

**THE UNITED REPUBLIC OF TANZANIA**

**MINISTRY OF HEALTH**

**STI TRAINING  
FOR  
CLINICIANS**

**USER'S MANUAL**



**NATIONAL AIDS/ STD CONTROL PROGRAMME**

Published by:

National ADIS/ STD Control Programme  
Ministry of Health  
P.O.Box 11857  
Dar es Salaam  
Tanzania

STI Training for Clinicians – User’s Manual.

ISBN 9987 650 16 3

Second English edition 2001

© National AIDS/ STD Control Programme, 1999  
Extracts from this book may be reproduced by non – profit organisations  
with acknowledgement to the National AIDS Control Programme.

Development and printed with support of the European Union (EU)



## **ACKNOWLEDGEMENTS**

The need for uniformity in the management of Sexually Transmitted Diseases (STDs) has for a long time been felt at all levels of health care in the country. This users' manual has come a long way to alleviate confusion which existed for many years as to which manual to use in STD case management.

This User's Manual is being introduced so that it will be used nation-wide. It is a result of combination of works including the manual previously developed by AMREF STD Case Management Workbook by WHO and treatment guidelines developed by NACP in November 1996. In view of this we are sincerely grateful to AMREF and in particular to the editors Dr. Kinton Nyamuryekung'e and Dr. C. Hammelmann for letting us use their manual as a template and thus avoiding unnecessary development work already undertaken by them. Furthermore, we are very much indebted to all those individuals, institutions and partners who contributed in one way or another to the success of this manual.

Finally, the Ministry of Health wishes to thank the European Union for the financial support given in the preparation and production of this manual.

Let us combine efforts to win the prevention and control of STDs.

**Dr. G. L. Upunda**  
**CHIEF MEDICAL OFFICER**

## LIST OF ABBREVIATIONS

|       |   |  |
|-------|---|--|
| AIDS  | - | Acquired Immune- Deficiency Syndrome       |
| AMREF | - | African Medical and Research Foundation    |
| DACC  | - | District AIDS Control Coordinator          |
| BD    | - | twice daily                                |
| DMO   | - | District Medical Officer                   |
| FP    | - | Family Planning                            |
| GDS   | - | Germany Development Service                |
| g     | - | gram                                       |
| GSF   | - | Good Samaritan Foundation                  |
| GTZ   | - | Gesellschaft für Technische Zusammenarbeit |
| GUD   | - | Genital ulcer Disease                      |
| HBO   | - | Health Behaviour Officer                   |
| HC    | - | Health Centre                              |
| HIV   | - | Human Immunodeficiency Virus               |
| HLM   | - | Health Learning Material                   |
| HTA   | - | High Transmission Area                     |
| IM    | - | intramuscular                              |
| IU    | - | International Units                        |
| Mg    | - | milligram                                  |
| MU    | - | mega units                                 |
| NACP  | - | National AIDS Control Programme            |
| OD    | - | once daily                                 |
| ON    | - | Ophthalmia Neonatorum                      |
| PHE   | - | Peer Health Educator                       |
| PID   | - | Pelvic Inflammatory Disease                |
| QD    | - | four times daily                           |
| RACC  | - | Regional AIDS Control Coordinator          |
| RMO   | - | Regional Medical Officer                   |
| RPR   | - | Rapid Plasma Reagin                        |
| SN    | - | serial number                              |
| STAT  | - | at once                                    |
| STD   | - | Sexually Transmitted Disease               |
| Tab   | - | tablets                                    |
| TD    | - | thrice daily                               |
| TPHA  | - | Treponema Pallidum Haemagglutination Assay |
| UDS   | - | Urethral Discharge Syndrome                |
| VDS   | - | Vaginal Discharge Syndrome                 |
| WHG   | - | Women Health Group                         |
| WHO   | - | World Health Organisation                  |
| WVT   | - | World Vision Tanzania.                     |

## TABLE OF CONTENTS Page

|   |    |
|---|----|
| Acknowledgements.....   | i  |
| List of abbreviations .....   | ii |
| 1. Introduction .....   | 1  |
| 2. Objectives .....   | 2  |
| 3. Public Health Importance of STIs .....   | 3  |
| 4. History Taking .....   | 4  |
| 5. Clinical Examination .....   | 5  |
| 6. STI Aetiologies, Symptoms, Signs and Complications.....                                | 7  |
| 7. The Concept of Syndromic Management of STDs.....                                       | 9  |
| 8. STD Syndromes: Overview .....  | 13 |
| 9. STD Syndromes: Flow Charts .....   | 15 |
| Genital Ulcer Syndrome: Flow Chart 1 .....  | 18 |
| Urethral Discharge Syndrome: Flow chart 2 .....   | 19 |
| Vaginal Discharge Syndrome: Flow chart 3 .....  | 20 |
| Pelvic Inflammatory Disease: Flow chart 4 .....   | 21 |
| Neonatal conjunctivitis: Flow chart 5 .....   | 22 |
| Inguinal Bubos: Flow chart 6 .....  | 23 |
| Balanoposthitis: Flow chart 7 .....   | 24 |
| Painful Scrotal Swelling: Flow chart 8 .....  | 25 |
| 10. STD Conditions for Referral .....   | 26 |
| 11. The Concept of Risk Behaviour .....   | 30 |
| 12. Health Education is STI Control .....   | 32 |
| 13. Education on Sexual and Reproductive Health (SRH) in Primary and Secondary Schools .. | 37 |
| 14. Condom Use, Promotion, Negotiations and Demonstration .....                           | 38 |
| 15. Contract Referral .....   | 42 |
| 16. Counselling of STD Clients .....  | 46 |
| 17. Monitoring and Evaluation of STI Services .....                                       | 48 |

## LIST OF TABLES

|  |    |
|--|----|
| 1. Topics to be covered during history taking in STD patients .....                    | 6  |
| 2. Clinical examination of female and male STD patients .....                          | 8  |
| 3. Aetiologies, symptoms, signs and complications of selected STDs .....               | 9  |
| 4. Advantages and disadvantages of different approaches in STD Management .....        | 14 |
| 5. STD Syndromes and aetiologic agents .....   | 16 |
| 6. Condylomata Acuminata and Condylomata Lata .....                                    | 27 |
| 7. Neonatal Conjunctivitis.....  | 29 |
| 8. Health Education through STD Clinicians: Selected topics.....                       | 35 |
| 9. Common misconceptions about Condoms and opposing facts.....                         | 40 |
| 10. Approximate incubation periods of STD Syndromes.....                               | 43 |
| 11. Monitoring of AIDS/STIs in a region.....   | 49 |
| 12. Requirements of STD drugs for health institution based on reported syndromes ..... | 67 |
| 13. Estimation of drug needs and other supplies.....                                   | 68 |

## **LIST OF FORMS**

|   |    |
|---|----|
| A. Data collection form a ANC surveillance.....                                     | 51 |
| B. Laboratory investigation request ion form.....                                   | 52 |
| C1.Health care seeking behaviour and treatment outcome assessment outcome form..... | 54 |
| C2.Clinical STD reporting form.....   | 59 |
| D1.NACP-STD supervision checklist form.....   | 61 |
| D2.Syphilis screening for Antenatal Clinic attendees supervision form.....          | 63 |
| E. Monitoring of STD control activities in a region form.....                       | 65 |
| F. Quarterly recording / ordering form for STD drugs.....                           | 69 |

## **LIST OF FLOW CHARTS**

|                                     |    |
|-------------------------------------|----|
| 1. Genital Ulcer Syndrome.....      | 18 |
| 2. Urethra Discharge Syndrome.....  | 19 |
| 3. Vaginal Discharge Syndrome.....  | 20 |
| 4. Pelvic Inflammatory Disease..... | 21 |
| 5. Neonatal conjunctivitis .....    | 22 |
| 6. Inguinal Bubos.....              | 23 |
| 7. Balanoposthitis.....             | 24 |
| 8. Painful Scrotal Swelling.....    | 25 |

## **LIST OF SUMMARY BOXES**

|   |    |
|---|----|
| 1. Components of a comprehensive STD Control Programme.....       | 4  |
| 2. Risky sexual behaviour in STD / HIV High Prevalence Areas..... | 30 |
| 3. Objectives of Contact Referral in STD Control.....             | 42 |
| 4. Contact Management.....  | 45 |
| 5. Counselling during STD Services.....                           | 47 |

## 1. INTRODUCTION

Control of Sexually Transmitted Infections (STIs) is seen as a priority by the Ministry of Health. Classical STDs in themselves are an important cause of disease burden and suffering. These are caused by complications such as infertility, chronic abdominal pain, congenital infections and still-births. Their importance has further increased by the fact that they contribute to the transmission of HIV infection. Efforts to control HIV / AIDS are therefore closely linked to those of controlling other STIs,

The NACP recognizes that, STI control demands the combined efforts of the health workers in the health service system and those working with the Community. Without such cooperation, control efforts are likely to fail The NACP therefore stresses the importance of training health workers in STD management including proper information and education of the patients as well as training of peer educators and community workers such as extension workers, NGO field workers and village health workers in STIs/AIDS and their complications. If combined with a regular drug supply such efforts can favourably influence HIV transmission as shown in the Mwanza trial.

To be effective in controlling STIs, any programme must be able to reach the majority in the population. This means that STI services must be available also at dispensaries and health centres where the majority of the people first come into contact with the health system. At this level of the health care system, the application of the syndromic approach to the management of STIs has been found to be appropriate, effective and feasible.

A number of studies have pointed out the particular vulnerability of women to acquire STIs and HIV infection. This increased vulnerability is not only due to biological, but also to socio-economical and cultural factors which contribute to the disadvantaged status of women compared to men. In addition, STIs tend to be more difficult to diagnose in women partial because or a large proportion of asymptomatic cases. At the same time, complications caused by untreated STIs are more serious and frequent in women than in men. For these reasons, special emphasis has been made to offer STI services in such a way that the particular needs of women are adequately addressed. A cautious approach is indicated to avoid that this special emphasis results in another way of discrimination of women, i.e. to create the impression that women are responsible for the spread of STIs,

STD services are open for both males and females, and do address the needs and potential objections of males in an equally effective way.

Quality STD services depend critically on the skills of the service providers. It is the intention of this User's Manual to support the training and supervision of STD clinicians under the National AIDS/ STDs Control Programme in a comprehensive way.

This is the second edition (the User's Manual. The main reasons for the printing of a new edition include changes in the flow charts which have been made since some drugs for treatment of gonorrhoea were no longer effective and had to be replaced. Moreover a new protocol for sentinel surveillance of ante-natal women was outlined. Finally there has been a change in the nomenclature internationally. WHO has accepted the term Sexually Transmitted Infections (STI) as a general and broader term including asymptomatic infections-[instead of Sexually Transmitted Diseases(STD), In the new edition we have therefore adopted the new term. In general, the terms can be used interchangeably without causing confusion, In the text the term STI is used to denote sexually transmitted infections in general, while the old term STDs is retained when diseases are dealt with.

## 2. OBJECTIVES

This User's Manual is primarily meant to provide the clinicians and supervisors of STI services with the knowledge and skills necessary to manage STD patients comprehensively. It puts special emphasis on STD services at OPD. The complementary role of Peer Health Educators (PREs) as motivators of their peers to seek STI services have long been recognized at HTAs, thus the recommendation for the clinical officers to provide support to the PREs. The development of the User's Manual was based on guidelines from the NACP, practical experiences from a number of STD training workshops for clinicians, on their working experience after the training and on the analysis of data gathered through established supervision instruments. Clinicians and supervisors should use the User's Manual during their initial training as a training module and later in their practical work as a reference manual.

The User's Manual is secondly meant as a course material for trainers of training workshops for STD clinicians and supervisors. Together with the Trainer's Guide, it will provide the trainers with a comprehensive package to prepare and conduct the training workshops in a productive and hopefully enjoyable way, along the guidelines of the NACP.

At the end of the training using this User's Manual the trainees should be able to:

- Provide privacy for STD clients
- Assure confidentiality to STD clients
- Recognize STD symptoms
- Know STD syndromes and their aetiologies
- Recognize STI complications
- Apply the principles of effective STD case management
- Apply the National STI treatment algorithms
- Give health education and counselling to clients on STD/AIDS prevention and control
- Establish and maintain a contact referral system
- Give support to community activities on STI/AIDS
- Monitor and supervise STD management

By using this User's Manual in combination with the Trainer's Guide the trainer will be able to:

- Prepare training workshops for STD clinicians and supervisors
- Identify additional workshop material or resource persons as necessary
- Conduct training workshops for STD clinicians and supervisors

### 3. PUBLIC HEALTH IMPORTANCE OF STI s

STIs are highly prevalent, they cause considerable morbidity, increase the risk of HIV infection and are costly to the individual and the society in general,

STIs are highly prevalent in Tanzania:

- Between 10 - 20% of the sexually active population contract STI each year
- Between 2 -15% of pregnant women are RPR and TPHA seroreactive
- Among people living in HTAs the prevalence of STIs is particularly high (for example, 27% among females)

STIs are responsible for serious complications in women, men and neonates:

- PID in women
- Ectopic pregnancy in women Infertility in women and men Urethral stricture in men
- Ophthalmia neonatorum in neonates

STDs link with HIV infection in various ways:

- HIV and other STIs share the same major transmission route, such as unprotected penetrative sex  
The same risk behaviours predispose to infections with HIV and other STIs
- Having an STD increases the risk of acquiring and transmitting HIV infection
- Being HIV infected can change the clinical presentation and treatment for other STIs
- STI intervention can significantly decrease HIV incidence in a community' as demonstrated in a large study in Mwanza, Tanzania

STIs have an important socio-economic impact:

- Cost for health services, especially for drugs
- Loss of economic productivity
- Relationship/marriage problems
- STI associated stigma and discrimination of infected people

STIs affect the success of the health programmes:

- Mother and Child Health Programme, especially ante-natal care
- Family Planning Programme
- Child Survival Programme
- AIDS Control Programme

The control of STIs is therefore a public health priority. A comprehensive STI control and prevention programme comprises the following key components:

#### **COMPONENTS OF A COMPREHENSIVE STD CONTROL PROGRAMME**

- Training of service providers
- Effective primary prevention of STIs
- Promotion of appropriate STD care seeking behaviour
- Cost- effective case management
- Contact management
- Routine prevention of ophthalmia neonatorum
- Availability and affordability of drugs
- STI case finding/ screening
- Monitoring and supervision.

**BOX 1**

#### 4. HISTORY TAKING

The main purpose of history taking is to obtain information about the patient's symptoms, when they first occurred and their change over time. Since history taking with STD patients involves discussion of sensitive issues, a conducive environment is an important precondition. A quiet room where patients can be interviewed in private is a basic requirement. Only people directly involved in the history taking should be present. The room must be furnished with at least two chairs on which the clinician and the patients can be sit during the interview. In order to help the patient to feel at ease,

- Greet the patient in a friendly manner and offer her/him a chair,
- Show that you are interested and make sure that your body gives the same friendly relaxed message as your words
- Speak a language which patients can understand
- Assure the patient that her/his consultation is confidential.

#### **The following should be observed:**

- Question should be phrased politely
- Medical terms should be avoided, simple ordinary language should be used instead
- Questions should be asked one at a time
- Questions should be free of any moral tone
- Avoid 'leading' questions and let people answer in their own style

Table 1 on page 6 lists the main topics to be covered during the history taking from a patient.

**TABLE 1: TOPIC TO BE COVERED DURING HISTORY TAKING IN STD PATIENTS**

| TOPIC                    | CONTENT   |
|--------------------------|---|
| PERSONAL CHARACTERISTICS | Ask for: <ul style="list-style-type: none"> <li>▪ Name</li> <li>▪ Age</li> <li>▪ Address</li> <li>▪ Occupation</li> </ul>   |
| PRESENT ILLNESS          | <ul style="list-style-type: none"> <li>▪ Ask about present complaints, when they started and whether they changed over time</li> <li>▪ Allow the patient to give the story of her/his illness uninterruptedly. Probe (ask more questions) on areas you feel adequate information has not been provided</li> <li>▪ Review other body systems</li> </ul>  |
| MEDICAL HISTORY          | Ask about: <ul style="list-style-type: none"> <li>▪ Previous STD episodes</li> <li>▪ Any current or long term medication .</li> <li>▪ Drug allergy</li> </ul>   |
| SEXUAL HISTORY           | Ask about: <ul style="list-style-type: none"> <li>▪ Last sexual intercourse: When it took place, whether and what preventive measures were taken, whether partner had any symptoms</li> <li>▪ Use of contraceptive methods</li> <li>▪ Number of sexual contact(s)</li> </ul> In addition, ask females about: <ul style="list-style-type: none"> <li>▪ Number of children and age of last born child</li> <li>▪ Menstrual history</li> </ul> |

## 5. CLINICAL EXAMINATION

Physical examination of a patient enables the clinician to confirm the symptoms the patient has described and to check for clinical signs of STDs. Also, other problems may be revealed if the patient had not complained about. Since the patient will feel highly sensitive about the clinical examination of the genital area, a conducive environment is absolutely essential. In addition to what is required for history taking, an examination couch, a screen/ curtain and a good light source are needed as minimum equipment. It must be ensured that nobody who is not directly involved in the clinical examination interrupts the process.

To reassure patients, who are reluctant to be examined and to win their confidence, the clinician needs to behave professionally before and during the examination.

The following should be observed:

- The clinician should explain the importance of the examination and its procedure Patients should be treated with respect and courtesy
- The clinician should be calm, friendly and smart
- Patients should be offered a chair.

Table 2 on page 8 summarises the main steps for a clinical examination of female and male STD patients.

**TABLE 2: CLINICAL EXAMINATION OF FEMALE AND MALE STD PATIENTS**

| FEMALE PATIENT   | MALE PATIENT   |
|--|--|
| <ul style="list-style-type: none"> <li>• With the patient sitting on a chair, examine for enlarged lymph nodes the anterior and posterior triangles of the neck, the submental, epi-troclear and suboccipital areas</li> <li>• Ask the patient to remove her clothing from the chest down and to lie on the couch using a sheet to cover the parts of the body that you are not examining</li> <li>• Inspect for any rashes, swellings and ulcers at the chest, back, thighs abdomen, buttocks, groins and genitals</li> <li>• Palpate the axillae for enlarged lymph nodes</li> <li>• Gently palpate the abdomen for tenderness and the presence of any pelvic masses taking care not to hurt the patient</li> <li>• Examine the pubic hair for nits/lice</li> <li>• Palpate the inguinal areas noting any tenderness and/or swelling of lymph nodes With the knees of the patient bent and separated, inspect the vulva, perineum and anus for abnormal discharge, ulcers, swellings, or any other abnormalities</li> <li>• For all enlarged lymph nodes, note location, number, consistency and whether painful or not</li> </ul> | <ul style="list-style-type: none"> <li>• Ask the patient to remove his shirt</li> <li>• With the patient sitting on a chair, inspect the skin for any rash and examine for enlarged lymph nodes in the axillae, anterior and posterior triangles of the neck, submental, epitrochlear and suboccipital areas</li> <li>• Ask the patient to put on his shirt, stand up and lower his pants so that he is stripped down to the knees</li> <li>• Inspect for any rashes, swellings and ulcers at the thighs, buttocks, groins and genital</li> <li>• Palpate the inguinal region for the presence of lymph nodes or bubos</li> <li>• Examine the pubic hair for nits/lice</li> <li>• Palpate the scrotum feeling for the testis, epididymis and the spermatic cord noting any enlargement or tenderness</li> <li>• Examine the penis for rashes or sores, then ask the patient to retract the foreskin</li> <li>• Inspect the glans penis, coronal sulcus, frenum for any visible abnormalities</li> <li>• Inspect the urethra for discharge, noting its colour and nature</li> <li>• In case of no obvious urethral discharge gently milk the urethra and note whether any discharge appears</li> <li>• With the knees of the patient bent and separated, inspect the peri-neum and anus for abnormal discharge, ulcers, swellings, or any other abnormalities</li> <li>• For all enlarged lymph nodes, note location, number, consistency and whether painful or not</li> </ul> |

## 6. STI AETIOLOGIES, SYMPTOMS, SIGNS AND COMPLICATIONS

STIs Occur both in the developed and the developing world. However, they are more prevalent in the developing world where health services are inadequate, skilled staff is scarce and only a few laboratories with limited facilities exist. Gonorrhoea, syphilis and AIDS are well known but more than twenty other STIs have been identified, thanks to advances in microbiology and laboratory technology.

Here, the focus will be on the most common STIs: Chancroid, chlamydia genitalis, candidiasis, gonorrhoea, herpes genitalis, lymphogranuloma venereum, syphilis, trichomoniasis and candidiasis. Their aetiologies, symptoms, signs and complications are summarised in Table 3. Note that for a number of STIs individuals can be infected without having symptoms. However, it is assumed that infected but asymptomatic individuals can infect their sexual partners. Contacts of patients with STIs should therefore be treated even if these contacts have no symptoms (see section 14: CONTACT REFERRAL).

**TABLE 3: AETIOLOGIES, SYMPTOMS, SIGNS AND COMPLICATIONS OF SELECTED STDs**

| DISEASE & PATHOGEN  | SYMPTOMS/ SIGNS   | COMPLICATIONS   |
|---|---|---|
| <b>CHANCROID</b><br><i>Haemophilus ducreyi</i>              | <p><b>In Women:</b> Irregular shaped, dirty, easily bleeding and painful ulcers at the vaginal entrance and around the anus, painful urination or defecation rectal bleeding, dyspareunia and vaginal discharge. May have no symptoms.</p> <p><b>In Men:</b> Painful irregular ulcer on penis, tenderness in the groin.</p> | <p><b>Men and Women:</b> Inguinal bubos, in about 112 of the cases unilateral.</p>  |
| <b>CHLAMYDIAL INFECTION</b><br><i>Chlamydia trachomatis</i> | <p><b>Women:</b> Vaginal discharge, painful urination, spotting after sexual intercourse, lower abdominal pain. Often no symptoms.</p> <p><b>Men:</b> Urethral discharge, painful urination. Often no symptoms.</p>   | <p><b>Women:</b> Bartholinitis, Cervicitis, Endometritis, Salpingitis (Pill). In pregnant women it may cause premature rupture of membranes, preterm delivery, neonatal Conjunctivitis.</p> <p><b>Men:</b> Urethral strictures, epididymitis and cystitis, and Conjunctivitis.</p> <p><b>Neonates:</b> Ophthalmia neonatorum.</p> |

**TABLE 3: CONTINUED**

| DISEASE & PATHOGEN  | SYMPTOMS/ SIGNS  | COMPLICATIONS   |
|---|--|---|
| <p><b>GONORRHOEA</b><br/>Neisseria gonorrhoeae</p>              | <p><b>Women:</b> Vaginal discharge, painful urination, lower abdominal pain, painful intercourse (dyspareunia), spotting after sexual intercourse. Proctitis and pharyngitis possible. May have no symptoms.</p> <p><b>Men:</b> Thick, yellow, purulent urethral discharge, painful urination. Proctitis and pharyngitis possible. May have no symptoms.</p>   | <p><b>Women:</b> Bartholinitis, Cervicitis, Salpingitis. Chronic, debilitating Pill, Pelvic abscesses, peritonitis, Ectopic pregnancy, Infertility.</p> <p><b>Men:</b> Urethral stricture, Epididymitis, Infertility.</p> <p><b>Neonates:</b> Ophthalmia neonatorum</p> |
| <p><b>HERPES GENITALIS</b><br/>Herpes simplex virus 1&amp;2</p> | <p>I) First episode</p> <p><b>Women:</b> Painful blisterlike lesions in and around the vagina and anus or on the thighs. Pain may be more severe than in men. May cause painful urination or vaginal discharge, neuropathic symptoms like urinary retention, constipation, paraesthesias. Other symptoms may include headache, fever and malaise. Often no symptoms.</p> <p><b>Men:</b> Painful penile lesions, may cause urethral discharge or pain on urination, same neuropathic and systemic symptoms as in women. May have no symptoms.</p> <p>II) Recurrent episodes</p> <p><b>Men and Women:</b> After first episode 50% recurrences, fewer lesions and systemic symptoms less common than in first episode. Pain, numbness or tingling in buttocks, legs or hips may precede other symptoms.</p> | <p><b>Mother to Newborn:</b> If mother has first episode, 20% to 50% of infants are infected at birth. Such infants may suffer from encephalitis. If mother has recurrent episode, 3% - 5% of infants are infected at birth.</p>  |

**TABLE 3: CONTINUED**

| <b>DISEASE &amp; PATHOGEN</b>                                    | <b>SYMPTOMS/ SIGNS</b>   | <b>COMPLICATIONS</b>   |
|--|--|--|
| <p><b>LYMPHOGRANULOMA VENEREUM</b><br/>Chlamydia trachomatis</p> | <p><b>Women:</b> Lower abdominal pain or low backache, femoral and/or inguinal bubos in 20% - 30%. May have no symptoms.</p> <p><b>Men:</b> Herpetic like vesicle or a small depigmented scar, femoral and i)guinal bubos.</p>   | <p><b>Women:</b> Two thirds of bubos shrink and form fibrous masses, 1/3 rupture and form scars, fistula and chronic inflammation of lymph nodes. Others include Cervicitis, Proctitis, Lymphostasis and Hypertrophic ulceration of the external genitalia.</p> <p><b>Men:</b> Lymphatic obstruction causing oedema of the penis and scrotum. Others include Rectal and urethral strictures, fistulas and rupture of bubo.</p> |
| <p><b>SYPHILIS</b><br/>Treponema pallidum</p>                    | <p><b>Men and Women:</b></p> <p><b>I) Primary syphilis:</b> Painless lesion ( chancre) on vulva, cervix, and penis. Regular clean indurated ulcer. Painless bubo.</p> <p><b>II) Secondary syphilis:</b><br/>1 - 6 months after the onset of the primary chancre. Malaise, fever, non-itchy generalized polymorphic body rash, lymph-adenopathy, condylomata lata on the perianal area, vulva, scrotum or other intertrigenous areas, alopecia.</p> <p><b>III) Tertiary syphilis</b><br/>1 - 20 years after the primary chancre. May present gummas, neurological and/or cardiovascular symptoms and signs.</p> | <p><b>Mother to Newborn:</b> Congenital syphilis in infants. Onset of symptoms usually between week 2 and 8. Hepatospleno-megally, jaundice, joint swelling, pseudoparesis, skin rash, anaemia and nuffles. Perinatal death possible.</p> <p><b>Women:</b> Premature delivery, abortions and stillbirths.</p> <p><b>Men and Women:</b> Meningitis, neurosyphilis</p>   |

**TABLE 3: CONTINUED**

| DISEASE & PATHOGEN                                     | SYMPTOMS/ SIGNS   | COMPLICATIONS   |
|--|---|---|
| <p><b>TRICHOMONIASIS</b><br/>Trichomonas Vaginalis</p> | <p><b>Women:</b> Green yellow abundant , frothy discharge with foul smell, itching, pain on micturition and on sexual intercourse. May have no symptoms.</p> <p><b>Men:</b> Urethral discharge, pain on urination or itching, prostatitis possible. Usually without symptoms.</p> | <p><b>Women:</b> Without treatment symptoms may persist for years and worsen in menses or after menses.</p> |
|  |   |   |

## 7. THE CONCEPT OF SYNDROMIC MANAGEMENT OF STIs

**STDs can be managed through the following approaches:**

- Aetiologic / laboratory approach: Identification of causative pathogen(s) through laboratory methods followed by pathogen specific treatment
- Clinical approach: Targeted treatment of suspected pathogen(s) based on clinical diagnosis
- Syndromic approach: Identification of clinical syndromes ( symptoms and clinical signs) followed by syndrome specific treatment targeting all pathogens which can cause the syndrome

**Table 4 on page 14 lists the main advantages and disadvantages of each approach.**

For the reasons outlined in Table 4, aetiologic/laboratory approach is only undertaken for patients referred after treatment failure. It is the approach applied in referral STD facilities. The clinical approach is not feasible at most health facilities because of its' demands on the clinical expertise of the service provider and the danger of insufficient treatment.

The syndromic approach has been proven to be effective even in rural settings and is therefore the recommended approach by the Ministry of Health outside referral centres.

Syndromic management of STDs is based on the diagnosis of defined symptoms and easily recognisable clinical signs. Each syndrome can be caused by a number of different pathogens. For each syndrome, a well defined standard treatment is recommended by the Ministry of Health which has been proven to be effective against the majority of endemic pathogens which can cause the syndrome.

Flow charts have been developed for each syndrome. These describe diagnosis, treatment and other essentials of case management in form of a decision tree. These flow charts are also called "STD management algorithms".

The flow charts / algorithms for syndrome-based STD management presented in this manual are the national STD management flow charts of the Ministry of Health in Tanzania adapted from WHO. They provide health workers with an efficient tool for STD case management without the need for laboratory investigations.

**TABLE 4: ADVANTAGES AND DISADVANTAGES OF DIFFERENT APPROACHED IN STD MANAGEMENT**

| APPROACH                                       | ADVANTAGES   | DISADVANTAGES   |
|--|--|---|
| <b>AETIOLOGIC/<br/>LABORATORY<br/>APPROACH</b> | <ul style="list-style-type: none"> <li>• Avoid over treatment, saves drugs</li> <li>• Conforms to traditional clinical training</li> <li>• Satisfies patients who feel not properly attended without laboratory check –up</li> <li>• Can be extended as screening to identify patients with asymptomatic STDs</li> </ul> | <ul style="list-style-type: none"> <li>• Laboratory results often not reliable due to:               <ul style="list-style-type: none"> <li>• Low motivation among laboratory staff</li> <li>• Lack of quality control</li> </ul> </li> <li>• Mixes infections often overlooked</li> <li>• Treatment delays, reluctance of patients to wait for laboratory results</li> <li>• High costs</li> <li>• Adequate laboratories not available at the majority of health facilities</li> </ul> |
| <b>CLINIC APPROACH</b>                         | <ul style="list-style-type: none"> <li>• Saves time for patients</li> <li>• Reduce the laboratory expenses</li> </ul>  | <ul style="list-style-type: none"> <li>• Mixed infections often overlooked</li> <li>• Similar clinical features can be caused by a variety of pathogens</li> <li>• Requires high clinic acumen</li> <li>• Requires long term training</li> <li>• Does not identify asymptomatic STDs</li> </ul>   |
| <b>SYNDROMIC<br/>APPROACH</b>                  | <ul style="list-style-type: none"> <li>• Saves time for patients</li> <li>• No laboratory expenses</li> <li>• Provides adequate treatment, even for mixed infections</li> <li>• Easy to reach and simple to apply</li> <li>• Cost- effective</li> </ul>  | <ul style="list-style-type: none"> <li>• Entails frequently overtreatment of patients</li> <li>• Requires special attention to microbial drug sensitivity monitoring</li> <li>• Does not identify asymptomatic STDs</li> <li>• Poor compliance as the patient has to take many drugs</li> </ul>   |

## 8. STD SYNDROMES:OVERVIEW

The following STD syndromes of female and male patients are covered in this manual:

- *Female patients:* **Vaginal discharge Syndrome (VDS)**  
**Pelvic Inflammatory Disease (PID)**
- *Male patients:* **Urethral Discharge Syndrome (UDS)**  
**Painful Scrotal Swelling**  
**Balanoposthitis**
- *Female and male patients:* **Genital Ulcer Disease (GUD)**  
**Inguinal Bubos**
- *Newborns* **Neonatal conjunctivitis**

These syndromes can be managed by health workers at all service levels. Table 5 on the next pages summaries the main symptoms, clinical signs and possible aetiological pathogens for each of these syndromes.

**TABLE 5: STD SYNDROMES AND AETIOLOGIC AGENTS**

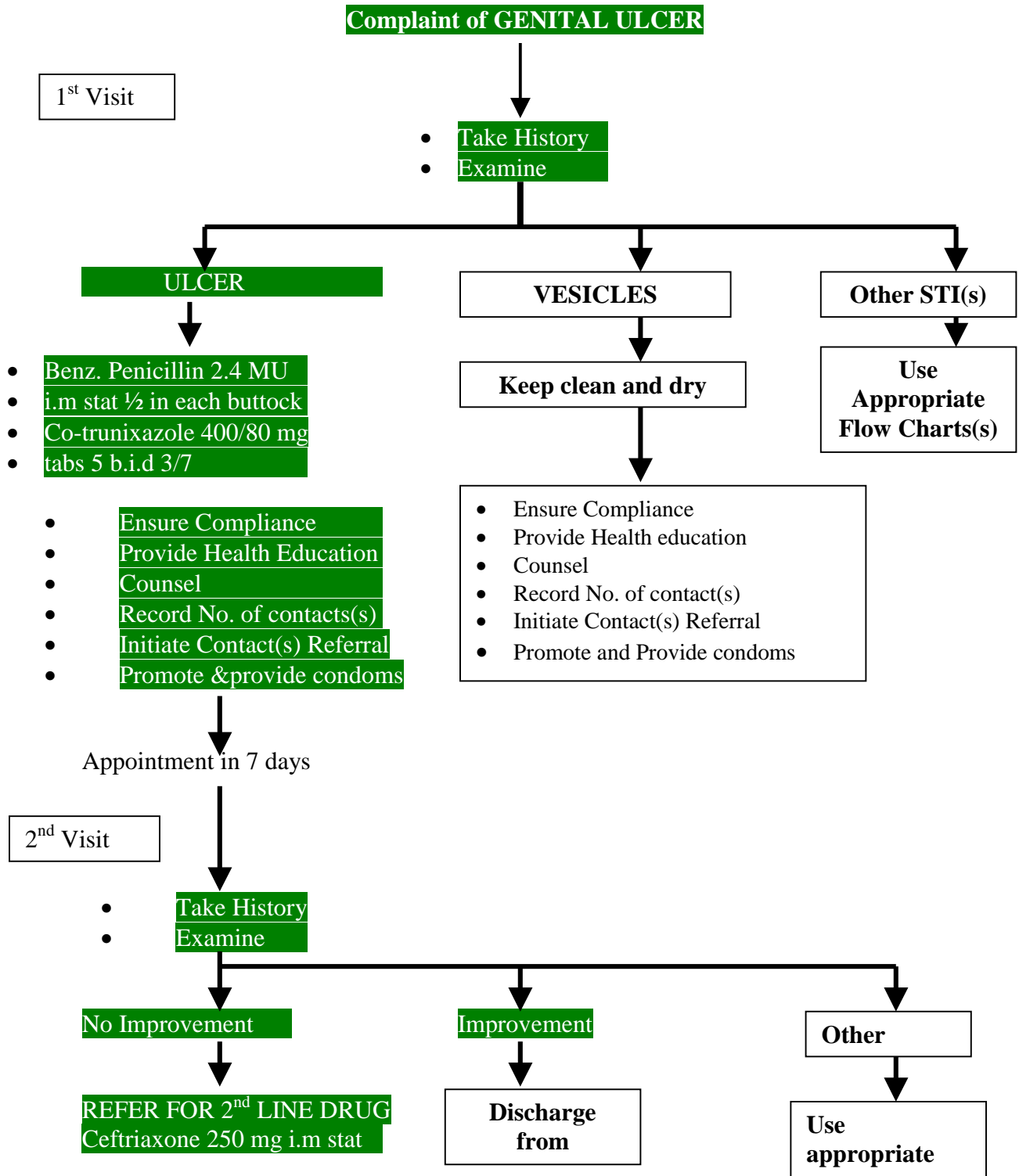
| STD SYNDROME   | SEX     | SYNDROMS   | CLINICAL SIGNS  | AETIOLOGIC AGENTS  |
|--|---------|--|---|--|
| URETHRAL DISCHARGE SYNDROME (UDS}                        | Males   | Urethral discharge, burning or painful urination   | Spontaneous or "milked" urethral discharge  | Chlamydia trachomatis<br>Neisseria gonorrhoeae   |
| PAINFUL SCROTAL SWELLING (acute epididymo-orchitis)      | Males   | Scrotal swelling, scrotal pain   | Scrotal oedema, erythema and tenderness   | Chlamydia trachomatis<br>Mumps virus<br>Neisseria gonorrhoeae<br>pyogenic bacteria                                   |
| VAGINAL DISCHARGE SYNDROME (VDS}                         | Females | Unusual vaginal discharge, itching, burning or painful urination   | Vaginal discharge abnormal in colour and odour  | Candida albicans<br>Chlamydia trachomatis<br>Gardnerella vaginalis<br>Neisseria gonorrhoeae<br>Trichomonas vaginalis |
| PELVIC INFLAMMATORY DISEASE (PID) (Lower Abdominal Pain) | Females | Mild to severe lower abdominal pain, sometimes fever, possibly combined with or history of vaginal discharge | Lower abdominal tenderness, guarding and /or rebound tenderness, possibly high temperature and/or vaginal discharge | Anaerobic bacteria<br>Chlamydia trachomatis<br>Neisseria gonorrhoeae   |

**TABLE 5: STD SYNDROMES AND AETIOWGIC AGENTS, CONTINUED**

| <b>STD SYNDROME</b>                | <b>SEX</b>       | <b>SYNDROMS</b>  | <b>CLINICAL SIGNS</b>                              | <b>AETIOLOGIC AGENTS</b>   |
|------------------------------------|------------------|--|--|--|
| <b>GENITAL ULCER DISEASE (GUD)</b> | Males<br>Females | Sore(s) on the genitalia, possibly discharge or inability to retract prepuce (males), burning upon urination (females) | Ulcer(s) on the genitalia, possibly inguinal bubos | Chlamydia trachomatis<br>Haemophilus ducreyi<br>Herpes simplex virus<br>Treponema pallidum |
| <b>INGUINAL BUBOS</b>              | Males<br>Females | Swelling and possibly bilateral pain in the groin  | Uni- or bubos in the groin, possibly tender        | Chlamydia trachomatis<br>Haemophilus ducreyi   |
| <b>BALANOPOSTHITIS</b>             | Males            | Pain, swelling, irritation, itching at penis   | Inflammation of glans and/or prepuce               | Candida albicans<br>Fusospirochaetes<br>the<br>Staphylococci<br>Streptococci               |
| <b>NEONATAL CONJUNCTIVITIS</b>     | New-borns        | Pus in the eyes  | Purulent conjunctivitis                            | Neisseria<br>Gonorrhoea<br>Chlamydia<br>Trachomatis  |

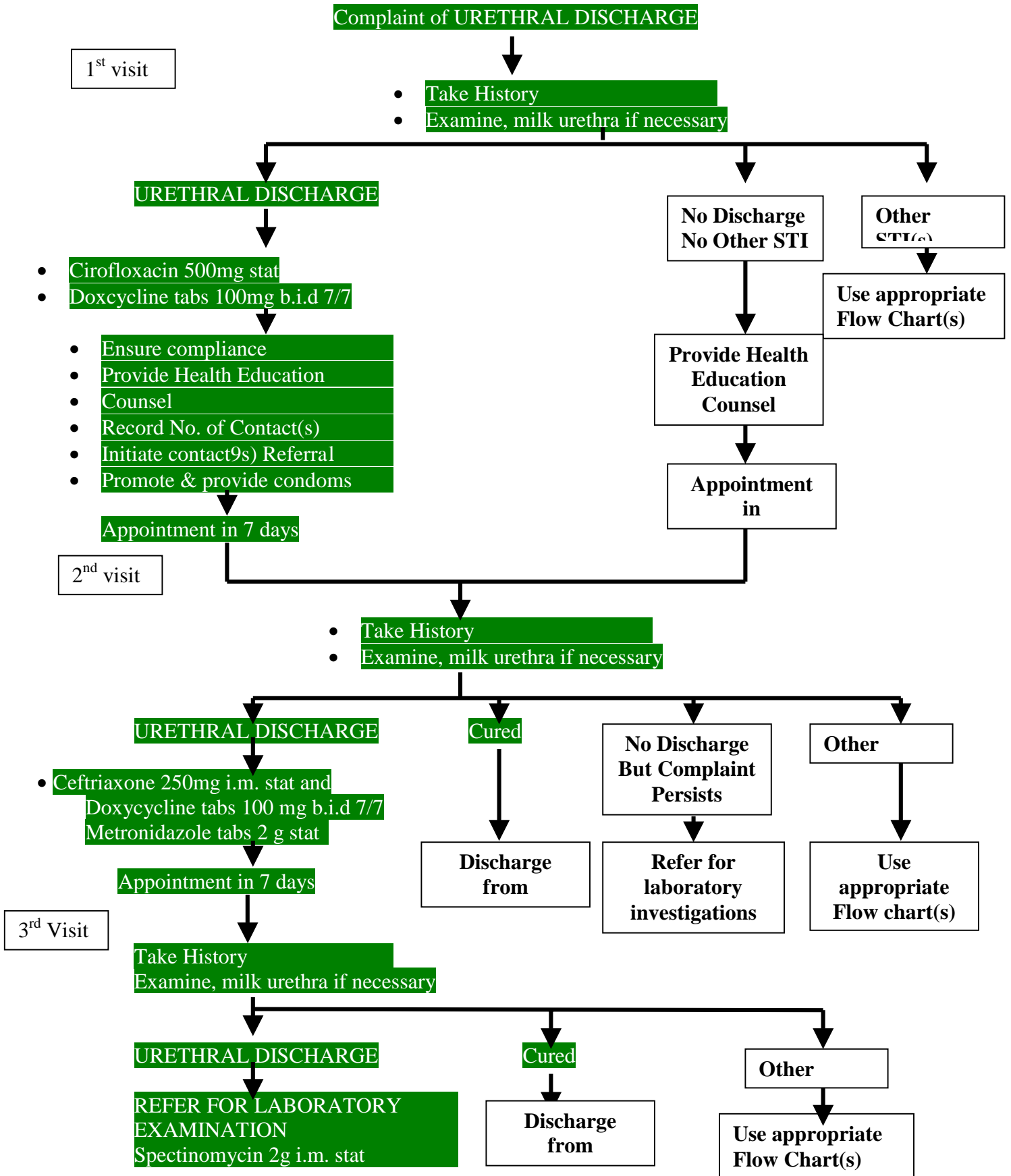
9. STD SYNDROMES: FLOW CHARTS  
FLOWCHART 1:

GENITAL ULCER SYNDROME (GUS)

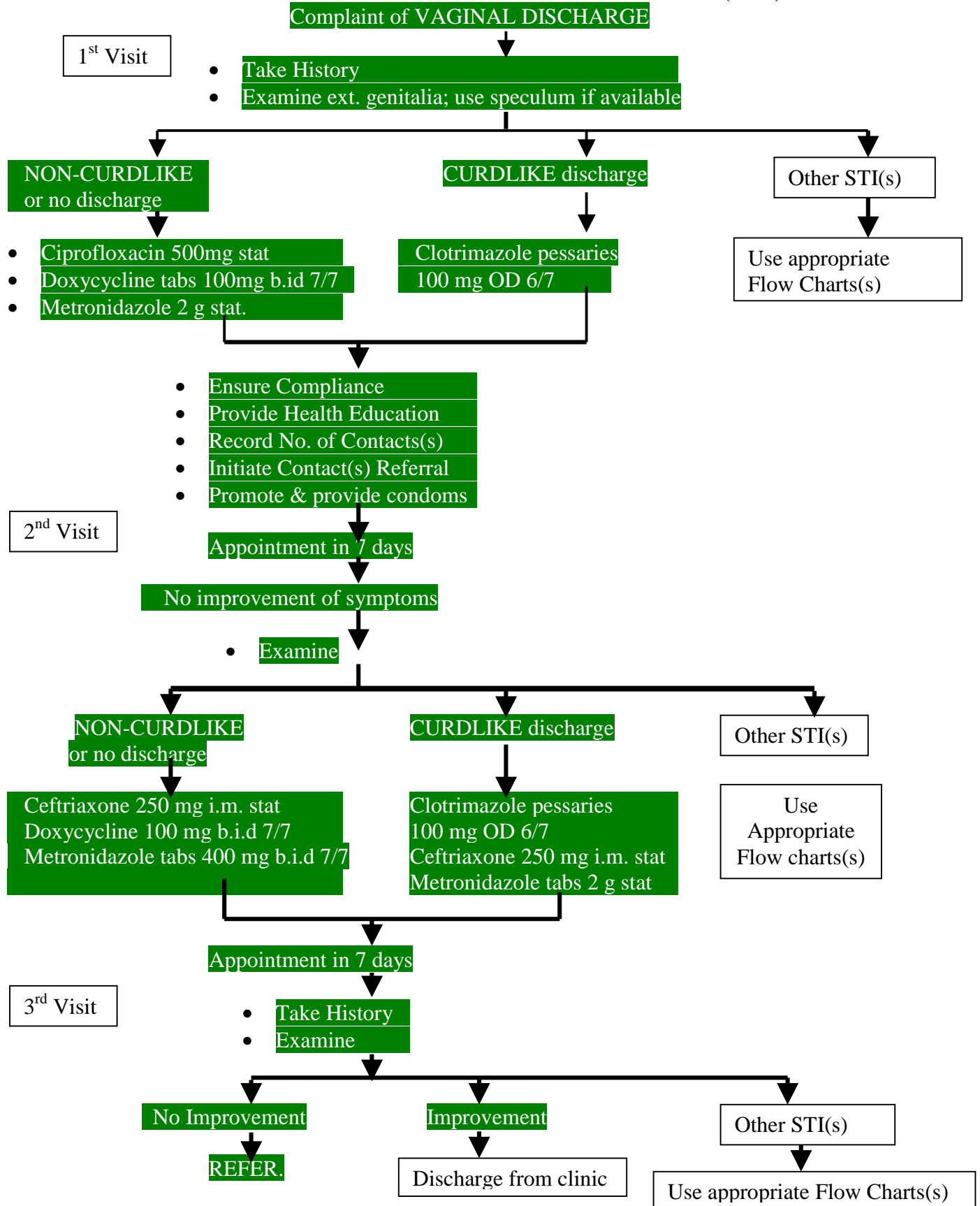


- Do not give Co-trimoxazole during pregnancy, substitute with Erythromycin tabs 500mg t.i.d 7/7
- Patients allergic to penicillin substitute with Erythromycin tabs 500mg t.i.d for 15 days.

## FLOWCHART 2: URETHRAL DISCHARGE SYNDROME (UDS)



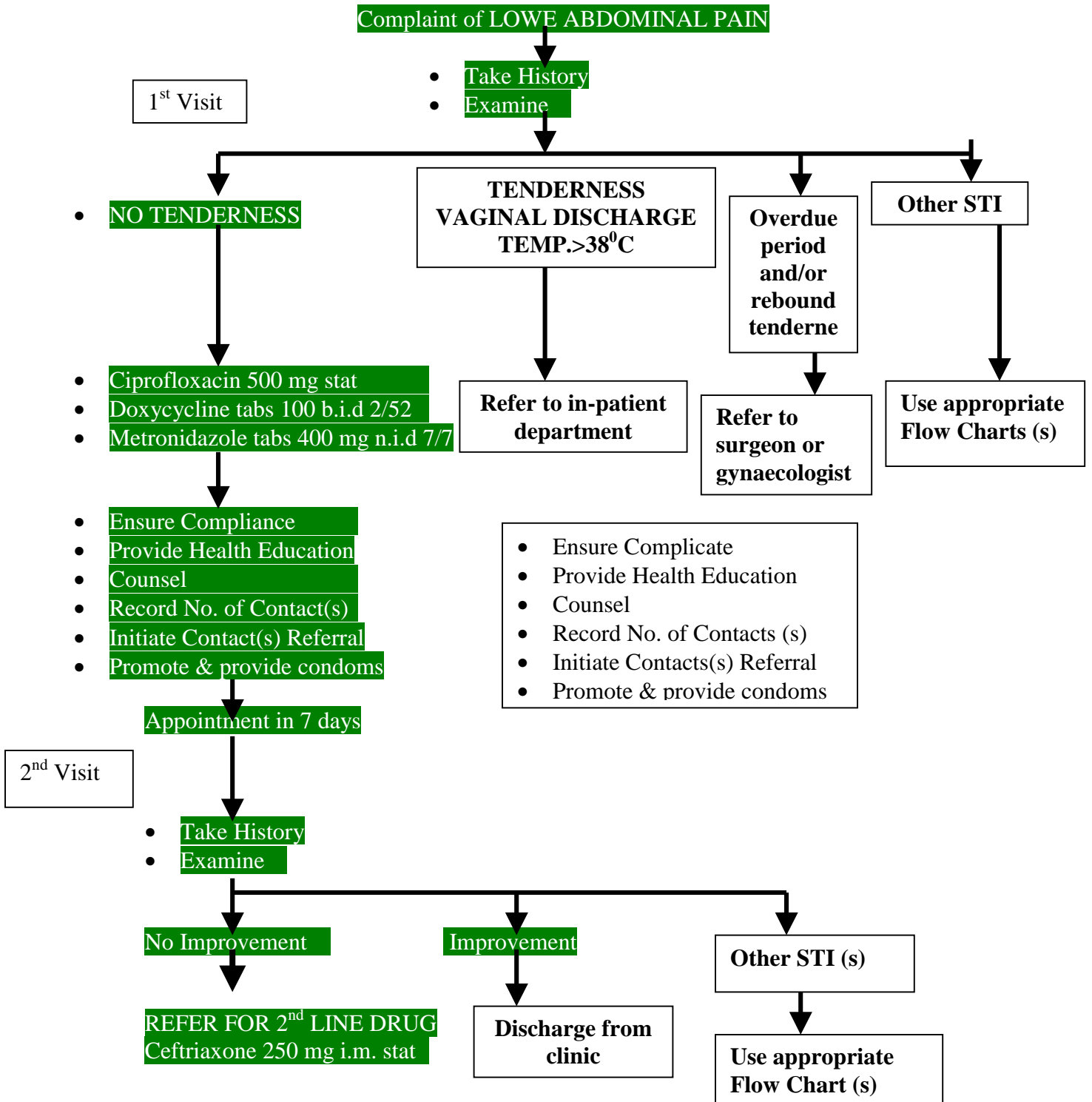
### FLOWCHART 3: VAGINAL DISCHARGE SYNDROME (VDS)



- Do not give Metronidazole in 1<sup>st</sup> trimester of pregnancy: Substitute with Clotrimazole pess. 200 mg od 3/7
- Do not give Doxycycline or Ciprofloxacin in pregnancy or to lactating mother. Substitute with

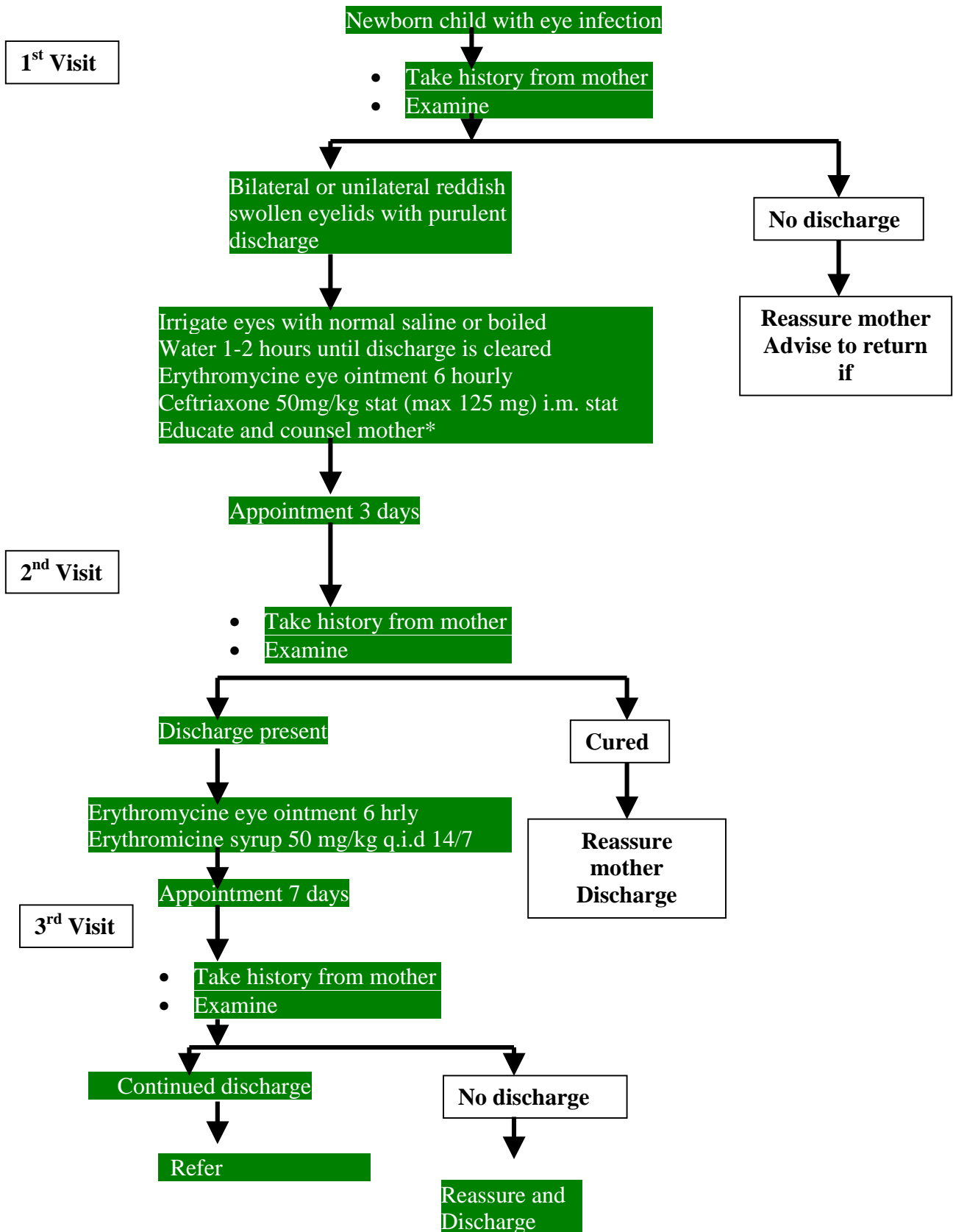
Erythromycin 500 mg t.i.d 7/7 or Ceftriaxone 250 mg i.m stat.

## FLOWCHART 4: PELVIC INFLAMMATORY DISEASE (PID)



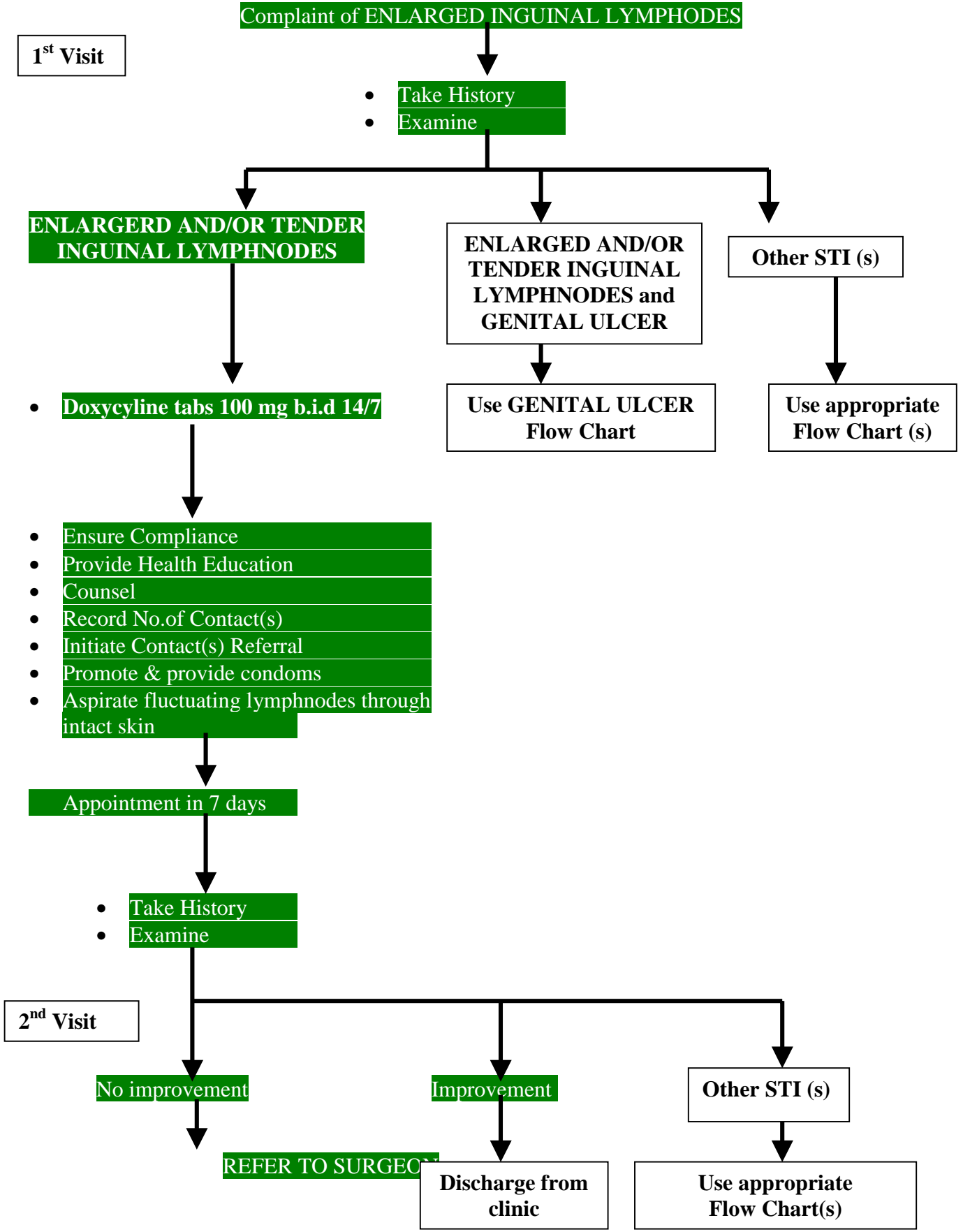
- Do not give Metronidazole in 1<sup>st</sup> trimester of pregnancy: substitute with Clotrimazole pess. 200 mg od 3/7
- Do not give Doxycycline or Ciprofloxacin in pregnancy or to lactating mother. Substitute with erythromycin 500 mg t.i.d 7/7 or Ceftriaxone 250 mg i.m stat.
- Even with no tenderness the risk for infection in someone complaining of lower abdominal pain is considered so great that treatment is necessary

## FLOWCHART 5: NEONATAL CONJUNCTIVITIS

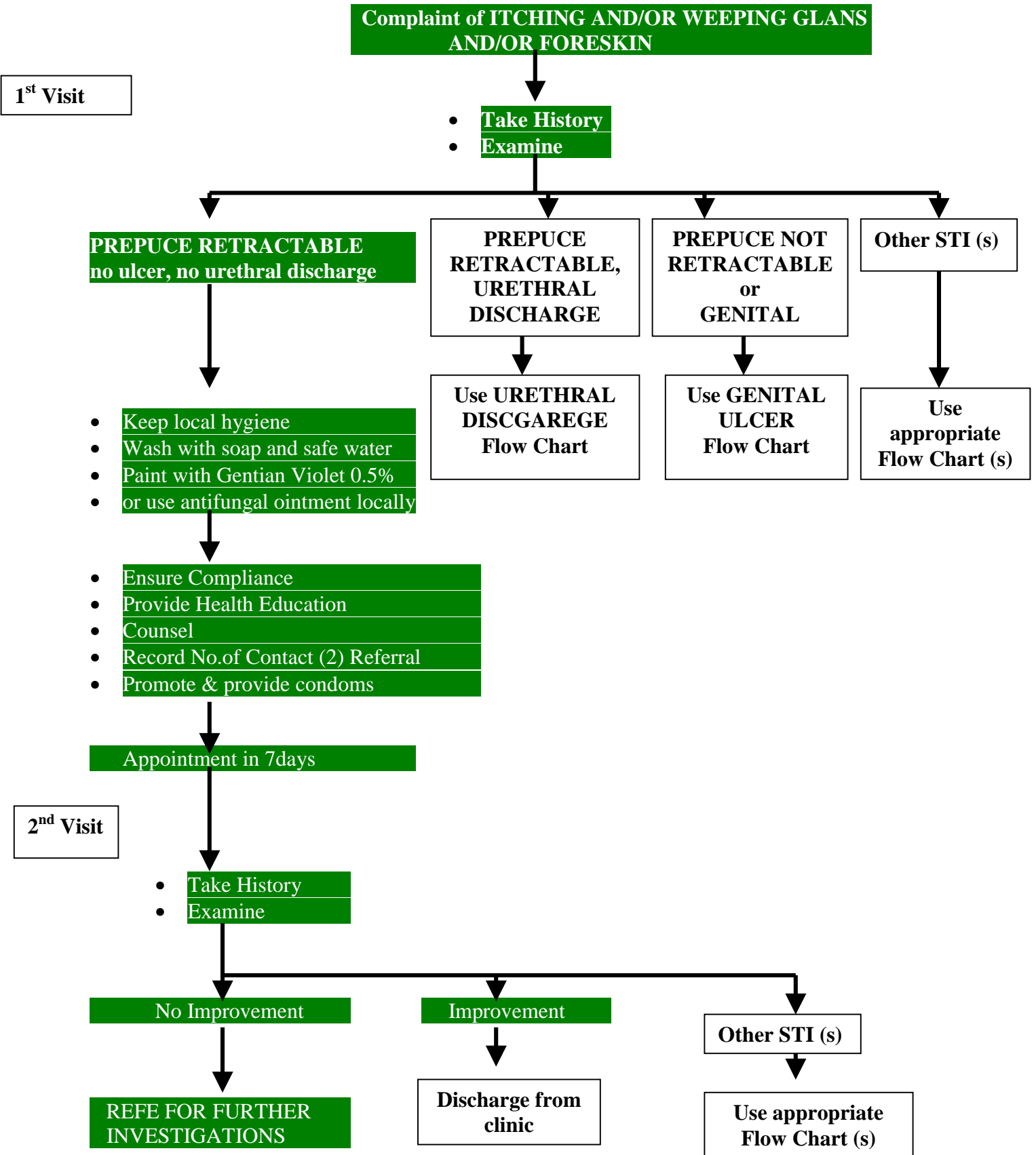


\*Mother should be examined and treated as per flow chart on vaginal discharge

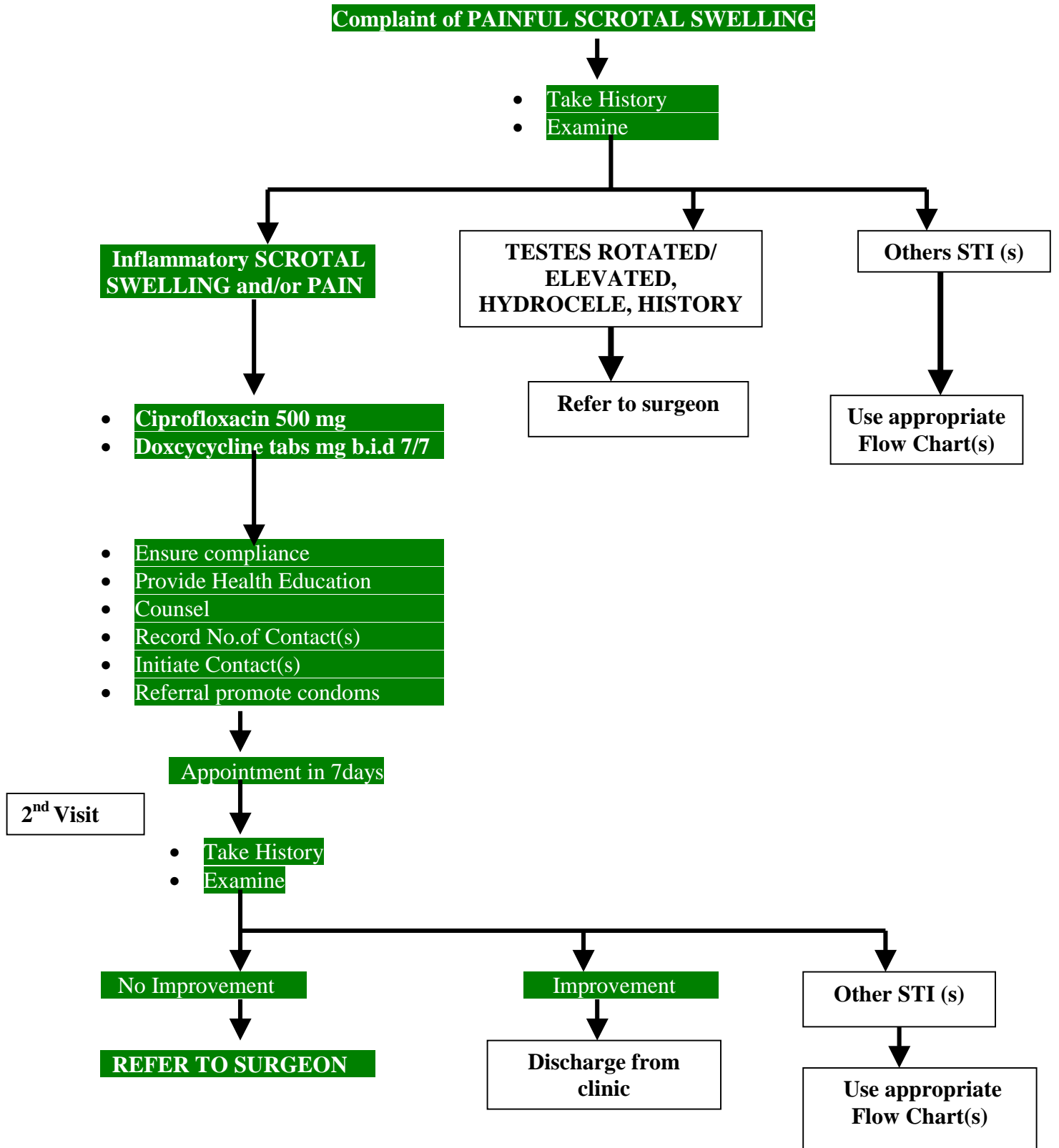
**FLOW CHART 6: INGUINAL BUBOS**



**FLOWCHART 7: BALANOPOSTHITIS**



**FLOWCHART 8: PAINFUL SCROTAL SWELLING**



## **10. STD CONDITIONS FOR REFERRAL**

The clinician will experience in her/ his practice STD conditions which do not fall under one of the STI syndromes defined in section 6 of this manual. Condylomata acuminata, Condylomata lata and Ophthalmia neonatorum (ON) will be mentioned herein more detail because of the frequency of occurrence, the importance of effective preventive measures.

.  
Details about symptoms and signs, aetiologies, complications, diagnoses, differential diagnosis, management plan, treatment and preventive measures are summarised on the next pages in Table 6 for, Condylomata acuminata and Condylomata lata and in Table 7 for Ophthalmia neonatorum.

**TABLE 6: CONDYLOMATA ACUMINATA AND CONDYLOMATA LATA**

| TOPIC                         | CONDYLOMATA ACUMINATA  | CONDYLOMATA LATA  |
|-------------------------------|--|---|
| <b>SYMPTOMS and SIGNS</b>     | <ul style="list-style-type: none"> <li>• Raised, skin-coloured growths with cauliflower-like surfaces on the genitalia, perianal area or urethra</li> <li>• Flourish in warm and moist parts of the body</li> <li>• May present as solitary or multiple warts</li> <li>• Often asymptomatic</li> </ul>               | <ul style="list-style-type: none"> <li>• Raised skin growths with greyish flat surfaces</li> </ul>  |
| <b>AETIOLOGY</b>              | Human papilloma virus  | Treponema pallidum  |
| <b>COMPLICATIONS</b>          | <ul style="list-style-type: none"> <li>• Laryngo-papillomatosis in newborn (infected from mother)</li> <li>• Genital malignancy.</li> </ul>  | <ul style="list-style-type: none"> <li>• Abortions</li> <li>• Stillbirths</li> <li>• Congenital syphilis</li> </ul>                               |
| <b>DIAGNOSIS</b>              | History and clinical examination   | <ul style="list-style-type: none"> <li>• History and clinical examination .</li> <li>• Dark field microscopy</li> <li>• Serology (RPR)</li> </ul> |
| <b>DIFFERENTIAL DIAGNOSIS</b> | <ul style="list-style-type: none"> <li>• Condylomata lata of secondary syphilis</li> <li>• Molluscum contagiosum</li> <li>• Granuloma inguinale</li> <li>• Sebaceous cyst</li> <li>• Benign or malignant tumours of other etiology</li> <li>• Normal pink pearl-like papules on the corona of glans penis</li> </ul> | <ul style="list-style-type: none"> <li>• Condylomata acuminata</li> </ul>   |

**TABLE 6: CONDYLOMATA ACUMINATA AND CONDYLOMATA LATA, CONTINUED**

| TOPIC           | CONDYLOMATA ACUMINATA  | CONDYLOMATA LATA  |
|-----------------|--|---|
| MANAGEMENT PLAN | <ul style="list-style-type: none"> <li>• Physical and/or chemical destruction of condylomata</li> <li>• Refer if extensive lesions or if treatment is not available</li> </ul>   | <ul style="list-style-type: none"> <li>• Refer for serological confirmation</li> <li>• Antibiotic treatment only after serological confirmation</li> </ul>  |
| TREATMENT       | <ul style="list-style-type: none"> <li>• Podophylin 20-40% solution applied directly on the lesions with surrounding skin protected</li> </ul> <p style="text-align: center;"><u>or</u></p> <ul style="list-style-type: none"> <li>• 80% trichloroacetic acid applied directly on the lesions and washed away after 6 hours</li> </ul> <p style="text-align: center;"><u>or</u></p> <ul style="list-style-type: none"> <li>• Electric cauterization</li> <li>• Circumcision in uncircumcised male if the lesion is on the prepuce</li> </ul> | <ul style="list-style-type: none"> <li>• Benzathine Penicillin 2.4 MU administered i.m weekly for 3 doses</li> </ul> <p>For persons allergic to Penicillin:</p> <ul style="list-style-type: none"> <li>• Doxycycline tabs 100 mg b.i.d for 15 days</li> </ul> <p style="text-align: center;"><u>or</u></p> <ul style="list-style-type: none"> <li>• Erythromycin tabs 500 mg o.d for 15 days</li> </ul> |

**TABLE 7:**

| TOPIC               | OPHTHALMIA NEONATORUM  |
|---------------------|--|
| SYMPTOMS and SIGNS  | Newborn in the first month of life with swollen, reddish and closed eyelids, and presence of purulent conjunctival discharge   |
| AETIOLOGY           | <ul style="list-style-type: none"> <li>• Neisseria gonorrhoeae</li> <li>• Chlamydia trachomatis</li> </ul> <p>Less common:</p> <ul style="list-style-type: none"> <li>• E.coli</li> <li>• Staphylococcus aureus</li> <li>• Streptococcus pyogenes</li> <li>• Trauma</li> <li>• Chemical irritation</li> </ul> <p>Usually contracted during birth from infectious genital discharge of the mother.</p>        |
| COMPLICATIONS       | <ul style="list-style-type: none"> <li>• Loss of eye sight</li> </ul>  |
| DIAGNOSIS           | <ul style="list-style-type: none"> <li>• History and clinical examination</li> </ul>   |
| MANAGEMENT PLAN     | <ul style="list-style-type: none"> <li>• Treatment as outlined below</li> <li>• Because full treatment cannot be done at most peripheral levels, refer the baby <u>immediately</u></li> </ul>  |
| TREATMENT           | <ul style="list-style-type: none"> <li>• Ceftriaxone 50 fig/kg i.m stat, to a maximum dose of 125 mg i.m. stat</li> <li>• Erythromycine syrup 50 fig/kg/day orally four times daily for 14 days</li> <li>• Thorough irrigation of the conjunctiva with normal saline</li> <li>• Erythromycin eye ointment into the lower conjunctival sacs (not eye lids) of both eyes at least three times daily</li> </ul> |
| PREVENTIVE MEASURES | <ul style="list-style-type: none"> <li>• Careful hand washing by personnel caring for infected infants is essential</li> <li>• Clean both eyes with dry cotton wool directly after birth and instill % tetracycline eye ointment</li> </ul>  |

## 11. THE CONCEPT OF RISK BEHAVIOUR

Among adults, the main route of STI/HIV transmission is through penetrative sexual intercourse. Therefore, unprotected penetrative sex with an infected individual is objectively the key risk behaviour. In practice, the STI/HIV status of the sexual partner is generally not known and often symptoms and signs are not obvious. Particularly in HTAs where the prevalence of STIs/ HIV can reach about 60%, every unprotected penetrative sex must be regarded as risky behaviour. This risk increases further with the number of sexual partners and the frequency of sexual acts.

### RISKY SEXUAL BEHAVIOUR IN STD/HIV HIGH PREVALENCE AREAS

- Unprotected penetrative sex

This risk further increases with:

- the number of sexual partners
- the frequency of sexual acts

*BOX 2*

Sexual behaviour is influenced by a variety of factors. Some factors and circumstances, which tend to adversely influence risk reduction, are listed below:

|                                       |  |
|---------------------------------------|--|
| <b>Occupation:</b>                    | Sex work, long distance truck driving, uniformed and migrant labour or other work with a high level of mobility.   |
| <b>War and political instability:</b> | Creates insecurity and mobility, which adversely influences sexual behaviour.  |
| <b>Gender:</b>                        | Women are particularly vulnerable due to their disadvantaged socio-economic status and usually limited rights in relationships with men. Also for men, sexual behaviour is influenced by their socialisation, role expectations or failure to fulfil them. |

- **Age:** Genital immaturity facilitates STD transmission during sexual intercourse. Young women are especially at risk in cultures where they marry or become sexually active during the early teenage years.
- **Economic situation:** Poverty forces individuals into the various kinds of material exchange for sex, weakens negotiating capacities and disrupts families. Women in particular, are drawn into this circle without having other options for improved income.
- **Alcohol and other abusive drugs:** The capacity for rational decision-making is reduced, the tolerance for risky behaviours increased.
- **Social factors:** Lack of sexual education in schools, families or other social institutions, increases the vulnerability for individuals exposed to other adversely influencing factors (see above).

While it becomes clear that risky sexual behaviour is a concern for all sexually active individuals, the special situation at HTAs is a concentration of factors adversely influencing risk reduction. This puts individuals - particularly women - who are living and/or working in HTAs at the highest risk.

STI/ HIV control at HTAs involves targeted interventions which have to address the particular situation of individuals living and working in HTAs. This does not mean that people from surrounding areas should be excluded from such interventions. On the contrary, links between HTAs and surrounding communities are so close that a clear-cut border between the two seems theoretical. STI/HIV control interventions and related services at HTAs should be open to everybody. This is also important to avoid discrimination and stigmatisation of those being targeted. Following these ground rules the special attention given to people at highest risk at HTAs aims to control STD/HIV not only among this group but also among members of the surrounding communities.

The following control strategies are applied:

- Preventive education
- Condom promotion
- Promotion of appropriate STD treatment seeking behaviour
- STD treatment of clients and their sexual partner(s) using the syndromic approach.

## 12. HEALTH EDUCATION IN STI CONTROL

### The Role Of Peer Health Educators In STI Control

Peer health education is an inward approach towards the control of HIV /STI. Peer educators (PREs) are members of the target groups sharing similar concerns, life experiences, values and norms. They act as agents for behaviour change by playing the role of models among their peers. Also, they are perceived as being credible disseminators of information because they use the same language and expressions as the targeted groups. PREs live and work at the site of the intervention and provide consistent and continuous STI/AIDS education to peer group members. Information regarding STV/AIDS prevention is potentially more likely to be relevant and credible if given by someone with similar life experiences as the target audience than an outsider.

This strategy has been used successfully in the national HIV High Transmission Areas Intervention Project implemented by WVT, GSF; DED (GDS), GTZ and AMREF since February 1993. PREs are identified among female and male members of various target populations including bar/guest house workers, petty business men and women, women in brothels) mining populations, persons involved in fishing, and truck drivers. PREs have also successfully been involved by AMREF in STI/AIDS interventions at workplaces and adolescents in and out of school.

Peer health education aims at achieving the following preventive objectives:

- Raising risk awareness of STVHIV infection among the targeted groups
- Encouraging peers to adopt preventive measures including:
  - Adoption of safer sexual practices
  - Reduction of numbers of sexual partners
  - Promotion of appropriate STD treatment seeking behaviour

The messages given by PREs aim at clarifying the following:

- The transmission of STVHIV through sexual contact
- The risk associated with unprotected penetrative sex
- The relationship between number of sex partners and risk of acquiring an STV/ HIV
- The various safer sex practices
- The importance of using condoms, even with long term partners
- The relationship between STIs and RIV
- The symptoms and signs of STDs
- The complications of STIs
- The existence of asymptomatic STIs

The PHEs motivate her/his peers to seek STI services through:

- Teaching peers about the anatomy of sexual organs
- Teaching peers about symptoms and signs of STDs
- Reducing fear or stigma associated with STIs
- Educating peers about the importance of seeking early treatment of STDs
- Emphasising the need for regular medical assessment
- Informing peers about where and when professional STI services are freely available

In order to achieve the objectives, the PHEs apply the following strategies:

- Conducting one-to-one / face-to-face encounters and small group discussions
- Organising role plays, drama and songs
- Participating in local seminars
- Promotion, distribution and/or selling of condoms
- Distribution of health learning materials
- Referral to local STI and counselling services

The PREs promote condom use through demonstrations of correct condom wearing using a penis model. They teach condom negotiation techniques and the correct disposal of condoms. They ensure availability of condoms at bar counters, guest house rooms and selected selling points. They also distribute or sell condoms to individuals / peers. The freely distributed condoms are supplied by the , NACP and provided locally through the RACCs and DACCs. PREs are in many places engaged in condom social marketing as income generating activity together with other local selling agents.

To enhance PREs verbal communications, educational materials such as posters, stickers, booklets, newsletters, T-shirts, khangas, caps, and key holders with STD/AIDS educational messages are being used.

The PHEs closely collaborate and need the support of other local key actors like AIDS Advisory Committees, local leaders, health workers, DACCs, RACCs or other local groups involved in STD/AIDS control such as Women Health Groups or youth groups. They are further supported by a local matron or patron, usually a health worker, and by HTA project staff. In this way, PREs do not replace, but facilitate the effort of professionals in STI/AIDS control by acting as multipliers among the target groups. Health professionals on local, district and regional level should therefore actively support PHEs in their demanding work and should keep up their motivation.

### **The Role of STD Clinicians in Health Education**

As professionals, clinicians play an important role in health education. Many surveys conducted by AMREF and others have demonstrated that health workers are a preferred source of health education for many members of various target populations. It is therefore important for the STD clinician to

realise these expectations and to act responsibly. Diagnosis and treatment is only one part of the work of STD clinicians - the other part is to provide every client with proper advice and health education. When the client is discharged from the consultation with the clinician, she/he should be aware that the treatment does not protect against reinfection and that the sexual partner(s) need also treatment, She/he should also have the knowledge on how to protect herself/himself in the future against reinfection. While discussing the various possible measures the clinician should be sensitive enough to work out with the client her/his potential constraints in applying these measures and to help the client to overcome these constraints.

The health education provided by the STD clinician should cover the following aspects :

- Nature and possible complications of the STI
- Need for medication compliance
- Need to return if symptoms persist after treatment
- Importance of partner referral and treatment
- Preventive education including safer sexual practices and condom use
- Advantage of regular medical assessment even without having symptoms
- Advise on referral sites for related services like counselling, voluntary testing, family planning Etc.

The clinician provides this education through a discussion with the client which may be enhanced by practical demonstrations and written materials. The clinician ensures that every client is aware about proper use of condoms and offers them to every client.

Health education by STD clinicians is complemented by other service providers and local key actors like DACCs or PHEs. A close collaboration and mutual support will make health education to clients and target groups more effective. As a professional, the clinician is requested to play a leading role in this process.

Table 8 in the next pages highlights information on selected topics to be addressed during health education by STD clinicians.

### **Partnership with the Community**

As we all know a lot of STIs go untreated in the community. Much of this may be because community members are not informed of complications of STIs, such as infertility, still birth and chronic pain. Neither are they informed of the prevalence of STI and HIV in their community. Now that a monitoring system is being established (Chapter 16) and syphilis screening initiated a lot more information will be available to the health workers. It is now their task to also inform community members. If results of screening of antenatal women for syphilis are known to community members and they are informed of syphilis complications and possibilities for treatment this is likely to improve attendance. The health workers and the health service system may not be able to carry out this task by themselves but may

need the support of PREs, VHWs and extension workers, who in their turn may be supported by an NGO. Similarly, the result of rapid appraisals (RAP), mainly based on focus group discussion and possibly conducted With the assistance of the same NGO, should also be fed back both to the community and to the health workers. These links between the community and the health service system: Screening results given back to the community and result of RAPs fed back both to the community and the health service system may vastly improve the effects of health work.

**TABLE 8: HEALTH EDUCATION THROUGH STD CUNICIANS: SELECTED TOPICS**

| TOPIC  | CONTENT   |
|--|---|
| NATURE AND COMPLICATIONS OF STD  | <ul style="list-style-type: none"> <li>• Explain that STD is contracted through sexual contact</li> <li>• Discuss symptoms, signs and possible complications of the STD</li> <li>• Explain that the condition is curable</li> </ul>   |
| NEED FOR MEDICATION COMPLIANCE<br><br>NEED TO RETURN IF SYMPTOMS PERSIST AFTER TREATMENT | <ul style="list-style-type: none"> <li>• Explain exactly the medication</li> <li>• Explain that treatment can only be effective if all the medication is taken as prescribed</li> <li>• Let patient take the first dose in front of you if possible</li> <br/> <li>• Explain that persistence of symptoms indicate treatment failure</li> <li>• Explain the importance to return to adjust the treatment</li> </ul> |

**TABLE 8: HEALTH EDUCATION THROUGH STD CUNICIANS: SELECTED TOPICS, CONTINUED**

| TOPIC   | CONTENT  |
|---|--|
| <p><b>IMPORTANCE OF PARTNER REFERRAL</b></p>          | <ul style="list-style-type: none"> <li>• Explain that sexual partner(s) are likely to be infected as well</li> <li>• Explain why it is important to treat sexual partner( s ) as wen</li> <li>• Discuss with client modalities of partner referral and assure confidentiality</li> </ul>   |
| <p><b>PREVENTIVE EDUCATION</b></p>                    | <ul style="list-style-type: none"> <li>• Make client aware about risk sexual behaviour</li> <li>• Make aware about the high prevalence of STIs/HIV in the community</li> <li>• Explain that even healthy Looking partners can be infected</li> <li>• Discuss with client safer sex practices</li> <li>• Demonstrate proper condom use</li> <li>• Discuss with clients her/his constraints in adapting safer sex practices and Possible ways how to overcome these constraints</li> <li>• Advise client not to practise sex until properly cured</li> </ul> |
| <p><b>ADVANTAGE OF REGULAR MEDICAL ASSESSMENT</b></p> | <ul style="list-style-type: none"> <li>• Make the client aware that asymptomatic STIs are common or that client might overlook symptoms and signs</li> <li>• Explain that regular medical assessments will help to identify and to treat these conditions</li> </ul>   |
| <p><b>REFERRAL TO RELATED SERVICES</b></p>            | <ul style="list-style-type: none"> <li>• Make client aware what expertise or services do exist in the community to get further help or advice about related problems</li> <li>• Explain to client the need to visit a referral site when indicated</li> </ul>  |

### **13. EDUCATION ON SEXUAL AND REPRODUCTIVE HEALTH (SRH) IN PRIMARY AND SECONDARY SCHOOLS**

Education of school children in sexual and reproductive health has for many years been a controversial and therefore neglected area. There has been a fear that such education would encourage sexual activity among school children. This belief has been very strong in spite of a considerable amount of proof pointing to the contrary.

The Ministry of Education and Culture (MOE&C) has now developed a new curriculum where education on sexual matters is included under the science section. Initial trials on sex education in schools are now undertaken by a number of NGOs in cooperation with the Ministries of Health and Education. When education on sexual and reproductive health finally becomes established as part of the teaching at school and teachers have been trained to carry out the task, this intervention could become one of the most important ways of influencing the behaviour of the youth. It will involve a very large part of the youth population at a time when their adult behaviour is formed.

The details of the implementation of this activity is not yet fully developed, For example, it is not clear if teachers will be willing and capable to undertake the training on all aspects of SRH, but might need the assistance of clinicians for educating the pupils on certain parts of the curriculum.

## 14. CONDOM USE PROMOTION, NEGOTIATION AND DEMONSTRATION

### **The Role of Condoms in STI/ HIV control**

Many studies have proven that latex condoms are highly effective in protecting against STDs infection. The most compelling evidence originate from studies of couples in which one is with HIV and the other is not, i.e. "discordant couples". Besides sexual abstinence or non- penetrative sex techniques, intercourse -vaginal, anal or oral- is the most reliable and widely available method for STI and HIV prevention. In addition, use has minimal negative side effects,

The promotion of proper and consistent use of latex condoms is therefore a corner-stone in prevention and control. The condom strategy requires that:

- Condoms have to be made easily accessible in sufficient number
- Negotiating skills are strengthened so that each individual, whether female or male, young old, has the capacity and the socially and culturally accepted right and opportunity to condom for self protection or to refuse sex

### **Condom Use, Storage and Disposal**

Condoms must be used consistently and correctly to provide maximum protection. Consistent use means using a condom from start to finish during each act of sexual intercourse.

Correct male condom use demands abiding to the following advice:

- Use a new condom for each act of intercourse, do not wash out and attempt to reuse a condom
- Tear the condom package open carefully using the guides in the package
- Do not use your teeth or other sharp objects to open the package- it may tear the condom
- Handle carefully the condom to avoid damaging it with fingernails, teeth, or other sharp objects
- Put on the condom as soon as the penis is erect and before any sexual contact (vaginal, anal or oral) with the partner
- Hold the tip of the condom and unroll it on to the erect penis, leaving space at the tip of the condom without trapping air in the condom's tip.
- Ensure adequate lubrication during intercourse
- Use only water-based lubricants if any
- Withdraw from the partner after ejaculation while the penis is still erect by holding the condom firmly against the base of the penis to prevent slippage
- Dispose of the used condom properly

For proper condom storage, observe the following:

- Condoms should be protected from direct sunlight, moisture and excessive heat
- Do not keep your condom in a tight pocket, in your wallet or car for a long period - it might be too hot
- Do not use condoms which are dry, dirty, brittle, yellowed, sticky, melted or otherwise damaged
- Condoms should be used before the expiry date or within three to five years of the manufacture date

For proper condom disposal, one can do the following:

- Throw it in a pit latrine (water filled toilets are easily clogged by condoms)
- Burn it in a fire
- Bury it in the ground

Used condoms should not be left around where children or animals can get them.

### **Condom Promotion and Negotiation Techniques**

The promotion of condoms should be based on facts. The development of a rational self-risk assessment is an important first step. It should include:

- An increase of awareness of the high STI/HIV prevalence in the local community
- The understanding of penetrative sex as the major transmission route
- The understanding of unprotected penetrative sex as the key risk behaviour

For example, recent surveys by AMREF among employees of companies in Tanzania revealed that some 40% of the employees thought that HIV can be transmitted by mosquito bites. It is only logical that these employees cannot regard a condom over a penis as a priority to protect themselves and any condom promotion that does not address this misconception about the transmission route will fall short of any success.

Condom promotion should further address common misconceptions about the condom itself. Some of these misconceptions on the one hand and opposing facts on the other hand are listed in Table 9.

**TABLE 9: COMMON MISCONCEPTIONS ABOUT CONDOMS AND OPPOSING FACTS**

| MISCONCEPTIONS                                      | FACTS   |
|---|---|
| Condoms break a lot and are not reliable            | <ul style="list-style-type: none"> <li>Condoms are subjected to a series of quality tests before they are made available for users. Condoms break very rarely when properly stored and used within the indicated time limits. Studies have reported breakage rates of less than 2% for vaginal or anal intercourse</li> </ul> |
| Most condoms are made too small for most men        | <ul style="list-style-type: none"> <li>Most condoms can be stretched enough to go around a person's head</li> </ul>   |
| Condoms contain HIV                                 | <ul style="list-style-type: none"> <li>Condoms do not contain the HIV virus. In contrast, condoms prevent the spread of HIV and other STIs if used properly.</li> </ul>   |
| Condoms fall off and get lost in the woman's vagina | <ul style="list-style-type: none"> <li>If the penis is withdrawn while still hard and while holding the base of the condom, the condom will not slip off. If for some reason it did, it could be removed using one's fingers.</li> </ul>  |

Further, condom promotion should be sensitive towards social, cultural and religious norms and Condom promotion should not be offending; the STD clinician should rather offer the opportunity discuss openly in a confidential atmosphere obstacles that might hinder the client to use the most reliable protective tool in sexual encounters. The protection of human life is one of the highest and most accepted values in every society, culture or religion. Condoms are a powerful tool to protect the individual's life and the lives of partners against the deadly HIV and other STIs.

Finally, condom promotion has to address the reality of the different roles women and men have in relationships. It is the man who finally has to put the condom on and it is usually the man who dominates in decisions on sexual issues. This situation puts women in a particularly vulnerable position.

With male clients, the discussion should therefore focus in particular on:

- His own risk to become infected during unprotected penetrative sex
  - His responsibility for the safety of his partner
  - His responsibility for his long term partner, spouse and family as applicable
  - His willingness to accept a decision from his partner not to engage in unprotected penetrative sex
- With female clients, the STD clinician should strengthen their negotiation skills. Strategies for effective

condom negotiation include the following:

- Choosing the best moment to discuss condom use. Both partners should feel comfortable. It is usually better to discuss before sexual activities and things get passionate.
- Keeping an open mind. Being prepared to listen to her partner's, concerns.
- Preparing rational responses to all arguments that her partner may use against her (this will increase self-confidence).
- Finding strength in numbers. Many millions of condoms are used every year in Tanzania. Let the partner(s) know that the man from today cares about himself and others, and that he is doing it with condoms now.
- Being assertive rather than aggressive. She should try to persuade rather than intimidate. Avoiding sexual activities when she or her partner are drunken
- Being confident and firm. Establishing her personal limits in advance, what she will and won't do, so that her health and well-being are always foremost and cannot be compromised.
- Having enough condoms readily available.
- Identifying friends or family members with whom she can openly share her experiences

Besides, during sessions with clients, the STD clinician can promote condoms in the following ways:

- By informal discussions with community members about STI/ AIDS prevention
- As a resource person by locally organized seminars or special events
- By collaborating and supporting local PREs or other key actors involved in condom distribution or selling
- By encouraging owners to display posters in drug stores, bars, hotels, etc.
- By encouraging local artists to make art, theatre, music, etc. to sensitize the community
- By approaching business people and asking them to stock condoms

### **Condom Demonstration and Availability**

Every clinician ensures that condoms are available at places where STI services are provided. The physical demonstration of a condom using a penis model is an essential part of health education. Clients should be provided with a sufficient number of condoms and be informed where they can get more in their neighbourhood.

## 15. CONTACT REFERRAL

### Concept and Objectives

The importance of contact referral or partner notification in STI control and prevention cannot be over-emphasised. The concept of contact referral and treatment is based on the following

- Each STD patient must have been infected by a sexual partner who should also be treated.
- Each STD patient is a potential source of infection to the sexual partner(s) until the infection is completed. These partners should therefore be treated.
- A treated STD patient is cured but not immune. This means that she/he can get re-infected if sexual partners still have the STI. A further reason why these partners should be treated.

The purpose of notifying the client's sexual partner(s) is therefore to break the chain of STI and to reduce the chance of the client being re-infected. For practical purposes we define the client as index case because she/he is the first person diagnosed with an STI in this network of partnerships. We define her/his sexual partners who could be the source of the infection or who have been infected by the index case as contacts.

The objectives of contact referral are listed below.

#### OBJECTIVES OF CONTACT REFERRAL IN STD CONTROL

- To identify the number of contacts of the index case.
- To notify the contacts about the need for medical assessment
- To treat the contacts according to their STD symptoms and signs (syndrome) or according to the diagnosed STD syndrome of index case.
- To provide health education to the contacts.

**BOX 3**

### Identification of the Number of Contacts

As mentioned above, contacts are all sexual partners of the client who could be the source of infection for the current STD episode of the client or could have become infected from the client's STD. It is therefore important to consider the time frame during which these events could have happened.

For example, a client comes with UDS to the clinician. The client reports to have symptoms since 4 days. He also reports about a person he had sex with 8 months ago. This sexual partner cannot be the source of the client's current UDS. The reason is that it takes usually a maximum of 14 days from the

time of infection until the time UDS symptoms and signs develop. The time from infection to onset of symptoms is called the incubation period. Since the client has had UDS symptoms since 4 days, any person who had sex With the client more than 18 days ago ( 4 days symptoms plus maximum incubation period of 14 days} is very unlikely to be the source of infection to the client. The sexual partner 8 months ago is therefore definitely not the source of the client's current UDS.

On the other hand, the same client reports also about 2 other sexual partners. With one of them, he had sex 12 days ago, With the other one 3 days ago; Although 1he client has UDS symptoms only since 4 days, he could have infected both of them. The reason is that patients become usually infectious to others shortly after getting infected themselves; in other words, patients can infect their partners within the incubation period, before they have developed symptoms.

In summary, the time frame that is relevant for contact identification is the duration of the current symptoms (in our example 4 days} plus the maximum incubation period. The duration of the current symptoms is known to the STD clinician through proper history taking (see section 4. HISTORY TAKING}. Approximate incubation periods for the common STD syndromes are listed in Table 10 on page 43. These calculated incubation periods are based on the known incubation periods of the common pathogens causing each syndrome as listed in Table 5 on page 16.

**TABLE 10: APPROXIMATE INCUBATION PERIODS OF STD SYNDROMES**

| STD SYNDROME   | APPROXIMATE INCUBATION PERIOD                                   |
|--|---|
| URETHRAL DISCHARGE SYNDROME (UDS}                    | 2- 14 days  |
| PAINFUL SCROTAL SWELLING ( acute epididymoorchitis ) | 1 –25 days  |
| VAGINAL DISCHARGE SYNDROME (VDS}                     | 2-20days  |
| PELVIC INFLAMMATORY DISFASE (PID)                    | 2 - 20 days, often ascending complication from VDS              |
| GENITAL ULCER SYNDROME (GUS}                         | 2 - 21 days, occasionally up to 3 months for Treponema pallidum |
| INGUINAL BUBOS                                       | 3 - 14 days   |
| BALANOPOSTHITIS                                      | 1 - 19 days   |

As a practical rule, the STD clinician should try to identify all the contacts of the index case during the past 4 weeks. In cases where the symptoms of the client started more than a week prior to her/his visit, this time should be added to the four weeks.

The identification of the number of contacts critically depends on the clients information. The STD clinician should be sensitive in her/his questions and should assure confidentiality. It is not important for the clinician to know the names of the contacts. The clinician should also resist any attempt to speculate about who of the contacts could be the potential source of infection.

### **Contact Notification and Referral**

Because of low cost and practicability the patient referral system should be used. It is also method recommended by WHO.

- The STD clinician provides the client (index case) with a referral cards for each contact named. These referral cards contain the register number of the index case.
- The patient informs the contacts by handing over the referral card and explaining the importance to attend for medical assessment and treatment.
- The contacts present the referral card to the clinician when come for treatment.

Observe the following principle of contact notification and referral:

- Confidentiality
- Non- coercion approaches
- Non- judgemental attitudes

A successful contact referral system will also depend on:

- Good explanations given to the case by the STD clinician about the importance of contact treatment
- Good collaboration of the index case
- Good explanations about the importance of medical assessment given to contacts by index case
- User friendly clinic hours

### **Types of contact referral and notification:**

- Index case referral
- Services provider referral

### **Contact Management**

The STD clinician should show her/his appreciation for responding positively to the request to attend

the clinic and should explain the reason for the invitation. History taking, clinical examination and diagnosis follow the same procedure as for any other patients.

Contacts should be managed as outlined below. Before discharge, health education is provided. Contacts with an STD syndrome are managed as if they were index cases. They should therefore be asked for their contacts.

#### CONTACT MANAGEMENT

- *Contact with STD syndrome:* Treat according to diagnosed SDT syndrome + according to the STD syndrome of the index case if *different from above*
- *Contact without STD syndrome:* Treat according to the STD syndrome of the index case

*BOX 4*

## 16. COUNSELLING OF STI CLIENTS

### Concept and Objectives

Problems related to sexuality and sexual relationships can be very complex as indicated in section (see in particular sections 11. THE CONCEPT OF RISK BEHAVIOUR and 13. CONDOM PROMOTION, NEGOTIATION AND DEMONSTRATION). The situation is even more through the difficulty experienced by most people to talk about "it". The information provided STD clinician during health education can only superficially be understandable to the various psychological factors may mitigate against applying this information in daily life.

Health education which does not try to identify underlying conflicts and determinants of sexual will fail to achieve the much desired behaviour change. The purpose of counselling is to address factors. The borderline between health education and counselling is therefore thin.

The objectives of counselling of an STD client are:

- To discover the psychological problem( s) facing the client
- To provide first line psychological support to the client
- To psychologically empower the client to solve his/her problems
- To refer the client to experienced counsellors as may be indicated
- To encourage the client to seek help from others including professional counsellors

### Counselling During STD Services

Counselling needs time and skills. Ideally, it should be good practice for any clinician that is an essential part of any consultation and treatment of patients. However, it is anticipated that constraints put the clinician in a difficult position, particularly when the client's problems are and more fundamental. A realistic compromise is therefore necessary between the options not to address the client's conflicts at all or to become too much involved without being able to fulfil the client' expectations.

The STD clinician should therefore act as a first line counsellor who assists the client through further referral as indicated. The following list provides some guidance to the clinician for her/his role as first line counsellor.

### **COUNCELLING DURING STD SERVICE**

- Offer client the opportunity to discuss their problems in a confidential atmosphere
- Help the client to priorities the key problems
- Identify the client's problems which urgently need the immediate attention of the STD clinician
- Facilitate the discussion of these urgent problems with the client the goal to reduce fears and regain self- confidence
- Identify the client's problems the need further help from trained counsellors
- Provide the client with a list of peer counsellors and professional counsellors for referral and further help
- Facilitate the identification of trustworthy individuals among the client's friends, relatives, etc. to whom she/he can talk about the problems
- Encourage the client to use offered the support from others.

*BOX 5*

To fulfil the role as first line counsellor, the STD clinician should develop a close collaboration with peer counsellors and professional counsellors in the community. First line counselling through the STD clinician and extended counselling through identified collaborators should be provided in particular to clients who return frequently with reinfections, who fail to cooperate in contact referral and who have fears about being HIV infected.

Confidentiality in all aspects is an absolute precondition for counselling work. However, it will be of much help and relief for the clinician to identify a colleague with whom she/he can discuss more complicated or frequently occurring problems in an anonymised fashion.

## 17. MONITORING AND EVALUATION OF STI SERVICES

### Concept and Objectives

STI prevention and control aims to achieve two main goals:

- To identify, treat and educate individuals with an STI
- To reduce the prevalence of STIs in the community and thereby reducing the risk of new HIV infections

Monitoring of STD services means the collection of data both from the health service system community based activities. In order to establish a common monitoring system for STDs and NACP convened a workshop of national experts. The workshop recommended that the basis information system should be the MTUHA system. It also suggested that this be complemented sentinel surveillance system and proposed the sentinel populations to be ante-natal women screened for HIV and syphilis. The Ministry of Health has outlined a protocol for (ANC HIV Surveillance in Tanzania) . The effectiveness of the guidelines for treatment of STIs patients will be followed surveys, which will also study changes in sexual and care seeking behaviour (form CI). The further recommended that sexual behaviour and KAPB be followed in the community through surveys and possibly through a questionnaire among secondary school students in the area around sentinel site every second year. It was moreover recommended that quality of care should be through surveys of the PPI6 & 7 indicators. Moreover, the sensitivity of the etiological agents to drugs recommended in the treatment guidelines should be followed on a regular basis. On the this monitoring system, complemented by supervision and the monitoring of the drug use it possible to follow STD/AIDS control both in the service system and in the community.

thus based both on social science, clinical and microbiological data as well as health statistics, the following:

- Information provided through routine reporting system (MTUHA)
- Information provided through sentinel surveillance
- Information provided through quality of care studies (PPI 6 &7)
- Information collected through RAP surveys in the community
- Information provided through regular supervision visits of STD service sites combined with treatment outcome and care seeking behaviour surveys
- Information provided through additional surveys or other research studies.

The monitoring system for a region is outlined on the next page.

**TABLE 11 : MONITORING OF AIDS/STIs IN A REGION**

|  |  |
|--|--|
| <b>Disease Monitoring/Reporting(MTUHA)</b>   | STI syndrome & sex, AIDS, Syphilis screening at MCH screening of blood for HIV                                 |
| <b>Condom use</b>  | Condoms sales; condoms free of charge  |
| <b>Sentinel Surveillance</b>   | HIV & Syphilis in ANC women  |
| <b>Community based surveys(RAP} in the catchment area of the sentinel sites or in a area of special interest local context</b> | Care seeking behaviour information; Sexual behaviour   |
| <b>School-based surveys (Questioner for Sec. Schools every second year)</b>  | Sex behaviour, Knowledge of STDs, Care seeking behaviour.  |
| <b>Survey in a sample of health institutions;</b>  | Quality of care: PPI6 & PPI7; STD syndromes & clinical outcome;<br>Care seeking behaviour data in STD patients |
| <b>National Surveys DHS/KAP/RCHS</b>   | Knowledge on STD/AIDS Sexual behaviour   |
| <b>Research studies</b>  | Surveys on subjects or area of special interest or of principle importance                                     |

**STI/AIDS MONITORING IN PRACTICE**

Routine monitoring of STI/AIDS is done through the MTUHA system and includes reporting of STI and AIDS cases, syphilis screening of pregnant women attending MCH clinics and screening of blood donors for HIV: This system is now in place in all parts of the country, but has to be complemented by sentinel surveillance to give a more complete picture of the status of the STVAIDS control.

Reporting is done with the use of MTUHA books and separate HIV/AIDS/STIs forms, some of which (mainly those dealing with STIs) are reproduced in this chapter. The forms are to be used only at sentinel sites and for supervision. Thus for routine reporting MTUHA forms are used.

**SENTINEL SURVEILLANCE**

Sentinel Surveillance is a systematic collection of data from a defined population at a defined sites for surveillance purposes. The purpose could be to follow an epidemic or endemic disease and the studied population could be ante-natal women.

HIV surveillance in Tanzania is using this method. Six regions namely Dar es Salaam, Dodoma, Kagera, Kilimanjaro, Mbeya and Mtwara have been selected for national surveillance. However, other regions which wish to investigate the HIV prevalence in the populations can also set up a surveillance system if they have the means to do so. However, the Ministry of Health demands that the rules for carrying

out HIV sentinel surveillance are followed. These are quoted below. HIV surveillance is generally combined with syphilis surveillance.

According to the protocol for ANC HIV Surveillance in Tanzania" screening will be done three consecutive months at each chosen sentinel site. It is assumed that this period will be enough the target of 350- 400 pregnant women per site. However, in rural areas with small catchment population it may only be possible to enrol 200 women. Still the survey should be limited to three consecutive months.

The third quarter of the year (July to Sept) has been designated as the time of the year during which all surveillance surveys should be undertaken. However, Regional Health Management Teams (RH, could recommended other months of the year where necessary.

All pregnant women coming to a selected ANC sentinel site for the first time for any pregnancy during the data collection period will be enrolled. Over-sampling of young pregnant women may introduce participation or selection bias and thus, should be avoided. Data to be collected from each enrolled women are socio-demographic characteristics and information necessary for comparison with behaviour surveillance data. Included are age, parity, education, marital status, residence, and duration of status that residence, distance between the woman's residence and the clinic. A carbonised duplicate collection form (Form A) will be used for data collection and a laboratory investigation request from (Form B) will accompany blood specimens to the laboratory.

At booking, a woman is routinely given a clinic number, which is also put on the clinic register book. This same clinic number is put on the data collection form (Form A) and on the vacutainer tube, which " will be used for blood collection. The same number will also be recorded on a laboratory request form. The woman is questioned and the information is filled in the data collection form (Form A). This will be followed by collection of 3 - 5ml of blood from the woman using vacutainer tube and needle.

The blood will be tested for syphilis with the use of Rapid Plasma Reagin (RPR) test. A midwife within the antenatal clinic or a laboratory assistant at a laboratory within the ANC premises (local laboratory) will perform the RPR test.

HIV testing will be done with the use of an ELISA test and a double ELISA test strategy will be applied to arrive at a correct result. If there are no refrigeration facilities the blood could be collected on filter paper and transported to the regional laboratory once a week. However, before the introduction of this method staff will have to go through a brief training.

HIV testing will be done on leftover blood specimen collected for syphilis screening. The testing will be unlinked and anonymous and informed consent will not be needed. It will also not be possible give HIV test results to individuals.

**Data collection form for ANC Surveillance**  
**Clinic card number**

(Remove this part after assigning surveillance number)

X \_\_\_\_\_

**MINISTRY OF HEALTH TANZANIA**  
**ANC SURVEILLANCE**  
**DATA COLLECTION FORM**

1. Surveillance number \_\_\_\_\_

2. Date of specimen collection (dd/mm/yy) \_\_\_\_\_

3. Clinic Name \_\_\_\_\_ District \_\_\_\_\_

4. Age of the woman (years) \_\_\_\_\_

5. Marital status (circle)

1. Single
2. Married
3. Cohabiting
4. Widow
5. Separated 6. Divorced
7. Other (specify \_\_\_\_\_)

6. Number of previous pregnancies \_\_\_\_\_

7. Education status of the woman (circle )

1. No formal education
2. Adult education
3. Primary
4. Secondary
5. Post secondary (e.g. collage, university)

8. Estimate distance in Kilometres from the woman's residence to the Clinic (circle)

1. Up to 5km
2. More than 5 km

9. How long have you lived in that area? (years) \_\_\_\_\_

## LABORATORY TEST RESULTS

11. RPR (circle) \_\_\_\_\_

1. Positive    2. Negative    3. indeterminate    4. Not done

12. First Serology (circle) \_\_\_\_\_

1. Positive    2. Negative    3. Indeterminate

13. Second Serology (circle) \_\_\_\_\_

1. Positive    2. Negative    3. Indeterminate)

### **Distribution:**

First copy: Send to NACP, Ministry of Health

Second copy: Remains at the RMO's Office

**NATIONAL AIDS CONTROL PROGRAMME**  
**ANC SURVEILLANCE**  
**Laboratory investigation requisition form**

Date \_\_\_\_\_

Clinic Name \_\_\_\_\_

Name of the Woman \_\_\_\_\_

Clinic Number (as appears on the ANC card) \_\_\_\_\_

HB \_\_\_\_\_

RPR Test Results \_\_\_\_\_

### **Monitoring of Health Care Seeking behaviour and treatment outcome.**

One of the aims of STD control activities is to have STD patients seek health care at institutions where effective treatment and correct information and education can be given, either private or public. It is also important to know that the treatment that is given is highly effective.

In order to follow these aspects and also to get to collect simple data on sexual behaviour, health workers at sentinel sites will be asked to fill form CI. The results of this form will then be summarized in form CZ to get an overview of results during the sampling period.

**MINISTRY OF HEALTH  
NATIONAL AIDS/STD CONTROL PROGRAMME  
HEALTH CARE SEEKING BEHAVIOUR & TREATMENT OUTCOME  
ASSESSMENT FORM**

(To be used at Sentinel Sites and filled for new STD cases only)

**Sampling Period** .....

**Initial Visit to the facility** (to be filled for all new patients)

1. Facility.....(Dispensary/Health Centre/Hospital)

2. District.....Region.....

3. Registration No ..... Marital Status .....

4. Age ..... Sex.....

5. Level of Education .....

6. Occupation .....

7. Did the patient seek care anywhere else before coming to the facility?

1. Yes

2. No

8. If yes, where did the patient seek care initially?

(a) Government health facility

(b) Private practice

(c) Pharmacy

( d ) Self treatment

(e) Traditional healer

9. Number of visits at other health facilities prior to seeking care at this facility .....

10. (a) Duration (days) of symptoms of present disease from onset till patient sought care at health institution, private or public .....

| Diagnosis/Complaint  | 1 - 7 days | 8 - 14 days | 15-28 days | 28 days |
|----------------------|------------|-------------|------------|---------|
| GDS                  |            |             |            |         |
| GUD                  |            |             |            |         |
| Lower Abdominal Pain |            |             |            |         |
| (PID)                |            |             |            |         |
| Others (specify      |            |             |            |         |

(b) Duration of symptoms of present disease from onset till today (tick appropriate)

| Diagnosis/Complaint  | 1 - 7 days | 8 - 14 days | 15-28 days | 28 days |
|----------------------|------------|-------------|------------|---------|
| GDS                  |            |             |            |         |
| GUD                  |            |             |            |         |
| Lower Abdominal Pain |            |             |            |         |
| (PID)                |            |             |            |         |
| Others (specify      |            |             |            |         |

11. No. of sexual partner(s) during the last month.....

12a. Has the client heard of condoms?

- (a) Yes   
 (b) No

12b. Does the client know where to obtain Condoms

- (a) Yes   
 (b) No

13. Does the client use condoms?

- (a) Always  
 (b) Never   
 (c) sometimes

14. Did the client condom in the last consider sexual “with non-regular partner” encounter?

- (a) Yes  
 (b) No

15. Partner notification

(a) Did the patient bring his/her partner(s) Yes  
 No

(b) If yes, how many partners? (Compare with answer to question 11).....

(c) Did you treat the partners(s)? Yes  
 No

(d) If no on (a) or if not all partners where brought did you give the patient contact slip(s)  
 Yes  
 No

(e) If yes, how many (compare with the no, given in question 11)

(f) Clarification if any.....

\*Partner: Symptomatic.....  
 Asymptomatic.....



(c) Referral? Where?.....

25. Treatment outcome

1. Cured
2. Improved
3. No change
4. Worse
5. Did not turn up

## CLINICAL STD REPORTING FORM

Information to be filled in this form will be partially information already filled in form C1.

The following information gives you further help on how to fill the CLINICAL STD Reporting form (form C2) on selected items.

Column 2 “**Type of Visit**” Enter “N” if the patient is seen from the first time i.e. new visit and “R” if the Patient is coming as a repeated visit.

Column 5,6,7 & 8 “**Diagnosis**” Tick [  ] appropriate.

Column 9 “**Number of partners last month**” Enter number of partners the client has sex with in the last month before he visited the Health Centre.

Column 10 “**Treatment outcome**” fill

1. For cured
2. For improved
3. For no change
4. For worse
5. Did not turn up

Column 11 “**Contact Slip given**” Enter number of slip given client for the purpose of notifying the partners with whom the patient has been in contact.

Column 13 “**No. of partner(s) treated**” Enter partners who came for treatment.



## **SUPERVISION**

Supervision should be carried out as a regular activity and part of the integrated supervision activities. In order to facilitate supervision a checklist has been worked out (form D1) and another form (form D2) outlined to encourage analysis of the findings on syphilis screening. The patients have been split up into two age groups < 20 and > 20 to allow for analysis on what is happening among youth, which better reflect recent changes in behaviour. Often there will not be enough patients < 20 to allow for analysis at a single health institution, but result from several sites have to be compiled and feed back both to the health workers and the community.

**MINISTRY OF HEALTH  
NATIONAL AIDS/STD CONTROL PROGRAMME  
NACP-STD SUPERVISION CHECKLIST**

1. Date of Visit .....Time of visit.....  
 Name of HF.....  
 District.....  
 Region .....Date of last Visit.....

2. Staff: Health workers trained (Names)  
 .....  
 .....  
 .....

3. Presently in work?

- |   |     |                          |    |                          |
|---|-----|--------------------------|----|--------------------------|
| 1. Examination bed                          | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 2. Screen                                   | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 3. separate room                            | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 4. Speculum                                 | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 5. Washing basin                            | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 6. Sterilizer                               | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 7. Kidney dish                              | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 8. Torch                                    | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 9. condom demonstrator                      | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 10. Treatment guide                         | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 11. Condoms                                 | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 12. Drug box                                | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 13. Gloves                                  | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 14. Are drugs stored safely?<br>If No, why? | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |

.....  
 .....

15. Records

Is the register book filled in properly? Yes  No

If No, why?

.....  
.....  
.....

Is monthly reporting form matching with register book      Yes       No

16. Observe the consultation of a patient

Is privacy maintained?      Yes       No

Is Proper examination done?      Yes       No

Is correct diagnosis made?      Yes       No

Is health education properly?      Yes       No

Is condom use promoted?      Yes       No

Is condom demonstration made?      Yes       No

Is the importance of compliance stressed?      Yes       No

17. Comments:-

.....  
.....  
.....

18. Name of supervisor:.....

19. Comments from provider:

.....  
.....  
.....

**MINISTRY OF HEALTH**  
**NATIONAL AIDS/STD CONTROL PROGRAMME**  
**SYPHILIS SCREENING FOR ANTENATAL CLINIC ATTENDEES**  
**SUPERVISION FORM**

1. Period: \_\_\_\_\_
2. Screening Centre: \_\_\_\_\_  
 District: \_\_\_\_\_
3. (a) Total number of FIRST attenders in this clinic \_\_\_\_\_  
 (b) Total number of women screened \_\_\_\_\_  
 (c) Total number < 20 years \_\_\_\_\_  
 (d) Total number of RPR positive \_\_\_\_\_  
 (e) Syphilis Prevalence overall \_\_\_\_\_ %  
 (f) Syphilis Prevalence < 20 \_\_\_\_\_ %
4. (a) Total number of RPR Positive \_\_\_\_\_  
 Percent Treated \_\_\_\_\_  
 (b) Total number of RPR Positive women not treated \_\_\_\_\_  
 Percent not Treated \_\_\_\_\_ %
5. (a) Number of Partners Treated \_\_\_\_\_  
 Percent Treated \_\_\_\_\_ %  
 (b) Number of Partners Treated \_\_\_\_\_  
 Percent not Treated \_\_\_\_\_ %

6. Comments: \_\_\_\_\_  
\_\_\_\_\_

Reported by: \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Key: WS = Women Screened, Wtr = women Treated, WP = Women Pos, PTr = Partner Treated

### **Reporting**

In order to monitor progress and identify problems activities have to be monitored. Both the Ministry of Health and the donors will request reports. The report should contain both narrative and financial parts. It has to relate closely to the plan of operations. Also, it could be made clearer through presentation in a summary form, which covers the main activities of STI control. An example of such of form (form E) follows on the next page.

**Monitoring of STD Control activities in a Region**

**FORM E**

Reporting Period

Date.....Month.....Year.....

| No. | Regional Profile   |             | End of previous year | 1 <sup>st</sup> quarter | 2 <sup>nd</sup> quarter | 3 <sup>rd</sup> quarter | 4 <sup>th</sup> quarter | Total |
|-----|--|-------------|----------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------|
| 1.  | No of Govt. Health institutions  |             |                      |                         |                         |                         |                         |       |
|     | No on NGO health Institutions  |             |                      |                         |                         |                         |                         |       |
|     | No of Private health Institutions  |             |                      |                         |                         |                         |                         |       |
|     | Total No. of Health Institutions.  |             |                      |                         |                         |                         |                         |       |
| 2.  | No of Govt. Health Institutions with staff trained on STD management.    |             |                      |                         |                         |                         |                         |       |
|     | No. of NGO Health Institution with staff trained on STD management.      |             |                      |                         |                         |                         |                         |       |
|     | No. of Private Health Institutions with staff trained on STD management. |             |                      |                         |                         |                         |                         |       |
| 3.  | No. of newly trained staff   | Clinicians  |                      |                         |                         |                         |                         |       |
|     |  | MCH         |                      |                         |                         |                         |                         |       |
|     |  | Laboratory  |                      |                         |                         |                         |                         |       |
|     |  | Orientation |                      |                         |                         |                         |                         |       |
|     | No of staff who have participated in refresher training course.          |             |                      |                         |                         |                         |                         |       |
| 4.  | No. of NGO Health Institutions reporting STDs                            |             |                      |                         |                         |                         |                         |       |
|     | No. of Private Health Institutions reporting STDs                        |             |                      |                         |                         |                         |                         |       |
| 5.  | Reported Syndromes   | GUD         |                      |                         |                         |                         |                         |       |
|     |  | VDS         |                      |                         |                         |                         |                         |       |
|     |  | UDS         |                      |                         |                         |                         |                         |       |
|     |  | Others      |                      |                         |                         |                         |                         |       |
|     |  | Total       |                      |                         |                         |                         |                         |       |
| 6.  | No. of institutions which screen for syphilis                            |             |                      |                         |                         |                         |                         |       |
|     | No. of antenatal women positive for syphilis                             |             |                      |                         |                         |                         |                         |       |
|     | % of antenatal women positive for syphilis                               |             |                      |                         |                         |                         |                         |       |
| 7.  | No. of institution which administer OWN prophylaxis                      |             |                      |                         |                         |                         |                         |       |
|     | % of institutions which administer OWN prophylaxis                       |             |                      |                         |                         |                         |                         |       |
|     | Prophylaxis  |             |                      |                         |                         |                         |                         |       |
| 8.  | Results of sentinel surveillance sites                                   |             |                      |                         |                         |                         |                         |       |
|     | Site 1   | HIV %       |                      |                         |                         |                         |                         |       |
|     |  | RPR%        |                      |                         |                         |                         |                         |       |
|     | Site 2   | HIV%        |                      |                         |                         |                         |                         |       |

|  |        |      |  |  |  |  |  |  |
|--|--------|------|--|--|--|--|--|--|
|  |        | RPR% |  |  |  |  |  |  |
|  | Site 3 | HIV% |  |  |  |  |  |  |
|  |        | RPR% |  |  |  |  |  |  |
|  | Site 4 | HIV% |  |  |  |  |  |  |
|  |        | RPR% |  |  |  |  |  |  |

- (data to be collected during supervisory visits and to be attached to all quarterly and annual reports)

## ESTIMATION OF DRUG NEEDS

The estimation of drug needs are based on the number of STD patients with different syndromes you expect to treat during the next order period (normally a 2 month period), what drugs are used in the region and what proportion of curdlike discharge you have in the region. It further depends on how many patients are cured at the first and second visits and thus how many come back for a third visit. At the national level the NACP has estimated that 10% would need treatment at a second visit and 1% at a third visit. When the programme has been running for some time in your district you will have a better idea of these proportions.

As you see from table 12 the estimation becomes quite complicated when you take all revisits (col. 4: visit no) into consideration and if you take the proportion of patients into account (col. 5:% of patients). After you have estimated the total number of the different syndromes in your region or district (P,Q,R,S) you have to multiply that with the proportion of patients (for GUD this depends on how much herpes-ulcer you think you have, in the example we have assumed 20% of the GUD being caused by herpes or others thus 80% remaining for drug treatment (see treatment guideline page 30) and with the number of tablets/injections need for each episode. This figure will then have to be divided by the number of tablets or injections per unit to get the total number of units required. In order to facilitate this process an approximation can be made, which still gives a good idea of the drug needs (see table 13).

If you for example want to order Benzathine penicillin you just have to know the estimated number of GUDs for the period, male + female (p) for hospitals, health centres and dispensaries in your district/region (table 12) and divide that number with 50 to get an approximate need of benzathine penicillin units. If you want to order Ciprofloxacin since this drug is used for several syndromes you have to know both the estimated number of UDS (M), VDS and PID to be able to estimate the need for Ciprofloxacin for that period:  $(Q + R + S)/100$

In order to make the drug order you first have to enter the estimated numbers of STDs at the back side of Form F and then fill the front page including the required number of units for next period [R] (column 9).

**TABLE 12: REQUIREMENTS OF STD DRUGS FOR HEALTH INSTITUTION BASED ON REPORTED SINDROMES**

| Syndrome      | Products              | Strength      | Visit No. | % of patients (estimate) | No. of Tab/Inj per episode | Estimated Number of Syndrome |                   |                     |                |                   |  |
|---------------|-----------------------|---------------|-----------|--------------------------|----------------------------|------------------------------|-------------------|---------------------|----------------|-------------------|--|
|               |                       |               |           |                          |                            | Regional Hospital            | District Hospital | HC and Dispensaries | Total          | No. Unit required |  |
| GUD<br>M+F    | Benzathine Penicillin | 2.4 MU        | 1         | 80 (a)                   | 1                          | X <sub>1</sub>               | Y <sub>1</sub>    | Z <sub>1</sub>      | P              |                   |  |
|               | Co-trimoxazole        | 400mg/80mg    | 1         | 80 (a)                   | 30                         | "                            | "                 | "                   |                |                   |  |
|               | Erythromycin          | 500 mg        | 21        | 8 (b)                    | 21                         | "                            | "                 | "                   |                |                   |  |
| UDS (M)       | Ciprofloxacin         | 500 mg        | 1         | 100 ©                    | 1                          | X <sub>2</sub>               | Y <sub>2</sub>    | Z <sub>2</sub>      | Q              |                   |  |
|               | Doxycycline           | 100 mg        | 1         | 100 ©                    | 14                         | "                            | "                 | "                   |                |                   |  |
|               | Doxycycline           | 100 mg        | 2         | 10 (d)                   | 14                         | "                            | "                 | "                   |                |                   |  |
|               | Ceftriaxone           | 250 mg        | 2         | 10 (d)                   | 1                          | "                            | "                 | "                   |                |                   |  |
|               | Spectinomycin         | 2 g           | 3         | 1 (e)                    | 1                          | "                            | "                 | "                   |                |                   |  |
| VDS           | Clotrimazole          | 100 mg        | 1         | 60                       | 6                          | X <sub>3</sub>               | Y <sub>3</sub>    | Z <sub>3</sub>      | R              |                   |  |
|               | Ciprofloxacin         | 500 mg        | 1         | 40 g                     | 1                          | "                            | "                 | "                   |                |                   |  |
|               | Doxycycline           | 100 mg        | 1         | 40 g                     | 14                         | "                            | "                 | "                   |                |                   |  |
|               | Metronidazole         | 400 mg        | 1         | 40 g                     | 5                          | "                            | "                 | "                   |                |                   |  |
|               | Clotrimazole          | 100 mg        | 2         | 4                        | 6                          | "                            | "                 | "                   |                |                   |  |
|               | Ceftriaxone           | 250 mg        | 2         | 4                        | 1                          | "                            | "                 | "                   |                |                   |  |
|               | Doxycycline           | 100 mg        | 2         | 4                        | 14                         | "                            | "                 | "                   |                |                   |  |
|               | Metronidazole         | 400 mg        | 2         | 4                        | 5                          | "                            | "                 | "                   |                |                   |  |
|               | Ceftriaxone           | 250 mg        | 2         | 6                        | 1                          | "                            | "                 | "                   |                |                   |  |
|               | Doxycycline           | 100 mg        | 2         | 6                        | 14                         | "                            | "                 | "                   |                |                   |  |
|               | Metronidazole         | 400 mg        | 2         | 6                        | 14                         | "                            | "                 | "                   |                |                   |  |
|               | Erythromycin          | 500 mg        | 1         | 10 j                     | 21                         | "                            | "                 | "                   |                |                   |  |
|               | Ceftriaxone           | 250 mg        | 2         | 0.6 k                    | 1                          | "                            | "                 | "                   |                |                   |  |
|               | PID                   | Ciprofloxacin | 500 mg    | 1                        | 90 l                       | 1                            | X <sub>4</sub>    | Y <sub>4</sub>      | Z <sub>4</sub> | S                 |  |
|               |                       | Doxycycline   | 100 mg    | 1                        | 90 l                       | 28                           | "                 | "                   | "              |                   |  |
| Metronidazole |                       | 400 mg        | 1         | 90 l                     | 14                         | "                            | "                 | "                   |                |                   |  |
| Ceftriaxone   |                       | 250 mg        | 2         | 10 m                     | 1                          | "                            | "                 | "                   |                |                   |  |

**TABLE 13: ESTIMATION OF DRUGS NEEDS AND OTHER SUPPLIES**

**P**= total number of GUD, M + F

**Q**=UDS

**R**= VDS

**S**= PID

| Drug  | Strength     | Unit | Total Tabs/<br>injec. needed  | Total Units          |
|---|--------------|------|---|----------------------|
| Benzathine pc                                 | 2,4 MU       | 50   | P   | P/50                 |
| Co-trimoxazole                                | 400 mg/80 mg | 1000 | 30 P  | 30P/1000             |
| Erythromycin                                  | 500 mg       | 1000 | 21 (0.1 P+ 0.1R)  | 2(P+R)/1000          |
| Ciprofloxacin                                 | 500 mg       | 100  | Q+R+S   | (Q+R+S)/100          |
| Doxycycline                                   | 100 mg       | 1000 | 14Q+7R+28S  | 7(2Q+R+S)/1000       |
| Cefriaxone                                    | 250 mg       | 1    | 0.1Q+0.1R+0.1S  | (Q+R+S)/10           |
| Metronidazole                                 | 400 mg       | 1000 | 0.5Q+0.5R+12S   | (0.5Q+2.5R+12S)/1000 |
| Clotrimazole                                  | 100 mg       | 6    | 4R  | 2R/3                 |
| Spectromycine                                 | 2g           | 1    | 0.01Q   | Q/100                |
| Syringes and<br>Needles 10ml & 21<br>G needle | 10 ml        | 100  | No of patients injected with<br>Benzathine, Cefriaxone,<br>Spectinomycine = A | A/100                |
| Vacutainer tubes &<br>needles                 | 10 ml        | 1000 | No of women screened for syphills<br>= B                                      | B/1000               |

**NATIONAL AIDS CONTROL PROGRAMME**

**FORM F**

**QUARTERLY RECORDING/ ORDERING FORM FOR STD DRUGS**

**(to be filled by all institutions that received STD Drugs and send to NACP one month before the end of the quarter)**

**Quarter**

**Date:...../...../..... NAME OF**

**HOSPITAL / CLINIC:.....DISTRICT..... REGIONA:.....**

| No  | ITEM   | UNIT SIZE | QUANTITY IN STOCK BEGINNING OF PERIOD (A) | NEW DRUGS RECEIVED DATE: (B) | NEW STOCK: OLD STOCK + NEW SUPPLIES (A+B) | QUANTITY IN STOCK END OF PERIOD = balance to be brought forward © | QUANTITY USED U= (A+B)- C | DRUGS REQUIRED FOR NEXT PERIOD (UNITS) ® |
|-----|--|-----------|---|------------------------------|---|---|---------------------------|--|
| 1.  | Benzathin Penicillin dry powder for inj.2.4 MEGA             | 50/Box    |   |                              |   |   |                           |  |
| 2.  | Water for inj. 50/box  | 50/Box    |   |                              |   |   |                           |  |
| 3.  | Ceftriaxon Powder inj. (Disodium salt) 250mg                 | 1 vial    |   |                              |   |   |                           |  |
| 4.  | Water for inj. 50/box  | 50/ Box   |   |                              |   |   |                           |  |
| 5.  | Ceftriaxon Powder inj. (Disodium salt) 125mg                 | 1 vial    |   |                              |   |   |                           |  |
| 6.  | Water for inj. 50/Box  | 50/Box    |   |                              |   |   |                           |  |
| 7.  | Ciprofloxacin 500 mg   | 100/Tin   |   |                              |   |   |                           |  |
| 8.  | Clotrimazole cream 1% 20 Gramm tubes                         | Tubes     |   |                              |   |   |                           |  |
| 9.  | Clotrimazole pess 100mg                                      | 6 per pkt |   |                              |   |   |                           |  |
| 10. | Co-trimazole tablets 400 mg/80 mg                            | 1000/Tin  |   |                              |   |   |                           |  |
| 11. | Doxycycline Capsules 100 mg                                  | 1000/Tin  |   |                              |   |   |                           |  |
| 12. | Erythromycine tabs.400 mg                                    | 1000/Tin  |   |                              |   |   |                           |  |
| 13. | Erythromycine eye ointment 0.5% 5g                           | 1 Tube    |   |                              |   |   |                           |  |
| 14. | Metronidazole tabs. 400mg                                    | 1000/Tin  |   |                              |   |   |                           |  |
| 15. | Podophyline 10% in water 60 ml                               | 1 Bottle  |   |                              |   |   |                           |  |
| 16. | Spectimomycine 2g  | 1 vial    |   |                              |   |   |                           |  |
| 17. | Water for inj.50/box   | 50/Box    |   |                              |   |   |                           |  |
| 18. | Tetracycline eye ointment 0.1% 5Gramm                        | Tubes     |   |                              |   |   |                           |  |
| 19. | Syringes & Needles 10ml. & 21 G Needle                       | 100/Box   |   |                              |   |   |                           |  |
| 20. | Vacutainer tubes 10ml w/needle                               | 1000/Box  |   |                              |   |   |                           |  |
| 21. | RPR Syphilis antigen Test                                    | 100/Box   |   |                              |   |   |                           |  |
| 22. | Vironostika Uniform II HIV and 2 plus 0 Organon (ELISA test) | 96/Kit    |   |                              |   |   |                           |  |
| 23. | Examination Latex Gloves L= Large                            | 100/Box   |   |                              |   |   |                           |  |
| 24. | Examination Latex Gloves M= Medium                           | 100/Box   |   |                              |   |   |                           |  |
| 25. | Gauze Absorbent  | Rolls     |   |                              |   |   |                           |  |
| 26. | Cotton absorbent   | 100/Packs |   |                              |   |   |                           |  |
| 27. | Plastic Pipettes   | Pieces    |   |                              |   |   |                           |  |

\* To be estimated from reported SDT syndromes previous period (normally a quarter) (See Table at the back)

**REQUESTING OFFICER:** .....**Date:**.....**SUPLYING OFFICER:**.....**Date:**.....

**AOTHORIZING OFFICER:**..... **Date:**.....**RECEIVED BY:** .....**Date:**.....

**STD SYDROMED REPORTED**  
**(During Previous Quarter**

|  | <b>GUD</b> | <b>GDS</b> | <b>PID</b> | <b>Other STDs</b> |
|--|------------|------------|------------|-------------------|
| <b>Male</b>  |            |            |            |                   |
| <b>Female</b>  |            |            |            |                   |
| <b>Total</b>   |            |            |            |                   |
| <b>No of ante- natal women screened for syphilis previous quarter</b>                |            |            |            |                   |
| <b>No of patients tested with RPR previous quarter</b>                               |            |            |            |                   |
| <b>No of birth in the health facility previous quarter</b>                           |            |            |            |                   |
| <b>No of children given Ophthalmia Neonatorum (ONN) prophylaxis previous quarter</b> |            |            |            |                   |