Date:

(FACE SHEET) **ETHICAL REVIEW COMMITTEE, ICDDR,B.**

Principal Investigator: Saifur Rahman

Application No. 99-002

Title of Study: Strategies to improve Prevention and management of reproductive tract infections (RTI) and sexually transmitted diseases (STD)

Trainee Investigator (if any): _____

Supporting Agency (if Non-ICDDR,B) USAID

Project Status: _____

[✓] New Study

[ ] Continuation with change

[ ] No change (do not fill out rest of the form)

Circle the appropriate answer to each of the following (If Not Applicable write NA)

1. Source of Population:
   - (a) Ill subjects — (Yes) No
   - (b) Non-ill subjects — (Yes) No
   - (c) Minor or persons under guardianship — Yes (No)

2. Does the Study Involve:
   - (a) Physical risk to the subjects — Yes (No)
   - (b) Social risk — Yes (No)
   - (c) Psychological risks to subjects — Yes (No)
   - (d) Discomfort to subjects — (Yes)
   - (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 or other) — (Yes) No
   - (b) Use of fetal tissue or abortus — Yes No NA
   - (c) Use of organs or body fluids — (Yes) No

4. Are Subjects Clearly Informed About:
   - (a) Nature and purposes of the study — (Yes) No
   - (b) Procedures to be followed including alternatives used — (Yes) No
   - (c) Physical risk — Yes No NA
   - (d) Sensitive questions — (Yes) No
   - (e) Benefits to be derived — (Yes) No
   - (f) Right to refuse to participate or to withdraw from study — (Yes) No
   - (g) Confidential handling of data — (Yes) No
   - (h) Compensation &/or treatment where there are risks or privacy is involved in any particular procedure — Yes No NA

5. Will Signed Consent Form be Required:
   - (a) From subjects — (Yes) No
   - (b) From parents or guardian (if subjects are minor) — Yes No NA

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 with 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. Example 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 Committee for review

We 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

PROPOSAL

STRATEGIES TO IMPROVE PREVENTION AND MANAGEMENT OF REPRODUCTIVE TRACT INFECTIONS (RTI) AND SEXUALLY TRANSMITTED DISEASES (STD)

(SUB-RESULT 1.4)

PREPARED BY:
OPERATIONS RESEARCH PROJECT (ORP)
HPED, ICDDR,B
IN COLLABORATION WITH NIPHP PARTNERS

OCTOBER 1998

Glossary

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
AVSC	Access to Voluntary and Safe Contraception
BCC	Behavioral Change Communication
BWHC	Bangladesh Women's Health Coalition
ESP	Essential Services Package
FWV	Family Welfare Visitor (paramedic)
GoB	Government of Bangladesh
HIV	Human Immunodeficiency Virus
HPSP	Health and Population Sector Program
ICDDR,B	International Center for Diarrhoeal Disease Research, Bangladesh
ICPD	International Conference on Population and Development
IUD	Intra-Uterine Device
IR	Intermediate Result
IEC	Information, Education and Communication
JTS	Jatiya Tarun Sangha
LSD	Laboratory Sciences Division
MCH-FP	Maternal and Child Health-Family Planning
NGO	Non-Government Organization
NIPHP	National Integrated Population and Health Program
OPD	Out Patient Department
ORP	Operations Research Project
PHC	Primary Health Care
QIP	Quality Improvement Partnership
RSDP	Rural Service Delivery Partnership
RTI	Reproductive Tract Infection
RPR	Rapid Plasma Reagin
STD	Sexually Transmitted Disease
SMC	Social Marketing Company
SACMO	Sub Assistant Community Medical Officer
SR	Sub-Result
TPHA	Treponema pallidum Hemagglutination Assay
USAID	United States Agency for International Development
UFHP	Urban Family Health Partnership
WHO	World Health Organization

CONTENTS

ABSTRACT

Background

Reproductive Tract Infections (RTI), including Sexually Transmitted Diseases (STD), have become a major public health concern in developing countries. With the emergence of HIV infection, prevention and management of RTI and STD became an urgent issue as many are co-factors for HIV transmission. Besides, untreated RTI/STD in women cause infertility, pain and even disability. Both the National Integrated Population and Health Program (NIPHP), and the Health and Population Sector Program (HPSP) have recommended RTI/STD services as an important component of the Essential Services Package (ESP) in the Bangladesh national program. The interventions in this proposal address some of the key issues that were identified through reviews of international and national literature, activity reports, research papers, and needs assessment conducted by various organizations in Bangladesh.

Objectives

The purpose of this operations research study is to design and test strategies for the improvement of prevention and management of RTI/STD in Bangladesh.

The specific objectives of the interventions are to (1) improve RTI/STD management through the operationalization of the syndromic management approach within the ESP in urban GoB and rural NGO sites; (2) assess antenatal screening for syphilis at the PHC level; and (3) improve RTI/STD prevention strategies through pharmacy-based RTI/STD services.

Interventions

The interventions are (a) operationalization of the syndromic approach at the PHC level including the assessment of its feasibility and validity, (b) operationalization of antenatal screening for syphilis at the PHC level using RPR tests and (c) assessment of pharmacies regarding provision of RTI/STD information and services, and the SMC training programme for pharmacists/drug sellers to build capacity for pharmacy-based RTI/STD services.

The proposed interventions were jointly developed and will be implemented in collaboration with the NIPHP partners. These partners are the GoB, RSDP, UFHP, SMC and QIP. The study sites, strategy designs, intervention activities and the roles and responsibilities of the partners were decided jointly through special meetings with concerned partners.

Sites for operationalization and assessment of the syndromic approach will be Sher-e-Bangla Nagar Government Outdoor Dispensary in Dhaka and the RSDP NGO Jatiya Tarun Sangha (JTS) ESP Clinic in Shibalaya. Intervention sites to assess the syndromic approach for vaginal discharge are yet to be fixed. Screening for syphilis will be at an urban GoB ESP clinic and an urban UFHP NGO ESP clinic. Sher-e-Bangla Nagar GoD will be the urban GoB site whereas the UFHP NGO sites will be Pragati Samaj Kallayan Prothisthan ESP clinic at Mirpur. The study on pharmacy-based RTI/STD services will be conducted in Tongi and will involve approximately 150 pharmacies.

Study design

Study designs that will be used are time series design for the syndromic management and the antenatal screening for syphilis, and pretest-posttest design for the pharmacy-based study. The validity of the syndromic approach will be assessed by laboratory tests as the standard of diagnosis.

Sampling

Non-probability sampling will be done in the cases of feasibility assessment of the syndromic management and the assessment of SMC training of drug sellers on STD/HIV/AIDS services. The samples for validity assessment of the syndromic management and the assessment of antenatal screening for syphilis at the PHC level will be probability samples. Standard package of sampling will be used to determine the size of the probability samples.

Data collection

Service statistics, provider-client interaction observations, focus group discussions, surveys, and "mystery shoppers" will be used to collect quantitative and qualitative information to document the process and quality of services, and to monitor the success of these three interventions.

Data analysis

Both qualitative and quantitative data will be analyzed. Univariate analysis, comparisons and bivariate analysis will be used as the quantitative analytical procedures. When appropriate, multivariate analysis and logistic regression will be used to determine the relationship among the different operational components of the intervention.

Expected outcomes

Findings and lessons learned from this research may be used to guide the scaling-up of the syndromic approach and help the introduction of antenatal screening for syphilis at the PHC level. The development of an improved training programme will increase the involvement of pharmacists/drug sellers in the National STD/AIDS program.

1. INTRODUCTION

RTI and STD are a major public health problem in developing countries. Several epidemiological and biological studies support the fact that both RTI and STD, especially those associated with genital ulceration, enhance HIV transmission.[1]

In 1994, the ICPD in Cairo recommended that control of RTI/STD should be considered as one of the essential components of reproductive health. In Bangladesh, HPSP and NIPHP have prioritized the issue as one of the key components of reproductive health care in the ESP. These programs address behavioral change communication, management of RTI/STD cases including partner referral, and condom promotion in the prevention and control of RTI/STD.[2,3]

There are three main categories of RTI: (a) sexually transmitted diseases,(b) endogenous, non-sexually transmitted infections, and (c) iatrogenic infections (e.g., infections introduced by childbirth or inappropriate performance of family planning services like IUD insertion, unsafe abortion or other improperly performed medical or surgical procedures).[4]

RTI and STD may have devastating effects on human well being. The consequences of STD have far-reaching implications for women, which exceed physical discomforts. The social burden, which manifests itself as a stigma and discrimination, falls predominantly on women. In terms of economic consequences, STD rank among the five most important causes of years of productive life lost in developing countries and account for loss of millions of dollars each year.[5] RTI also have an impact on family planning programs countering acceptance and continuation of contraceptive methods. The physiological, social, economic, and developmental impact of AIDS is being felt at every level of society. Economic consequences cannot only be measured in direct cost of AIDS morbidity and mortality but also through indirect costs to survivors. The estimated health care costs in Bangladesh for AIDS cases by the year 2010 (and this is only assuming 60 percent of AIDS cases actually receive hospital care) are to be $ 10.5 million per year.[6]

Reproductive health programs focus on women, providing information and services for RTI/STD. Following the ICPD in Cairo, and the fourth World Women Conference in Beijing, globally, there is an increasing need for men to share more responsibility in preventing STD and RTI, HIV infection and AIDS.[7] Men also have increased risks due to their patterns of sexual behavior. RTI/STD/HIV/AIDS services require male involvement for their own better health as well as the better health of their partners. Men need to be adequately informed regarding the availability of STD prevention and treatment at the PHC level.

Key issues related to the prevention of RTI/STD are early detection and treatment and the promotion of community awareness through behavioral change communication (BCC). BCC messages should include topics such as personal hygiene, safer sex practices and health-seeking behavior. In improving RTI case management to date, the focus has been on diagnosis and treatment. To achieve high cure rates, drug compliance, partner referral and treatment, referral linkages, and client education are all essential.[8]

The effects of untreated syphilis on pregnancy include stillbirth or late miscarriage, neonatal death, infant death and infant infection. Screening of pregnant womenis an important element of syphilis prevention among newborns. One study showed that even in countries with sero-reactivity rates lower than 1 per 1000, syphilis screening in pregnant women was shown to be cost-effective.[11]

About half of the RTI/STD patients, both in urban and rural areas of Bangladesh, commonly consult unqualified practitioners[12]. Males in particular use pharmacies or village practitioners as first-line providers. Most pharmacists in Bangladesh have no formal qualification. Therefore, Knowledge about RTI/STD is generally poor. STD services at the PHC level are underutilized by men.[12] Men prefer male providers especially for reproductive health care. Condoms, the most widely available male method for STD prevention remains largely underutilized.[13] The role and responsibilities of men in the decision making process for STD control have not received adequate attention. It is obvious that in the context of Bangladesh men are a very difficult group to target for health services.

3. BACKGROUND AND RATIONALE

3.1 Review of literature and activities on RTI/STD prevention and management

3.1.1 Prevalence of RTI and STD

For several decades, STD have ranked among the top five conditions for which adults in developing countries seek care.[14] The WHO estimated that during 1995, at least 333 million new cases of curable STD occurred in adults globally; an estimated 120 million were in the ten countries of South-East Asia.[5] Moreover, it is estimated that as of December, 1997, about 30 million people were HIV infected worldwide, six million being in South and Southeast Asia. According to an estimation of the WHO in 1992, about 20,000 people were HIV infected Bangladesh.[15] Findings of different community-based and clinic-based studies indicate that RTI, including STD, are prevalent in Bangladesh. According to some investigators, the estimated number of STD was 2.3 million in 1996.[15] Dr. Sarah Hawkes in her study has shown that about one percent of all pregnant women in a rural area had syphilis.[16] Another study among Dhaka slum dwellers revealed that more than 11 percent of the men and 5 percent of the women had syphilis.[17]

3.1.2 Interaction of RTI/STD and HIV/AIDS

HIV and RTI/STD show a mutual interaction: the presence of RTI/STD greatly increases the risks for HIV transmission and aqusition by sexual contact. On the other hand, concurrent HIV infection alters the natural course and response to treatment of RTI/STD.[4]

There is a strong relationship between STD and HIV transmission. HIV is mainly transmitted by sexual contact (heterosexual, homosexual). The presence of a STD is a marker which reflects the high-risk behavior for HIV infection. Unprotected sexual contact with multiple partners is highly predisposing for acquring or transmitting STD, including HIV. Designing effective interventions aim at reducing high-risk sexual behavior is a prime ..... of public health in the prevention of of the spread of HIV/AIDS and is of prime importance after the emergence of HIV/AIDS.

3.1.3 Knowledge about RTI, STD, HIV and AIDS

Only recently RTI began to receive attention in public health in Bangladesh. Much is yet to be done in terms of informing the professionals as well as the public. Awareness about STD is moderately high among clinic providers, although their knowledge of the specific mode of transmission and means of prevention is weak.[18] Today there is a growing initiative to improve the knowledge of providers in both GoB and NGOs.

3.1.4 Service-seeking behavior for RTI/STD

In Bangladesh RTI/STD services are provided at both GoB and NGO settings at various levels. There are also untrained allopathic and non-allopathic practitioners offering such services. Regarding service-seeking behavior for RTI/STD limited information is available. The findings of one study show that urban communities use pharmacies as a source of medicines, advice, and information for health problems. Pharmacies also play a role in reproductive health services, providing referrals for clinical family planning methods, advice on pregnancy, and treatment and referral for STD-related symptoms. Most drug sellers do not have training in pharmacy or in MCH-FP-related topics.[19]

3.1.5 Condom promotion

Condom promotion as part of STD counseling was demonstrated to be an effective means of reducing the incidence of STD. Therefore, condom promotion is becoming recognized as a critical component of effective STD case management. It includes (1) advice about condom use, (2) a demonstration of correct use, and (3) provision of condoms.[20]

A literature review of the behavioral factors related to STD and HIV/AIDS in Bangladesh indicates that nationwide, condom is generally recognized as a contraceptive method. Still, the use of condom is low.[21] According to the 1996-1997 Bangladesh Demographic and Health Survey, 3.9 percent of married women and 5.7 percent married men use condom as a contraceptive method.[22]

3.1.6 Drug compliance

Important factors related to the successful management of STD are: availability of drugs, providers' knowledge, clients' motivation and adherence to treatment; parrtner treatment and follow-up. While visiting the GoB ESP service delivery sites, it was evident that there was a lack of drugs. Moreover, providers were not trained in the syndromic approach. Providers often prescribed drugs not available at the clinic. Clients were unwilling to buy these drugs because of financial constraints. At some of the NGO clinics, drug supply was adequate. However, the providers informed that partner notification and treatment was difficult. Efforts are made to keep WHO recommended drugs in the NGO clinics.

3.1.7 Contact referral/partner notification and management

Discussing STD with a partner is difficult because it raises questions about fidelity and trust. Some NGOs are practicing a partner notification system in the management of STD. Most, however, use client referral approach. Marie Stopes Clinic society uses a partner notification card with diagnostic code. Providers at the clinic reported that in 20 percent of the cases, they were able to notify and treat partners. In Matlab, client and provider referral are practiced. Another study showed that a common practice was to prescribe and provide medication for both partners. In this study, more than

one third of the FWV provided prescriptions and drugs for the partner and the client. Half of the SACMOs mentioned that they did not provide treatment for the partner.[23]

3.1.8 Antenatal screening for syphilis

Syphilis is a systemic and chronic infectious disease transmitted through sexual contact, from mother to infant during pregnancy and through transfusion of infected blood. In developing countries, the reported prevalence rates among pregnant women fluctuates between 3-19 %.[24] A pregnant woman with untreated syphilis has approximately 33 percent risk of giving birth to an infant infected with syphilis.[25]

Most cases of syphilis among women are asymptomatic since the painless primary lesion is localized in the vagina or cervix. Without screening many women are not aware that they require treatment. Screening and treating pregnant women for syphilis has been shown to be a highly cost-effective in the prevention of congenital syphilis.[26] Even in countries with sero-prevalence of less than 1 per 1000, screening was reported to be cost-effective.[11] A study in Bangladesh showed that if the syphilis prevalence rate remains less than 6 percent, screening with RPR test, followed by TPHA, is more cost-effective than performing RPR test alone. The study also showed that the benefit-cost ratio of the syphilis screening with treatment is about 4.5 in Bangladesh. [27] RPR test is one of the most commonly used non-specific serological tests for the diagnosis of syphilis. TPHA is specific and used as confirmatory test. At higher prevalence rates, RPR alone can be used for screening. A few NGOs have already started doing routine screening of pregnant women. Routine antenatal screening should always be associated with the consent of the client, appropriate treatment for client and partner, and necessary confidentiality.

3.1.9 Syndromic management of RTI and STD

Several STD syndromes can be managed easily and rapidly using clinical flowcharts for diagnosis and treatment. The WHO recommends that national STD control programs incorporate diagnostic and therapeutic flow charts into their STD management guidelines[9]. WHO has therefore developed and promoted flowcharts since the early eighties based on syndromic diagnosis and treatment for STD case management.[28] Most flowcharts for urethral discharge and genital ulcers have been shown to be sufficiently valid in different settings. But the validity of the flowcharts starting for vaginal discharge is problematic due to the low sensitivity and specificity of symptoms and signs. WHO therefore proposed a new concept, incorporating a risk assessment as a part of the diagnostic flowcharts for symptomatic women to increase the sensitivity of the approach. Although the syndromic approach to managing patients with STD is currently in use in many developing countries, evaluation of these flowcharts is essential to ensure efficient management.

Currently, a few NGOs are using the syndromic approach. Most of them are using original WHO recommended flow charts, which have not yet undergone the process of standardization, evaluation or validation in the context of Bangladesh. The family planning, STD/RTI and HIV/AIDS Task Force of NIPHP has taken the lead to develop the Technical Standard and Service Delivery Protocol for the Management of RTI/STD.[10]

3.1.10 Males and STD/AIDS

Considering STD/AIDS, the role men play as partners has different connotations and can vary widely between different sub-cultures and social strata. They can have multiple sexual partners before marriage, within marriage, or outside marriage and can get STD including HIV/AIDS. Strategies to control STD in the community should also take into account men's concerns, roles and responsibilities. [8]

Recent available national data indicate that men have not been the focus of research. There is very limited information available on men's knowledge, attitude and practice with regard to STD. Although awareness about HIV/AIDS is higher among men than women, it is still quite low.[22] To date, most male involvement initiatives have focused on male safer sex practices; establishment of male-only sexual health clinics, or holding separate clinic hour for males; studies of prevalence of STD among males; and limited research on service-seeking behavior of men.[29] A GoB clinic-based RTI/STD study in Bangladesh showed that only three percent of the clients visiting the clinic for RTI/STD problems, were males. [12] Available research indicates that men tend to go to pharmacies and village practitioners for STD treatment.

3.2 Lessons learned

- Lack of information on nation wide prevalence of RTI/STD in Bangladesh.
- Prevalence of STD and HIV/AIDS in the neighboring countries is of great concern.
- In many facilities, knowledge among providers with regard to RTI/STD is not sufficient.
- The utilization of unqualified practitioners for RTI/STD treatment is quite common. Males prefer pharmacies as a first-line provider--particularly in the case of STD.
- Introduction of syndromic management at PHC level seems to be feasible.
- Flowcharts for the syndromic management of RTI/STD in the context of Bangladesh have been developed.
- Validity assessment of the syndromic approach for vaginal discharge has yet to be carried out.
- NGOs practice partner notification with difficulty. Most of the NGOs practice patient referral partner notification.
- Antenatal screening for syphilis at the PHC seems to be feasible.
- Awareness of males and females on STD/AIDS is low.
- STD service seeking of males at the PHC level is poor.

Many of these lessons learned have been reflected in the research interventions. Those, which have not been reflected, will be addressed in future research activities.

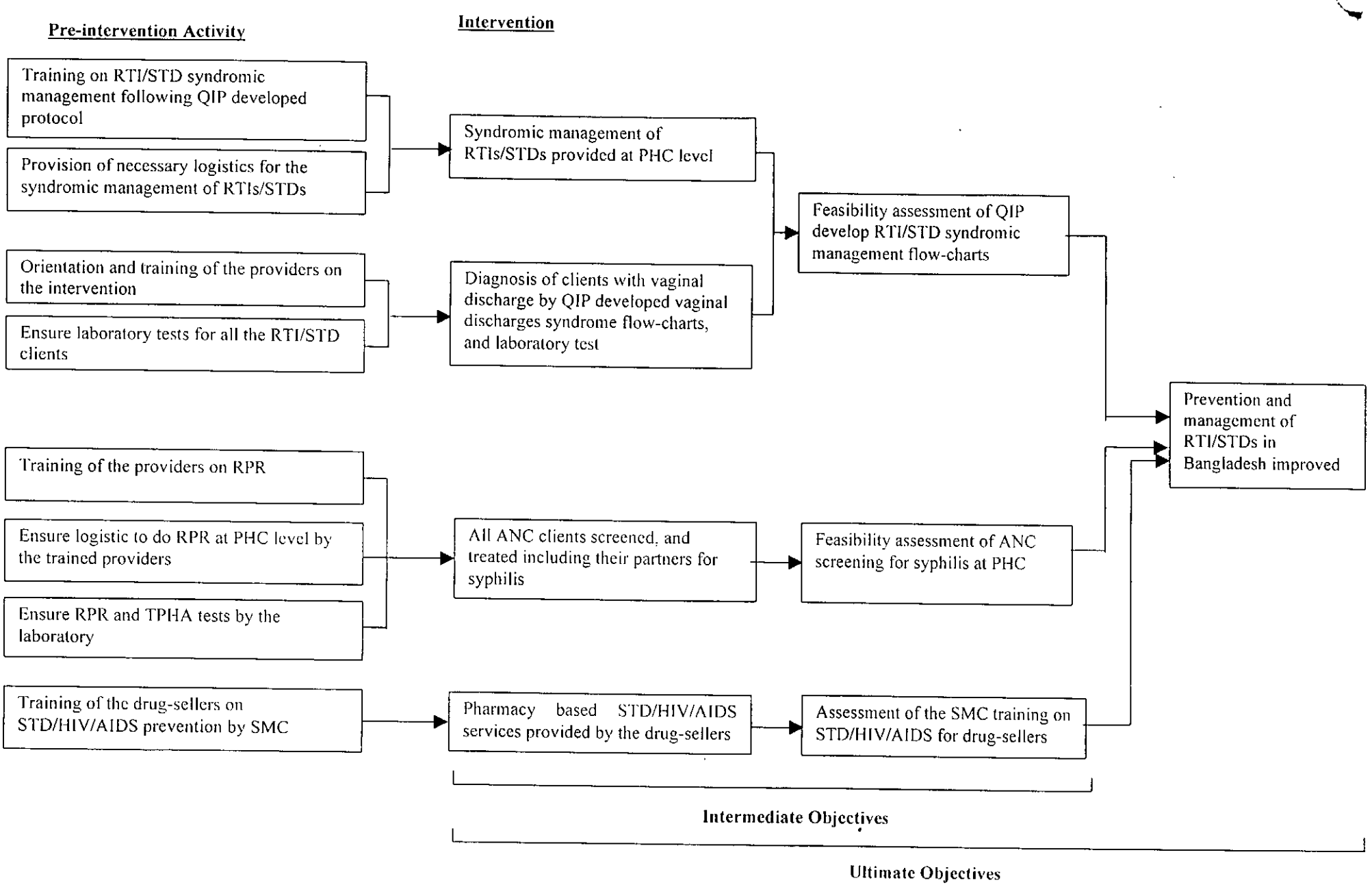
4. INTERVENTIONS

4.1 Objectives of the interventions

The objectives of the interventions are:

- Improvement of RTI/STD management through the operationalization and assessment of the syndromic approach at the PHC level
- Assessment of the antenatal screening for syphilis at the PHC level
- Improvement of RTI/STD prevention strategies through pharmacy-based RTI/STD services

4. 2 Conceptual framework



4.3 Research Questions and Indicators

Objectives	Research Questions	Indicators	Data Source
Improvement of RTI/STD management through the operationalization of the syndromic approach at the PHC level	1. How can the syndromic approach be operationalized at the PHC level?	- Percent of observed male and female clients diagnosed - Percent of observed male and female clients treated - Percent of observed male and female clients counseled for prevention of RTI/STD - Percent of male and female clients' partner received treatment - Percent of male and female clients came for follow up visit	• Observations • Service statistics
	2. How effective is the syndromic approach in the management of RTI/STD clients with vaginal discharge?	- Sensitivity, specificity and predictive value of the approach	• Service statistics • Laboratory reports
Assessment of antenatal screening for syphilis at the PHC level	3. How can antenatal screening for syphilis be operationalized at the PHC level?	- Percent of ANC clients screened for syphilis by FWV(paramedic) - Percent of screened women tested positive by FWV (paramedic) - Percent of screened women confirmed by laboratory test - Percent of positive women referred by FWV (paramedic) for treatment	• Service statistics • Observations • Laboratory reports • Exit interviews
Improvement of RTI/STD prevention strategies through pharmacy-based STD/HIV/AIDS services	How can pharmacies be effective providers of services on STD/HIV/AIDS prevention?	- Percent of trained drug sellers in pharmacies having correct knowledge on STD/HIV/AIDS - Percent of trained drug sellers in pharmacies providing correct information to the clients	• Baseline survey • "Mystery Shoppers" • Pre- and post- test (Training) • Post intervention survey(After six months of the training)

4.4 Research questions and variables

Research questions	Indicators	Independent variables	Dependent variables
How can the syndromic approach be operationalized at the PHC level?	• Percent of observed male and female clients diagnosed • Percent of observed male and female clients treated • Percent of observed male and female clients counseled for prevention of RTI/STD • Percent of male and female clients' partner received treatment • Percent of male and female clients came for follow up visit	• Provider trained on syndromic management of RTI/STD • Provider trained on counseling regarding prevention and management of RTI/STD • Availability of necessary equipment • Availability of necessary drugs • Availability of privacy	• Clients received services through syndromic approach • Partners of the clients treated
How can antenatal screening for syphilis be operationalized at the PHC level?	• Percent of ANC clients screened for syphilis by FWV(paramedic) • Percent of screened women tested positive by FWV (paramedic) • Percent of screened women confirmed by laboratory test • Percent of positive women referred by FWV (paramedic) for treatment	• All steps of RPR followed by trained FWV (paramedic) • Clients referred for treatment by FWV (paramedic)	• RPR tests done by FWV (paramedic)
How can pharmacies be effective providers of services on STD/HIV/AIDS prevention?	• Percent of trained drug sellers in pharmacies having correct knowledge on STD/HIV/AIDS • Percent of trained drug sellers in pharmacies providing correct information to the clients	• Drug sellers received training on STD/HIV/AIDS	• Knowledge of drug sellers on STD/HIV AIDS • Services by the drug sellers on the prevention of STD/HIV/AIDS

4.5 Description of the interventions

To achieve the objectives the following three interventions are proposed:

(a) Operationalization and assessment of the syndromic approach at the PHC level

(b) Operationalization of antenatal screening for syphilis at the PHC level

(c) Building capacity for pharmacy-based services to prevent STD/HIV/AIDS

4.5a Operationalization and assessment of the syndromic approach at the PHC level

The intervention includes:

- operationalization of the syndromic approach
- assessment of feasibility and validity of the syndromic approach

Operationalization and feasibility assessment of the syndromic approach

The syndromic management of RTI/STD would allows health care providers to make diagnosis by flow charts, without sophisticated laboratory tests. In addition to syndromic diagnosis and treatment, the syndromic approach needs to address drug compliance, counseling for prevention; condom use; and partner notification and treatment.

The syndromic approach will be operationalized at the PHC level of the urban GoB and RSDP NGO ESP intervention sites. Operationalization of the syndromic approach will include:

- diagnosis and treatment of RTI/STD clients using RTI/STD management flow charts developed by the family planning, STD/RTI and HIV/AIDS Task Force of NIPHP
- development of the providers' (medical officers/paramedics) skill through training
- availability of equipment for the examination of clients
- adoption of infection prevention procedures to decontaminate examination tools
- availability of recommended drugs for clients at the clinic
- treatment of partners
- compliance of drugs
- follow up of treatment
- counseling of clients on prevention of RTI/STD using IEC materials
- demonstration for clients on correct use of condom
- referral of clients when required
- supervision and monitoring of the RTI/STD services by the managers

Intervention at the urban GoB site

According to the Government Outdoor Dispensary infrastructure the providers at the dispensary are medical officer and paramedic. All the providers will be trained on the syndromic approach. All steps of the syndromic approach will be followed by the providers using service delivery protocol for management of RTI/STD which has been developed by the family planning, STD/RTI and HIV/AIDS Task Force of NIPHP. They will use sterilized equipment (speculum,

sterilized/disposable gloves, disposable syringes and needles) for the purpose of examination and treatment. They will examine each client and will also provide treatment for the partners of the clients. In the provision of partners' treatment providers will first inform clients on the importance of contact tracing and treatment, and then they will be requested to bring their partners to the dispensary. If referral is not possible, the clients will receive treatment for their partners. All the recommended drugs for the treatment will be supplied at the clinic, and clients and partners will receive full course of medicines. The providers will keep record in a register format which will be used to record information on clients' profile, syndromes, treatment, follow up and partner management. The information will be kept confidential. They will inform clients on the prevention of RTI/STD/HIV/AIDS using BCC materials, and will provide condoms with the demonstration of its correct use. Both male and female providers will provide services and the choice of either provider will be the choice of the clients. If the medical officer is available, only he or she will implement the syndromic diagnosis and treatment, and the paramedic will refer RTI/STD clients to him or her. But in case of male medical officer and female clients or female medical officer and male clients, female and male paramedic will manage the clients respectively depending on the choice of the clients. If the symptoms of a client persist after treatment through the syndromic approach, he/she will be referred as recommended by the protocol **(appendix –1)**. Clients suffering from ciprofloxacin resistant *N. gonorrhoeae* infection will be treated at the clinic with a single IM injection of 250 mg ceftriaxone.

The managers (CS, DDFP) of the dispensary will supervise the services of the providers, drugs recommended by the protocol on supply, decontamination procedure, waste disposal system and necessary logistics on supply.

Intervention at rural NGO site

The RTI/STD services will be provided as an integrated approach with all other services from the static clinic and satellite clinics under the RSDP. The front-line service provider in the RSDP intervention area is the paramedic, who works in a team with clinic aids and community mobilizers. Availability of a doctor in the clinic is not common for all RSDP NGOs. If a doctor is available, he or she acts as a referral point.

At the intervention site, community mobilizers and depot holders will motivate and refer RTI/STD clients to the satellite clinic. The paramedic will provide RTI/STD services to the clients and their partners from both static and satellite clinic. Because of the limited facilities available in some of the satellite clinics, the paramedic in those clinics will provide only those RTI/STD services, which do not need speculum examination according to the standardized service delivery protocol for management of RTI/STD. If the clients need examination, she will be referred to a static clinic or to the satellite clinic where examination facilities are available. If a doctor is available, he or she will be responsible to manage clients referred by paramedics in the static clinic. The male STD clients will always be referred to static clinic where a male provider will manage those clients. Where necessary, the clients will be referred from the static clinic to thana health complex.

The providers will follow the NIPHP developed flowcharts to manage RTI/STD clients and there will be a continuous supply of drugs. Examination and treatment of clients will be always with sterilized equipment (autoclaved / sterilized speculum, sterilized/disposable gloves, disposable

syringes and needles). Clients and their partners will receive the full dose of medicine/s with nominal price. In providing treatment to the partners, providers will inform clients on the importance of contact tracing and treatment, and then they will be requested to bring their partners to the clinic. The community mobilizer will assist in partner notification and will also do the follow up for drug compliance. The doctor, paramedic, community mobilizer and depot holder are also responsible to provide health education on the prevention of RTI/STD using BCC materials. They will also provide condoms to the clients with demonstration on its correct use. All the RTI/STD clients will be treated with due confidentiality and privacy. The providers will keep record on the diagnosis and treatment of clients and reported partners using supplied record keeping form.

Supervision on the providers' services, drugs on supply, infection prevention procedures, the waste disposal system and necessary logistics on supply at both static and satellite clinics by the assigned person who will be selected jointly by the concerned NGO and RSDP. There will be follow up on the activities of the community mobilizers and depot holders.

The functional feasibility of the operationalization of the syndromic approach will be done through process evaluation and qualitative assessment of the implemented operations for the syndromic approach.

Validity assessment of the syndromic management of vaginal discharge:
The validity of the syndromic approach will be assessed in collaboration with the ICDDR,B Laboratory Sciences Division. The intervention will be limited to the assessment of the syndromic approach for vaginal discharge. The validity of flow charts for the symptoms of vaginal discharge is still under assessment. In the research intervention validity of Family Planing, STD/RTI and HIV/AIDS task force of NIPHP developed flowcharts (with and without speculum examination, **(Appendix -1)** for vaginal discharge syndrome will be assessed in selected study sites.

Recruitment of women:
The study will include women attending the clinics with complaints of vaginal discharge. Recruitment will be done by selecting women after registration, in order of arrival at the clinic and before any interview or physical examination. Maximum 10 women will be included in the study per day at each setting. Women will be informed on the purpose of the study and written consent will be obtained from each participant by signing a preprinted consent form **(Appendix -2)**. Illiterate clients will be requested to give fingerprint.

Research methods:
Interview:
Clinical history including the risk assessment, will be conducted by the doctor. **(Appendix -3)**

Therapeutic decision:
After the interview a clinical examination of the external genitals as well as bimanual pelvic examination with speculum will be performed. At each study site the provider will make two therapeutic decisions based on interview and clinical examination to verify the two syndromic approaches. The first therapeutic decision will be taken in the approach without speculum

examination. The second will be taken according to the directives of the approach with speculum examination. Clinical findings will be noted onto a standardized form **(Appendix -4)**.

Syndromic management:
The clients will be managed according to the second therapeutic decision. Treatment of clients will be associated with the treatment of their partners.

Laboratory diagnosis:
Laboratory tests will be performed to diagnose *Chlamydia, gonococcal, T. vaginalis, Candida* infection as well as bacterial vaginosis. The following tests will be performed:

Pathogen	Tests
N. gonorrhoeae	culture (endocervix)
C. trachomatis	ELISA (endocervix)
T. vaginalis	Fresh examination (vaginal discharge)
Yeast	Fresh examination + Gram-staining (vaginal discharge)
Bacterial vaginosis	Gram-staining (vaginal discharge)

Endocervical swabs will be taken for culture and ELISA tests, and high vaginal swab will be taken for fresh examination and Gram-staining. The Nugent criteria will be used for the diagnosis of bacterial vaginosis.[30] Swabs for culture of *N. gonorrhoeae* will be directly plated onto selective media which will be transported to LSD. Swabs for the detection of the *C. trachomatis* antigen will be kept in an appropriate medium and also brought to LSD. Fresh examination and Gram-staining will be done at the sites. Laboratory testing will be free of cost to the clients. Laboratory tests results will be recorded on a special form **(Appendix - 5)**.

Follow-up:
All women will be requested to return to the clinic on the 7th day after the first visit. They will be informed on the test results. If needed, treatment will be modified according to the laboratory findings.

Treatment:
Women with vaginal discharge will receive a syndromic treatment according to the flowcharts developed by family planning, STD/RTI and HIV/AIDS task force of NIPHP.

Ethical issues:

No special diagnostic procedures or any hazardous materials will be used. Treatment of RTI/STD conforms to standardized guidelines.[10] Data obtaining during the study will be strictly confidential. Written consent will be obtained from all women included in the study. Since diagnosis will be

performed according to standard methods and since recommended treatment regimens will be used, women attending the study have no higher risk for adverse reactions than other women. The participants will retain the right to leave the study at any time.

Safety procedures:

Only sterile and disposable needles and syringes will be used. Vaginal specula will be sterilized. All the clinic staff at the study site will be oriented on the universal precautions.

Study design

Operationalization and feasibility assessment of the syndromic management of RTI/STD:

The study will be clinic based and the design will be a time series one. Pre-intervention observation will be done to assess the facilities and the services at the dispensary on RTI/STD diagnosis, treatment, counseling and the partner management. The observation will also include provider client interactions. Following the intervention there will be a number of periodic observations over time to evaluate and assess the feasibility of the implemented operations. Service statistics of the dispensary related to RTI/STD management will be collected along with the observations. The observations and service statistics checklists will be developed in coordination with SR 1.1(ESP) intervention team. The observation checklists will be on services of providers, provider client interactions, drug supply, and infection prevention procedure and waste disposal system. Besides, client exit interviews will be conducted as the part of process evaluation and qualitative assessment of the syndromic approach. The pre-intervention service statistics checklist will include RTI/STD clients flow, diagnosis, treatment, partner treatment and counseling on prevention of RTI/STD. The post-intervention service statistics checklist will be based on the developed register format.

Validity assessment of the syndromic management of vaginal discharge:

The sensitivity, specificity and positive predictive value of the flow charts will be assessed with the laboratory findings as standard of diagnosis. The sensitivity of the flowcharts will be represented by the proportion of infections detected by the syndromic diagnosis using the flowcharts. Specificity is represented by the proportion of uninfected clients who are correctly identified by the flowcharts. The proportion of diagnoses confirmed by laboratory tests results will represent the positive predictive value of the flowcharts.

Sampling

Operationalization and feasibility assessment of the syndromic management

The sample will be purposive and will include clients with complaints of RTI/STD who will be observed at the study sites over a two-year period. Primarily the provider-client interactions will be observed throughout a month at every three months interval over the mentioned time period. The observation plan may be reorganized considering the availability of RTI/STD clients.

Validity assessment of the vaginal discharge flowcharts

The sample size of this study has been calculated using following formula:
$N = \{Z^2 x\ p x (1-p)\} / L^2$

Z score, which is 1.96 for the confidence level 95%
Expected sensitivity of the flowchart: p
Desired precision of this expected proportion: L
Prevalence of the STD in the group to which the flowchart will be applied

The expected sample size = N/ prevalence rate

According to the results of a recently performed clinic-based study (unpublished data), the prevalence rate of gonococcal/chlamydial infection among women expected to be approximately 3%. For validation of the syndromic management of vaginal discharge (70% sensitivity, 10% precision) the minimum number to be included will be 81/.03=2,700 with an estimated study duration of 2 years.

Data Collection

Data will be collected from observations, exit interviews and the service statistics to document qualitative and quantitative information. The data for validity assessment of vaginal discharge will be collected from service statistics and laboratory reports.

Study Sites

Operationalization and feasibility assessment of the syndromic management of RTI/STD:

GoB Urban ESP Clinic: The Sher-e-Bangla Nagar government outdoor dispensary is the proposed intervention site as the urban GoB set-up, which is located in Ward 40 of Zone 6 of Dhaka City Corporation. Due to its location, its catchment area includes part of the adjacent wards of Zone 7 of Dhaka City Cooperation. This particular infrastructure belongs to the Directorate of Health Services. The dispensary is also situated close a Slum. This particular facility was chosen to be transformed into a model Essential Services Clinic as part of an ESP intervention in the urban area under ICDDR,B Operations Research Project.

NGO Rural ESP Clinic: Jatiya Tarun Sangha ESP Clinic in Shibalaya was selected as the rural NGO intervention site jointly with the RSDP. The clinic is situated in Shibalaya.

Validity assessment of the syndromic management of vaginal discharge:

To assess the validity of the syndromic flowcharts of vaginal discharge with and without speculum examination will need a number of study sites to reach the necessary sample size within a reasonable time period. All the study sites (clinic) need flow of RTI/STD clients. The study sites will be confirmed assessing the service statistics regarding RTI/STD of several GoB or NGO service delivery sites.

Intervention Activities

Operationalization and feasibility assessment of the syndromic management of RTI/STD:

1. Development of pre- and post-intervention observation checklists for RTI/STD services of the providers, provider client interaction, drugs on supply, infection prevention procedure and waste disposal system in the clinic
2. Development of checklists for the pre-intervention service statistic of the dispensary
3. Preparation of questionnaire for RTI/STD client exit interview
4. Development of register format to keep record on the RTI/STD clients and their partners
5. Development of post intervention service statistics checklist
6. Preparation of supervision and monitoring checklists for the managers to supervise RTI/STD services, drugs on supply, decontamination procedure and waste disposal system
7. Collection of RTI/STD service statistics of the clinic
8. Pre-intervention observations
9. Collection and selection of IEC materials for counseling on RTI/STD and the service seeking behavior regarding RTI/STD
10. Selection of providers for the intervention and allocation of their job responsibilities
11. Orientation and training of the service providers on the syndromic management and the Intervention
12. Provision of QIP developed standardized protocol to the providers
13. Post-intervention observations
14. RTI/STD client exit interviews
15. Supervisions on RTI/STD services of the providers, drugs on supply, infection prevention procedures and waste disposal system.
16. Analysis and sharing of the study findings with the partners

In addition to the above mentioned activities the following activities will be done for the rural NGO intervention site:

17. Development of pre and post intervention observation checklists to observe the services at both static and satellite clinics, and to observe the activities of the community mobilizers and depot holders.
18. Orientation of the managers, community mobilizers and depot holders on the proposed intervention and on the basic information on RTI/STD

Validity assessment of the syndromic management of vaginal discharge:

Activities to assess validity are:

1. Selection of the study sites
2. Development of consent form for the laboratory investigations
3. Orientation of the providers on the study
4. Sample collection for the laboratory tests
5. Collection and analysis of data

Responsibilities of the Concerned Partners

GoB Urban Area

The implementation of the intervention will be done by the GoB. Thus the GoB will be responsible to ensure necessary logistics and human resources for the intervention and to supervise the ongoing activities. ORP will coordinate and collaborate with the GoB in the implementation of the intervention. All the operations research related activities will be conducted by the ORP. QIP will provide protocols on syndromic management of RTI/STD.

NGO Rural Area

The implementation of the intervention will be done by the Jatiya Tarun Sangha (JTS). They will be responsible for providing necessary logistics for the intervention and supervising the ongoing activities. RSDP will coordinate and collaborate with ORP and the respective NGO (JTS) on this intervention. ORP will coordinate and conduct all operations research related activities. Protocols on syndromic management of RTI/STD will be provided by QIP.

Study area for validity test

ORP will ensure necessary logistics and human resources for the sample collections and tests. The Laboratory Science Division of ICDDR,B will be responsible for conducting all the laboratory tests. Collection and analysis of data will be done by ORP with collaboration of the Laboratory Science Division of ICDDR,B.

For the overall intervention QIP will provide protocols for the syndromic approach, and collection and selection of IEC will be done jointly by QIP and ORP for the purpose of counseling on prevention of RTI/STD.

Data analysis

Operationalization and Feasibility assessment of the syndromic management

The available information from the collected data will be analyzed to see whether the syndromic approach is operationalizable, acceptable and adaptable. Acceptability and adaptability will assessed by qualitative analysis through 'exit interviews' with patients as they leave the clinic; interviews with providers before and after using the syndromic approach; and observations of provider-client interactions before and after the introduction of sydromic approach at the study sites. Quantitative analysis will be done to see whether the syndromic approach is operational at the study sites using following variables.

Independent variables:

- Providers trained on syndromic management of RTI/STD
- Providers trained on counseling regarding prevention and management of RTI/STD
- Availability of necessary equipment
- Availability of necessary drugs
- Availability of privacy

Dependent variables:

- Services (Risk assessment, examination, treatment, counseling, drug compliance i.e., advised to complete full dose medicine, supply of full dose medicine and advise for follow up visit) received by the clients through syndromic approach
- Partners of the clients received treatment

The following cross-tabulation is an example of one of the dummy tables that will be used in the analysis.

Table 1 Activities done by the trained provider to manage observed RTI/STD clients

Services by the trained provider	Client received services through syndromic approach		Total
	Done	Not Done	
Risk assessment			
Examination			
Treatment			
Advice to complete full course of medicine			
Counseling on prevention			
Advice for follow up visit			
Advice for partner treatment			
Total clients observed			
% of clients who has undergone all the above activities			

Syndromic approach is operationalizable if all the mentioned activities in the table are done by the trained provider to manage 80% of the total observed clients. Univariate analysis will be done to see the operationalizability of partner management and counseling. Partner management will be operationalizable if the partners of 50% clients report at the clinic for treatment, and counseling will be operationalizable if all the clients are counseled on drug compliance, partner management, RTI/STD prevention including condom use demonstration in privacy. All the cut off points could be changed through discussion with the program managers of the service delivery sites.

Validity assessment of the syndromic management of vaginal discharge

The collected data will be analyzed to determine sensitivity, specificity and positive predictive value. Following cross-tabulation will be used for this analysis.

Table 2 Sensitivity and specificity of the vaginal discharge syndrome flowchart

	Standard		
	+	-	**Total**
Flowchart +	A (true +)	B (false +)	**A + B**
Flowchart -	C (false -)	D (true -)	**C + D**
Total	A + C	B + D	**A + B + C + D**

The analyzed sensitivity, specificity and positive predictive value of the flow chart will be A/A + C i.e., proportion of infections detected by the flow chart, D/B + D i.e., proportion of patients without infection who are correctly identified by the flowchart, and A/A + B i.e., proportion of diagnosis by flowchart confirmed by laboratory diagnosis respectively.

Expected outcome
Findings and lessons learned from the research will be used to guide the scaling-up of the syndromic approach at the PHC level in the national program.

4.5b Operationalization of antenatal screening for syphilis at the PHC level

The most commonly used serological tests for screening are the RPR test and the Venereal Disease Research Laboratory (VDRL) test. Both the tests are non-specific. Specific tests are the fluorescent treponemal antibody absorption test (FTA-ABS) and *Treponema pallidum* hemagglutination assay (TPHA), which are used as confirmatory tests. For the purpose of routine screening of pregnant women, the use of a qualitative RPR test alone without confirmation with TPHA, is sufficient.

Recruitment of women:

Women attending the selected clinics for antenatal care will be included in the study. All pregnant women, on their first visit to the clinic, will be recruited for the purpose of the study. The recruitment will be done by selecting women who will be registered as pregnant women. Information will be given to the ANC clients on the purpose of the study. The number of women refusing the participation as well as the refusal will be noted. Written consent will be taken from each participant by signing a preprinted consent form (Appendix-6). Illiterate clients will be requested to give finger-print.

Research methods:

Screening for syphilis at the sites:
In the proposed intervention, all pregnant women, on their first visit to the clinic, will be screened for syphilis. RPR will be used for screening. Blood sample will be collected for test with due consent from each client. The paramedic or laboratory technician will do the RPR tests at the sites. At the study sites the venous blood from each ANC client will be collected into a clean dry test tube without an anticoagulant. The samples will be then centrifuged. A pipet will be used to transfer the serum to one circle on the RPR card where two circles will be used for positive and negative control. One drop of antigen will be dispensed on the serum sample. The card will be then rotated by hand for eight minutes. Finally the results will be read under sufficient light using the positive and negative control to compare. The results of the tests will be recorded in the register book of paramedic or laboratory technician. Women will be requested to wait for test results which will be referred to medical officer on the same day.

Reagent for the RPR and the collected sample will be preserved at optimal temperature. Although the RPR kit can stand room temperature, to ensure the quality of the test cooling apparatus for the preservation of these will be available at the service sites.

Treatment:
Women who have reactive RPR test will be referred to the doctor of the clinic by the paramedic for treatment.

Testing at Laboratory Sciences Division laboratory:
The Laboratory Sciences Division of ICDDR,B will perform the RPR test and TPHA for all the positive samples and 10 percent of the negative samples to assess the test result of paramedic. TPHA will be done as the confirmatory test to support the research study.

Ethical issues:

No special diagnostic procedures or any hazardous materials will be used. Treatment of RTI/STD will be according to the technical standard and service delivery protocol.[10] Data obtaining during the study will be strictly confidential. Written consent will be obtained from all women included in the study. Since diagnosis will be performed according to standard laboratory methods and since recommended treatment regimens will be used, women attending the study have no higher risk for adverse reactions than other women. The participants will retain the right to leave the study at any time.

Safety Procedures:

Only sterile and disposable needles and syringes will be used. All the clinic staff at the study site will be oriented on the universal precautions for blood borne infections.

Study Design
It will be a time series clinic based study. The service registers will be the data source for the numbers and results of the syphilis screening. All the positive results and ten percent of the negative results of the RPR tests done by the paramedic will be compared with the RPR tests done at LSD. LSD will also do TPHA to confirm these positive and negative test results. There will be a series of provider client interaction observations, observations on the paramedic's ability to do the RPR test, and exit interviews following the intervention will be done to assess feasibility of the antenatal screening as a component of ANC.

Sampling
The sample size has been calculated considering 3% prevalence rate of syphilis among women attending MCH/FP clinic. Taking 1% precision and 95% confidence interval, the approximate calculated sample size is 1,118 ANC clients. The duration of collection of samples will be 1 year.

Data collection
The required data will be collected from the service statistics, observation checklists, laboratory reports and exit interviews to get quantitative as well as qualitative information to analyze the process of the service.

Study site
GoB and UFHP urban ESP clinics will be the sites for this research intervention. Sher-e-Bangla Nagar GoB outdoor dispensary will be the GoB site and Pragati Samaj Kallayan Prothisthan ESP clinic at Mirpur will the the UFHP site.

Activities

1. Development of observation check lists
2. Development of questionnaire for the exit interviews
3. Orientation of medical officers and FWVs on the intervention
4. Training of FWVs on RPR testing procedure
5. Regular keeping record of RPR tests done by the FWV
6. Supervision on the ANC services
7. Confirmatory testing
8. Observations and exit interviews
9. Data collection and analysis

Responsibilities of the partners

GoB will be responsible for the implementation and supervision of syphilis screening as one of the components of ANC. Necessary logistics regarding laboratory support of the study will be ensured by ORP. A Supervisor will be assigned by ORP at each intervention site who will be responsible to coordinate laboratory support and to bring samples to LSD. All the research related activities will be done jointly by ORP and LSD of ICDDR,B. The responsibilities of UFHP are yet to be decided.

Data analysis

Both quantitative and qualitative analysis will be done on the total screening process. Qualitative analysis will be done to study the acceptability and adaptability of the screening for syphilis by the providers as well as by the clients. The RPR test done by the paramedics will be compared with RPR test done by the laboratory through cross tabulation. Besides, bivariate analysis will be done using following independent and dependent variables to study whether the screening for syphilis is operationalizable at the study sites.

Independent Variables:

- All steps of RPR followed by the trained FWV (paramedic)
- Clients referred for treatment by the trained FWV (paramedic)

Dependent variables:

- RPR tests done by the paramedic

The followings are the examples of some of the dummy tables that will be used to analyze the study findings:

Table 1 Cross tabulation of RPR test done by the paramedic and the laboratory

RPR done by the trained paramedic	RPR done by the laboratory				Total	
	Positive (+)		Negative (-)			
	%	n	%	n	%	n
Positive (+)						
Negative (-)						
Total	100%	N	100%	N	100%	N

Here, the result of RPR tests done by the paramedics will be verified with the result of RPR tests done by the laboratory. The RPR screening will be operationalizable if all the results of the tests done by the paramedics match with the results of the tests done by the laboratory.

Expected outcome
Findings and lessons learned from the research will be used to guide the scaling up of antenatal screening for syphilis at the PHC level.

4.5c Building capacity for pharmacy-based services to prevent STD/HIV/AIDS

As is many other developing countries, pharmacies and drugstores are the resources most readily available to the people with symptoms of sexually transmitted disease. Drug sellers at pharmacies or drugstores who supply drugs for self-treatment need to be well informed on RTI/STD prevention and management to help prevent persistent infection, serious health complications and increased drug resistance.

The proposed intervention is an attempt to build the knowledge of drug sellers on prevention and management of RTI/STD. The SMC had started their activities involving pharmacists/drug sellers since 1989. To date they have trained about 39,000 unqualified medical practitioners including rural medical practitioners and drug sellers of the pharmacies as health providers for FP and ORT/ORS. But special training on STD/HIV/AIDS started in 1996 and to date they have trained about 500 health providers including drug sellers in Narayanganj, Mymensingh, Jamalpur, Benapole and Tejgoan. The rationale of this health provider's training is: many people especially men use drug sellers in pharmacies as the first line provider for any health problem; drug sellers can give time to the clients and clients feel free to talk to them; clients do not want to wait long for medical treatment; and male clients prefer pharmacies more that GoB and NGO facilities because culturally they feel uncomfortable as many women clients are usually present in these facilities which cater almost exclusively to women and young children. The intervention is to see whether drug sellers in the pharmacies can provide necessary STD/HIV/AIDS prevention services to the clients. The services will include provision of information on STD/HIV/AIDS, and on condoms as one of the preventive measures to prevent STD/HIV/AIDS; treating STD clients with recommended drugs if clients need treatment from them or to refer clients to get treatment from other sources; giving emphasis on the completion of the medicine course; and treating partners or counseling on partner treatment.

In the intervention about 150 pharmacies in Tongi municipality area enlisted by SMC will be includes. Drug sellers of these pharmacies will be trained by SMC on the prevention of STD/HIV/AIDS and the effectiveness of the training then will be assessed.

Study design
The study will be a pretest and posttest design. Necessary data collection will be done through pre- and post-intervention surveys of the pharmacies with observation checklist and self-administered questionnaire with due consent from the participants **(Appendix-7)**. Each and every pharmacist/drug sellers who will participate in the training will be interviewed to collect qualitative information on the pharmacy and their profession. A number of randomly selected pharmacies will be surveyed by 'mystery shoppers' before and after the intervention. The effectiveness of the training will be assessed by pretest-posttest and also through a follow up survey on the selected pharmacies six months after the training.

Sampling
All the drug sellers of the enlisted pharmacies for SMC training program on STD/HIV/AIDS will undergo pre- and post test. Mystery shopping will be done only in the pharmacies selected randomly from the list supplied by SMC. Pre- and post intervention mystery shopping will be on randomly selected separate sample groups. Post intervention survey will be done on the randomly selected pharmacies six months after the training.

Data collection
Data will be collected by baseline and post intervention survey on the drug sellers from the enlisted pharmacies participating in the training. Data will also be collected from pre- and post test (training) results and the findings from mystery shopping.

Study sites
The study site is Tongi, Gazipur which has been selected jointly by ORP and SMC as the intervention site.

Activities
1. Listing of pharmacies or drugs stores
2. Baseline survey
3. Collection and selection of IEC materials for the participants of the training
4. Training on STD/HIV/AIDS of drug sellers
5. Pre- and post- test for the participants of the training
6. Mystery shopping in the randomly selected pharmacies
7. Post intervention survey on randomly selected pharmacies
8. Analysis of the study

Responsibilities of the partners
Social Marketing Company (SMC) will coordinate all the activities related to training. ORP will conduct all the research activities. Collection and selection of IEC will be done jointly by ORP, SMC and BCCP.

Data analysis
Bivariate and multivariate relationships will be analyzed considering the following independent and dependent variables.

Independent Variable:
- SMC training of drug sellers on STD/HIV/AIDS

Dependent Variables:
- Knowledge on STD/HIV/AIDS
- STD/HIV/AIDS prevention services (Health education; management i.e., history taking, treatment, drug compliance i.e, advised clients for the completion of the medicine and follow up visit; Counseled clients for the treatment of the partner/s and prevention of STD/HIV/AIDS)

Table 1 Effect of training on pharmacy based RTI/STD services

Pharmacy based RTI/STD services	SMC Training of the drug sellers					
	Before the training			After the training		
	Yes	No	Total	Yes	No	Total
History taken						
Treatment provided						
Drug compliance						
Clients counseled for STD/AIDS prevention						
Clients counseled for STD/AIDS prevention						
Total						

Table 2 Effect of training on the knowledge of the drug sellers on STD/HIV/AIDS

Knowledge on STD/HIV/AIDS	SMC Training of the drug sellers				
	Before the training	After the training			
	%	n_1	%	n_2	
What is STD/AIDS?					
STD/AIDS transmission					
STD/AIDS prevention					

n = number of drug sellers who have knowledge before the training

n_1 = number of drug sellers who have knowledge immediately after the training

n_2 = number of drug sellers who have knowledge six months after the training

Expected Outcomes

Findings and lessons learned from the study will be used to guide the scaling up of the development of an improved training methodology to increase involvement of pharmacies/drug sellers as providers of STD/HIV/AIDS prevention services.

5. ORP INTERVENTION TEAM AND COUNTERPARTS

Intervention Team:

ORP, ICDDR,B
Mohsin Uddin Ahmed
Saifur Rahman
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Barkat-e-Khuda

LSD, ICDDR,B
Josef Bogaerts*

NIPHP partners:

GoB
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Deputy Civil Surgeon (DCS), Dhaka
Deputy Director Family Planning (DD-FP), Dhaka
Assistance Director Clinical Contraceptives (AD-CC), Dhaka
Line Director, ESP
Programme Manager, STD/AIDS

RSDP
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6. GANTT CHART FOR PROPOSED INTERVENTIONS ON STRATEGIES TO IMPROVE RTI/STD PREVENTION AND MANAGEMENT

Sl. #	Activities	1998				1999				2000				Person/ Organization Responsible
		Quarter				Quarter				Quarter				
		1	2	3	4	1	2	3	4	1	2	3	4	
A.1	Operationalization of the syndromic approach at urban ESP GoB ESP clinic													L - Lead C - Collaborator
	Development of pre-intervention observation checklists, questionnaire for interviews and service statistics													ORP
	Pre-intervention observations													
	Collection of pre-intervention service statistics of the dispensary													
	Orientation of the providers on the intervention													CS, DDFP, PM, ORP
	Improvement of GoD facilities													L - CS, DDFP, In-charge C - ORP
	Allocation of job responsibilities of the providers													L - CS, DDFP C - ORP
	Ensure supply (drugs and equipment)													GoB
	Development of register format													L - ORP C - GoB, ORP
	Development of post-observation checklist, questionnaire for exit interview, service statistics checklist, supervision checklist, and monitoring checklist													ORP
	Collection and selection of IEC													L - ORP C - GoB, QIP
	Training of the service providers on syndromic management													L - QIP, ORP C - GoB
	Provision of family planning, STD/RTI and HIV/AIDS taskforce of NIPHP developed standardized service delivery protocol for management of RTI/STD													QIP

Sl. #	Activities	1998				1999				2000				Person/ Organization Responsible
		Quarter				Quarter				Quarter				
		1	2	3	4	1	2	3	4	1	2	3	4	
	Initiation of RTI/STD service delivery													L - GoB C - ORP
	Supervision on RTI/STD services													L - CS, DDFP
	Monitoring, observations and exit interviews													L - ORP C - GoB, QIP
	Collection of service statistics													ORP
	Analysis and sharing of the study findings with the partners													ORP
A.2	Operationalization of Syndromic Approach at Rural NGO ESP Clinic													
	Development of pre-intervention observation and service statistic checklists, and questionnaire for interviews													ORP
	Pre-intervention observations													
	Collection of pre-intervention service statistics of the dispensary													
	Orientation of the providers on the intervention													L - RSDP, JTS C - ORP
	Improvement of clinic facilities													JTS, RSDP
	Allocation of job responsibilities of the providers													L - JTS, RSDP C - ORP
	Ensure supply (drugs and equipment)													JTS, RSDP
	Development of register format													L - ORP C - JTS, RSDP
	Development of post-observation checklist, questionnaire for exit interview, service statistics checklist, supervision checklist, monitoring checklist													L - ORP C - JTS, RSDP, QIP
	Collection and selection of IEC													JTS, RSDP, ORP
	Training of the service providers on syndromic management													L - QIP C - RSDP, ORP

Sl. #	Activities	1998				1999				2000				Person/ Organization Responsible
		Quarter				Quarter				Quarter				
		1	2	3	4	1	2	3	4	1	2	3	4	
	Provision of family planning, STD/RTI and HIV/AIDS taskforce of NIPHP developed standardized protocol													QIP
	Initiation of RTI/STD service delivery													L - JTS C - RSDP, ORP
	Supervision on RTI/STD services													ORP
	Monitoring, observations and exit interviews													L – ORP, C - JTS, RSDP
	Collection of service statistics													ORP
	Analysis and sharing of the study findings with the partners													ORP
A.3	Activities to assess the validity of the syndromic management flowcharts													
	Selection of the study site													L - ORP C - LSD
	Development of consent form for the laboratory investigations													
	Orientation of the providers on the study													ORP
	Collection of samples													LSD
	Collection of data													ORP
	Analysis of data and sharing of study findings with partners													ORP, LSD
B.	Antenatal Screening for syphilis at PHC level													
	Development of pre and post observation checklist													ORP
	Development of questionnaire for the exit interviews													ORP
	Pre-intervention observation													ORP
	Orientation and training of medical officers and FWVs on the intervention													L – ORP C - LSD
	Regular record-keeping of RPR tests done by FWV													LSD
	Supervision on ANC services													DDFP
	Sample collection for confirmatory testing													LSD

Sl. #	Activities	1998				1999				2000				Person/ Organization Responsible
		Quarter				Quarter				Quarter				
		1	2	3	4	1	2	3	4	1	2	3	4	
	Post intervention observation and exit interviews													ORP
	Data collection and analysis													ORP, LSD
	Sharing of study findings with partners													ORP
C.	Building Capacity for pharmacy based services to prevent STD/HIV/AIDS													L – Lead C - Collaborator
	Listing of owners and drug sellers of the pharmacies or drug stores													SMC
	Baseline survey													ORP
	Collection and selection of IEC materials for the participants of the training													ORP, SMC, QIP
	Training on RTI/STD/HIV/AIDS of the owners and the drug sellers													L - SMC C - ORP
	Mystery shopping													ORP
	Post intervention survey													
	Analysis of the study													
	Sharing the study findings													

GoB = Government of Bangladesh
CS = Civil Surgeon
DDFP = Deputy Director, Family Planning
GoD = Government Outdoor Dispensary
ORP = Operations Research Project, ICDDR,B
LSD = Laboratory Science Division, ICDDR,B
RSDP = Rural Service Delivery Partnership
QIP = Quality Improvement Partnership
SMC = Social Marketing Company
JTS = Jatiya Tarun Sangha, RSDP NGO

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Appendices

Appendix - 1	Technical standard and service delivery: vaginal discharge (flow charts)
Appendix - 2	Consent form (Validity assessment of the syndromic management for vaginal discharge)
Appendix - 3	History taking (general and sexual): draft
Appendix - 4	Clinical examination record form: draft
Appendix - 5	Laboratory diagnosis record form: draft
Appendix - 6	Consent form (Assessment of antenatal screening for syphilis)
Appendix - 7	Voluntary consent form (Building capacity for pharmacy based services to prevent STD/HIV/AIDS)
Appendix - 8	Questionnaires (Feasibility assessment of the syndromic approach and building capacity of the pharmacy based services to prevent STD/HIV/AIDS)
Appendix - 9	Budget for the laboratory component of the protocol
Appendix - 10	Proposal review

Vaginal Discharge

Vaginal Discharge

Vaginal discharge is the most common gynecological complaint of women in Bangladesh.

A healthy normal woman may have a variable amount of clear and white discharge from her vagina. The discharge usually increases and becomes more watery when a woman is in the middle of her menstrual cycle. It also increases when she is taking oral contraceptive pills (OCP) and when she has an IUD in place.

Vaginal Discharge is considered to be pathological when there is a change in the quantity, consistency, color or smell of the discharge. Pathological discharge may lead to unusual signs and symptoms like, irritation & itching in the genital area; external or internal burning when passing urine; intermenstrual bleeding; pain on intercourse (dyspareunia).

Causes of Vaginal Discharge

Main causes of vaginal discharge are:

- Infections of the vagina (Vaginitis) e.g. Candidiais, Trichomoniasis and Bacterial Vaginosis.
- Infections of the cervix (Cervicitis) e.g. mucopurulent cervicitis by Gonorrhea and/or Chlamydia.
- Simultaneous vaginal and cervical infections.

The most probable cause of a woman complaining of vaginal discharge is Vaginitis. Cervicitis is a less frequent cause of vaginal discharge, but the complications of untreated Cervicitis are much more serious.

Not all infections of the female reproductive tract are transmitted through sexual intercourse. In fact, the most common infections i.e. Candidiasis and Bacterial Vaginosis are not sexually transmitted.

Signs and Symptoms of the Syndrome

- Vaginal discharge
- Can be associated with vaginal irritation, itching and soreness.
- If speculum examination is possible, origin and nature of the discharge should be detected;
  - ➪ Cervicitis is diagnosed if there is endocervical discharge or friability of cervix (bleeds easily on gentle touch or swab) or positive risk assessment.

- ⇨ In Trichomoniasis and Bacterial Vaginosis profuse, watery, foul-smelling and frothy vaginal discharge is seen.
- ⇨ Candidiasis is diagnosed if curd-like vaginal discharge is found.

- When associated with lower abdominal pain it is suggestive of pelvic inflammatory disease (PID) and the related flowchart is to be followed.

In the absence of advanced laboratory tests, it is not possible to make a reliable distinction between Gonococcal and Chlamydial cervicitis because :

- Coexistence of Gonococcal and Chlamydial infections are common and signs/symptoms overlap.
- Cervical infections are frequently asymptomatic.

RTI/STD Risk Assessment

Risk assessment has been incorporated in the flowcharts as part of diagnostic criteria for symptomatic women to increase their sensitivity to diagnose Cervicitis.

Risk assessment is considered positive if at least one of the following statements is true:

- Her partner has symptoms or was recently treated for a RTI/STD
- She is a sex worker
- She has/had more than one sexual partner or a new sexual partner in the past three months

Complications

Vaginal discharge facilitates acquisition and transmission of HIV infection. Moreover, if left untreated Gonococcal and Chlamydial cervicitis can lead to serious consequences like :

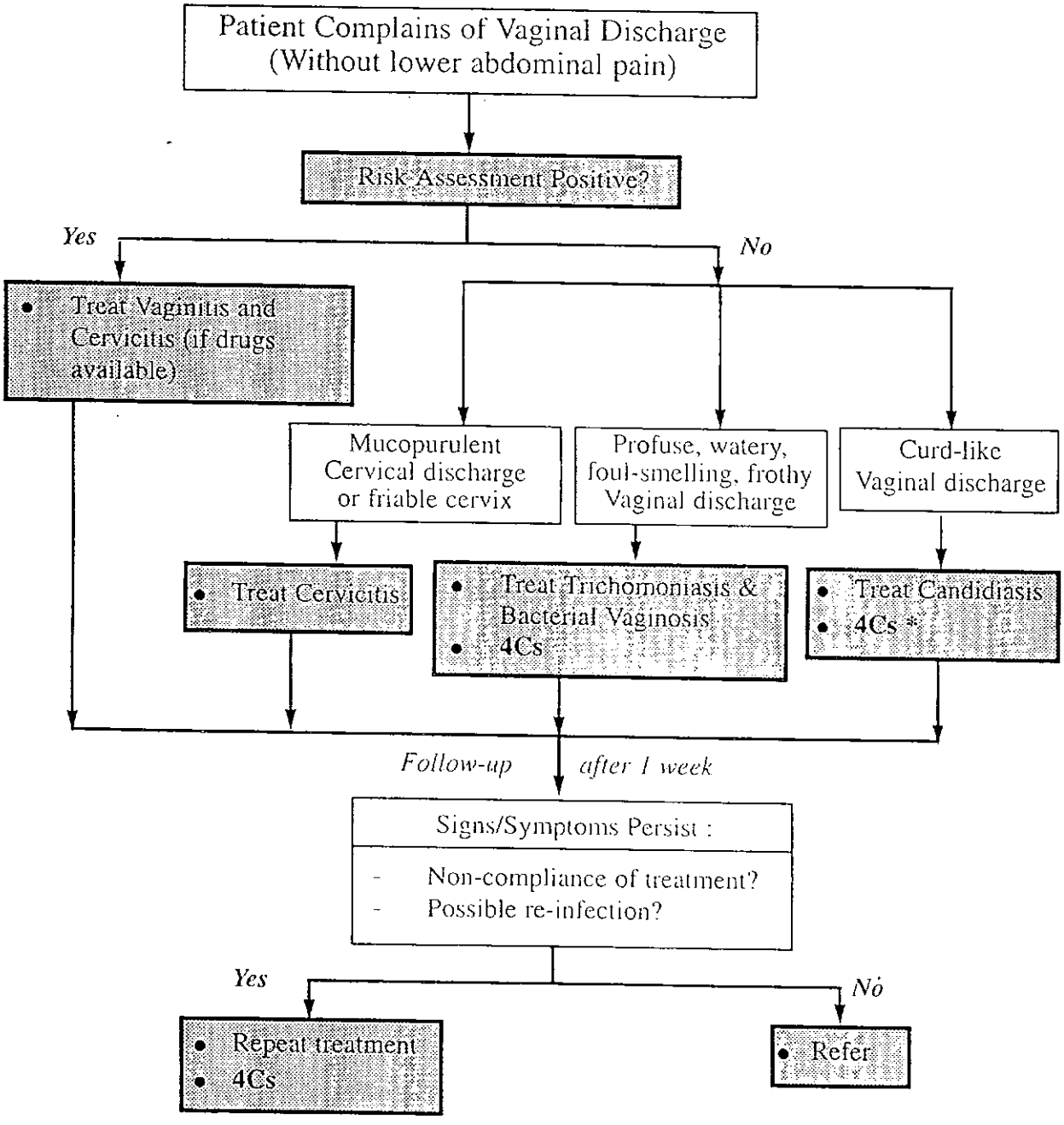
- pelvic inflammatory disease (PID in 10-20% of untreated cases)
- infertility
- ectopic pregnancy
- neonatal infections (Ophthalmia Neonatorum, Pneumonitis)

Recommendation All women with a vaginal discharge having positive risk assessment or diagnosed as Cervicitis should be treated for BOTH Gonococcal and Chlamydial infections.

Referral If Vaginal Discharge persists even after 1 week of treatment for appropriate duration using proper antibiotic and adherence to 4Cs, refer the patient to appropriate facility/individual/established next level referral center.

Vaginal Discharge

(If Speculum Examination is possible)



* ***Partner notification not required***

Note : *Most of the women with Vaginal Discharge in Bangladesh will be treated for Vaginitis only*

Management of Vaginal Discharge Syndrome

(If Speculum Examination is possible)

Medical Strategies to confirm the Syndrome

To confirm the syndrome gaginal discheage do the followings;

Take History :

- History and nature of vaginal discharge (physiological or pathological).
- Pregnancy history.
- Present contraceptive use.

Assess Risk Possibility :
As before.

Do Physical Examination:

- Use a speculum to inspect and examine vagina and cervix to;
  - ➢ note type, color, odor, amount and origin of discharge,
  - ➢ condition of the cervix (friable or not),
  - ➢ look for IUD thread (where applicable).
- Check for other RTI/STD

Use flow chart :
Use the same flowchart if vaginal discharge is detected during other services, e.g., IUD, etc.

Treatment of Vaginal Discharge Syndrome: *(With Speculum Examination)*

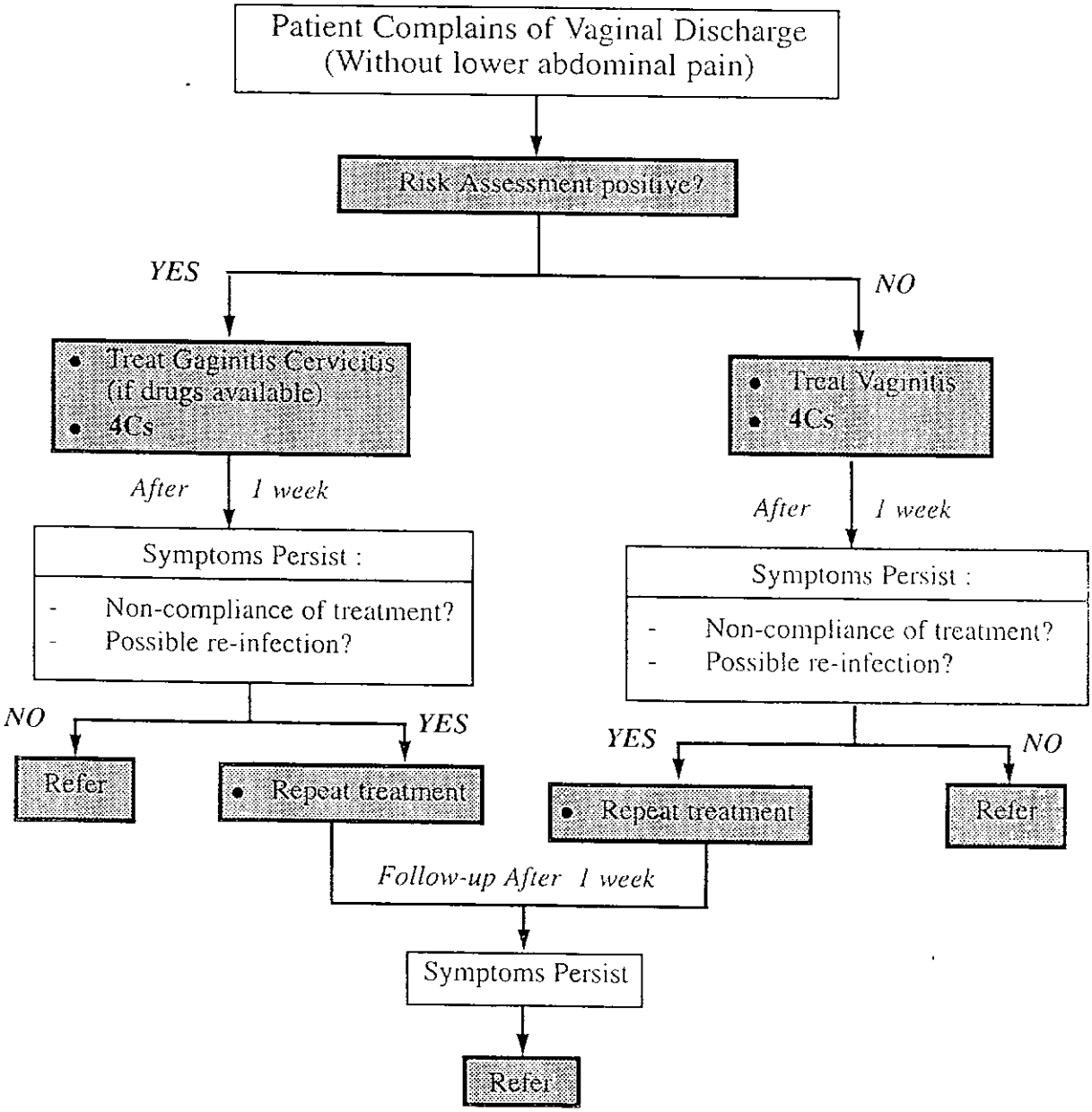
Cervicitis	Trichomoniasis & B. Vaginosis	Candiadisis
1. **Tab Ciprofloxacin** 500 mg, orally as a single dose* or **Inj Ceftriaxone** 250 mg, IM as a single dose *PLUS* 2. **Cap Doxycycline** 100 mg, orally 12 hrly x 7 days* or **Cap Tetracycline** 500 mg, orally 6 hrly x 7 days* or **Tab Erythromycin** 500 mg, orally 6 hrly x 7 days	**Tab Metronidazole** 2, gm orally as a single dose **or** 400 mg, 2 times daily x 7 days **or** **Tab Secnidazole** 2 gm, orally as a single dose **(not to be given in 1st trimester of pregnancy)**	Tab Clotrimazole or **Miconazole** 150 mg, intravaginally for 3 days **or** **Cap Fluconazole** 150 mg, orally as a single dose *
	If mixed infection is detected provide combined treatment.	

* *Should not be prescribed during pregnancy or lactation.*

- If possible, single dose treatment should be given/taken from the clinic.
- Persistence of Vaginal Discharge may be due to resistance to drugs, non-compliance of treatment or possible re-infection. .
- Partner notification card: Give card for partner(s) management with diagnostic code VD , only in case of Cervicitis for treating partner for Urethritis.

Vaginal Discharge

(If Speculum Examination is not possible)



Note : Most of the women with Vaginal Discharge in Bangladesh will be treated for Vaginitis ***only***

Management of Vaginal Discharge Syndrome

(If Speculum Examination is not possible)

Medical Strategies to Confirm the Syndrome

To confirm the syndrome do the following:

Take History:

- History and nature of vaginal discharge (physiological or pathological)
- Pregnancy history
- Present contraceptive use

Assess Risk Possibility :

As before (see page ******).

Do Physical Examination:

- If possible check for other RTI/STD

Treatment of Vaginal Discharge Syndrome: (Without Speculum Examination)

Cervicitis	Vaginitis
1. **Tab Ciprofloxacin** 500 mg, orally as a single dose * *or* **Inj Ceftriaxone** 250 mg, IM as a single dose *PLUS* 2. **Cap Doxycycline** 100 mg, orally 12 hrly x 7 days * *or* **Cap Tetracycline** 500 mg, orally 6 hrly x 7days* *or* **Tab Erythromycin** 500 mg, orally 6 hrly x 7 days	1. **Tab Metronidazole** 2 gm, orally as a single dose *or* 400 mg, 2 times daily x 7 days *or* **Tab. Secnidazole** 2 gm, orally as a single dose **(not to be given in 1st trimester of pregnancy)** *PLUS* 2. **Tab Clotrimazole or Miconazole** 150 mg, intravaginally for 3 days *or* **Cap Fluconazole** 150 mg, orally as a single dose*

* *Should not be prescribed during pregnancy or lactation.*

- If possible, single dose treatment should be given/taken from the clinic.
- Persistence of Vaginal Discharge may be due to resistance to drugs, non-compliance of treatment or possible re-infection.
- Partner notification card: Give card for partner(s) management with diagnostic code VD only in case of Cervicitis to be treated for Urethritis.

Vaginal Discharge (যোনিপথে স্রাব)

Vaginal discharge বা যোনিপথে স্রাব বাংলাদেশে মহিলাদের অত্যন্ত পরিচিত একটি সমস্যা।

সুস্থ অবস্থায় একজন মহিলার কিছু পরিষ্কার সাদা স্রাব হওয়া স্বাভাবিক। সাধারণতঃ মাসিকের মাঝামাঝি সময় স্রাব জলীয় (Watery) হয় এবং পরিমাণে বৃদ্ধি পায়। এছাড়া খাবার বড়ি বা আই ইউ ডি ব্যবহার করলে স্রাব বেশী পরিমাণে যায়।

যোনিপথে সংক্রমণ হলে স্রাবের পরিমাণ, ঘনত্ব, রং এবং গন্ধে পরিবর্তন ঘটে। এছাড়া যোনিপথের সংক্রমণে স্রাবের পাশাপাশি অন্যান্য লক্ষণ ও চিহ্ন যেমন, অস্বস্তি, যৌনাঙ্গে চুলকানি, প্রস্রাবে জ্বালাপোড়া, মাসিকের মধ্যবর্তী সময়ে রক্তস্রাব এবং সহবাসে ব্যাথা থাকতে পারে।

যোনিপথে স্রাবের কারণ

যোনিপথে স্রাবের প্রধান কারণসমূহ হলো ঃ

- যোনিপথে সংক্রমণ যেমনঃ ক্যানডিডিয়াসিস, ট্রাইকোমোনিয়াসিস এবং ব্যাকটেরিয়াল ভ্যাজাইনোসিস।
- জরায়ুমুখে সংক্রমণ (cervicitis) যেমনঃ গনোরিয়া এবং/অথবা ক্লামাইডিয়া।
- যোনিপথ ও জরায়ুমুখের মিশ্র সংক্রমণ।

মহিলাদের যোনিপথে স্রাবের সবচেয়ে পরিচিত কারণ হলো যোনিপথে সংক্রমণ (Vaginitis)। জরায়ুমুখে সংক্রমণ (Cervicitis) তুলনামূলক ভাবে যদিও কম হয় কিন্তু Cervicitis এর চিকিৎসা না করালে পরবর্তীতে জটিলতা দেখা দিতে পারে।

মহিলাদের সব ধরণের প্রজননতন্ত্রের সংক্রমণ যৌন সম্পর্কের কারণে হয় না। যেমন, ক্যানডিডিয়াসিস ও ব্যাকটেরিয়াল ভ্যাজাইনোসিস যৌনবাহিত নয়।

সিনড্রোমের লক্ষণ ও চিহ্ন ঃ

- যোনিপথে স্রাব
- সংগে জ্বালাপোড়া ও চুলকানি থাকতে পারে
- স্পেকুলাম পরীক্ষার সুবিধা থাকলে, স্রাবের উৎস ও ধরণ নির্ণয় করা যায়।
  যদি স্রাবের উৎস জরায়ুমুখ হয়, হালকা স্পর্শে অথবা Swab লাগানোর পর জরায়ুমুখ থেকে সহজে রক্তক্ষরণ হয়, অথবা ঝুঁকি নিরূপণে রোগী ঝুঁকিপূর্ণ বলে চিহ্নিত হয়, তাহলে Cervicitis এর চিকিৎসা দিতে হবে।
  - ট্রাইকোমোনিয়াসিস এবং ব্যাকটেরিয়াল ভ্যাজাইনোসিস দ্বারা সংক্রমিত হলে প্রচুর জলীয় ফেনা ফেনা ও দুর্গন্ধযুক্ত স্রাব হয়
  - ক্যানডিডিয়াসিস দ্বারা সংক্রমণ হলে স্রাব সাদা দইয়ের মত স্রাব হয়।
  - স্রাবের পাশাপাশি তলপেটে ব্যথা থাকলে, তলপেটে ব্যথার ফ্লো-চার্ট ব্যবহার করে ব্যবস্থাপনা দিতে হবে।

গনোরিয়া অথবা ক্লামাইডিয়ার সংক্রমণের কারণে Cervicitis হয়েছে কিনা ল্যাবরেটরী পরীক্ষা না করে নির্দিষ্ট করে বলা যায় না, কারণ ঃ

- প্রায়ই গনোরিয়া ও ক্ল্যামাইডিয়ার মিশ্র সংক্রমণ থাকে এবং রোগের লক্ষণ ও চিহ্ন আলাদা করা যায় না।
- জরায়ুমুখে সংক্রমণ (cervicitis) হলে প্রায়ই কোন লক্ষণ থাকে না।

যৌনবাহিত সংক্রমণের ঝুঁকি নিরূপণ ঃ

ফ্লো-চার্টে রোগ নির্ণয়ের জন্য ঝুঁকি নিরূপণ প্রশ্নমালা অন্তর্ভুক্ত করা হয়েছে, বিশেষ করে লক্ষণবিহীন মহিলাদের ঝুঁকি নিরূপণ করে রোগ নির্ণয় করা গুরুত্বপূর্ণ।

নীচের যে কোন একটি প্রশ্নের উত্তর হ্যাঁ হলে রোগী ঝুঁকিপূর্ণ ঃ

- সঙ্গীর লক্ষণ আছে অথবা সম্প্রতি যৌনবাহিত রোগের চিকিৎসা করা হয়েছে।
- রোগী একজন যৌনকর্মী।
- রোগীর এক বা একাধিক যৌনসঙ্গী আছে অথবা গত ৩ মাসের মধ্যে নতুন কোন যৌনসঙ্গী হয়েছে।

জটিলতা ঃ

যোনিপথে স্রাব জনিত সমস্যা থাকলে HIV সংক্রমণের ঝুঁকি বেড়ে যায়। বিশেষ করে গণোরিয়া ও ক্ল্যামাইডিয়ার (Cervicitis) চিকিৎসা না করলে বিভিন্ন জটিলতা দেখা দিতে পারে ঃ

- তলপেটে সংক্রমণ বা PID (চিকিৎসা না করলে শতকরা ১০ - ২০ ভাগ ক্ষেত্রে PID হতে পারে।)
- বন্ধ্যাত্ব
- জরায়ুর বাইরে গর্ভধারণ
- নবজাতকের চোখে সংক্রমণ এবং নিউমোনিয়া

পরামর্শ ঃ

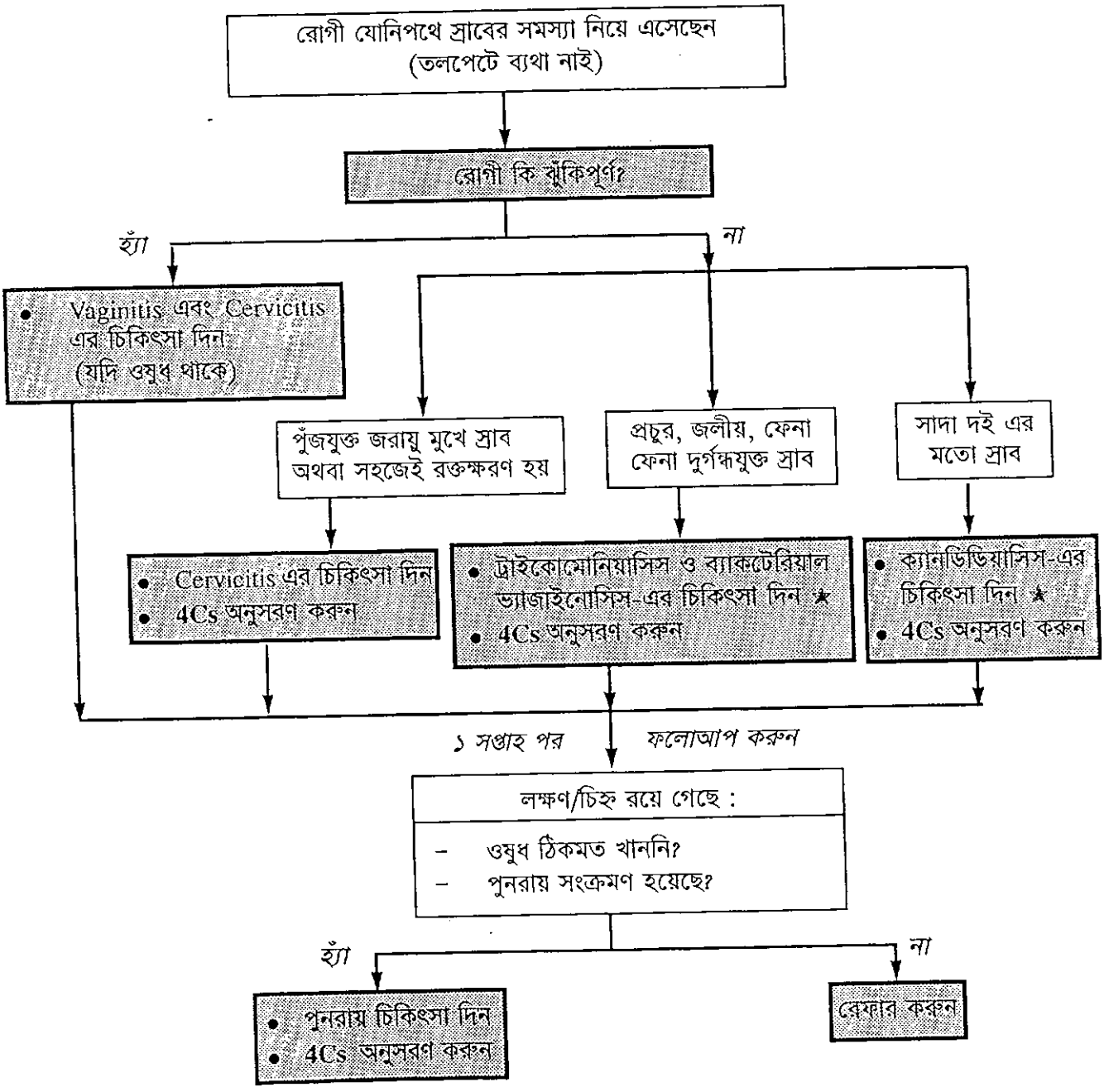
কোন রোগী যোনিপথে স্রাবের সমস্যা নিয়ে ক্লিনিকে আসার পর, ঝুঁকি নিরূপণে রোগী ঝুঁকিপূর্ণ বলে চিহ্নিত হলে গণোরিয়া, ক্ল্যামাইডিয়া (Cervicitis)-এর চিকিৎসা একসাথে দিতে হবে।

রেফার ঃ

এক সপ্তাহ এন্টিবায়োটিক ও 4Cs অনুসরণ করা সত্ত্বেও লক্ষণ রয়ে গেলে রোগীকে উচ্চতর / যথাযথ পর্যায়ে রেফার করতে হবে।

Vaginal Discharge (যোনিপথে স্রাব)

(স্পেকুলাম পরীক্ষার সুবিধা আছে)



★ *সঙ্গীর চিকিৎসার দরকার নাই*

বিঃ দ্রঃ বাংলাদেশে অধিকাংশ মহিলাদের শুধুমাত্র Vaginitis এর চিকিৎসার প্রয়োজন হয়।

যোনিপথে স্রাব (Vaginal Discharge) সিনড্রোমের ব্যবস্থাপনা

(স্পেকুলাম পরীক্ষার সুবিধাসহ)

সিনড্রোম নিশ্চিত হবার জন্য নিম্নোক্ত ব্যবস্থা গ্রহণ করুন ঃ

ইতিহাস গ্রহণ ঃ

- স্রাবের বর্ণ ও ধরণ (স্বাভাবিক অথবা অস্বাভাবিক)
- গর্ভ সম্পর্কিত ইতিহাস
- বর্তমানে পরিবার পরিকল্পনা পদ্ধতি ব্যবহার।

ঝুঁকি নিরূপণঃ পূর্বের মত

শারীরিক পরীক্ষা ঃ

- স্পেকুলাম দিয়ে যোনিপথ ও জরায়ুমুখ পরীক্ষা করুন ঃ
  - ➢ স্রাবের উৎস, রং, গন্ধ, পরিমাণ ও ধরণ দেখুন
  - ➢ জরায়ু মুখে সহজে রক্তক্ষরণ হয় কিনা (ভঙ্গুর/ friable কিনা)
  - ➢ সম্ভাব্য ক্ষেত্রে আই ইউ ডি-র সূতা দেখুন
- প্রজননতন্ত্র/যৌনবাহিত সংক্রমণের অন্যান্য লক্ষণ/চিহ্ন পরীক্ষা করুন।

অন্যান্য সেবা যেমন আই ইউ ডি প্রয়োগের সময় রোগীর যোনিপথে স্রাব চিহ্নিত করলে এই ফ্লো-চার্ট অনুসরণ করে চিকিৎসা দিন।

যোনিপথে স্রাবের চিকিৎসা [স্পেকুলাম পরীক্ষাসহ]

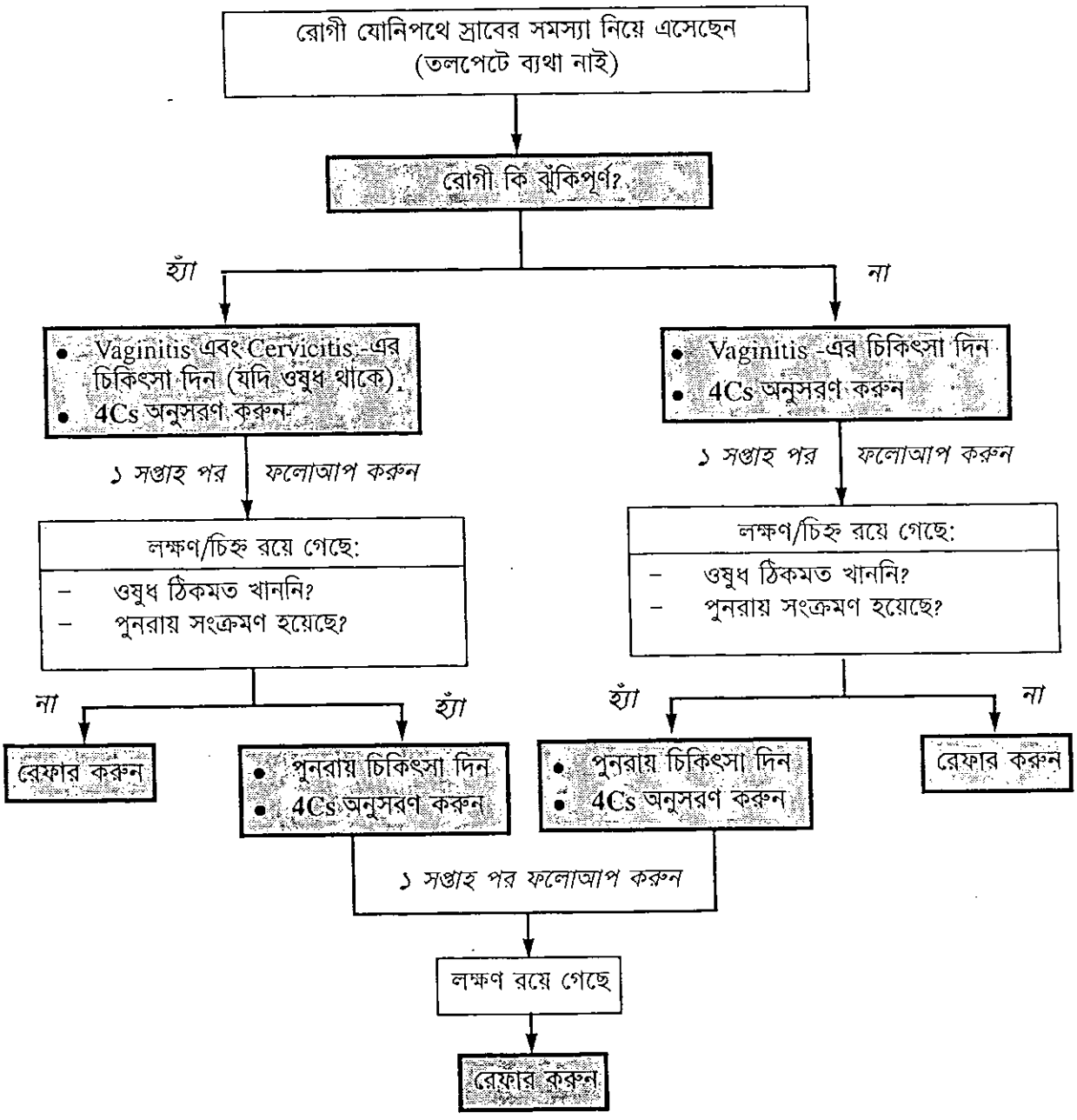
Cervicitis	Trichomoniasis এবং Bacterial vaginosis	Candidiasis
1. **Tab Ciprofloxacin** 500 mg মুখে একমাত্রা * অথবা **Inj Ceftriaxone** : 250 mg মাংশপেশীতে একমাত্রা এবং 2. **Cap Doxycycline:** 100 mg ১২ ঘন্টা অন্তর × ৭ দিন* অথবা **Cap Tetracycline** 500 mg মুখে ৬ ঘন্টা অন্তর × ৭ দিন * অথবা **Tab Erythromycin** 500 mg ৬ ঘন্টা অন্তর × ৭ দিন	**Tab Metroniazole:** 2 gm মুখে একমাত্রা অথবা 400 mg ২ বার × ৭ দিন । অথবা **Tab Secnidazole** 2 gm মুখে একমাত্রা। (গর্ভের প্রথম ৩ মাসে দেয়া যাবে না।)	**Clotrimazole** অথবা **Miconazole Vaginal Tab:** 150 mg যোনিপথে ১ বার × ৩ দিন অথবা **Cap Fluconazole :** 150 mg মুখে একমাত্রা।*
	মিশ্র সংক্রমণ রয়েছে মনে হলে একাধিক সংক্রমণের চিকিৎসা একসাথে দিন	

* গর্ভাবস্থায় ও স্তনদানকালে দেয়া যাবে না।

- *সম্ভব হলে ক্লিনিকে একমাত্রার ওষুধ খাইয়ে দিন।*
- *এন্টিবায়োটিকে প্রতিরোধ (Resistance to antibiotics), পুনরায় সংক্রমণ, বা সঠিক নিয়মে ওষুধ না খাওয়ার কারণে vaginal discharge দীর্ঘস্থায়ী হতে পারে।*
- *রোগীর Cervicitis বা জরায়ুমুখে সংক্রমণ থাকলে সঙ্গীর Urethritis চিকিৎসার জন্য 'VD' চিহ্নিত কার্ড দিন।*

Vaginal Discharge (যোনিপথে স্রাব)

(স্পেকুলাম পরীক্ষার সুবিধা নাই)



৫৭

বিঃ দ্রঃ বাংলাদেশে অধিকাংশ মহিলাদের শুধুমাত্র Vaginitis এর চিকিৎসার প্রয়োজন হয়।

যোনিপথে স্রাব সিনড্রোমের ব্যবস্থাপনা

(স্পেকুলাম পরীক্ষার সুবিধা নাই)

সিনড্রোম **confirm** করার জন্য নিম্নোক্ত ব্যবস্থা গ্রহণ করুনঃ

ইতিহাস গ্রহণ ঃ

- স্রাবের বর্ণ ও ধরণ (স্বাভাবিক অথবা অস্বাভাবিক)
- গর্ভ সম্পর্কিত ইতিহাস
- বর্তমানে পরিবার পরিকল্পনা পদ্ধতির ব্যবহার

ঝুঁকি নিরূপণঃ পূর্বের মত (৫৬ পৃষ্ঠা দেখুন)

শারীরিক পরীক্ষা ঃ

- প্রজননতন্ত্র/যৌনবাহিত সংক্রমণের অন্যান্য লক্ষণ/চিহ্ন পরীক্ষা করুন

যোনিপথে স্রাবের চিকিৎসা [স্পেকুলাম পরীক্ষা ছাড়া]

Cervicitis	Vaginitis
১। **Tab Ciprofloxacin** 500 mg মুখে একমাত্রা * অথবা **Inj. Ceftriaxone** 250 mg মাংশপেশীতে একমাত্রা এবং ২। **Cap Doxycycline** 100 mg মুখে ১২ ঘন্টা অন্তর × ৭ দিন* অথবা **Cap Tetracycline** 500 mg মুখে ৬ ঘন্টা অন্তর × ৭ দিন* অথবা **Tab Erythromycin** 500 mg মুখে ৬ ঘন্টা অন্তর ×৭ দিন	১। **Tab Metronidazole** 2 gm মুখে একমাত্রা অথবা 400 mg মুখে ২ বার × ৭ দিন অথবা **Tab Secnidazole** 2 gm মুখে একমাত্রা (গর্ভের প্রথম ৩ মাসে দেয়া যাবে না) এবং ২। **Tab Clotrimazole or Miconazole** 150 mg যোনিপথে × ৩ দিন অথবা **Cap Fluconazole** 150 mg মুখে একমাত্রা*

* গর্ভাবস্থায় ও স্তনদানকালে দেয়া যাবেনা।

- *সম্ভব হলে ক্লিনিকে একমাত্রার ওষুধ খাইয়ে দিন।*
- *এন্টিবায়োটিকে প্রতিরোধ (Resistance to antibiotics), পুনরায় সংক্রমণ, সঠিক নিয়মে ওষুধ না খাবার কারণে vaginal discharge দীর্ঘস্থায়ী হতে পারে।*
- *রোগীর Cervicitis বা জরায়ুমুখে সংক্রমণ থাকলে সঙ্গীর Urethritis চিকিৎসার জন্য 'VD' চিহ্নিত কার্ড দিন।*

Referral of RTI/STD cases

Syndromic approach to RTI/STD case management alone cannot take the responsibility of RTI/STD control of a country. Successful sy odromic RTI/STD case management must always be very well supported by well organized referral network *(laboratory support and specialized service providers).*

Strengthening of laboratory infrastructure should always be subordinate to requirements for RTI/STD control interventions. Laboratory tests improve the diagnostic ***specificity*** of symptomatic RTI/STDs, as well as the diagnostic ***sensitivity*** of asymptomatic RTI/STDs. This means that laboratory is needed in asymptomatic individuals, to identify serious infections that do not have specific signs and symptoms, to monitor resistance to antibiotics and to validate Treatment Algorithms.

RTI/STD cases may need to be referred in the following situations:

- *Patient does not respond to the treatment (persistence cases);*
- *Patient needs confirmation of the diagnosis by laboratory tests*
- *Patient has confusing or complex syndrome.*

Clinical infrastructure in our country are organized at three successive levels. Patients are first seen in primary health care or first-encounter level health units of the GOB (H&FWC) and NGO clinics. Most of the primary level health care centers usually does not have any facility to perform laboratory procedures to support the syndromic management of RTI/STD. If possible primary level health care facilities should be equipped for performing microscopic examination of fresh/stained specimens and RPR.

RTI/STD referral centers should be specialized facilities equipped with trained doctors and/or laboratory equipment for dealing with the referred/complicated as well as simple cases.

Intermediate level of referral centers (THC, District Hospital, MCWC, Private clinics, Diagnostic laboratories, etc.) should be located in the Thana or District levels. These facilities should have better infrastructure, specialized/skilled manpower and better diagnostic capabilities. Lab. tests in these facilities might include microscopic examination of fresh/stained specimens, RPR, culture of Neisseria gonorrhoa, identification of penicillinase-producing strains, antigen detection of Chlamydia trachomatis. Serology might include HIV testing (ELISA) or particle agglutination as well as confirmatory tests for Syphilis and T. Pallidum.

Persistence RTI/RTI/STD cases or patients with confused or complex syndromes, or patients who needs confirmation of the diagnosis should be referred from the primary level centers to the intermediate or central level health care facilities.

The central/national level facilities (Medical College Hospitals, Other GOB facilities, Specialized Hospitals/Clinics/Laboratories, etc.) are usually located in the divisional/capital cities or in a university hospital. The range of diagnostic tests performed varies according to the available human, material and financial resources and the work load.

International Centre for Diarrhoeal Disease Research, Bangladesh
Operations Research Project

Voluntary Consent Form
(Assessment of the validity of the syndromic management of vaginal discharge)

Title of the Research: Strategies to improve prevention and management of reproductive tract infections (RTIs) and sexually transmitted diseases (STDs)

Principal Investigator: Saifur Rahman

ENGLISH VERSION:

We are going to perform a study on the assessment of the syndromic approach in the management of women attending this clinic with the complaints of vaginal discharge. This study will help us to obtain information on how effective the syndromic approach is in the management of cases with complaints of vaginal discharge. The result of this study will improve the quality of our health care services. When you attend the study, we will ask you some questions concerning your health. Some of the questions are very personal. Please feel free to answer these questions. All information will be kept strictly confidential. After obtaining information from you, a physical examination will be performed, including a vaginal examination. A sample will be taken from your genital tract but your uterus will remain clean. Samples obtained from you will be sent to the laboratory for examination. The results of these tests will be communicated next week. If there is any discordance in the test results we'll request you to give an additional sample on the seventh day after the first visit for confirmation of the first result. Even if you don't want to participate in this study, or if you want to leave the study during follow-up, you will be allowed to continue to use the services of this clinic.

BANGLA VERSION: will follow

Signature of Investigator/or agents	Signature/finger-print of Participant
Date:	Date:

History taking (General and Sexual)

(Draft)

1. Clinic regist no. .....
2. Client serial no. .....
3. Date of first visit ../../..
4. Name Client
5. Address
6. Age (years) ....
7. Religion 1) Islam 2) Hindu 3) Christian 4) Buddhist 5) Other
8. Current Civil Status 1) Married 2) Widow 3) Divorced/separated 4) Single
9. Do you have any children Yes/No
   If yes, number of children .....
10. Have you ever been at school? Yes/no
    If yes, number of completed years in school
    Primary (1-5)
    Secondary (6-10)
    Higher Secondary (11-12)
    Graduate (> 12) or Postgraduate
11. Can you read: Yes/No
    Can you write: Yes/No
12. What is your occupation? .....
13. What is your husband's occupation? .....
14. Monthly income (both partners) .....
15. Have you had a stillbirth? Yes/No
16. Have you had premature deliveries? Yes/No/Unknown
17. Have you suffered from spontaneous abortions? Yes/No/Unknown
    If yes, Number.....
18. Have you ever had an induced abortion? Yes/No
    If yes, Number .....
19. Date/month of last menstruation .....

Now we are going to ask you some personal questions. If you answer explicitly it will help us in our research.

1. Where does husband currently works? 1) Town 2) Village 3) Abroad
   If abroad, specify where: .....
2. Does husband live at home? Yes/No
3. Has your husband a genital ulceration? Yes/No/Unknown
4. Has your husband a genital discharge? Yes/No/Unknown
5. Has your genital warts? Yes/No/Unknown
6. Did your husband marry before you or after you? Yes/No
7. If yes, number of current wives: .....
8. Does your husband have relationship with other women? Yes/No/Known
9. Have you been married before? Yes/No
10. Do you have any relationship with another men? Yes/No/No answer
11. What do you use as sanitary protection?
    1. Nothing
    2. Tampons from shop
    3. Home made tampons
    4. Home made towels
12. Do you wash inside your vagina during menstruation? Yes/No/Sometimes
13. Do you wash inside vagina after sexual contact? Yes/No/sometimes
14. Do you have any general health problem? .....
15. Have you suffered from an abnormal vaginal discharge in the past? Yes/No
16. Have you suffered from genital warts? Yes/No/Unknown
17. Have you suffered from genital ulcers? Yes/No/Unknown
18. Have you taken any medicines within 7 days before present visit?
    Yes/No/Unknown
    If yes, what kind of medicines? .....
    from where did you buy the medicine? .....
    who told you to take the medicine? .....
19. Are you using any family planning method at present? Yes/No
    If yes, what? 1) Pill 2) Condom 3) Injection 4) Sterilization 5) IUD 6) Others
    Since when? Months..... Years .....
20. Have you pain or a burning sensation when passing urine? Yes/No
21. Are you suffering from frequency of micturation? Yes/No
22. Have you an itching sensation in the genital region? Yes/No
23. Have you fever? Yes/No
24. Have you lower abdominal pain? Yes/No
25. Have you diarrhoea at the moment? Yes/No
26. Have you lower back pain? Yes/No
27. If currently not menstruation, are you suffering now from a vaginal discharge? Yes/No
    If yes, since when: 1) >8 days 2) 8-14 days 3) >14d-4 weeks 4) >4 weeks
    If yes, what is the colour: 1) White 2) Yellow 3) Brown 4) Green 5) Colorless 6) Unknown
28. Have you recently observed any change in you vaginal discharge? Yes/No

CLINICAL EXAMINATION (draft)

Patient serial no.....
Client register no .....

Date .../.../...
Name .....

Indicate: first visit
follow-up
Date of next visit .../.../....

1. Body weight (kgs) .....
2. Temp (°C) .....
3. Lymphadenopathy (extra inguinal) (> .5 cm) Yes/No
   If yes, site:
4. Vulva
   Genital warts
   If yes, specify 1) condylmata acuminata 2) Condylomata lata
   Bartholin's cyst/abscess Yes/No
   Vesicles Yes/No
   Ulcer Yes/No
   If yes, number of ulcers .....
   Invasive ulcers? Yes/No
   Since when? 1) ≥ 7 days 2) 7- ≥ days 3) >14d - ≥ weeks 4) >4 weeks
   Vulvo/vaginal discharge Yes/No
   Other abnormalities
   If yes, specify .....
5. Peri-vulvar region, perineum and peri-anal region

warts	1) condylomata acuminata	Yes/No
	2) condylomata lata	Yes/No
Vesicles		Yes/No
Ulcers		Yes/No
If yes,	Number of ulcers	Yes/No
	Painful ulcers	Yes/No
	Dirty ulcers?	Yes/No
	Invaisve ulcers?	Yes/No

   Since when? 1) ≤ 7 days 2) >14- ≤ days 3) > 14d - ≤ 4 weeks 4)>4 weeks
   If yes, specify .....

6. Speculum examination

Condition of cervix		Vaginal discharge	
ectopion	yes/no	Yes/no	
friability	yes/no	if yes, colour:	1. white
ulcer	yes/no		2. watery
			3. bloody
mucopus present	yes/no		4. greenish
			5. yellowish
if present, specify:			6. other
1) yellow pus		if yes, consistency:	
2) pus			1. clumpy/curd like
3) watery			2. thin/watery
			3. thick
cervical prolaps	yes/no		

7. Examination of the inguinal regions
   - lymphnodes yes/no
     - if yes, bilateral yes/no
   - buboes yes/no
     - if yes, bilateral yes/no
     - fistulated yes/no

8. Bimanual examination
   - adnexal tenderness left yes/no
     right yes/no

LABORATORY DIAGNOSIS

Vaginal Discharge:

1.	Fresh examination:	T. vaginalis	yes/no
		yeasts	yes/no
		filaments	yes/no
2.	Gram staining:	BV score:	
		yeasts:	yes/no

Cervix:

N.gonorrhoeae		pos/neg
	β-lactamase	pos/neg
C.trachomatis	ELISA	pos/neg
	PCR	

Serum:

RPR1	TPHA2
RPR2	TPHA2

International Centre for Diarrhoeal Disease Research, Bangladesh
Operations Research Project

Voluntary Consent Form
(Assessment of screening for syphilis as a component of antenatal care)

Title of the Research: Strategies to improve prevention and management of reproductive tract infections (RTIs) and sexually transmitted diseases (STDs)

Principal Investigator: Saifur Rahman

ENGLISH VERSION:

We are going to perform a study on antenatal screening for syphilis of pregnant women attending this clinic. The study will help us to obtain information about the functional feasibility of ANC screening for syphilis at the primary health care level. The result of this study will improve the quality of our health care services. When you attend the study we will ask you some questions concerning your health. Some of the questions are very personal. Please feel free to answer these questions. All information will be kept strictly confidential. After obtaining information from you, 10 ml blood will be drawn today from the vein of your arm for the diagnosis of syphilis. Blood samples obtained from you will be sent to the laboratory for examination. The results of these tests will be communicated today. If there is any discordance in the test results we'll request you to give an additional sample on the day for confirmation of the first result. If, for some reason, you don't want to continue participating in this study, or if you want to leave the study during follow-up, you will be allowed to continue to use the services of this clinic.

BANGLA VERSION: will follow

Signature of Investigator/or agents
Date:

Signature/finger-print of Participant
Date:

International Centre for Diarrhoeal Disease Research, Bangladesh
Operations Research Project

Voluntary Consent Form
(Building capacity for pharmacy-based services to prevent STD/HIV/AIDS)

Title of the Research: Strategies to improve prevention and management of reproductive tract infections (RTIs) and sexually transmitted diseases (STDs)

Principal Investigator: Saifur Rahman

ENGLISH VERSION:

Statement Read to Subject:

We are from the Operations Research Project of ICDDR,B. We are going to perform a study jointly with SMC on drug sellers (or pharmacists) of Tongi municipality attending the one-day SMC training on STD/HIV/AIDS. This study will help us to obtain information on the profile of the drug sellers (or pharmacists), their involvement in providing RTI/STD services from the pharmacies and their knowledge on STD/HIV/AIDS. The result of this study will help to build capacity for pharmacy-based services designed to prevent STD/HIV/AIDS. When you attend the study you will be given a self-administered questionnaire concerning your profile, nature of dealing with clients with the complaints of RTI/STD and your knowledge about STD/HIV/AIDS. Please feel free to fill the questionnaire completely. All the information will be kept strictly confidential. If you are willing to participate in the study, please sign your name and then fill the questionnaire. Everyone who is invited to attend the training will be accepted to attend the full training course even if you decide, for some reason, that you don't want to participate in the study.

BANGLA VERSION: will follow

The participants of the study will sign their name in the space given on the first page of the questionnaie.

Questionnaires
Feasibility assessment of the syndromic approach, and building capacity of the pharmacy based services to prevent STD/HIV/AIDS

ASSESSMENT INSTRUMENT FOR URBAN GOB FACILITIES(Health)

Name of the : _____ |__|__|__|

Type of clinic: _____ |__|__|

Address: _____

Corporation/Municipality _____ |__|__|
Ward _____ |__|__| Zone _____ |__|__|
Cluster _____ |__|__|
District _____ |__|__|

Date of Interview : __/__/__ Name of the Interviewer _____ |__|__|

Name and position of the Respondents:

Name:	Position:
1. _____	_____
2. _____	_____
3. _____	_____

SERVICE DELIVERY, FACILITY ASSESSMENT AND PROVIDER AND MAANGEMENT MODULE

The purpose of this instrument is to assess the current configuration of GOB health and family planning services and the functioning of services provided by GOB. The assessment includes physical infrastructure, family planning and health services, IEC, MIS and the current situation of providers in terms of staffing, training, service provision. The information from this assessment will be used to develop a comprehensive plan to transform the concerned GOB facilities into a model ESP centre.

This instrument has three modules: Organization and management module, service delivery module, facility assessment module and provider assessment module. The instrument contains several pre-coded and open-ended questions to be asked to the concerned providers. In addition, part of the instrument is an inventory of the facilities, which should be completed through observation of the equipment and facilities and through discussions with the persons in charge of the facility on the day of the visit. *In all cases,* the interviewer should verify that the items exist by actually observing them. If s/he is not able to observe them, then coding should be done accordingly.

The principal respondents for this instrument will be the In-charge or manager, or any senior health provider at the clinic. Information from interviewer observations of the facilities will also be recorded. Other service providers at the clinic and other clinic staff may serve as secondary respondents to complement and complete any missing information not reported or unknown by the key informant(s). If full information can not be gathered from one visit, several visits should be made to complete the assessment.

All respondents should be informed that the information will be kept strictly confidential.

SERVICE DELIVERY MODULE

A. SERVICES PROVIDED(Mark ✔ for 'yes' and x for 'no'& Use code as applicable)

1. What child health services do you provide and how many days of the week and if you refer where? (Initially unprompted and then probing for others twice)

	Service	Days	Refer	Where
i. ARI treatment	—	—	—	_____
ii.Diarrhoea management	—	—	—	_____
iii.Breastfeeding counseling	—	—		
iv.Others_____	—	—	—	_____

2. What other reproductive health services do you provide and how many days of the week and if you refer where? (Initially unprompted and then probing for others twice)

	Service	Days	Refer	Where
i.Breast-feeding counselling	—	—		
ii. Ist aid EOC	—	—	—	_____
iii. STD/RTI counselling	—	—	—	_____
iv.STD/RTI management	—	—	—	_____
v.Others_____	—	—	—	_____

3. What general health services do you provide and how many days of the week and if you refer where? (Initially unprompted and then probing for others twice)

	Service	Days	Refer	Where
i. Malaria	—	—	—	_____
ii.Tuberculosis	—	—	—	_____
iii.First aid	—	—	—	_____
iii.Other health service	—	—	—	_____

4. What laboratory services do you provide?

□ Urine albumin test □ Urine sugar test □ Blood Hb test □ Others (Specify)_____
□ None

5. How do you refer your clinets to other facilities ?

	Referal slip	Note	Telephone	Verbally
Health	___	___	____	___

B. LOGISTICS SUPPLY(Mark ✔ for 'yes' and x for 'no'& Use code as applicable)

1. From where do you obtain your supplies? (Multiple answers possible)

□ Central medical Store, □TEMO, □ District Warehouse □ Regional Warehouse
□ C/SOffice □ Others (please specify)_____.

2.a. Is there any stock register kept by the for the inventory of commodities?
□ Yes □ No (If no, skip to Q 3)

2.b. When was it last updated? ___/___/_____

3. Indicate the condition of storage of commodities:(separate room, almira, shelve, freeze, floor, openspace, systematic, cleanliness and others, any storage problem)

_____
_____
_____
_____

4.a.Do you have a system for ordering supplies? □ Yes □ No (If no, skip to section C)

4.b.How do you order or procure your supplies?(Instrument, frequency, regularity, delays, collection)

_____
_____
_____
_____

EQUIPMENTS AND SUPPLIES

Equipments	Available 1=Yes 2=No		Quantity	# Working
Stethoscope	1	2		
Blood pressure instrument	1	2		
Thermometer	1	2		
Respiration counter	1	2		
Tongue depressor	1	2		
Measuring tape	1	2		
Weighing scale/machine	1	2		
Disposable syringe	1	2		
Disposable needles	1	2		
Artery Forceps	1	2		
Lifter with jar	1	2		
Sponge holding forceps	1	2		
Torch light with batteries	1	2		
Rubber catheter	1	2		
Speculum (vaginal)	1	2		
Scalpel	1	2		
Scissor	1	2		
Kidney tray	1	2		
Rubber gloves	1	2		
Examination/Spot light	1	2		
Antiseptic solution/cream	1	2		
Savlon	1	2		
Bandages	1	2		
Cotton	1	2		
Sutures	1	2		
Sterilizer for needles	1	2		
Autoclave	1	2		
Electric Sterilizer	1	2		
Timer	1	2		
Haemoglobinometer	1	2		
ESR Stand	1	2		
ESR tube	1	2		
Glass slides	1	2		
Cover slip	1	2		
Stove/heater	1	2		
Spirit lamp/Gas lamp	1	2		
IUD set	1	2		
Cristix (for urine albumin test)	1	2		
Benedict's solution(for urine test)	1	2		
Test tubes	1	2		
Test tube holder	1	2		
Rack for test tubes	1	2		
Telequist	1	2		
Drug and Dietary Supply Kits (DDS)	1	2		
Satellite Clinic Kits	1	2		
Soap case with soap	1	2		
Refrigerator	1	2		
Vaccine carrier	1	2		
Ice packs	1	2		
Dropper for feeding vaccine	1	2		
Bucket with lid	1	2		

MEDICINES

Drugs	Type 1=Kit 2=Loose		Quantity	Sufficiency 1=Yes 2=No		Stock out since
Tab. Paracetamol	1	2		1	2	
Syp. Paracetamol	1	2		1	2	
Tab. Aspirin	1	2		1	2	
Iron tablets	1	2		1	2	
Tab. Hysomide	1	2		1	2	
Tab. Chloroquine	1	2		1	2	
Tab. Vitamin B-complex	1	2		1	2	
Drop/Syp. Vitamin B-complex	1	2		1	2	
Tab. Albendazole	1	2		1	2	
Tab. Cotrimoxazole	1	2		1	2	
Susp. Cotrimoxazole	1	2		1	2	
Tab. Penicillin	1	2		1	2	
Tab. Metronidazole	1	2		1	2	
Susp. Metronidazole	1	2		1	2	
Tab. Antacid	1	2		1	2	
Susp. Antacid	1	2		1	2	
Cap. Ampicillin/Amoxycillin	1	2		1	2	
syp.Ampicillin/Amoxycillin	1	2		1	2	
Cap. Tetracycline	1	2		1	2	
Cap. Doxycycline	1	2		1	2	
Eye ointment	1	2		1	2	
Eye drops	1	2		1	2	
Ear drops	1	2		1	2	
Nystatin	1	2		1	2	
Whitfield Unguantum	1	2		1	2	
Benzyl benzoate lotion	1	2		1	2	
ORS	1	2		1	2	
Gentian violet	1	2		1	2	
Vaccines: BCG	1	2		1	2	
DPT	1	2		1	2	
Polio	1	2		1	2	
TT	1	2		1	2	
Measles	1	2		1	2	
Cap. Vitamin A	1	2		1	2	
Oral contraceptive	1	2		1	2	
Condoms	1	2		1	2	
Injectables	1	2		1	2	
IUDs	1	2		1	2	
Norplant	1	2		1	2	

FURNITURE

Furniture	Available 1=Yes 2=No		Quantity	# Working
Chairs	1	2	_____	_____
Bench	1	2	_____	_____
Tables	1	2	_____	_____
Stools for patients	1	2	_____	_____
Supply cabinets	1	2	_____	_____
Examination Beds	1	2	_____	_____
IUD insertion table	1	2	_____	_____
Screen for isolation	1	2	_____	_____
Other (Specify_____)	1	2	_____	_____

C. CLINIC INFORMATION SYSTEM(Mark ✔ for 'yes' and x for 'no'& Use code as applicable)

1. What are the register(s)/format(s) you use for recording?(Please list)

2. How do you use these registers?

3. What are the reports you prepare and where do you send them & how frequently ? (collect copies of reporting forms)

4. Do you provide any card/format to your clients?

□ IUD □ Inj □ Immunization □ Growth monitoring □ ANC □ Referral □ Others

5. Who prepares and compiles information for reporting?(Position)

FACILITY ASSESSMENT MODULE

A. ASSESSMENT OF PHYSICAL CONDITIONS(Mark ✔ for 'yes' and x for 'no'& Use code as applicable)

1. Who owns the facility?

_____

2. Describe the examination and counselling area and reception area?

a. Reception Area:(Space, tool, adequate for client flow, any other problems)

_____
_____
_____

b. Examination Area:(Space(separate or combined), bed, cover, screen, light(natural/artificial, auditory privacy during conversation, Visual privacy during examination, water for hand washing, any other problem)

_____
_____
_____

c.Counselling Area:(Space, screen, auditory privacy during conversation, any other problem)

_____
_____
_____

B. CLINIC SANITATION ISSUES (Mark ✔ for 'yes' and x for 'no'& Use code as applicable)

1.How are clinic wastes disposed of?

Needles : _____
Syringes : _____
Used cotton balls, bandages: _____
Ampules, vials : _____
Saline bags : _____
Other (specify) _____ : _____

2. Is there a functioning toilet? (Check whether water-seal and flash are working properly)

☐ Yes ☐ No

C. INFORMATION, EDUCATION, COMMUNICATION(Mark ✔ & Use code as applicable) (Only observe and document the following)

1. Does the clinic have a signboard outside? (Main & clinic specific)
   □ Yes □ No (If no, skip to Q 2)

1a. What information does the signboard outside the clinic have on it?(Observe) (circle all that apply)

Information	Yes	No
Name of clinic	1	2
Services provided	1	2
Working hours	1	2
Other (Specify: _____)	1	2

2. What type of materials are there if any(depending on topics or themes)?(circle all that apply) [See codes for types of the IEC materials at the bottom of the page]

Topic:	Displayed (Observe)	Types of the material (See codes)	Stored
Family planning	____	____	____
EPI	____	____	____
ARI	____	____	____
Diarrhoea	____	____	____
Breastfeeding	____	____	____
Child nutrition	____	____	____
Vit A	____	____	____
Maternal Care	____	____	____
HIV/AIDS	____	____	____
Skin infections (Scabies, Ring worm)	____	____	____
Other (Specify: _____)	____	____	____

[Code lists for types of IEC material:

Poster =1; Flip-chart =2; Brochure =3; Pamphlet = 4, Other (specify) _____ = 7, NA =8]

PROVIDER ASSESSMENT MODULE

[Clinic manager should be the primary respondent for this module. Other service providers at the clinic and other clinic staff may serve as secondary respondents to complement and complete any missing information]

A. STAFFING/POSITIONS(Mark ✔ & Use code as applicable)

1.Describe the staff position, responsibility, and training status of the providers?

(a) Position	(b)Approved Number	(b)Approved Filled	(c) Number	(d)Major Respnsibility	(d)Training received(use codes) (last two years)
1. Clinic In-charge	__|__|	__|__|			
2. Medical Doctor	__|__|	__|__|			
3. Nurse/ FWV	__|__|	__|__|			
4. Paramedic (LHV)	__|__|	__|__|			
5. Lab technician	__|__|	__|__|			
6 . Pharmacist/ Druggist	__|__|	__|__|			

7. Clerk/Store-Keeper |__|__| |__|__|

8. Cleaner/Sweeper |__|__| |__|__|

9. Other |__|__| |__|__|
(Specify:_____)

1.Giving FP injections, 2.Inserting IUD, 3. Inserting Norplant, 4. Performing vasectomy, 5.Performing tubectomy, 6.Contraceptive counseling 7. Contraceptive screening, 8. Side effects management, 9. Ist aid EOC, 10. Basic EOC 11. Giving immunizations 12. Treating ARI, 13. Treating diarrhoea 14. Treating RTI/STD 15. Providing ANC, 16. Performing MR, 17.Treating Worms, 18. Treating malaria, 19. Treating TB, 20. Counseling, 21. Infection prevention(Sterilization & Disinfection)

Other (Specify:_____)

THANK YOU. THIS MODULE OF THE INTERVIEW IS COMPLETED

ORGANIZATION AND MANAGEMENT COMPONENT

A. Coordination(Mark ✔ & Use code as-applicable)

1. Have you met among yourselves in last three months?(Issues discussed, follow up, regular of need based)

_____
_____
_____

2. Are there coordination committees that you attend?(Please document the name, frequency, issues discussed from coordination committes minutes?

_____
_____
_____

Who supervises each position?

Position	Who supervise
1 Clinic In-charge	_____
2. Medical Doctor	_____
3. Nurse/ FWV	_____
4. Paramedic	_____
5. Lab technician	_____
6 Pharmacist/Druggist	_____
7. Clerk/Store-Keeper	_____
8.Cleaner/Sweeper	_____
9. Other (Specify:_____)	_____

THANK YOU. THE INTERVIEW IS COMPLETED

Observation guide for interaction between clients and service providers at the service delivery centre of Essential Service Package Intervention

REPRODUCTIVE TRACT INFECTION (RTI)

Obtain the consent of both client and provider before proceeding to observe interaction between them. When observing be as discrete as possible and on no accounts become involved in the interaction. Make sure that the provider knows that you are not there to evaluate her/him and that you are not an "expert" who can be consulted during the session. Try to sit behind the client but not directly in view of the provider. Make notes as quietly as possible.

Observer _____|__| Date of Observation: ___/___/___
DD/ MM / YY

A. Name and ID of Facility:
_____|__|__|__|__|

B. Client's Number
.....|__|__|__|__|
(Note: This same number should be written on the client interview form)

C. Designation, name and ID of staff member observed **(code ID only for observed provider)**:

	Name	ID
a. Doctor.....1	_____	|__|__|__|
b. Paramedic 2	_____	|__|__|__|
c. Vaccinator.....3	_____	|__|__|__|

D. Type of sector? Code |__| (DHS = 1, DFP = 2,DCC = 3)

INSTRUCTIONS TO OBSERVER: After coding question no. 002 please fill out respective module to perform your observation of what happened during the client-provider interaction. Use several modules if the client is given several services.

❖ Arrival Time |__|__|.|__|__| hours
b. Time Seen |__|__|.|__|__| hours
c. Time Out |__|__|.|__|__| hours

❖ Did the provider greet the client in a friendly manner?
Yes 1
No 2

❖ What was the purpose of the visit as indicated by the client?

A. Family Planning 01
a. Current user:
Resupply or repeat visit (without problems) 1
Resupply or repeat visit (problem with method, Wanted to change method, or discontinue FP).....2
Consult about Problem/doubt with Current Method3
Other_____ 4
b. Non-user:
Obtain method for the first time (new).....5
Obtain method (ever user).....6
Other _____ 7

B. Antenatal Care/ TT immunization 02
C. Postnatal Care 03
D. Consultation/Treatment for STDs/RTIs.....04
E Child Immunization 05
F. Diarrhoea 06
G. ARI 07
H. Other_____ 77

Go to respective module

MODULE D: REPRODUCTIVE TRACT INFECTION (Female Client)

	yes	no	NA	code
History Taking				
Did the provider ask about				
01. Occupation				
a. occupation of clients				
b. occupation of spouse				
02. Presenting complaints (Vaginal Discharge, lower abdominal pain, genital ulcer, inguinal swelling)				
03. Pregnancy history				
04. Current contraceptive use				
05. If vaginal discharge, nature of vaginal discharge				
06. If lower abdominal pain				
a. missed/ overdue period				
b. recent abortion/delivery				
c. vaginal bleeding				
07. If genital ulcer				
a. duration of ulcer				
b. nature of ulcer				
c. repeated infection				
08. If inguinal swelling				
a. history of groin pain				
b. recent genital ulceration				
c. recent or past swelling/ulceration anywhere in the body				
09. Partner's symptoms(urethral discharge,genital ulcer, inguinal swelling)				
10. Recent new partner				
11. Multiple partners				
12. Spouse at home after long stay away				
Examination				
Did the provider do the followings				
13. Abdominal examination				
a. Severe tenderness				
b. Abdominal mass				
14. Palpated inguinal lymph nodes				
15. Inspected genitalia				
a. ulcer				
b. swelling				
c. discharge				

	Yes	No	NA	Code
16. Per-vaginal examination				
a. washed hand before per-vaginal examination				
b. used fresh gloves for the examination				

17. Speculum examination				
If yes, A. used sterilized speculum				
B. observed				
a. profuse/offensive/frothy discharge	Correct/incor			
b. yellow/purulent discharge	Correct/incor			
c. white curd like discharge	Correct/incor			
d. mixed discharge	Correct/incor			
e. no discharge	Correct/incor			
C. Kept the speculum in decontaminated solution				

If ques. 18 = no, then code 2. NA 18A, 18B (a, b, c, d, e) = 8
If ques. 18 and 18A = yes then code 1. Code 18B a, b, c, d, e code 1 = yes, correct and code 2 = no and code 3 = yes incorrect

Diagnosis				
18. Did the provider make syndromic diagnosis?				
19. If yes, please specify the provider's diagnosis?				
a. cervicitis				
b. vaginitis				
c. candidiasis				
d. PID				
e. others				

Treatment				
20. Prescribed medicines				
21. Provided medicines				

MODULE D: REPRODUCTIVE TRACT INFECTION (Male Client)

	yes	no	NA	Code
History Taking				
Did the provider ask about				
01. Occupation				
a. occupation of client				
b. occupation of spouse(s)				
02. Presenting symptoms (Urethral Discharge, genital ulcer, scrotal swelling, inguinal swelling)				
03. If urethral discharge				
a. nature of discharge				
b. pain during urination				
04. If inguinal swelling				
a. history of groin pain				
b. recent genital ulcer				
c. recent or past swelling anywhere in the body				
05. If scrotal swelling				
a. history and nature of swelling				
b. history of injury				
c. history of STI in last six weeks				
d. history of any urethral discharge				
06. If genital ulcer				
a. duration of ulcer				
b. nature of ulcer				
c. repeated infection				
07. Partner's symptoms (vaginal discharge, lower abdominal pain, genital ulcer, inguinal swelling)				
08. Recent new partner				
09. Multiple partners				
10. At home after long stay away				

Examination				
Did the provider do the following				
11. Palpated inguinal lymph nodes				
12. Examined genitalia				
inspection for ulcer				
urethral discharge (milk urethra)				
	yes	no	NA	Code

13. Examined scrotum				
a. inspection				
b. tenderness				
c. position				

Diagnosis				
14. Did the provider do syndromic diagnosis				
15. If yes please specify the provider's diagnosis				
a. Urethral discharge				
b. Genital ulcer				
c. Scrotal swelling				
d. Inguinal bubo				

Treatment				
16. Prescribed medicines				
17. Provided medicines				

Information and counseling				
18. Reassured the patient				
19. Explained the problem				
20. Explained the use of prescribed/provided drugs				
21. Took feedback on the use of drugs				
22 Emphasized completion of treatment, even after the disappearance of symptoms and signs				
23. Informed that he/she may get the infection through sexual contact				
24. Informed avoidance of sexual contact during the period of treatment of client and partner to prevent reinfection				
25. Emphasized on use of condom if sexual contact cannot be avoided				
26. Demonstrated the use of condom using model				
27. Provided condoms				
28. Informed that some of the RTIs are due to lack of personal hygiene				
29. Informed that HIV/AIDS is also sexually transmitted and it has no curative treatment				
30. Encouraged follow-up visit on the specified date				
31. Used flip chart for the purpose of counseling				

	yes	no	NA	Code
Partner Management				
32. Helped the patient to understand the importance of partner management even if the partner is asymptomatic				
33. Discussed possible ways of partner management				
34. Asked whether the partner is pregnant				
35. Provided/prescribed medicines				

Missed Opportunities				
36. Discussed family planning (methods, sources)				
37. Encouraged vaccination of the child (if child under 1 year)				
38. Discussed feeding the child under 2 years (breastfeeding/complementary feeding)				
39. Discussed availability of other health services				

40. Did the provider maintain a respectful and non-judgmental attitude towards the client?				

41. If referred, why and where?

_____
_____
_____

42. Comments of the observer (If any):

_____
_____
_____

Questionnaire for the Pha rmacists \Drug Sellers
Building Capacity for Pharmacy-Based STD/HIV/AIDS Services
Operations Research Project, ICDDR, B

Eligibility : Drugs sellers participated in the SMC training on STD/HIV/AIDS

Questionnaire number |__|__|__|__|
Date of filling |__|__|__|__|__|__|
y y m m d d

Profile of the participant:

1. Name: _____

2. Age (In years): |__|__|

3. Address:
   Name of the pharmacy: _____

   Road/Market/bazar: _____

4. Education: (Please give tick mark in the box of your right answer)
   1. Below S.S.C
   2. S.S.C
   3. H.S.C
   4. Degree
   9. Others, please specify_____

5. How long have you been working as a pharmacist/drug seller?
   _____ Years completed

6. How long have you been working in this pharmacy?
   |__|__| Year |__|__| Month

7. As a pharmacist, did you receive any formal training?
   1. Yes
   2. No

8. Did you have any training on STD?
   1. Yes
   2. No

Information on Pharmacy

9. Do your pharmacy has any doctor?
   1. Yes
   2. No

10. Do your pharmacy has any separate room for attending patient?
    1. Yes
    2. No

11. Did any client come to you with the problems of their private parts?
    1. Yes
    2. No

12. If yes, what were those problems?
    1. Genital ulcer
    2. Pus discharge
    3. White discharge
    9. Others_____

Knowledge on STD

13. Do you know about sexually transmitted diseases?
    1. Yes
    2. No

14. Where did you know/hear about STD?
    1. Practitioner
    2. Book
    3. Newspaper/Magazine
    4. Radio
    5. TV
    6. Billboard
    7. Friend
    8. Pharmaceutical company
    9. Others, please specify _____

15. Do you want to know more about STD?
    1. Yes
    2. No

Practice

16. What do you do with the clients seek treatment for STD? (multiple answers acceptable)
    1. Examine
    2. Provided treatment
    3. Counseling
    4. Refer
    9. Others, please specify_____

17. If counsel, what do you counsel on? (multiple answer acceptable)
    1. Sexual intercourse outside the marriage
    2. Condom use
    3. Treatment from doctor
    4. Complete treatment
    5. Treatment of partner
    6. follow up visit
    9. Others, please specify_____

18. Do you use any materials to provide health education on STD?
    1. Poster
    2. Flip chart
    3. Literature of pharmaceutical company
    4. Model of genital organ
    5. Do not use any material
    9. Others_____

19. If refer, where do you refer?
    1. Qualified doctor
    2. Skin/VD Specialist
    4. Hospital
    5. Other, please specify_____

Questionnaire for the Pharmacists/Drug Sellers
Building capacity for Pharmacy-Based
STD/HIV/AIDS services
Operations Research Project, ICDDR,B

উত্তরদাতাঃ সোশাল মার্কেটিং কোম্পানী আয়োজিত "ফার্মাসিষ্টদের এস,টি,ডি, এইড্স বিষয়ক প্রশিক্ষণ"-এ অংশগ্রহণকারী ওষুধ বিক্রেতা।

প্রশ্নপত্র নং ঃ |__|__|__|

প্রশ্নপত্র পূরণ করার তারিখ ঃ |__|__|__|__|__|__|
YY MM DD

<u>উত্তরদাতার সাধারন তথ্য</u>

০১. নামঃ _____

০২. বয়স (বছর)ঃ |__|__|

০৩. ঠিকানা, ফার্মেসির নামঃ _____
সড়ক/বাজার ঃ _____

০৪. শিক্ষাগত যোগ্যতা (সঠিক উত্তরের পাশে টিক (✓) চিহ্ন দিন)

☐ ১. এস এস সি-র কম _____শ্রেনী
☐ ২. এস এস সি
☐ ৩. এইচ এস সি
☐ ৪. ডিগ্রী
☐ ৯. অন্যান্য, (উল্লেখ করুন) _____

০৫. ওষুধ বিক্রেতা হিসেবে কতদিন যাবত কাজ করছেন ?

_____ পূর্ণ বছর

০৬. বর্তমানে আপনি যে ওষুধের দোকান বা ফার্মেসিতে কাজ করছেন, সেখানে কতদিন ধরে আছেন?

|___|___| বছর |___|___| মাস

০৭. ওষুধ বিক্রেতা হিসেবে আপনার কোন প্রশিক্ষণ আছে কি (যদি হ্যা হয়, তাহলে কি প্রশিক্ষণ নিয়েছেন তা উল্লেখ করুন) ?

☐ ১. হ্যা (উল্লেখ করুন) _____
☐ ২. না

০৮. যৌনবাহিত রোগের ওপর আপনার কোন প্রশিক্ষণ আছে কি ?

☐ ১. হ্যা
☐ ২. না

<u>ফার্মেসির তথ্য</u>

০৯. আপনি যে ফার্মেসিতে কাজ করেন সেখানে কোন ডাক্তার বসেন কি ?

☐ ১. হ্যা
☐ ২. না

১০. আপনি যে ফার্মেসিতে কাজ করেন, সেখানে রোগী দেখার জন্য পৃথক জায়গা আছে কি ?

☐ ১. হ্যা
☐ ২. না

১১. আপনার কাছে কি যৌন রোগের সমস্যা নিয়ে কোন রোগী আসেন ?

☐ ১. হ্যা
☐ ২. না

১২. উত্তর হ্যাঁ হলে গত একমাসে আপনার কাছে কি ধরণের সমস্যা নিয়ে রোগী এসেছেন ? (একাধিক উত্তর গ্রহণযোগ্য)

- ☐ ১. যৌনাঙ্গে ক্ষত (ঘা)
- ☐ ২. প্রস্রাবের রাস্তায় পূঁজ যাওয়া
- ☐ ৩. সাদা স্রাব (মহিলাদের ক্ষেত্রে)
- ☐ ৯. অন্যান্য (উল্লেখ করুন) _____

<u>যৌনবাহিত রোগ সম্পর্কে ধারণা</u>

১৩. আপনি কি যৌনবাহিত রোগ সম্পর্কে জানেন ?

- ☐ ১. হ্যা
- ☐ ২. না

১৪. যৌনবাহিত রোগ সম্পর্কে আপনি কিভাবে/কার কাছ থেকে জেনেছেন ? (একাধিক উত্তর গ্রহণযোগ্য)

- ☐ ১. ডাক্তার/প্র্যাকটিশনার
- ☐ ২. বই
- ☐ ৩. পত্রিকা/ম্যাগাজিন
- ☐ ৪. রেডিও
- ☐ ৫. টিভি
- ☐ ৬. বিলবোর্ড
- ☐ ৭. বন্ধু
- ☐ ৮. ওষুধ কোম্পানী
- ☐ ৯. অন্যান্য (উল্লেখ করুন)_____

১৫. আপনার কি যৌনবাহিত রোগ সম্পর্কে আরো জানার ইচ্ছা আছে ?

- ☐ ১. হ্যা
- ☐ ২. না

প্রাকটিস

১৬. যৌনবাহিত রোগ নিয়ে কোন রোগী এলে আপনি কি করেন ? (একাধিক উত্তর গ্রহণযোগ্য)

- ☐ ১. পরীক্ষা করি
- ☐ ২. চিকিৎসা দিই
- ☐ ৩. পরামর্শ দিই
- ☐ ৪. রেফার করি
- ☐ ৯. অন্যান্য, (উল্লেখ করুন) _____

১৭. পরামর্শ দিয়ে থাকলে, সাধারণতঃ কোন্ কোন্ বিষয়ে পরামর্শ দিয়ে থাকেন ? (একাধিক উত্তর গ্রহণযোগ্য)

- ☐ ১. বিবাহ বহির্ভূত যৌন সম্পর্ক পরিহার
- ☐ ২. কনডম ব্যবহার
- ☐ ৩. ডাক্তারের পরামর্শ অনুযায়ী চিকিৎসা করা
- ☐ ৪. চিকিৎসা সম্পূর্ণ করা
- ☐ ৫. যৌন সংগীর চিকিৎসা করা
- ☐ ৬. পুনরায় আসা (follow-up visit)
- ☐ ৯. অন্যান্য (উল্লেখ করুন) _____

১৮. যৌনবাহিত রোগীদের স্বাস্থ্য শিক্ষা/পরামর্শ দিতে কোন উপকরণ ফার্মেসীতে ব্যবহার করেন কি?

- ☐ ১. পোষ্টার
- ☐ ২. ফ্লিপ চার্ট
- ☐ ৩. ওষুধ কোম্পানীর লিটারেচার
- ☐ ৪. যৌনাঙ্গের মডেল
- ☐ ৫. কোন সামগ্রী ব্যবহার করি না
- ☐ ৯. অন্যান্য (উল্লেখ করুন)_____

১৯. রেফার করা প্রয়োজন মনে করলে, কোথায় করেন ?

- ☐ ১. পাশ করা ডাক্তারের কাছে পাঠাই
- ☐ ২. বিশেষজ্ঞ ডাক্তারের কাছে পাঠাই
- ☐ ৩. হাসপাতালে যেতে বলি
- ☐ ৯. অন্যান্য (উল্লেখ করুন) _____

International Center for Diarrhoeal Disease Research, Bangladesh
Operations Research Project

Research Title: **Strategies to Improve Prevention and Management of Reproductive Tract Infections (RTIs) and Sexually Transmitted Disease (STDs)**

Mystery Shopping
Script to play role on seeking services for STD from pharmacy

Title of the research Project: Operations Research Project

Research Title: Strategies to improve prevention and management of RTIs/STDs in Bangladesh

Mystery shoppers should be dressed ordinarily. The preferable timing of the shopping is afternoon when pharmacies are not crowded. Mystery shoppers will not note any information during the shopping period. Instead, after each shopping they will go to a suitable place to write down the necessary information gathered during shopping in a supplied structured information sheet. Each shopper will do shopping in 3 selected pharmacies. The research investigators will select pharmacies for mystery shopping.

Role Play
Following is the script for role-play, where the players will be mystery shopper and drug seller. The script will the role player of mystery shopping. The mystery shopper should be polite in speaking to drug seller. He should not show any attitude that he is in hurry. During conversation with drug-seller the shopper will listen drug-seller attentively and will try to remember his responses. During role

Shopper: Brother, I would like to talk with you privately. (In pharmacy privacy may not be available. If not available speak to him in low voice. If drug-seller request to wait, the shopper has to wait)

Drug seller: He may request you to wait or take you to a place having privacy.

Shopper: I am having problem in my private part and want to have drugs for that.

Drug seller: Consult with a doctor?

Shopper: I don't want to go to a doctor. I prefer to buy medicine from you.

Drug seller: What is your problem?

Shopper: I have ulcer in my genitalia.

Drug seller: How long are you having this ulcer?

Shopper: It is about 3 days.

Drug seller: Do you have vesicles with ulcer?

Shopper: No.

Drug seller: Did you have :x with CSW or did you go to brothel?

Shopper: Yes.

Drug seller: Did you use condom?

Shopper: No. Why do I use condom?

Drug seller: To prevent STD.

Drug seller: I want to see the ulcer?

Shopper: No I cannot show.

(Shopper will refuge softly. If drug seller insists, the shopper will say that tomorrow he will come again to show)

There after the drug sellers may give drugs for treatment. The shopper has to listen the drug seller attentively and will buy medicine if necessary. If the drug seller want to inject medicine, the shopper will refuge softly and will say that he will come tomorrow. The shopper will notice whether the drug seller discuss followings:

Explain the dose of the medicine
Advise to complete full dose medicine
Advise for follow up visit
Advise for partner treatment
Advise for condom use
Explain how to use condom
Provide information on HIV/AIDS prevention

During shopping mystery shopper will observe followings and later note in the information record sheet.

Separate room for doctor to sit
Separate space by putting partition
Posters on STD/AIDS on display
Leaflet on STD/AIDS on Display
Sticker on STD/AIDS
Packets of Condom on display

ফার্মেসি থেকে যৌন রোগের পরামর্শ গ্রহনের ভূমিকাভিনয়

পরামর্শ গ্রহনকারী অবশ্যই সাধারন পোষাক পরিহিত থাকবেন। ফার্মেসি থেকে এ ধরনের পরামর্শ গ্রহনের আদর্শ সময় হচ্ছে দুপুরের পর। সে সময় ফার্মেসিতে ক্রেতাদের আগমন কম থাকে। অভিনয়ের ছলে পরামর্শ গ্রহনকালে কোন কিছু নোট করার প্রয়োজন নেই। পরামর্শ গ্রহন কালের বিষয়সমূহ স্মরণে রেখে প্রতিটি অভিনয়ের পর তা নির্দিষ্ট কোন স্থানে বসে সরবরাহকৃত ফরমে নোট করতে হবে। প্রতিজন পরামর্শ গ্রহনকারী দিনে ৩ টি নির্ধারিত ফার্মেসিতে অভিনয় করবেন। ইন্টারভেনশনে সংশ্লিষ্ট ব্যক্তিরা ফার্মেসিগুলি নির্ধারন করতে সহায়তা করবেন।

ভূমিকাভিনয় ঃ

নিম্নে পরামর্শ গ্রহনকারী এবং ঔষধ বিক্রেতার মধ্যে আলোচনার একটি সম্ভাব্য চিত্র তুলে ধরা হলো। স্ক্রিপটি পরামর্শ গ্রহনকারীকে অভিনয়ে সহায়তা করবে। পরামর্শ গ্রহনকারী কথাবর্তায় শান্ত থাকবেন এবং তাড়াহুড়ো করবেন না। ঔষধ বিক্রেতার সাথে আলোচনাকালে বিক্রেতা কি বলছেন তা মনযোগ সহকারে শুনতে হবে এবং স্মরণ রাখার চেষ্টা করতে হবে।

পরামর্শ গ্রহনকারী ঃ (ফার্মেসিতে গিয়ে এদিক ওদিক তাঁকিয়ে ঔষধ বিক্রেতাকে উদ্দেশ্য করে বলবে) ভাই, আমি আপনার সাথে গোপনীয় কিছু আলাপ করতে চাই। (যদি গোপনীয়তা রক্ষা করার ব্যবস্থা না থাকে তাহলে যথাসম্ভব নীচু স্বরে কথা বলতে হবে)।

ঔষধ বিক্রেতা আপনাকে অপেক্ষা করতে বলতে পারেন, ফার্মেসির পেছন দিকে সাধারনত পৃথক যে স্থান থাকে সেখানে নিয়ে যেতে পারেন অথবা ফার্মেসিতেই আপনার সাথে আলাপ শুরু করতে পারেন। সুবিধা মত অবস্থায় আপনি আপনার অসুবিধার কথা বলুন।

পরামর্শ গ্রহনকারীঃ আমার যৌনাঙ্গে কিছু অসুবিধা হয়েছে, ঔষধ প্রয়োজন।

ঔষধ বিক্রেতা ঃ আপনি ডাক্তারের কাছে যান।

পরামর্শ গ্রহনকারীঃ আমি ডাক্তারের কাছে যেতে চাচ্ছি না। আমি আপনার কাছ থেকে ঔষধ কিন্‌তে চাই।

ঔষধ বিক্রেতা ঃ কি অসুবিধা হয়েছে ?

পরামর্শ গ্রহনকারী ঃ আমার যৌনাঙ্গে ঘা(ক্ষত) হয়েছে।

ঔষধ বিক্রেতা ঃ কতদিন যাবত ?

পরামর্শ গ্রহনকারী ঃ ৩ দিন যাবত।

ঔষধ বিক্রেতা ঃ ক্ষতের সাথে ফোসকা আছে কি ?

পরামর্শ গ্রহনকারী ঃ আমার প্রস্রাবের রাস্তা দিয়ে পুজ যাচ্ছে।

ঔষধ বিক্রেতা ঃ কতদিন যাবত ?

পরামর্শ গ্রহনকারী ঃ ৩ দিন যাবত।

পরামর্শ গ্রহনকারী ঃ না

ঔষধ বিক্রেতা ঃ এর মধ্যে কোন যৌনকর্মীর (পতিতা/খারাপ মেয়ে মানুষ) সাথে সহবাস করেছেন কি ?

পরামর্শ গ্রহনকারী ঃ হ্যাঁ।

ঔষধ বিক্রেতা ঃ কনডম ব্যবহার করেছিলেন কি ?

পরামর্শ গ্রহনকারী ঃ না। কনডম ব্যবহার করব কেন ?

ঔষধ বিক্রেতা ঃ যৌন রোগ প্রতিরোধ করার জন্যে।

ঔষধ বিক্রেতা ঃ আমাকে ক্ষতটা (ঘা)/পুজ যাওয়াটা দেখান।

পরামর্শ গ্রহনকারী ঃ না, আমি দেখাতে চাচ্ছি না।

(যদি তারপরও ঔষধ বিক্রেতা পরীক্ষা করতে চান সেক্ষেত্রে পরামর্শ গ্রহনকারী আগামীকাল পুনরায় যাবেন বলে আশ্বস্ত করবেন)

পরবর্তীতে ঔষধ বিক্রেতা কিছু ঔষধ দিতে পারেন। ঔষধগুলি সম্পর্কে মনযোগ সহকারে শুনতে হবে এবং প্রয়োজনে কিনতে হবে। যদি ইনজেকশন দিয়ে দিতে চান তাহলে পরে নিবেন বলে এড়িযে যেতে হবে। নিম্নে উল্লিখিত প্রসঙ্গগুলি ঔষধবিক্রেতা বলছেন কিনা এবং বলে থাকলে কি বলছেন তা স্মরণ রাখতে চেষ্টা করবেন পরামর্শ গ্রহনকারী।

- ঔষধের মাত্রা
- পুরো মাত্রার ঔষধ গ্রহন
- পুনরায় আসা (Follow up visit)
- যৌন সংগীর চিকিৎসা
- কনডম ব্যবহার
- সঠিকভাবে কনডম ব্যবহার পদ্ধতি
- এইচ আই ভি/এইডস প্রতিরোধ সম্পর্কীয় তথ্য

পরামর্শ গ্রহনকারী ঔষধ বিক্রেতার সাথে আলোচনার ফাঁকে নিম্নের বিষয় সমূহ পর্যবেক্ষণ করবেন।

- ডাক্তার বসার পৃথক কক্ষ আছে কি না
- পার্টিশন দিয়ে রোগী পরীক্ষার ব্যবস্থা আছে কিনা
- STD/AIDS- এর পোষ্টার আছে কি না
- STD/AIDS- লিফলেট আছে কি না
- STD/AIDS-এর ষ্টিকার আছে কি না
- প্রদর্শনের জন্য কনডম আছে কি না

International Center for Diarrhoeal Research, Bangladesh
Operations Research Project

Research title: Strategies to improve prevention and mangement of reproductive tract infections (RTIs) and Sexually Transmitted Diseases (STDs)

Information from role play
(Record Sheet)

Code No.: |__|__|__|

Name of the Pharmacy:

Address:

Name of the mystery shopper:

Date of the Mystery Shopping:

1. What was the attitude of the drug seller towards you?

1. Friendly
2. Sympathetic
3. Hostile
4. Not interested
5. Other

2. Did the drug seller show interest to treat ?

1. Yes
2. No
3. Advised to go to doctor
4. At first advised to go to doctor, but on request agreed to treat

3. Did the drug sellers want to know the history of the disease? (symptoms and sexual behaviour)

1. Yes
2. No

4. If yes, what did he want to know?

_____

_____

5. Did the drug seller want to do physical examination?

1. Yes
2. No
3. Other (Please mention)

6. Did the drug seller provide medicine?

1. Yes
2. No

7. If yes, Please mention:

Name of the medicine	Dose	Course

8. Did the drug seller discuss on condom use to prevent STD?

1. Yes
2. No

9. If yes, what did he discuss?

_____

_____

10. Did the drug seller advise to complete the full course of medicine?

1. Yes
2. No
3. Not applicable

11. Did the drug seller request for follow up visit?

1. Yes
2. No
3. Not applicable

12. Did the drug seller discuss on how to use condom?

1. Yes
2. No
3. Not applicable

13. Did the drug seller suggest treat partner?

1. Yes
2. No
3. Not applicable

14. If yes, what did he suggest?

_____

_____

15. Did the drug seller discuss on HIV/AIDS and its prevention?

1. Yes
2. No
3. Not applicable

16. If yes, what did he discuss?

_____

_____

17. Did the pharmacy have separate room for doctor?

1. Yes
2. No

18. Did the pharmacy have any arrangement to talk in privacy?

1. Yes
2. No

19. In the pharmacy followings were on display:

Materials	Yes	No	Comments
1. condom			
2. Poster on condom use			
3. sticker on conuse			
4. poster on STD prevention			
5. Sticker on STD prevention			
6. Poster on HIV/AIDS			
7. Sticker on HIV/AIDS			

20. Starting time of discussion with the drug seller
21. Ending time of discussion with the drug selles
22. Time of filling up the record sheet

23. Comments of the shopper:

ফার্মেসিতে ভূমিকাভিনয় তথ্য সিট

কোড নং ঃ |__|__|__|

ফার্মেসির নাম ঃ

ঠিকানা ঃ

পরামর্শ গ্রহনকারির নামঃ পরামর্শ গ্রহনের তারিখঃ ___/___/___

১। আপনার প্রতি ঔষধের বিক্রেতার ব্যবহার কেমন ছিল ?

১. বন্ধুত্বপূর্ণ
২. অশোভন
৩. অনাগ্রহী
৪. অন্যান্য

২। ঔষধ বিক্রেতা কি চিকিৎসা করতে আগ্রহ প্রকাশ করেছেন ?

১. হ্যাঁ
২. না
৩. ডাক্তারের কাছে যেতে বলেছে
৪. ডাক্তারের কাছে যেতে বলেছে কিন্তু পরে অনুরোধে রাজি হয়েছে

৩। ঔষধ বিক্রেতা কি আপনার রোগের ইতিহাস জানতে চেয়েছেন ? (যৌন আচরণ এবং রোগের উপসর্গ)

১. হ্যাঁ
২. না

৪। উত্তর হ্যাঁ হলে, কি জানতে চেয়েছে ?

_____

_____

_____

৫. ঔষধ বিক্রেতা কি আপনাকে শারিরীক পরীক্ষা করতে চেয়েছেন ?

১. হ্যাঁ
২. না
৩. অন্যান্য (উল্লেখ করুন) ----------

৬। ঔষধ বিক্রেতা কি আপনাকে ঔষধ দিয়েছেন/দিতে চেয়েছেন ?

১. হ্যাঁ
২. না

৭। যদি হ্যাঁ হয়, তাহলে ঃ

ঔষধের নাম	মাত্রা	কতদিন ব্যবহার করতে বলেছেন

৮। কনডম যৌনবাহিত রোগ প্রতিরোধ করে, ঔষধ বিক্রেতা কি এ বিষয়ে আলোচনা করেছেন ? (প্রয়োজনে probe করবেন)

১. হ্যাঁ
২. না

৯। উত্তর হ্যাঁ হলে, কি বলেছেন ?

_____

_____

১০। ঔষধ বিক্রেতা কি পুরো মাত্রার ঔষধ সেবনের পরামর্শ দিয়েছেন ?

১. হ্যা
২. না
৩. প্রযোজ্য নয়

১১। ঔষধ বিক্রেতা কি রোগের অবস্থা জানানোর জন্য পুনরায় যেতে বলেছেন ?

১. হ্যাঁ
২. না
৩. প্রযোজ্য নয়

১২। কনডম কিভাবে ব্যবহার করতে হয়, এ সম্পর্কে ঔষধ বিক্রেতা বলেছেন কি ? (প্রয়োজনে probe করবেন)

১. হ্যাঁ
২. না
৩. প্রযোজ্য নয়

১৩। যৌন সংগীর চিকিৎসার বিষয়ে ঔষধ বিক্রেতা পরামর্শ দিয়েছেন কি ? (প্রয়োজনে probe করবেন)

১. হ্যা
২. না
৩. প্রযোজ্য নয়

১৪। যদি পরামর্শ দিয়ে থাকেন তাহলে কি পরামর্শ দিয়েছেন ?

_____

_____

১৫। HIV/AIDS প্রতিরোধের বিষয়ে ঔষধ বিক্রেতা কিছু বলেছেন কি ?

১. হ্যাঁ
২. না
৩. প্রযোজ্য নয়

১৬। যদি হ্যাঁ হয়, তাহলে কি বলেছেন ?

_____

_____

১৭। ফার্মেসিতে ডাক্তার বসার আলাদা ব্যবস্থা আছে কি ?

১. হ্যাঁ
২. না

১৮। ফার্মেসিতে গোপনীয় ভাবে কথা বলার ব্যবস্থা আছে কি ?

১. হ্যাঁ
২. না

STD / AIDS Training for Pharmacists

Pre/Post test Questionnaire

Ques 1. What is AIDS?

_____

_____

_____

Ques 2. What is HIV?

_____

_____

_____

Ques 3. How does HIV spread?
(Please give beside the correct answer)

a) by sexual intercourse

b) by blood transfusion

c) by sneez and cough

d) by syringe and needle

e) by mosquito bite

f) all of above

Ques 4. Who are at risk of being infected by HIV?
(Please give beside the correct answer)

a) RTI/STI patients

b) parenteral drug users

c) person having multiple sex partners

d) foeus of infected pregnant mother

e) all of above

Ques 5. Is there any treatment for AIDS?

a) yes

b) no

Ques 6. How does AIDS can be prevented?

_____

_____

_____

_____

_____

_____

Ques 7. What is STD?

_____

_____

_____

Ques 8. What are the complications of STD?
(Please give beside the correct answer)

a) sterility

b) blind children

c) AIDS

d) abortion

e) all of above

Ques 9. What are the 4 important things for the treatment of STD?

_____

_____

_____

_____

_____

_____

Ques 10. What are the advantages of using condom?
(Please give beside the correct answer)

a) RTI/STI can be prevented

b) AIDS can be prevented

c) unwanted pregnancies/ childbirth can be prevented

ফার্মাসিস্টদের এস.টি.ডি এইড্স বিষয়ক প্রশিক্ষণ

প্রশিক্ষণ পূর্ব প্রশ্নপত্র

প্রশ্ন ১। এইড্‌স কি?

প্রশ্ন ২। এইচ. আই. ভি কি?

প্রশ্ন ৩। এইচ. আই. ভি কি ভাবে ছড়ায় ?

(সঠিক উত্তরের পার্শে টিক চিহ্ন দিন)

(ক) যৌন মিলনের মাধ্যমে

(খ) রক্ত পরিসঞ্চালনের মাধ্যমে

(গ) হাঁচি কাশির মাধ্যমে

(ঘ) সিরিঞ্জ ও সুঁচের মাধ্যমে

(ঙ) মশা কামড়ে

(চ) উপরের সব গুলো উপায়ে

প্রশ্ন ৪। এইচ. আই. ভি দ্বারা কাদের সংক্রমনের বেশী ঝুঁকি রয়েছে ?

(সঠিক উত্তরের পার্শে টিক চিহ্ন দিন)

(ক) যৌন রোগে আক্রান্ত ব্যক্তির

(খ) ইনজেকশনের মাধ্যমে নেশা গ্রহনকারী

(গ) যাদের একাধিক যৌন সঙ্গী রয়েছে

(ঘ) আক্রান্ত মায়ের গর্ভের শিশু

(ঙ) উপরের সব গুলো

প্রশ্ন ৫। এইড্স রোগের কি চিকিৎসা আছে ?

(ক) আছে

(খ) নেই

প্রশ্ন ৬। এইড্স থেকে প্রতিরোধের উপায় কি কি ?

_____

_____

_____

_____

_____

_____

প্রশ্ন ৭। যৌন রোগ বা এস, টি, ডি, কি ?

_____

_____

_____

প্রশ্ন ৮। যৌন রোগের জটিলতা কি কি ?

(সঠিক উত্তরের পার্শে টিক চিহ্ন দিন)

(ক) বন্ধ্যাত্ব

(খ) অন্ধ শিশু

(গ) এইড্স

(ঘ) গর্ভবতী মায়ের সন্তান নষ্ট হওয়া

(ঙ) উপরের সব গুলো

প্রশ্ন ৯। যৌন রোগের চিকিৎসায় চারটি বিশেষ করনীয় কি কি ?

_____

_____

_____

_____

_____

_____

প্রশ্ন ১০। কনডম ব্যবহার করলে কি সুফল পাওয়া যায় ?

(সঠিক উত্তরের পাশে টিক চিহ্ন দিন)

(ক) যৌন রোগ থেকে বাঁচা যায়

(খ) এইডস থেকে বাঁচা যায়

(গ) অবাঞ্ছিত শিশু জন্মদান থেকে বিরত থাকা যায়

Appendix-9

Budget for the Laboratory Sciences component of the protocol

Summary Budget

Account Description	US $ Amount Requested		
	1st year	2nd year	Total
Human resource: 15% salary of research officer	570	590	1,160
Consumables	26,649	17,766	44,415
Capital Investment	6,945	-	6,945
Other contractual services: samples transport cost; miscellaneous costs and unforeseen costs	4,500	3,000	7,500
Total operating cost	38,664	21,356	60,020

S. Moin
27/2/99
Shamima Moin
Cashier, Budget & Costing

Detailed Budget

I Validity assessment of the syndromic approach for vaginal discharge :

Sample size: 3,000 clients with the complaint of vaginal discharge
Number of study sites: 2

a. Capital Investment *	6,000.00 USD
b. Consumables **	36,000.00 USD
Supplies10%	3,600.00 USD
Depreciation 10%	3,600.00 USD
Speculum examination	620.00 USD
Total	43,820.00 USD

c. Transport of samples to ICDDR,B : Collected samples will be transported to LSD on every week days from the study sites.

*** Capital Investment:**
Two microscopes will be required for the two study sites.
Total cost of microscope: 3000 x 2 = 6000 USD (Transport included)

**** Consumables**
Laboratory testings:

1. Culture for Gonorrhoea, including supplements including transport	04.00 USD
2. ELISA test for Chlamydia	06.00 USD
3. Gram Staining & fresh examination (including slides etc.)	02.00 USD
Total cost per client:	12.00 USD

Total cost for 3,000 clients: 3,000 x 12 = 36 ,000.00 USD

Speculum examination:

4. Gloves (7 USD/50 pairs gloves, 3,000 pairs of gloves are required)	420.00 USD
5. Speculum (5 USD/pc, 40 speculums are required)	200.00 USD
Total	620.00 USD

II. Operationalization and assessment of antenatal screening for syphilis at PHC level:

Sample size: 1,500 pregnant women (Approx.)
Site: Sher-e-Bangla Nagar GoD

A. At the site:

a. Capital investment*	350.00 USD
b. Consumables**	595.00 USD
Total	945.00 USD

c.: Transport of samples to ICDDR,B : Collected samples will be transported to LSD on every week days from the study sites.

***Capital investment:**

Instruments	Quantity	Price	Total
Centrifuge machine			
Electrical	1	200 US$	200 USD
Manual	1	100 US$	100 USD
Electrical rotator	1	50 US$	50 USD
Total			350 USD

****Consumables:**

Requirements and costs of screening:
1 RPR Kit (ORGANON, Teknika) = US $ 50.00 (500 Tests/kit) (without taxes)
Total kits required: 1,500 ÷ 500 = 3 Kits
Total cost of kits: 50 x 3 = US $ 150

Other requirements of the tests:

Instruments	Quantity	Total
Disposable syringes and needles	3,000	220.00 USD
5cc test tube	3,000	200.00 USD
Bucket	1	5.00 USD
Total		445.00 USD

Total cost of the consumables:
150 + 445 = 595 USD

(In case of load shedding the manual centrifuge will be used and rotating of the RPR card will be done manually)

B. At LSD in ICDDR,B

a. Consumables* 110 USD

*Total number of women: 1,500
Estimated percentage of RPR reactive at the site: 3% → 45 samples
All 45 samples will be brought to LSD for RPR + TPHA
10 percent of the RPR negative will also be brought to LSD for RPR and TPHA →
1455 x 10% = 145 negative RPR

Estimated total number of tests (RPR + TPHA) that will be done by LSD → (45 + 145) = 190
Requirements to do these 190 (RPR + TPHA) tests

Material/Instrument	**Quantity**	**cost**	**Total**
TPHA Kit (200tests/kit)	1	60 USD	60 USD
RPR Kit (500 tests/kit)	1	50 USD	50 USD

III. Human Resource

a. Research officer in LSD
15% salary of the research officer = 570 USD/year

All the capital investment at the study sites will be returned to ORP after the completion of each study.

Proposal Review

Proposal's Title: - Strategies to improve the prevention and management of RTIs/STDs in Bangladesh

The proposal has been developed in collaboration with the NIPHP partners. The partners are the GoB, RSDP, UFHP, SMC and QIP. The proposal was reviewed by an ORP working group, consisting of members from USAID, RSDP, UFHP, MOHFW (representatives from the Directorates of Health and Family Planning) and other government agencies. It was also reviewed by Dr. John Stoeckel and Dr. Cherif Soliman, WHO and FHI Consultant, Dermatologist and STD specialist. Attached are the comments from the reviewers on the proposal.

Dr. Cherif Soliman gave his comments through a special meeting and also over the telephone while he was in Bangladesh. Instead of any specific comments he had only queries on the proposal His queries were on intervention (a) Operationalization and assessment of the syndromic approach at the PHC level and (b) Building capacity for pharmacy based services to prevent STD/HIV/AIDS of the proposal which were mutually agreed upon through detailed discussion.

Dr. John Stoekel's comments included both queries and suggestions. His queries were discussed and mutually agreed upon. The changes suggested in Comments 8 and 10 have been incorporated. In responding to his Comment 8, using of urine tests to diagnose gonococcal and chlamydial infection has been excluded. Comment 10 was addressed through incorporation of a conceptual framework and a set of proposed dummy tables that will be used in the analysis of the proposed operations.

Comments from Dr. John Stoeckel on the proposal: Strategies to improve the prevention and management of RTIs/STDs in Bangladesh

1. Remove "STDs" from title, as it is a sub-category of RTIs, or use "RTI/STD" if there is a concern about highlighting STDs.
2. Pg. 4, under 2, Problem Statement - Needs a summary statement of the three specific problems that will be addressed by the study.
3. Pg. 7, Line 7 "Providers of these (NGO) sites are well trained on the syndromic approach". The statement seems to contradict the objective of the study, i.e., to validate the syndromic approach, and appears to assume the approach is already valid.
4. Pg.5, Under Prevalence of RTIs and STDs. The argument for a "high" prevalence of STDs is weak. Only syphilis is given a prevalence figure but there are no data for the other STDs or for other RTIs as well. The same could be said for the statement made under "Lessons Learned" (Pg. 8) - "RTIs/STDs are prevalent in this community".
5. Pg.10, Research Questions and Indicators - The research questions under the first objectives should be reviewed. Q.1 depends upon the successful validation of the syndromic approach (Q.2). If the approach cannot be validated then it cannot be used in the management of RTI/STD clients.
6. Major Issue. (What impact does the use of the syndromic approach have upon the provision of other services at each SDP?) The study should include this as a research question along with the methodology to answer the question.
7. Pg. 14, line-3 - ".... client exit interviews will be conducted as part of the process evaluation and qualitative assessment of the syndromic approach". What data will be collected by the exit interviews and how do they relate to the research questions?
8. Pg. 13. - "Assessment of feasibility and validity of the syndromic approach" I find this section very confusing. The syndromic approach is based on vaginal discharge, with and without speculum examination. In the group without a speculum exam, will vaginal discharge be based upon self-reporting or signs (discharge) observed by physician taking vaginal swabs? What are the "QIP developed vaginal discharge flow-charts? How do they differ from the standard WHO vaginal discharge flow-charts? If sample for lab tests is collected from all clients, are they used as the gold standard for both groups? If so, then why are urine tests used to diagnose gonococeal and chlamydia infection?
9. Pg. 17, Study Design - How will the exit interviews be used to assess "feasibility" of the antenatal screening as a component of ANC? Feasibility should be defined.
10. Analytical plans or, at the minimum, a set of proposed dummy tables that will be used in the analysis should be provided for each of the three interventions.
11. A statement of the study objectives should be included, i.e., the same objectives stated for the interventions (see pg.9).

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In-Box

RELATED: Dictionary Thesaurus

Reply-To: <scherif@intouch.com>
From: "Cherif Soliman" <scherif@intouch.com> Save Address Block Sender
To: "Barkat-e- Khuda" <barkat@icddrb.org>
Cc: "saifur rahman" <saifur_r@hotmail.com>
Subject: Greetings from Cairo
Date: Thu, 8 Oct 1998 22:36:24 +0200

Dear Prof Barkat
Greetings from Cairo.
I am sending you this e-mail to express my thanks for giving me the chance to review the review paper and the proposal on strategies to improve the prevention and the management of RTIs/STDsin Bangladesh
After our meeting at AVSC, Dr Saifur Rahman, Dr Mohsin Ahmed and I met on several occasions. I hope my comments during the special meetings and telephone discussions with Dr Saifur were useful.
I shall be glad to cooperate in further activities
Kind regards and best wishes

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