, views regarding the anal STDs, male sex business and treatment facilities, treatment seeking history, treatment cost, protection from STDs/HIV, protection from harmful practices, information on sexuality and STDs.

Selling Sex Related Issues

Time and history of initiation, continuation and future planning about selling sex issues, cost of sex, payment system, brokers' role, working (sex business) environment and working conditions, working hours, operation system, contact and action venues, harassment and violence issues.

Other Issues

Perception sex and gender, self-gender and sexual identification, meaning and underlying reasons, entertainment outside sex business, alcohol and drug-using behaviors, peer role in sex life and business.

APPENDIX 4

QUANTITATIVE INFORMATION WILL BE COLLECTED ON THE FOLLOWING TOPICS

Survey Questionnaire

(both open and closed ended questions will be arranged)

1. No of interview: ☐
2. Date of interview: ☐
3. Interviewer's name code: ☐
4. Place of interview: ☐

BACKGROUND INFORMATION

5. Age ☐

6. Years of completed schooling ☐

7. Occupation
   Main:
   Minor (others):

8. Monthly income (taka) ☐

9. Main source of income

10. Marital status
    Sing----- Mar---- Sep---- Div---- Wid--- Living with partner-----

11. Number of children
    Living: ☐
    Dead: ☐

KNOWLEDGE ABOUT STD/HIV/AIDS

12. Did you hear the name of AIDS Yes ------- No-------

13. Did you hear the name of other STDs Yes------- No-------

14. What do you know about AIDS? (Tick all mentioned)

Transmission: M-F sex..... M-M sex..... Blood trans.....MTCT..... Kiss----

Sharing needles/syrynges.....Cloths.....Food & Utensils .....

Mos. bites.....Others.....

Treatment: Yes..... No..... Do not know.....

Prevention..... Condoms..... Others.....

15. From where did you learn about AIDS? (Tick all mentioned)

Radio.....TV.....Newspaper.....Friends.....Family members.....Health workers .....

Books/magazines.....NGO workers .....Others.....

16. What do you know about other STDs? (Tick all mentioned)

Transmission: M-F sex..... M-M sex..... Blood trans.....MTCT..... Kiss----

Sharing needles/syrynges.....Cloths.....Food & Utensils .....

Mos. bites.....Others.....

Treatment: Yes..... No..... Do not know.....

Prevention..... Condoms.....Others.....

17. Usually what do you do to avoid getting STDs/AIDS?

Using condom.....Washing penis with Dettol, Savlone etc. .....Washing penis with soap.....

Washing penis with urine..... Taking antibiotic medicines.....

Avoiding sex with female sex workers.....Avoid dirty partners.....Avoid sharing needles.....

Others.....

STDS & SEXUAL HEALTH PROBLEMS AND TREATMENT SEEKING

(Now I would like to ask you about sexual problems and diseases. Please feel free to share your opinion and experience with me. This will help us designing health services for you and your friends)

18. Did you ever have the experience of the following problems? (Tick all mentioned)

    Discharge (pus/blood/anything else) ..... from penis..... Discharge (pus/blood) from anus.....

    Pain/burning sensation during urination ..... Itchy rash on genitals.....Pain during sex.....

    Genital sores/ulcer.....others.....

19. If yes, how many times during the last month .....last one year time .....in whole life.....

20. Do you have any problem at present? Yes..... No.....

21. If yes, mention that

    Discharge (pus/blood/anything else) ..... from penis..... Discharge (pus/blood) from anus.....

    Pain/burning sensation during urination ..... Itchy rash on genitals.....Pain during sex.....

    Genital sores/ulcer.....others.....

22. Do you have any other sexual health problems to tell us?

    Small size penis.....Cann't have sex for long time.....Don't erect.....Others.....

23. In case of current disease or any other sexual health problems (if mentioned), what are you doing to treat yourself?

    Doing nothing..... Taking traditional medicines..... Doing self medication (modern).....

    Attended CMCH..... Attended AH.....Attended private clinic/chamber.....

24. In this case, how many days did you wait before seeking measures?
    Immediately ..... Days .....

25. Did/do you ever suffer from piles?
    Yes..... how long..... No.....

26. What did/do you do then?

Did/do nothing..... Traditional medicines ..... Modern (oral) medicines.....

Surgery in CMCH.....Surgery in private clinic..... Others.....

SEXUAL PARTNERSHIP

27. Tell me the total number of sex partners you had in the last week. ☐

(Male..... Female..... Hijra.....)

28. Tell me the total number of sex partners you had in the month. ☐

(Male..... Female..... Hijra.....)

29. Who are usually your male partners?

Sex workers..... Relatives.....Friends.....Employers .....Police.....Mastan.....Students.....

Business men.....Service holder.....Railway guard.....Dock workers ..... Foreign sailors.....

Bangladeshi sailors.....Others.....

30. What was the marital status of your sex partners ?

last week: Married .....Never been married.....Separated.....Divorced.....Wid.....

Usually: Married .....Never been married.....Separated.....Divorced.....Wid.....

31. Who were your female partners?

Last week : Sex worker.....Relative.....Girl friend.....Others.....
Last month: Sex worker.....Relative.....Girl friend.....Others.....

32. What was their marital status?

Last week: Married .....Never been married.....Separated.....Divorced.....Wid.....
Usually: Married .....Never been married.....Separated.....Divorced.....Wid.....

33. Please tell us the age range of your sex partners in the last week.

Male partners
Female partners

33. Did your male sex partners usually give you money for sex? Yes..... No.....

34. How many men gave you money.....

In the last week
In the last month

Total amount in last week
Total amount in last month

35. Usually how much (range) your partners offer you per program?

36. Do you ever offer money for sex to other men/boys? Yes..... No.....

37. When did you last pay for sex ? Last week..... Last month..... Last year.....

38. How much did you pay for that?

39. How much usually you spend for sex? Per week Per month

40. How many new sex partners you had in last week?

Males Females Hijra

41. How many new sex partners you had in last month?

Males Females Hijra

42. Do you have sex for gift? Yes..... No.....

43. What types of gift? (open)

44. Do you have any boy friend and having sex for that love relation? Yes.....# ..... No.....

SEXUAL ACTS, CONDOM AND LUBRICANT USE

45. What kind of role you play in your sexual interaction with other males?

Always insertive..... Always receptive..... Sometimes insertive and sometimes receptive

46. Why do you always insert? (open)

47. Why do you always receive? (open)

48. Why do you play both insertive and receptive roles? (open)

49. How many times you had anal sex (not partner) in the last week?

Insertive ☐ Receptive ☐

50. What are the other sex acts you or your partners used to practise?

Anal.....Oral.....vaginal.....Thigh.....Mutual mustarbation.....Kissing.....

Others.....

51. Did you have participate in group sex?

In the last week?	Yes..... .....#	No.....
In the last month?	Yes.....#	No.....

52. How many persons (excluding you) did participate in the last group sex ? ☐

53. What was your role in that group sex?

Insertive .....Receptive..... Both.....

54. Did you or other partners use condom in that group sex? Yes..... No.....

55. Did you use condom in your last insertive anal sex ? Yes..... No.....

56. Did your partner use condom your last receptive sex act? Yes..... No.....

57. How many times you did not use condom in your last insertive sex in the last week? ☐

58. How many times did your partners not use condoms in your last receptive sex in the last week? ☐

59. What is the condom using pattern with your male partners in the last one year?
(in case of both insertive and receptive acts, if different pattern, then please notify)

Always (no miss)..... Never..... Very occasionally used..... Very occasionally missed.....

60. Did you use condom with your last female partners? Yes..... No.....

61. Why do you use condom? (open)

62. Why do you not use condom? (open)

63. Do you have condom with you now? Yes..... No.....

64. (If cannot, in that case) Please name the brand of condom you use and the cost per packet or piece.

Name of the brand.....Cost per piece/packet.....

65. From you can get condoms?

Pharmacy.....Grocery shop.....Hospital/clinic.....NGO workers.....Others.....

66. Do you use lubricant during male sex? Yes..... No.....

67. If yes, please tell us which lubricant you use?

Saliva.....Oil.....K-Y Jelly.....Soap.....Others.....

68. Where do you get the lubricant?

Pharmacy.....Grocery shop.....Friends.....Others.....

DRUG USING BEHAVIORS

69. Do you use any drugs? Yes..... No.....

70. Please mention, what kind of drugs you use?

Heroine.....Ganja.....Alcohol.....Phensydyl.....Injecting drugs.....

Others.....

71. (In case of injecting drugs) Do you share needles & syringes among your drug using friends?

Yes..... No.....

72. Why do you use drug? (open)

73. Do your any sex partners use injecting drugs? Yes..... No.....

SELF-RISK ASSESSMENT

74. Do you think you are at risk of getting STDs?

High..... Medium.....Small.....No risk.....Do not know.....

75. Do you think you can get AIDS?

High.....Medium..... Small.....No chance at all.....Do not know.....

76. Give the reasons for your opinion? (open)

(Thank you very much for giving us your valuable time)

জরিপ ফর্ম - ১৯৯৯

১. সাক্ষাৎকার নং ☐

২. তারিখ :

৩. সাক্ষাৎকার গ্রহণকারীর নামের কোড :

৪. সাক্ষাৎকার গ্রহণের স্থান :

ব্যক্তিগত ও পারিবারিক তথ্য

৫. বয়স :

৬. কতদূর (কত বছর) লেখাপড়া করেছেন ?

৭. আপনি কি করেন ? প্রধান পেশা : অন্যান্য কাজ :

৮. আপনার মাসিক আয় কত টাকা ?

৯. আপনার আয়ের প্রধান উৎস কি ?
আর কোনো উপায়ে কি আয় করেন ?

১০. আপনার বৈবাহিক অবস্থা কি ?
☐ অবিবাহিত ☐ বিবাহিত ☐ তালাক ☐ পরিত্যক্ত ☐ বিপত্নীক ☐ সহীর সাথে বসবাস

১১. সন্তানের সংখ্যা ? জীবিত কতজন ? ☐ মৃত কতজন ? ☐

যৌন রোগ/এইডস্ সম্বন্ধে ধারনা

১২. আপনি কি এইডস্ এর নাম শুনেছেন ? ☐ হ্যাঁ ☐ না

১৩. আপনি কি অন্য কোনো যৌনরোগের নাম শুনেছেন ? ☐ হ্যাঁ ☐ না

১৪. আপনি এইডস্ সম্বন্ধে কি জানেন ? (সব উত্তরে টিক চিহ্ন দিন)

কি ভাবে ছড়ায় ?
- ☐ পুরুষে-নারীতে যৌন সম্পর্ক
- ☐ পুরুষে-পুরুষে যৌন সম্পর্ক
- ☐ দূষিত রক্ত গ্রহনে
- ☐ আক্রান্ত মা থেকে শিশুতে
- ☐ একে-অপরে চুম্বাতে
- ☐ একই সূঁচ বিভিন্ন জনে ব্যবহারে
- ☐ একের কাপড় অন্যে ব্যবহারে
- ☐ খাবার/বাসনপত্র ব্যবহারে
- ☐ মশার কামড়ে
- ☐ অন্যান্য
- ☐ অন্যান্য

এর চিকিৎসা আছে কি ? ☐ হ্যাঁ ☐ না

কিভাবে প্রতিরোধ করা যায় ? ☐ কনডম ☐ অন্যান্য ☐ অন্যান্য

১৫. কোথা থেকে এইডস থেকে সম্বন্ধে জেনেছেন ? (সব উত্তরে টিক চিহ্ন দিন)

☐ রেডিও ☐ টিভি ☐ সংবাদপত্র ☐ বন্ধুবান্ধব ☐ পরিবার ☐ স্বাস্থ্যকর্মী
☐ বই/ম্যাগাজিন ☐ এনজিও কর্মী ☐ অন্যান্য

১৬. আপনি অন্যান্য যৌনরোগ সম্বন্ধে কি জানেন ? (সব উত্তরে টিক চিহ্ন দিন)

কি ভাবে ছড়ায় ? ☐ পুরুষে-নারীতে যৌন সম্পর্কে ☐ পুরুষে-পুরুষে যৌন সম্পর্কে
☐ দূষিত রক্ত গ্রহণে ☐ আক্রান্ত মা থেকে শিশুতে
☐ একে অপরে চুমোতে ☐ একই সূঁচ বিভিন্ন জনে ব্যবহারে
☐ একের কাপড় অন্য ব্যবহারে ☐ খাবার/বাসনপত্র ব্যবহারে
☐ সবার কাছাড়ে ☐ অন্যান্য

এর চিকিৎসা আছে কি ? ☐ হ্যাঁ ☐ না

কিভাবে প্রতিরোধ করা যায় ? ☐ কনডম ☐ অন্যান্য

১৭. বিভিন্ন যৌনরোগ/এইডস যেন না হয় তার জন্য সাবিকভাবে কি করে থাকেন ?

☐ কনডম ☐ ডেটল, স্যাভলন দ্বারা যৌনাঙ্গ ধোয়া ☐ সাবান দ্বারা যৌনাঙ্গ ধোয়া
☐ মুত্র (প্রস্রাব) দ্বারা যৌনাঙ্গ ধোয়া ☐ ক্যাপসুল/ট্যাবলেট (এন্টিবায়োটিক) সেবন
☐ মেয়ে পতিতাদের সাথে যৌন মিলন না করা ☐ নোংরা/অপরিষ্কার যৌনসঙ্গীর সাথে মিলন না করা
☐ অন্যের ব্যবহৃত সূঁচ/সিরিঞ্জ ব্যবহার না করা ☐ অন্যের ব্যবহৃত ব্লেড/ক্ষুর দ্বারা সেভ না করা
☐ অন্যান্য

যৌন স্বাস্থ্যের সমস্যা ও রোগ এবং চিকিৎসা বিষয়ক

(এখন আমি আপনাকে আপনার যৌন স্বাস্থ্য বিষয়ে প্রশ্ন করবো। আপনার যৌন সমস্যা ও রোগব্যাধি নিয়ে আলাপ করবো। দয়া করে খোলামনে স্বাচ্ছন্দের সাথে আপনার মতামত ও অভিজ্ঞতার কথা আমাদের সাথে আলাপ করবেন। আপনার দেয়া তথ্য আপনার এবং আপনার মতন অনেকের স্বাস্থ্য সেবা দেয়ার ব্যবস্থায় মূল্যবান ভূমিকা রাখবে বলে আমরা মনে করি।)

১৮. আপনার জীবনে কি কখনও এই সমস্যাগুলোর ব্যাপারে আক্রান্ত হয়েছে ?

☐ পুরুষাঙ্গ দিয়ে পুঁজ, রক্ত, বা কিছু বের হচ্ছে ☐ পায়ুপথে পুঁজ, রক্ত, বা কিছু বের হচ্ছে
☐ প্রস্রাবের সময় ব্যথা ও জ্বালাপোড়া ☐ পুরুষাঙ্গে ও এর চারপাশে চুলকানি
☐ যৌন মিলনে ব্যথা ☐ পুরুষাঙ্গে ঘা ☐ পাইলস (অর্শ) ☐ অন্যান্য

১৯. যদি হ্যাঁ হয়, মোট কতবার হয়েছে? ☐ গত মাসে ☐ গত এক বছরে ☐ সারা জীবনে

২০. আপনার কি বর্তমানে কোনো সমস্যা আছে? ☐ হ্যাঁ ☐ না

২১. যদি হ্যাঁ হয়, তাহলে বলুন আপনার কি সমস্যা আছে? (সব উত্তরে টিক চিহ্ন দিন)

☐ পুরুষাঙ্গ দিয়ে পুঁজ/রক্ত/বা কিছু বের হয় ☐ পায়ুপথে পুঁজ/রক্ত/বা কিছু বের হয়
☐ পেশাবের সময় ব্যথা ও জ্বালাপোড়া হয় ☐ পুরুষাঙ্গে ও তার চারপাশে চুলকানি
☐ পুরুষাঙ্গে ঘা/ক্ষত ☐ অর্শ (পাইলস) ☐ যৌনমিলনে ব্যথা
☐ অন্যান্য

২২. এছাড়াও কি আপনার যৌনস্বাস্থ্য বিষয়ক অন্যকোনো সমস্যা আছে?
☐ পুরুষাঙ্গ আকারে ছোট/চিকন ☐ দীর্ঘসময় ধরে যৌনমিলনে অক্ষমতা
☐ পুরুষাঙ্গ শক্ত হয় না ☐ অন্যান্য

২৩. যদি কোনো যৌনরোগ বা সমস্যা থাকে/ছিল, তার জন্য কি ব্যবস্থা নিয়েছেন?
☐ কিছুই না ☐ আয়ুর্বেদ, ইউনানী, মঘা, হোমিওপ্যাথ ☐ নিজেই নিজের চিকিৎসা (এ্যালোপ্যাথিক)
☐ চট্টগ্রাম মেডিকেল কলেজ হাসপাতালে ☐ আমেরিকান হাসপাতালে চিকিৎসা
☐ প্রাইভেট চেম্বার/ক্লিনিক

২৪. কোনো ব্যবস্থা নেয়ার আগে, কতদিন অপেক্ষা করেছিলেন?
☐ অতিশীঘ্র ☐ দিন

২৫. আপনার কি কখনও পাইলস রোগ হয়েছে? ☐ হ্যাঁ ☐ কত দিন আগে ☐ না

২৬. আপনি তখন কি করেছিলেন?
☐ কিছুই না ☐ আয়ুর্বেদ, ইউনানী, মঘা, হোমিওপ্যাথ
☐ এ্যালোপ্যাথিক মুখে খাওয়ার ঔষুধ ☐ চট্টগ্রাম মেডিকেলে সার্জারী
☐ প্রাইভেট ক্লিনিকে সার্জারী ☐ অন্যান্য

যৌনসঙ্গী/সঙ্গিনীর সাথে সম্পর্ক

২৭. গত সপ্তাহে আপনার মোট কতজন যৌন সঙ্গী/সঙ্গিনী ছিল ?

☐ পুরুষ ☐ মহিলা ☐ হিজড়া

২৮. গত মাসে আপনার মোট কতজন যৌনসঙ্গী/সঙ্গিনী ছিল ?

☐ পুরুষ ☐ মহিলা ☐ হিজড়া

২৯. সার্বিকভাবে আপনার পুরুষ যৌনসঙ্গী কারা ? (সব উত্তরে টিক চিহ্ন দিন)

☐ পুরুষ যৌনকর্মী ☐ আত্মীয় ☐ বন্ধুবান্ধব ☐ চাকুরীর বস
☐ পুলিশ ☐ মাস্তান ☐ ছাত্র ☐ ব্যবসায়ী ☐ চাকুরী হীন
☐ রেলওয়ে গার্ড ☐ ডক শ্রমিক ☐ বিদেশী নাবিক ☐ দেশী নাবিক
☐ অন্যান্য :

৩০. আপনার যৌন সঙ্গীদের বৈবাহিক অবস্থা কি ? (সব উত্তরে টিক চিহ্ন দিন)

গত সপ্তাহে : ☐ বিবাহিত ☐ অবিবাহিত ☐ পরি ☐ তালাক ☐ বিপ :
সার্বিকভাবে : ☐ বিবাহিত ☐ অবিবাহিত ☐ পরি ☐ তালাক ☐ বিপ :

৩১. আপনার নারী যৌনসঙ্গীনিরা কে ছিল ?

গত সপ্তাহে : ☐ নারী পতিতা ☐ আত্মীয়া ☐ বান্ধবী ☐ অন্যান্য
গত মাসে : ☐ নারী পতিতা ☐ আত্মীয়া ☐ বান্ধবী ☐ অন্যান্য

৩২. তাদের বৈবাহিক অবস্থা কি ?

গত সপ্তাহে : ☐ বিবাহিত ☐ অবিবাহিত ☐ পরিত্যক্ত ☐ তালাকে ☐ বিধবা
সার্বিকভাবে : ☐ বিবাহিত ☐ অবিবাহিত ☐ পরি ☐ তালাক ☐ বিধবা

৩৩. গত সপ্তাহের যৌনসঙ্গী/সঙ্গীনির বয়সের ব্যবধান কেমন ছিল ?

পুরুষ সঙ্গী ☐
মহিলা সঙ্গী ☐

৩৪. আপনার পুরুষ সঙ্গীরা সেক্স-এর জন্য কি আপনাকে টাকা দেয় ?

☐ হ্যাঁ ☐ না

৩৫. কত জন কত টাকা আপনাকে দিয়েছিল ?

গত সপ্তাহে ☐ জন গত সপ্তাহে মোট ☐ টাকা

গত মাসে ☐ জন গত মাসে মোট ☐ টাকা

৩৬. সাধারণত: প্রতি 'Program'-এ কত টাকা পান ?

সর্বনিম্ন ☐/= সর্বোচ্চ ☐ টাকা

৩৮. আপনি নিজে সর্বশেষ কবে সেক্স-এর জন্য টাকা খরচ করেছেন ?

☐ গত সপ্তাহে ☐ গত মাসে ☐ গত বছরে

৩৭. আপনি নিজে কি কখনও সেক্স-এর জন্য টাকা খরচ করেছেন ? ☐ হ্যাঁ ☐ না

৩৯. কত টাকা সর্বশেষ বার দিয়েছেন ? ☐ টাকা / সাধারণত সপ্তাহে ☐ টাকা মাসে ☐

৪০. গত সপ্তাহে আপনার মোট কতজন নতুন যৌন সঙ্গী ছিল ?

☐ পুরুষ ☐ মহিলা ☐ হিজড়া মোট ☐ জন

৪১. গত মাসে আপনার কতজন নতুন যৌনসঙ্গী ছিল ?

☐ পুরুষ ☐ মহিলা ☐ হিজড়া মোট ☐ জন

৪২. উপহার সামগ্রীর বিনিময়ে কি আপনি কখনও সেক্স করেন ? ☐ হ্যাঁ ☐ না

৪৩. কি ধরনের উপহার ? (open ended)

৪৪. আপনার কি কোনো boyfriend আছে ? তার সঙ্গে ভালবাসার সম্পর্কের কারনে সেক্স করেন ? (হ্যাঁ) (না)

যৌনক্রিয়া, কনডম ও লুব্রিক্যান্টের ব্যবহার

৪৫. অন্যান্য পুরুষ সঙ্গীর সাথে যৌনমিলনের সময় আপনি কি করেন ?

☐ সবসময়ে আমি ঢুকাই/দেই ☐ সবসময় আমাকে ঢুকায়/নেই
☐ দুটোই করে থাকি

৪৬. আপনি সবসময় কেন ঢুকান/দেন ? (open ended)

৪৭. আপনি সবসময় কেন নেন/ঢুকাতে দেন ? (open ended)

৪৮. আপনি কেন উভয় ভূমিকাই নেন ? (open ended)

৪৯. গত সপ্তাহে মোট কতবার আপনি পায়ুপথে মিলন করেছেন ?

☐ দিয়েছেন ☐ নিয়েছেন ।

৫০. আপনি এবং আপনার যৌনসঙ্গীরা কি কি ধরনের যৌনক্রিয়ায় অংশ নেন ?

☐ পায়ুপথে মিলন ☐ মুখে নেয়া ☐ যোনি পথে মিলন ☐ উরুর ফাঁকে
☐ একে অপরের হস্তমৈথুন ☐ চুমা ☐ অন্যান্য

৫১. আপনি কি কখনও দলগত যৌনক্রিয়ায় অংশগ্রহন করেছেন ?

গত সপ্তাহে ☐ হ্যাঁ ☐ বার ☐ না
গত মাসে ☐ হ্যাঁ ☐ বার ☐ না
গত বছরে ☐ হ্যাঁ ☐ বার ☐ না

৫২. সর্বশেষ দলগত যৌনমিলনে আপনি ছাড়া আর মোট কতজন সঙ্গী ছিল ? ☐ জন

৫৩. আপনার ভূমিকা কি ছিল ? ☐ দেয়া ☐ নেয়া ☐ উভয়ই

৫৪. আপনি বা আপনার যৌনসঙ্গীরা সর্বশেষ দলগত যৌনক্রিয়ায় কি কনডম ব্যবহার করেছিলেন ? ☐ হ্যাঁ ☐ না

৫৫. আপনি যে যৌনক্রিয়ায় যাকে দিয়েছিলেন, সেখানে কি আপনি কনডম ব্যবহার করে ছিলেন ? ☐ হ্যাঁ ☐ না

৫৬. যে সর্বশেষ যৌনচিয়ায় আপনার সঙ্গী আপনাকে দিয়েছিল: তখন সে কি কনডম ব্যবহার করেছিল ? ☐ হ্যাঁ ☐ না

৫৭. গত সপ্তাহে আপনি যতবার আপনার সঙ্গীদের দিয়েছেন, তার মধ্যে কতবার কনডম ব্যবহার করেন নি ? ☐ বার

৫৮. গত সপ্তাহে আপনাকে যতবার আপনার সঙ্গীরা দিয়েছে, তার মধ্যে কতবার তারা কনডম ব্যবহার করে নাই ? ☐ বার

৫৯. গত এক বছরে একটু মনে করে বলুন, সঙ্গীদের দেয়া অথবা নিজেদের নেয়া সন্তান গর্ভাবস্থা আপনাদের কনডম ব্যবহারের ধরন কেমন ছিল ?

☐ সবসময় ব্যবহার হয়েছে ☐ কখনও ব্যবহার হয় নাই
☐ হঠাৎ মাঝে মধ্যে ব্যবহার হয়েছে ☐ হঠাৎ মাঝে মধ্যে ব্যবহার হয় নাই

৬০. আপনি কি আপনার কোন যৌনসঙ্গীনির সাথে কনডম ব্যবহার করেছিলেন কোন বারের জিলনে ? ☐ হ্যাঁ ☐ না

৬১. আপনি কি কি কারনে কনডম ব্যবহার করেন ? (open ended)

৬২. আপনি কি কি কারনে কনডম ব্যবহার করেন না ? (open ended)

৬৩. আপনার সাথে কি এখন কনডম আছে ? হ্যাঁ — না

৬৪. (যদি না থাকে, এবং ব্যবহার করে বলে দাবী করে) আপনি কোন ব্রান্ডের কনডম ব্যবহার করেন ? ☐ নাম দাম কত প্রতিটি/প্যাকেটের

৬৫. আপনি কোথা থেকে কনডম পান ?

☐ ফার্মেসি ☐ ষ্টল/মোবাইল দোকান ☐ হাসপাতাল/ক্লিনিক
☐ এনজিও কর্মী ☐ অন্যান্য

৬৬. আপনি কি সেক্স করার সময় পিচ্ছিল করার জন্য কি কিছু ব্যবহার করেন ?
হ্যাঁ ——— না

৬৭. যদি হ্যাঁ হয়, তবে কি ধরনের পদার্থ ব্যবহার করেন ?
☐ থুথু ☐ তেল ☐ K-Y জেলী ☐ সাবান ☐ অন্যান্য—

৬৮. কোথা থেকে এই পিচ্ছিলকারক পদার্থ পান ?
☐ ফার্মেসি ☐ দোকান ☐ বন্ধুবান্ধব ☐ অন্যান্য—

মাদকদ্রব্য বিষয়ক

৬৯. আপনি কি মাদকদ্রব্য ব্যবহার করেন ? ☐ হ্যাঁ ☐ না

৭০. যদি করেন, তাহলে বলুন সেগুলো কি ধরনের ?
☐ হেরোইন ☐ গাঁজা ☐ এ্যালকোহল ☐ ফেনাসিডিল
☐ ইনজেকশন ড্রাগ

৭১. (ইনজেকশন ড্রাগের ক্ষেত্রে) আপনি কি ইনজেকশনের সুঁচ/সিরিঞ্জ বন্ধুদের সাথে একসাথে ব্যবহার করেন ? ☐ হ্যাঁ ☐ না

৭২. আপনি কেন মাদকদ্রব্য ব্যবহার করেন ? (open ended)

৭৩. আপনার যৌনসঙ্গীদের মধ্যে কেউ কি ইনজেকশন ড্রাগ ব্যবহার করে ? — হ্যাঁ — না

রোগে আক্রান্ত হবার ঝুঁকি সংক্রান্ত

৭৪. আপনি কি মনে করেন, আপনার কোনো যৌনরোগ হবার সম্ভাবনা আছে ?
☐ বেশী ঝুঁকি ☐ মোটামুটি ঝুঁকি ☐ খুব কম ঝুঁকি ☐ কোনো ঝুঁকি নাই
☐ জানি না

৭৫. আপনি কি মনে করেন, আপনার এইডস হতে পারে ?
☐ বেশী ঝুঁকি ☐ মোটামুটি ঝুঁকি ☐ খুব কম ঝুঁকি ☐ কোনো ঝুঁকি নেই ☐ জানি না

৭৬. আপনার এমন মনে হওয়ার কারণ কি ? (open ended)

Principal Investigator: Khan Sharful Islam

Check List

After completing the protocol, please check that the following selected items have been included.

1. **Face Sheet Included** ✓
2. **Approval of the Division Director on Face Sheet** ✓
3. **Certification and Signature of PI on Face Sheet, #9 and #10** ✓
4. **Table on Contents** ✓
5. **Project Summary** ✓
6. **Literature Cited** ✓
7. **Biography of Investigators** ✓
8. **Ethical Assurance** ✓
9. **Consent Forms** ✓
10. **Detailed Budget** ✓

MEMORANDUM

Date : 18 August 1999

To : Dr. Sharful Islam Khan, PHSD

From : Prof. George Fuchs, Interim Director

Subject: **SDC Approval**

I am pleased to inform you that SDC's approval for the research protocol entitled "Situation assessment of male to male sex business in Chittagong for STD/HIV intervention" was received recently from SDC Dhaka. A sum of $50,414 ($44,223 in direct cost and $6,191 in overhead) is allocated from SDC's research funds to your project. Please make sure that the entire fund is spent (not only allocated) before 31 December 2000.

Please accept my heartfelt congratulations!

cc: Prof. Lars Ake Persson, Division Director, PHSD
Dr. Ishtiaque A. Zaman, ERID
Mr. M.A. Samad, Acting CFO

Reviewer 1

I reviewed the study proposal entitled "Situation assessment of male to male sex business of the port city of Chittagong for STD/HIV intervention in Bangladesh." The proposal describes a study that uses the capture-recapture technique to estimate the number of male sex workers in Chittagong and qualitative methods to describe and evaluate the intricacies of the male sex business in this community.

The subject of the study is important and scientifically obtained results will be useful in assisting the national STD/HIV program to develop programs to reach male sex workers, a potential core STD transmitter group in the Bangladeshi population.

The study protocol is well-considered but I have a few concerns.

- 50 in-depth interviews with male sex workers seems to be too many. Typically, qualitative research finds redundancy after no more than 30 interviews and often much fewer. The methodology should include some built-in check for redundancy and interviews should cease after an *a priori* level of redundancy is achieved.

- Among the specific aims, only 1-5 are addressed in the interview guide supplied in Appendix 1. It is unclear whether the issues of health care facilities and barriers to obtaining health care (Aim #6) are to be studied in this project. Furthermore, Specific aims 7-9 are not truly a subject of study. These are more concerned with laying the groundwork for an intervention. I think that this is important work and ought to be done but I am not sure that this falls within the purview of ICDDR,B's mission. And if it does, is it appropriate to expend research money to lay the groundwork for intervention programs outside the framework of actual research? These questions should be addressed by the Research Review Committee. I am just not sure how engaging the police and local power structure will advance the research.

- A minor point but I am aware of only one HIV case being identified in a sero-epidemiologic study (by Rich *et al.* In Chittagong). Certainly other cases have been identified but I think the nature of the epidemic is overstated in the discussion in the proposal.

- Capture-recapture seems like an excellent approach to estimate the number of male sex workers. It is not a simple method, as written in the proposal. I see no outline of a plan to undertake this methodology. Since it is key to a main aim of the study, I think the authors should write a very specific plan to employ this methodology so that it is clear to the readers that they can do this project. The methodology was developed to estimate populations of rodents and other fauna in field ecology. Its use in public health has been limited and somewhat controversial so an example of expertise would be helpful to this

reviewer.

- The time line, on the whole, seems reasonable. I am, however, curious about the number of interviewers and the length of their employment. By my calculations, 3 interviewers engaged for 3 months will be interviewing, on average, 7 persons per interviewer per month (based on 75 interviews). I understand that it will take time to identify MSWs, set up an appointment and perform the interview but less than 2 interviews per week strikes me as a very leisurely pace. I think this pace should be justified.

- There is no specific budget line item for travel between Dhaka and Chittagong. The co-investigator has six months per diem budgeted and 6 months salary for the project yet the proposal says that the co-investigator will be traveling back and forth between Chittagong and Dhaka. It seems the per diem budget would be too high in this case.

Quality of the project	Medium
Adequacy of project design	High
Suitability of methodology	High/Medium
Feasibility within time period	High
Appropriateness of the budget	High/Medium
Potential value of field of knowledge	High

I support the application with qualification on technical grounds (that the researchers demonstrate the ability to perform the capture-recapture methodology and analyze the data. And with qualification on budget ground (that the number and length of employment of the interviewers be justified).

Response to Reviewer 1

1. We do agree and are quite careful regarding the issue of redundancy in qualitative data. As the redundancy depends on the nature of the topic, sensitivity and way of asking questions and other contextual issues, therefore, initially we have planned to collect 50 life-history interviews due to following reasons:

   Firstly, the number is not at all rigid. It depends on availability and accessibility of respondents. Secondly, previous experiences suggest that some life history interviews usually miss important issues and there have no ways but to discard such interviews. Therefore the number of interviews should be more than the actual required number. Thirdly, certainly after a *priori* level of redundancy, the data collection will be ceased. In order to check redundancy, data analysis will be begun from the very beginning of data collection. The PI and co-investigator will be continuously listening and listing the issues emerged in tape recorded interviews. In addition, coding and sorting of translated and typed data will also be an on going process.

2. The issues of health care facilities and barriers to obtaining health care (objective # 6) will be studied and guideline questions will be included in the Appendix 1.
   We do agree that the objectives 7-9 are not strictly subject of study in conventional sense. However, these specific aims will have to achieve due to following reasons:
   - If the ultimate goal of a research is to move to action and if that research design does not make such provision beforehand and has no plan of action for that, then there would be least or no chance of utilization of study findings for designing interventions especially in the context of Bangladesh.
   - Therefore, this study will not only explore and describe the existing situation, but also a culturally sensitive trial intervention program will be designed based on factual data. In this respect, a supportive and enabling environment for current and future actions would be necessary, for which proper initiatives could be taken efficiently during this phase. In addition, the research topic itself is such a sensitive area, which would be difficult to attain without groundwork through objectives 7-9.
   - It is expected that the trial intervention program will be launched in Chittagong in collaboration with Bandhu Social Welfare Society and/or with other local interested NGOs as the continuation of the next action phase in near future.

3. The present government statistics of HIV infection reveals a total of 102 HIV infections and among them 10 AIDS cases (6 already died) till December 1998. The government has clearly realized that the epidemic has already begun in Bangladesh. The WHO and World Bank's prediction is
   higher than the official figure. The study findings of the first round of sero and behavioral surveillance will be disseminated soon at official level, which will better reflect the present situation. However, at this stage the nature of the epidemic is not overstated in the proposal.

4. Absolutely agreed and we will integrate this suggestion by adding the description of capture-recapture methods and will provide references to this respect.

5. Three peer-interviewers will be recruited for a period of three months on daily basis. After recruitment, they will be trained for two weeks. Then they will be sent to the field for a rapid assessment and mapping of important contact venues as the groundwork for the capture-recapture survey. Then the capture-recapture will be conducted. In addition, one interviewer by rotation would be completely involved in ethnographic observation. Therefore, in reality the rest two interviewers will get less than two months (26 working days a month) period of time for interviewing the total sample of MSWs and their clients. It was mentioned in the proposal that it would indeed difficult to identify MSWs, set up appointment and build rapport with these stigmatized populations for in-depth interviews. In addition, not only MSWs, depending on the accessibility and possibility, efforts will be given to interview their clients, which is assumed to be more troublesome and time consuming as well. Therefore required time support may be quite higher than any other conventional requirements.

6. The budget line item for travelling between Dhaka and Chittagong will have to be included. If budget allows, the co-investigator will be received full term salary (12 months). The co-investigator will have to stay in the field and supervise the fieldwork in absence of the PI. During the beginning and ending of the project work, the PI and co-investigator will have to stay together and in other period they can stay in rotation according to the need.

Reviewer 2

26th May 1999

Review of Protocols submitted to ICDDR,B for SDC Funding

Situation assessment of male to male sex business of the port city of Chittagong for STD/HIV intervention in Bangladesh

Main Point

Whilst fully supporting the overall aim of this proposal, I am a little concerned about the apparent void between research and practice. Specific aim no. 7 states that the research will be 'working for a future intervention program'; no. 8 states 'creating a supportive and enabling environment to work for interventions'; and no. 9 declares 'advocacy, support and getting lay outs for designing a model intervention program.'

My main worry is that there does not seem to be a well articulated and stated link between the proposed research and the possibility of future interventions. Whilst there is a well described dissemination package, there is no obvious connection between the study findings and future programmes. Are there pre-existing networks of support and/or intervention for men selling sex in Chittagong? The proposal mentions the Bandhu Social Welfare Society, are they already working in Chittagong? If they are not working there, and no other NGO/self-help groups have been identified, how do the researchers propose that their findings are going to translate into intervention packages? Who will carry out this intervention work?

I would suggest that the researchers address more clearly the issue of putting their research output into an intervention outcome. Otherwise, there seems to be a danger that this is 'stand alone' research. Whilst worthy in and of itself, it would not then meet the stated aims of the proposal.

Minor Points:

1. What is the evidence that male to male sex in Chittagong is predominantly commercial in nature? Why not widen the study to include non-commercial male to male sex? Is there an epidemiological reason for this restriction? Although the proposal states that previous studies have found evidence of an "extensive clandestine sex trade (male and female)"

do the researchers have any information on the proportion of male sex that is paid for?

2. Why are health care providers being interviewed? There are well documented indicators for measuring the quality of care provided in sexual health-care-seeking encounters. Why not use these rather than face to face interviews?
3. Who will conduct the ethnographic observations among the MSWs? Is this the role for the peer interviewers or will more qualified researchers undertake this?
4. How will the sustainability of condom distribution be ensured? 'Token distribution' alone is generally not recommended unless it is linked to a follow-up programme of, for example, free distribution, social marketing, or campaigns to inform clients on the availability and accessibility of condoms.
5. What does 'advocacy meeting' mean?
6. Budget:

- Why is the co-investigator only working for 6 months?
- Why are the data entry personnel 'men'?

7. Appendix 1:

- Why not ask about types of sexual behaviour? If men selling sex are, in fact, selling mutual masturbation and/or oral sex then this has significantly different meanings for interventions aimed at STI/HIV reduction.
- What use will the information on 'sexual fantasies' be put to?

Response to Reviewer 2

Response to the main point

If research findings attempt to move into action, then it should have such rooms in the initial design and methods. As this project has such ultimate goal, therefore, it has accommodated the components of operations like building good rapport and networking with male sex workers (MSWs) and their clients (aim #7) and establishing advocacy dialogue with all concerned authorities/people (aim #8). We think these two aims are rationally well linked to reach the ultimate goal of designing a model intervention program (aim #9).

Bandhu Social Welfare Society has been working in Dhaka on similar issues. They have aspirations to start working in Chittagong. Beside Bandhu, if other capable local NGOs or self-help groups are interested to be involved, it could be considered. Translating research findings to intervention packages does not essentially require pre-existing organization in the field. However, it is expected that a trail intervention program based on the designed model will be launched in Chittagong at the next immediate phase under the direct supervision of the Social and Behavioural Sciences Programme (SBSP) of ICDDR,B. Initially we have discussed with Bandhu about that and they are interested to work as implementing agency in this respect. In fact, they have already started seeking fund to work in Chittagong from their side and naturally it is expected that the present project could easily move to action by Bandhu.

Responses to minor points

1. The recently completed study on Chittagong Port clearly revealed the existence of male to male sex business in Chittagong. Most male sex workers (MSWs) maintain non-commercial love relations and similarly most clients also have non-commercial encounters. Therefore, it seems really difficult to assess at this stage whether male to male sex predominates at commercial or non-commercial settings in Chittagong.

   Furthermore, intervention on non-commercial male to male sexual encounter would be very difficult due to serious cultural shame and social stigmatization attached to it in Bangladeshi society. Therefore, at this point, the present study will not particularly focus on non-commercial settings. However, with time and proper field experience, this could be achieved gradually.

2. This project will not really focus on quality of care. Rather it will just primarily investigate whether the existing clinical facilities have any room for MSWs, if not why, providers' perspectives in this respect and to find out barriers to improving the present situation. This information will help during designing clinical intervention for these populations.

3. The PI, co-investigator and trained peer-interviewers will conduct ethnographic observations. All these observations will thus be cross- checked, discussed and integrated to prepare the final report.

4. At the end of each interview session, on the ground of moral and ethical considerations, the interviewer will conduct face to face brief educational training on STD/AIDS and condom use by showing dildo. We have seen in earlier studies that the respondents often ask for condoms. Therefore, it is decided to offer 2/3 pieces of condoms to each respondent as a gift with a view to encourage them using condoms in future. In addition, as it is expected that an intervention program will be launched as follow-up phase, therefore, the possibility of condom promotional activities is there as raised in the review comments.

5. The concerned authorities and most people do not acknowledge the existence of male to male sex, its prevalence and consequences on STD/HIV transmission. They do not realize and understand the reasons and ways to interact with the situation. Rather they show denial, judgmental and blaming attitudes. If these issues are not addressed properly and carefully from the very beginning, they will never be supportive and cooperative. Rather may create barriers to future activities even to fieldwork. Therefore, advocacy meetings, where all these issues will be discussed, have no alternatives in order to make our views and objectives transparent and getting their assurance of support and cooperation.

6. Budget
   - The co-investigator will actually be working for 12 months. Due to budget inadequacy, it has been initially planned in that way. However, if budget allows, rest 6 months' salary will be offered.
   - Certainly there would be no gender discrimination. Data entry personnel will be recruited from any gender, preferably women. It was a sleep of pen.

7. Appendix I
   - Types of sexual activities will certainly be asked.
   - Questions on sexual fantasies will be asked to explore how sexual fantasies differ from the real practices and do they have any impact on sexual behaviors, disease transmission and prevention aspect.

BANDHU SOCIAL WELFARE SOCIETY
AN HIV/ AIDS and STDS PREVENTION PROJECT

106, Kakrail, Dhaka-1000, Bangladesh
Phone : 880-2-9339898, 880-2-407683
Fax: 880-2-835224. E-Mail: bandhu@bdmail. net

June 15, 1999

To
The Research Review Committee
ICDDR,B
Dhaka

Sub: Collaboration with ICDDR,B

Dear Colleagues,

Bandhu Social Welfare Society worked with the Social and Behavioural Sciences Programme (SBSP), ICDDR,B in Dhaka and Chittagong in the year 1997-1998 on MSM populations. As you may know, Bandhu Social Welfare Society is a male sexual health project based in Dhaka, providing a range of STD/HIV prevention services for males who have sex with males. We have developed a successful STD management program, as well as an outreach and education program utilizing a model of intervention and support developed in collaboration with the Naz Foundation International.

We would be happy to continue our support to the SBSP of ICDDR,B in developing needs analysis for sexual health promotion in Chittagong amongst males who have sex with males, and work collaboratively with the SBSP towards a successful intervention program to prevent the spread of STD/HIV amongst them and their sexual partners.

Yours sincerely,

Shale Ahmed
Executive Director

Curriculum Vitae

Md. Sharful Islam Khan (Bobby)

Self-assertion

Although health problems are originated in human bodies, however, these are the consequences of sociocultural, psychosocial, economic, demographic, geographical, organizational and political problems of a country, which are often less understood and/or overlooked. With this emerging abstraction and realization, I have furnished my academic background with enriched endowment to apply integrated multidisciplinary approaches in health sciences to deal with the public/community health problems in trans and interdisciplinary ways.

Despite having biomedical graduation, I did not keep on clinical proposition, rather I have equipped myself with social and behavioral sciences in order to take up public and community health problems by applying holistic perspectives fitted to the local context. I strongly believe there should be no disciplinary pride and prejudice in this respect. Health scientists and social scientists need to work together in partnership. We need interdisciplinary collaboration and integrated knowledge to solve socioculturally embedded health problems. Let me begin a challenging trip towards a new horizon in order to encounter the existing, emerging and re-emerging health problems of the twenty-first century.

Personal Information

Parents' Names	Zinnat Ara Khan & Qumrul Islam Khan
Date of Birth	August 01, 1967
Nationality	Bangladeshi by birth
Sex	Male
Marital Status	Married
Permanent and Mailing Address	Md. Sharful Islam Khan (Bobby) 25/23, Sher Shah Suri Road (3rd floor) Mohammadpur, Dhaka-1207, Bangladesh
	Contact telephone: 812706 (Res.)
	E-mail: bobby@dhaka.agni.com (Res.)

Responsibilities in Current Employment

Research

- I have been working as a National Research Fellow in the Social and Behavioural Sciences Programme (SBSP), under Public Health Sciences Division (PFSD), ICDDR,B since October 01, 1997.
- Presently I am actively involved in qualitative and quantitative social and behavioral sciences research especially on sexual health and STDs/HIV/AIDS. I worked with several important research projects, for example, on male sexual health and homosexual behaviors, youth sexuality and peer education, situational assessment of the Chittagong Port for STD/HIV prevention, national sexual behavioral surveillance, and BRAC-ICDDR,B Matlab project.

Intervention management

- Currently I am involved with BRAC-ICDDR,B STD/HIV and sexual health project in Matlab. This is a community based intervention research project with ultimate goal of improving sexual and reproductive health of rural women and men. I have been involved in preparing IEC materials based on factual data from Matlab, training of the targeted community and working with village practitioners (traditional and modern), pharmacists, religious leaders *(Emam),* traditional birth attendants (TBA), local influential persons, women health workers (*shastha sebica*) and adolescent and young people.
- I used to supervise all project activities including finance, administration and scientific aspects. I guided and directed the activities and performance of the interviewers, translators and data entry staffs of all these projects.

Training and advocacy

- I have experience in conducting training sessions on human sexuality, sexual behaviors, and research methods, especially qualitative techniques.
- I had been assigned in advocacy with government and non-government organizations in terms of establishing connection and creating enabling environment for conducting research and interventions.

Communication skill

- I have developed substantial experience to be nicely interacted with both male and female sex workers, males who have sex with males, hijras, injecting drug users, rickshaw pullers, sailors, dock workers and fishermen. I am confident that I can work with any marginalized populations across gender with non-judgmental attitudes, respect and honor.

NGO relations

- I have experience in arranging scientific meetings and study disseminating and design workshops with various groups of professionals including NGOs. During Chittagong Port project, networking with NGOs was done under my direct supervision and involvement.

Grant proposal writing

- I have been involved in writing research proposal. Recently one of my proposals on male sex business has been in the process of funding from SDC. Currently I am writing a two years intervention research project on male to male sex in Bangladesh.

Academic Qualification

- **Master's in Health Social Science (MHSS)**

Mahidol University, Thailand

Passing year: 1997

Course duration: Two years

CGPA: Grade 'A' (4.00 points)

Field of study:

1. Medical Anthropology,
2. Health Sociology,
3. Psychology and Health,
4. Health Economics,
5. Social Science Research Methodology
6. Population and Health,
7. Statistical Analysis,
8. Medical Geography,
9. Social Sciences of Reproductive Health,
10. Social Sciences of Tropical Diseases
11. Health and Safety of the Workers.

- **Bachelor of Medicine and Bachelor of Surgery (MBBS)**

Dhaka Medical College, Dhaka, Bangladesh.

Passing year: 1992

Course duration: Five years

Marks obtained: **Average 60 percent**

Field of study: Anatomy, Physiology and Biochemistry, Pharmacology, Forensic Medicine, Community Medicine, Pathology, Medicine, Surgery, and Obstetrics & Gynaecology.

- **Higher Secondary Certificate (HSC)**

Dhaka College, Dhaka.

Passing year: 1984

Course duration: Two years

Marks obtained: **Average 81 percent**

Field of study: Bengali and English Literature, Mathematics, Physics, Chemistry and Biology.

- **Secondary School Certificate (SSC)**

Mohammadpur Government High School, Dhaka

Passing year: 1982

Course duration: Ten years

Marks obtained: **Average 81 percent (secured 10th position in the combined merit list under Dhaka Board)**

Field of study: Bengali and English Literature, Mathematics, Physics, Chemistry, Biology and Islamic Studies.

Academic Awards

- Primary and Secondary scholarship in the year 1976 and 1979 from Mohammadpur Govt. Primary. School.
- President award at SSC examination in the year 1982 from Mohammadpur Govt., High School.
- Scholarship at HSC examination in the year 1984 from Dhaka College.
- Scholarship awarded from the Ford Foundation through Mahidol University for studying Master's Degree International Program in Thailand in the year 1995.

Training Received

- Full time residential clinical training on Internal Medicine and Surgery under the Department of Medicine and Surgery of Dhaka Medical College Hospital for 12 months from August 1992 to July 1993.
- Attended a short course in Research Methodology arranged by Bangladesh Medical Research Council in the year 1992.
- Short course on Bio-statistics conducted by ICDDR,B on 1993.
- Attended a short course on gender and human sexuality organized by AIHD, Mahidol University, Thailand in 1996.

Teaching Skill

After completion of internee ship training, I joined in Bangladesh Medical College as the Lecturer in the Department of Physiology and Biochemistry and worked there for two years, which enabled me to be an Instructor especially for young people.

Publication and Paper Presentation

- A research paper was presented on Sexuality and Sexual Behaviors in the Sixth Annual Scientific Conference (ASCON VI), ICDDR,B Dhaka, on 8-9 March 1997.
- An abstract entitled 'Bisexual behaviors of male STD patients in Dhaka, Bangladesh' was published in the 4th International Congress on AIDS in Asia and the Pacific, October 25-29, 1997 Manila, Philippines.
- Recently a paper on the Sociocultural construction of male sexuality is presented orally in The Asia Pacific Social Science and Medicine (APSSAM) Conference, which is rescheduled to be held on December 07-11, 1998 in Indonesia.
- A research paper was presented on the topic Programs on males who have sex with males in Bangladesh: Necessity and barriers the 8th Annual Scientific Conference (ASCON VIII), ICDDR,B Dhaka, on 13 to 14 February 1999.

National and International Workshop/Conference Experience

- Attended as an official participant in the Regional Workshop on the Social Science and Reproductive Health, held on July 1996 at Kanchanaburi, Thailand on the theme of Community based programs for adolescent sexual health and domestic violence against women.

- Attended as a BAPCP representative in the Workshop on Designing Behavior Change Intervention for HIV among High Risk Population in Bangladesh, organized by Bangladesh AIDS Prevention and Control Programme (BAPCP) and CARE-Bangladesh, held on August 1997, at CDM, Rajendrapur, Dhaka, Bangladesh
- Attended the 4th International Congress on AIDS in Asia and the Pacific, October 25-29, 1997 Manila, Philippine.
- Attended the World AIDS Conference, in Geneva, June 28 – July 02, 1998.
- Attended the Asia and Pacific Social Science and Medicine (APSSAM) Conference, in Indonesia, December 07-11, 1998.

Computer Skill and Language Proficiency

Completed a course on Microcomputer, which covered Word 97, Harvard Graphics and SPSS PC+, and Fox Pro.

Bengali: Mother tongue (having skills in writing Bengali literatures).

English: Good in spoken and written English.

Extra-Curricular Affiliation

1. Member of Bangladesh Medical Association (BMA) since 1992.
2. Ex-Vice President of Dhaka Medical College Students' Union in the year 1990-1991.
3. Ex-President of *Shapla, and Upaoin,* socio-cultural non-political organization in Dhaka Medical College in 1989 and 1990.
4. Ex-Executive Director of Leo Club of Dhaka Medical College.
5. Ex-Executive member of Shandhani, Dhaka Medical College.

References

1. **Abbas Bhuiya, Ph.D**
   Head
   Social and Behavioral Sciences Programme (SBSP)
   Public Health Sciences Division
   International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B)
   Dhaka-1000, Bangladesh
   Telephone: 880-2-871751-60 Ext.2227

2. **Dr. Carol L. Jenkins, Ph.D.**
   Ex-Head, Social and Behavioral Sciences Programme (SBSP)
   Public Health Sciences Division
   International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B)
   Dhaka-1000, Bangladesh
   Telephone: 880-2-871751-60 Ext.2227

3. **Dr. Jahir Uddin Ahmed**
   Director (MCH-S)
   Directorate of Family Planning, Azimpur, Dhaka 1205
   Telephone: 501334 (Off).

4. **Dr. Abu Jamil Faisel**
   Country Representative
   AVSC International, House No 40, Road No 16/A, Dhanmondi R/A, Dhaka-1209
   Telephone: 819236 (Off), E-mail: avsc.ajf@drik.bgd.toolnet.org

Sharful Islam Khan (Bobby)

Curriculum Vitae
of
Abbas Uddin Bhuiya, PhD (ANU)

Overview

Trained in Statistics, demography, epidemiology, and social science from Chittagong University, Chittagong, Bangladesh and Australian National University, Canberra, Australia.

Have nearly 20 years of professional experience in the field of population and health research.

Have familiarity with the rural development and health problems in the developing world and intervention programmes to alleviate them.

Involved in implementing community development oriented programmes for the improvement of health in partnership with the indigenous village-based organizations in rural Bangladesh.

Involved in studying the impact of women-focused social and economic development programme on human well-being and the mechanisms of the impact in rural Bangladesh.

A. Contact Address

Public Health Sciences Division
International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B)
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B. Educational Qualification

PhD (1989) in Demography from the Australian National University, Canberra, Australia. (Thesis: Factors affecting child survival in Matlab, Bangladesh)

M.A. (1984) in Demography from the Australian National University, Canberra, Australia. (Thesis: Levels and differentials in child nutritional status and morbidity in a rural area of Bangladesh)

M.A. (1976) and B.A. Honours (1975) and in Statistics from Chittagong University, Chittagong, Bangladesh

C. Present Position

Social Scientist, Public Health Sciences Division, ICDDR,B (1994 till date).

Project Director: Chakaria Community Health Project and BRAC-ICDDR,B joint research project in Matlab.

D. Past Positions

Associate Scientist, Population Science and Extension Division, ICDDR,B (1988-1991).

Co-Investigator, Demographic Surveillance System, Matlab, ICDDR,B (1984-1991).

Research Associate, Community Services Research Working Group, ICDDR,B (1980-1984)

Research Fellow, National Foundation for Research on Human Resource Development (merged with Bangladesh Institute for Development Studies), Dhaka (1978-1979).

Statistician, Investment Corporation of Bangladesh, Dhaka (1976-1976).

E. Awards Received

Australian National University Post-graduate Scholarship for PhD studies.

National Centre for Development Studies Centre Fellowship for studying M.A. in Demography at the Australian National University.

First Grade Residential Scholarship as a student of M.A. at the Chittagong University.

F. Involvement Outside ICDDR,B

Honorary Chairman of MOUCHAK, a national NGO, 1997-.

Member of the Board of Directors of the HIV/AIDS Alliance in Bangladesh (HASAB), 1998-.

Participated in the World Bank Missions to Nepal as a member during 1993-95.

Worked as a consultant to Swiss Red Cross, Bern during 1990-93 to review its strategies on primary healthcare related activities in Bangladesh.

Participated as a resource person in a data analysis workshop in Jakarta, Indonesia, in 1993, organized by Applied Diarrhoeal Disease Research and Harvard University.

Assisted UNICEF, Dhaka during 1991-1992 to prepare abstracts of UNICEF funded studies in Bangladesh during 1987-1992.

Reviewed BRAC's Health and Development Watch project in 1991.

G. Additional Professional Exposure

Was a visiting scholar at the University of Pennsylvania and University of Wisconsin at Madison, USA, in 1991.

Attended a course on Management Development in the International Training Institute, Sydney, Australia, in 1994.

H. International Conference Attendance

Attended the 4th International Congress on AIDS in Asia and the Pacific held in Manila in 1997.

Attended a review meeting of the Global Health Equity held in Wuhan, China in 1997

Presented a paper in the IUSSP conference in Beijing, China in 1997.

Presented a paper in the XIVth International Conference of Social Science and Medicine in Scotland in 1996.

Participated in a meeting of the Global Health Equity Initiatives at the Rockefeller Center, Bellagio, Italy in 1996.

Participated in a workshop on Global Burden of Disease at the Harvard University in 1996.

Presented a paper in the IUSSP conference in Montreal, Canada in 1993.

Presented two papers in the Child Survival Workshop in Hawaii, USA in 1990.

Presented a paper in the Health Transition Workshop in Canberra, Australia in 1989.

Presented a paper in the Fourth Annual Conference of the Indian Society for Medical Statistics in Bangalore, India in 1986.

Attended a meeting on Analysis of Trends and Patterns of Mortality in the ESCAP Region held in Chiangmai, Thailand in 1985.

Presented a paper in the Third Annual Conference of the Indian Society for Medical Statistics in Calcutta, India in 1985.

Participated in the Fifteenth Summer Seminar on Population of the East-West Population Institute, Hawaii, as Professional Associate, in Interactions of Socioeconomic Development with Mortality Transitions in Asia Workshop in 1984.

Presented a paper in the Second Annual Conference of the Indian Society for Medical Statistics in Lucknow, India in 1984.

I. Current Research Interest

Issues related to health, family planning, and social and economic development intervention programmes - design, operation, and impact.

Behavioural change interventions at the individual and community levels for the improvement of health, especially of women and children.

Action research to develop strategies to ensure community participation in health related activities including cost recovery/health insurance.

J. Technical Expertise

Setting up demographic registration system, designing and conducting operations research and socioeconomic and demographic surveys.

Management of large scale data for efficient retrieval and analysis.

Statistical skills for analysing large scale, socio-economic, demographic and health data by using common computer software.

Application of participatory research tools for action research, and monitoring and evaluation of programmes.

K. Publications

Principal Authorship

1. Bhuiya A. Reproductive and sexual health problems as perceived by women and men in a rural area of Bangladesh. Scientific Report No. 80. ICDDR,B, 1997.

2. Bhuiya A., Riabux C. Rethinking community participation: prospects of health initiatives by indigenous self-help organizations. Special Publication No. 65. ICDDR,B, 1997.

3. Bhuiya A. and Chowdhury M. The effect of divorce on child survival in a rural area of Bangladesh. *Population Studies*, 51, 1997.

4. Bhuiya A., Yasmin F., Begum F., Rob U. Community participation in health, family planning and development programmes: International experiences. Special Publication No. 59. ICDDR,B, 1997.

5. Bhuiya A. Health knowledge an behaviour in five unions of Chakaria. Special Publication No. 52. ICDDR,B, 1996.

6. Bhuiya A, Bhuiya I, Chowdhury M. Factors affecting acceptance of immunization in rural Bangladesh. *Health Policy and Planning*, 10, 1995.

7. Bhuiya A, Chowdhury M. The impact of social and economic development programme on health and well-being: a BRAC-ICDDR,B collaborative project in Matlab. Working Paper No. 1. BRAC-ICDDR,B Joint Research Project, Dhaka, 1995.

8. Bhuiya A. Streatfield K. Feeding, home remedy practices, and consultation with health care providers during childhood illness in rural Bangladesh, *Journal of Diarrhoeal Diasese Research*, 13, 1995.

9. Bhuiya A. D'Souza S. Socioeconomic and demographic correlates of child health and mortality in Matlab. In Fauveau V. edited Matlab: Women, Children and Health. ICDDR,B; Dhaka, 1994.

10. Bhuiya A. Health programme inputs and infant and child survival in rural Bangladesh: evidence from Bangladesh Fertility Survey 1989. In Cleland J. edited Bangladesh Fertility Survey, 1989: Secondary Analysis. NIPORT, Dhaka, 1993.

11. Bhuiya A, Streatfield K, and Sarder AM. Mother's education and knowledge of major childhood diseases in Matlab, Bangladesh. In the proceedings of the XXIInd IUSSP General Conference - Montreal held in 1993.

12. Bhuiya A. and Mostafa G. Levels and differentials in weight, height and body mass index among mothers in a rural area of Bangladesh. *Journal of Biosocial Science*, 25, 1993.

13. Bhuiya A. Abstracts of UNICEF - Supported Studies 92 Bangladesh. UNICEF, Dhaka, 1992.

14. Bhuiya A. Abstracts of UNICEF - Supported Studies 87-91 Bangladesh. UNICEF, Dhaka, 1992.

15.Bhuiya A. and Streatfield K. A hazard logit model analysis of covariates of childhood mortality in a rural area of Bangladesh. *Journal of Biosocial Science*, 24, 1992.

16.Bhuiya A. Village health care providers in Matlab, Bangladesh: a study of their knowledge and management of childhood diarrhoea. *Journal of Diarrhoeal Disease Research*, 10, 1992.

17.Bhuiya A. and Streatfield K. Mothers' education and survival of female children in a rural area of Bangladesh. *Population Studies*, 45, 1991.

18.Bhuiya A, Streatfield K, and Meyer P. Mother's hygienic awareness, behaviour, and Knowledge of major childhood diseases in Matlab, Bangladesh. In J. Caldwell et al. (eds) What We Know About Health Transition: The Cultural, Social and Behavioural Determinants of Health. Health Transition Series No. 2 (Vol. I). Health Transition Centre, Canberra, 1990.

19.Bhuiya A. Factors affecting child survival in Matlab, Bangladesh. Unpublished PhD thesis, Department of Demography, The Australian National University, Canberra, 1989

20.Bhuiya A, Wojtyniak B and Karim R. Malnutrition and child mortality: are socioeconomic factors important? *Journal of Biosocial Science*, 21(3), 1989.

21.Bhuiya A, Wojtyniak B, D'Souza S, Nahar L and Shaikh K. Measles case fatality among the underfives: a multivariate analysis of risk factors in a rural area of Bangladesh. *Social Science and Medicine*, 24(5) 1987.

22.Bhuiya A, Wojtyniak B, D'Souza S, and Zimicki S. Socioeconomic determinants of child nutritional status: boys versus girls. Food and *Nutrition Bulletin*, 8(3), 1986.

23.Bhuiya A, Zimicki S and D'Souza S. Socioeconomic differentials in child nutrition and morbidity in a rural area of Bangladesh. *Journal of Tropical Pediatrics*, 32, 1986.

24.Bhuiya A. Levels and differentials in child nutritional status and morbidity in a rural area of Bangladesh. Unpublished MA thesis, Department of Demography, The Australian National University, Canberra, 1983.

Co-authorship

1. Chowdhury AMR, Karim FK, Sarkar SK, Cash R, Bhuiy a A. The status of ORT in Bangladesh: how widely is it used? *Health Policy and Planning*, 12, 1997.

2. Khan M.I., Bhuiya A., Chowdhury M. An inventory of the development programmes by Government and non-Government organizations in selected unions of Matlab (excluding BRAC & ICDDR,B). Working Paper No. 17. BRAC-ICDDR,B Joint Research Project, Dhaka, 1997.

3. Ansary S., Fulton L., Bhuiya A., Chowdhury M. An impact of evaluation of the Meghna-Dhonagoda embankment. In Two studies on the impact of Meghna-Dhonagoda flood control, drainage and irrigation project. Working Paper No. 19. BRAC-ICDDR,B Joint Research Project, Dhaka, 1997.

4. Jamil K, Bhuiya A., Streatfield K. Chakraborty N. The immunization program: an impressive acievement, but challenges remain. A Kantner et al. Edited Bangladesh Demographic and Health Survey 1993-94, Extended Analysis, 1996.

5. Khan S.R., Chowdhury AMR, Ahmed SM, Bhuiya A. Women's education and employmernt: Matlab experience. *Asia-Pacific Population Journal*, 11, 1996.

6. Eppler P., Bhuiya A., Hossain M. A process-oriented approach to the establishment of community-based village health posts. Special Publication No. 54. ICDDR,B, 1996.

7. Nasreen H., Chowdhury M., Bhuiya A., Rana M., Caldwell I. An assessment of client's knowledge of family planning in Matlab. Working Paper No. 13. BRAC-ICDDR,B Joint Research Project, Dhaka, 1996.

8. Khan M.I., Bhuiya A., Chowdhury M. Cultural construction of health and the institutional measures of change in rural Bangladesh: the cases of the BRAC village organization and the ICDDR,B MCH-FP programmes in the selected villages of Matlab. Working Paper No. 14. BRAC-ICDDR,B Joint Research Project, Dhaka, 1996.

9. Momen M., Bhuiya A., Chowdhury M. Vulnerable of the vulnerables: the situation of divorced, abandoned and widowed women in a rural area of Bangladesh. Working Paper No. 11. BRAC-ICDDR,B Joint Research Project, Dhaka, 1995.

10.Mannan M., Chowdhury M., Bhuiya A., Rana M. Formation of village organizations: the first three months. Working Paper No. 4. BRAC-ICDDR,B Joint Research Project, Dhaka, 1995.

11.Chowdhury M., Bhuiya A., Vaughan P., Adams A., Mahmud S. Effects of socio-economic development on health status and human well-being: determining impact and exploring pathways of change. Proposals for phase II of the BRAC-ICDDR,B Matlab joint project 1996-2000 AD. Working Paper No. 6. BRAC-ICDDR,B Joint Research Project, Dhaka, 1995.

12.Rashid S., Chowdhury M, Bhuiya A. An inside look at two BRAC schools in Matlab. Working Paper No. 8. BRAC-ICDDR,B Joint Research Project, Dhaka, 1995.

13.Choudhury AY and Bhuiya A. The effects of biosocial variables on changes in nutritional status of rural Bangladeshi children pre- & post-monsoon flooding. *Journal of Biosocial Sciences*, 25, 1993.

14.Chowdhury M, Choudhury Y, Bhuiya A, Islam K, Hussain Z, Rahman O, Glass R, and Benninsh M. Cyclone aftermath: research and directions for the future. In Hossain H, C.P. Dodge, and F.H. Abed edited From Crisis to Development: Coping with Disasters in Bangladesh. University Press Limited, Dhaka, 1992.

15.Yunus M, Aziz KMA, Bhuiya A, and Strong M. Feeding practices during and after acute diarrhoea in a rural area of Bangladesh. Proceedings of the Commonwealth Conference on Diarrhoea and Malnutrition, held in New Delhi during 29 November -1 December, 1991.

16.Aziz KMA, Yunus M, Bhuiya A, and Strong M. Nutritional implications of cultural practices in the home management of diarrhoea in a rural area of Bangladesh. (Paper presented in the Commonwealth Conference on Diarrhoea and Malnutrition, held in New Delhi during 29 November -1 December, 1991).

17.Chowdhury AY and Bhuiya A. Periodic crisis, public health intervention and severe malnutrition among children in a rural area of Bangladesh. Program for the Introduction & Adaptation of Contraceptive Technology, Bangladesh, Dhaka, 1990.

18.Mostafa G, Wojtyniak B, Fauveau V, and Bhuiya A. The relationship between sociodemographic variables and pregnancy loss in a rural area of Bangladesh. *Journal of Biosocial Science*, 23, 1990.

19.D'Souza S, Bhuiya A, Zimicki S, and Sheikh K. Mortality and Morbidity: the Matlab Experience. Ottawa, Ontario: International Development Research Centre, 1988.

20.Khan N, Wojtyniak B, and Bhuiya A. Levels and trends in mortality in ICDDR,B Demographic Surveillance Areas. In: Recent Trend in Fertility and Mortality in Bangladesh. Proceedings of a national seminar held in Dhaka. Planning Commission, Dhaka, 1987.

21.Islam S, Bhuiya A and Yunus M. Socioeconomic differentials of diarrhoea morbidity and mortality in selected villages of Bangladesh. *Journal of Diarrhoeal Disease Research*, 2(4), 1984.

22.D'Souza S and Bhuiya A. Socioeconomic mortality differentials in a rural area of Bangladesh. *Population and Development Review*, 8(4), 1982.

23.D'Souza S, Bhuiya A and Rahman M. Socioeconomic differentials in mortality in a rural area of Bangladesh. In WHO: Mortality in South and East Asia: A Review of Changing Trends and Pattern, 1950-75. Proceedings of the Joint WHO/ESCAP meeting held in Manila. Manila, 1982.

24.D'Souza, S and Bhuiya A. Mortality differentials in a rural area of Bangladesh: results from Matlab thana, Comilla district. In Edmonston, B and R Bairagi (eds.): Infant and child mortality in Bangladesh. Proceedings of the Conference on Infant and Child Mortality. Dhaka, Institute of Statistical Research & Training, University of Dhaka, January 1982.

25.D'Souza, S and Bhuiya A. Mortality differentials in a rural area of Bangladesh: results from Matlab thana, Comilla district. In: Basu A and K.C. Malhotra (eds): Human Genetics and Adaptation, Vol. 2. Proceedings of the Indian Statistical Institute Golden Jubilee International Conference on Human Genetics and Adaptation. Indian Statistical Institute, Calcutta, February 1982.

26.National Foundation for Research on Human Resource Development. Primary education network in Bangladesh: capacity and utilisation (mimeo). NFRHRD, Dhaka, 1978. Contributed as a member of the research group.

27.National Foundation for Research on Human Resource Development. Towards establishing planned families as a way of life in Bangladesh (mimeo). NFRHRD, Dhaka, 1978. Contributed as a member of the research group.

L. Professional Associations

Member of the International Union for the Scientific Study of Population (IUSSP).

Life member, Bangladesh Statistical Association.

Life member, Bangladesh Population Association.

Life member, Nutrition Society of Bangladesh.
A member of the Essential National Health Research Working Group in Bangladesh under the auspices of Commission on Health Research for Development.

M. Personal Information

Date of birth - 31 December 1951

Marital status - Married and have two children

Nationality - Bangladeshi

N. Country Visited

Australia, Canada, China, Hong Kong, India, Indonesia, Japan, Nepal, Singapore, Thailand, United Kingdom, USA and Switzerland.