

2016

National Guidelines on the Syndromic Management of Sexually Transmitted Infections (STIs) and other Reproductive Tract Infections (RTIs).

Federal Ministry of Health, Abuja

National AIDS and STI's Control
Programme(NASCP)



FOREWORD

Sexually Transmitted Infections (STIs) remain a very important public health problem globally. With the emergence of the HIV and AIDS pandemic, it has become imperative for a more coordinated approach to reduction of the burden of STIs. Globally, it is estimated that 499 million new cases of curable STIs occur each year. These consist of 10.6 million cases of Syphilis, 106.1 million cases of Gonorrhea, 105.7 million cases of Chlamydia and 276.4 million cases of Trichomoniasis. These figures do not include the additional health burden caused by HIV and other viral STIs such as Herpes Simplex Virus Infection. While data on incidence of STIs is not readily available, the report of the 2013 National Demographic and Health Survey (NDHS) indicated that 4 percent of women and 2 percent of men in Nigeria experienced a Sexually Transmitted Infection and/or abnormal genital discharge or sore 12 months prior to the survey.

The 2013 NDHS also indicated that 40 percent of women and 45 percent of men with self-reported STI symptoms sought advice or treatment from the clinic, hospital, private doctor, or other health professionals. However, 27 percent of women and 20 percent of men sought no advice or treatment for their symptoms.

The FMOH with the technical guidance of WHO developed the first edition of the National Guidelines for the Syndromic Management of STIs in Nigeria in 1992. This edition of The Guidelines for the Syndromic Management of STIs has been developed with strict consideration of the emerging issues in antimicrobial resistance especially to gonorrhea and the clinical management of STIs among key populations. The guidelines contain information on clinical aspects of management of STIs as well as counseling, community education information and support services which will be extremely important to all health care providers who are responsible for STI case management and other STI control activities. This document also highlights preventive measures such as abstinence, counseling, reduction of number of sex partners, use of condoms (male and female), testing, treatment, case finding, contact tracing and management.

This document has been prepared as a first hand guide in the management of patients with Sexually Transmitted Infections. It is recommended that all health care providers and other relevant stakeholders in the country acquaint themselves with it.

I therefore recommend the National Guidelines on Syndromic Management of Sexually Transmitted Infections to all healthcare providers at all levels of care for the purpose of providing quality health services for Nigerians.



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ABBREVIATIONS AND ACRONYMS

AIDS	-	Acquired immune Deficiency Syndrome
CDC	-	Center for Disease Control
CBO	-	Community Based Organization
CSO	-	Community Social Organization
DFID	-	Department for International Development
EAQ	-	Exchange Access to Quality
FMoH	-	Federal Ministry of Health
FP	-	Family Planning
HIV	-	Human Immuno-deficiency Virus
HSV	-	Herpes Simplex Virus
MCH	-	Material and Child Health
NARHS	-	National HIV and AIDS and Reproductive Health
NASCP	-	National AIDS and STIs Control program
NDHS	-	Nigeria Demographic and Health Survey
NGO	-	Non-Governmental Organization
PHC	-	Primary Health Car
RAP	-	Risk Assessment Positive
RTIS	-	Reproductive Tract Infection
SFH	-	Society for Family Health
STDs	-	Sexual Transmitted Diseases
STIs	-	Sexual Transmitted Infections
UNAIDS	-	United State Agency for International Development
UNFPA	-	United Nation Found for Population Activity
VIA	-	Visual Inspection with Acid
WHO	-	World Health Organization
PATH	-	Program for Appropriate Technology in Health

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CHAPTER ONE

INTRODUCTION

1.1 Background

Sexually Transmitted Infections (STIs) / Reproductive tract infections (RTIs) are caused by microorganisms normally present in the reproductive tract, or introduced from outside during sexual contact or medical procedures, or as a result of an imbalance in vaginal bacterial flora. RTIs could be caused by endogenous organisms that are the normal bacteria present in the female genital tract, following abortion (post-abortion) or childbirth (postpartum); iatrogenic causes, that is after an obstetric or gynaecological procedure or after the application of chemicals or drugs into the vagina by the patient; or as the result of sexually transmitted infections (STIs). STIs have important reproductive health implications and can be associated with significant levels of morbidity as well as increased risk of HIV transmission. Furthermore, data on incidence of STIs are not readily available especially in developing countries.

Globally, it is estimated that 499 million new cases of curable STIs occur each year. These consist of 10.6 million cases of syphilis, 106.1 million cases of gonorrhoea, 105.7 million cases of chlamydia and 276.4 million cases of trichomoniasis. These figures do not include the additional health burden caused by HIV and other viral STIs such as Herpes Simplex Virus (HSV). Unlike other conditions such as un-intended pregnancy or HIV infections, which affect more people in sub-saharan Africa and south East Asian countries; STIs / RTIs constitute a major public health burden globally. In developing

countries, STIs and their complications ranked in the top five disease categories for which adults seek health care. In addition, antimicrobial resistance particularly for gonorrhea, is becoming increasingly wide spread.

The report of the 2008 National Demographic and Health Survey (NDHS) indicated that 5 percent of women and 3 percent of men in Nigeria had experienced a sexually transmitted infection and/or abnormal genital discharge or sore 12 months prior to the survey. The 2008 NDHS also indicated that 46 percent of women and 58 percent of men with self-reported STI symptoms sought advice or treatment from health facilities or health care workers. However, 38 percent of women and 22 percent of men sought no advice or treatment for their symptoms.

1.2 Public Health Importance of STIs / RTIs

STIs / RTIs impose an enormous burden of morbidity and mortality, both directly through their impact on reproductive and child health, and indirectly through their role in facilitating the sexual transmission of HIV infection. The greatest impact can be seen among women in whom severe complications include chronic pelvic pain, and adverse pregnancy outcomes (ectopic pregnancies, spontaneous abortions, stillbirth, endometritis and low birth weight.). In both men and women, STIs play a major role in infertility. A growing number of malignancies are also attributed to STIs, notably cervical, anal and hepatocellular carcinoma. In the new born, complications of STIs / RTIs include pneumonia, ophthalmia neonatorum and congenital syphilis.

Pelvic infections account for 17.4 percent of all gynaecological admissions in Africa while abortion accounts for between 7 - 29 percent of maternal deaths in developing countries.

Infection following vaginal deliveries is 10 times more common in developing than developed countries. Most cases of infertility are related to RTIs, while about 32 ectopic pregnancies occur per 1000 live births in Africa.

The World Bank estimated that STIs, excluding HIV, are the second commonest cause of healthy life years lost by women in the 15-49 years age group. They are also responsible for 17 percent of the total burden of disease in women of reproductive ages¹.

Enhancement of HIV transmission among clients with STIs has been demonstrated in many epidemiological and biological studies. Many symptomatic STIs enhance the transmission of HIV by promoting viral shedding and weakening the natural barriers against HIV. Effective case management of STIs has been demonstrated in a community study in Mwanza, Tanzania to reduce HIV incidence by 42 percent. In many societies, STIs are associated with stigma which discourages health-seeking behaviour. However, this only serves to drive the epidemic further underground; hence, public investment and involvement is vital to breaking this conspiracy of silence.

It is indisputable that STIs / RTIs are associated with significant socio-economic consequences. These include costs of treatment and absenteeism from work, social stigmatization, psychological consequences and infertility. Untreated STIs / RTIs can lead to loss of employment and broken marriages leading to disruption of the family unit.

Interventions for STIs / RTIs control have been proved to be cost effective with direct benefit to the individual, family and the community. A cost effectiveness analysis by the World Bank showed that STI control interventions were comparable to tuberculosis

¹ world bankworld development report 1993; investing in health New York oxford university press 1999

control and measles immunization since their impact is felt beyond the affected individual. STI case management is therefore a public health intervention whose cost should not be borne only by the affected individual.

1.3 Rationale for STIs / RTIs Management

1. Effective management of STI / RTI.
2. Prevention of complications.
3. Promotion of safer sexual practices.
4. Treatment of partners.
5. Facilitation of training and supervision of health care providers.
6. Use of commonly available and effective drugs at all levels of health care delivery.
7. Prevention of mother-to-child transmission of infection.

1.3.1 Rationale for Syndromic Approach to STIs / RTIs Management

In order to make STIs / RTIs control more effective, provision of appropriate health care services, including prompt and effective treatment of patients and their partners, health education and counseling must be accessible to everyone who needs it. These services must be available at the point of first contact with the health service providers (public or private) such as the primary health care centers, dispensaries, outpatient departments and outreach posts, irrespective of whether laboratory facilities for the diagnosis of STIs / RTIs are available or not.

At the secondary and tertiary health institutions where laboratory facilities and experts should be available, aetiologic and clinic-based approaches to STIs / RTIs management are often affected by a variety of problems. These include lack of appropriate drugs,

laboratory equipment and personnel, long waiting time, high cost of services and limited population coverage.

The syndromic approach to management of STIs / RTIs makes treatment accessible and affordable to a majority of the population because trained health workers at all levels can use it. In addition, it does not require sophisticated equipment. It works through the use of *flow charts*, which have been prepared using symptoms presented by the patient and signs elicited by the health care provider. It ensures that patients and partners are treated at the point of first contact by making diagnosis based on signs and symptoms without having to wait for laboratory results. The patients are educated and counseled on adherence to the full course of treatment, the importance of partner notification and risk-reduction through the use of condom is also highlighted.

1.4 Goal of STIs / RTIs Syndromic Management

The goal of STIs / RTIs management is not only to cure the client, but also to break the chain of transmission and avoid complications. Therefore, the STI management package goes beyond diagnosis and prescription but also include patient education, partner treatment as well as provision of condoms.

The objectives of STIs / RTIs management are:

1. To make a correct diagnosis based on appropriate clinical assessment.
2. To provide proper antimicrobial therapy, obtain cure, decrease infectivity and avoid complications.
3. To reduce and prevent future high risk behavior.
4. To treat sexual partners in order to break the transmission chain.

CHAPTER TWO

PREVENTION OF SEXUALLY TRANSMITTED INFECTIONS (STIs) / REPRODUCTIVE TRACT INFECTIONS (RTIs)

2.1 Basic Facts about Sexually Transmitted Infections and Reproductive Tract Infections

Sexually transmitted infections are infectious diseases caused by one or more microorganisms that are mainly transmitted from one infected person to another during unprotected sexual intercourse. The risk of transmission of STIs from one infected person to another varies according to the causative organism. For instance, up to 50 percent of sexual partners of an individual with gonococcal urethritis may be infected after a single act of sexual intercourse. On the other hand, the risk of sexual transmission of HIV after a single act of sexual intercourse in the absence of other STI lesions may be as low as 0.1 – 1%.

Most people with STIs such as gonococcal and non-gonococcal urethritis, syphilis and HIV may be asymptomatic or mildly symptomatic for a long time, but still be infectious, at risk of disease progression and developing complications. Such people can spread the infections to un-infected sexual partners during sexual intercourse, and such contacts may develop the disease and complications. For this reason, a more inclusive term “Sexually transmitted Infections” (STIs) is preferred to “Sexually transmitted diseases” (STDs). Understanding STIs is important because they may lead to serious complications if untreated or poorly treated. In addition, they enhance the sexual transmission of HIV. Therefore, making proper diagnosis and treatment is of paramount importance.

Some STIs can arise from endogenous microorganisms; these include vaginal candidiasis and bacterial vaginosis. They are referred to as endogenous reproductive tract infections. This distinction is important for patient education and partner management.

There are over 20 different types of STIs, as summarized in Table 1.

The most common presentations are:

1. Discharge from the penis (urethritis)
2. Discharge from the vagina (vaginitis and rarely cervicitis)
3. Sores or wound on the genital parts of both men and women (genital ulcers)
4. Abnormal swellings of the lymph nodes or groin (buboes)
5. Abnormal growth on the genital parts or other neighboring areas in both men and women (warts).

Table 1²: Common STIs / RTIs

STIs / RTIs	Type of Organism	Causative Organism
Bacterial vaginosis	Bacteria	<i>Gardnerella vaginalis</i> , and Anaerobes
Gonorrhoea	Bacteria	<i>Neisseria gonorrhoeae</i>
<i>Chlamydia</i>	Bacteria	<i>Chlamydia trachomatis</i>
Syphilis	Bacteria	<i>Treponema pallidum</i>
Chancroid	Bacteria	<i>Hemophilus ducreyi</i>
Granuloma inguinale (donovanosis)	Bacteria	<i>Klebsiella granulomatis</i>
Lymphogranuloma venereum (LGV)	Bacteria	<i>Chlamydia trachomatis</i>
Yeast infection	Fungi	<i>Candida albicans</i>
Trichomoniasis	Protozoa	<i>Trichomonas vaginalis</i>
Herpes rash	Virus	Herpes simplex viruses 1 & 2
HIV infection	Virus	Human immunodeficiency virus
Hepatitis B infections	Virus	Hepatitis B virus
Hepatitis C Infection	Virus	Hepatitis C virus
Molluscum contagiosum	Virus	<i>Molluscum contagiosum</i>
Genital warts	Virus	Human papilloma virus
Scabies (crab)	Mite	<i>Sarcoptes scabiei</i>
Body lice	Crab louse	<i>Phthirus pubis</i>
Pelvic Inflammatory disease	Multiple organisms	<i>Neisseria gonorrhoeae</i> , <i>Chlamydia trachomatis</i> Anaerobes
Post abortion complications	Multiple organisms	Anaerobes, Gram Negative Bacteria
Abnormal Vaginal discharge in pregnancy and post delivery	Multiple organisms	<i>Candida albicans</i> , Any normal commensal in the vagina

²Adopted from WHO(2005 and 2010 guidelines)

Table 2³: Types of infections and their pathology

Type of Infection	Source of Infection	Mode of spread	Common examples
Endogenous infections	Organisms normally found in vagina	Usually not spread from person to person, but overgrowth can lead to symptoms	Yeast infection, bacterial vaginosis
Sexually transmitted infections	Sexual partners with STI	Sexual contact with infected partner	Gonorrhoea, chlamydia, syphilis, chancroid, trichomoniasis, genital herpes, genital warts, HIV
Iatrogenic infections	<p>Inside or outside the body:</p> <ul style="list-style-type: none"> • Endogenous (vagina) • STI cervix or vagina) • Contamination from outside <p>By medical procedures or following examination or intervention during pregnancy, childbirth, the postpartum period or in family planning (e.g., IUD insertion) and gynaecological settings.</p>	Infection may be pushed through the cervix into the upper genital tract and cause serious infection of the uterus, fallopian tubes and other pelvic organs.	<p>Contaminated needles or other instruments, e.g. uterine sounds, may transmit infection if infection control is poor.</p> <p>Pelvic inflammatory disease (PID) following abortion or other trans cervical procedure.</p> <p>Also, many infectious complications of pregnancy and postpartum period.</p>

³Adopted from WHO (2005 and 2010 guidelines)

2.2 Basic facts about HIV/AIDS and its relationship with STIs

According to the National HIV/AIDS and Reproductive Health Survey (NARHS Plus 2012), the national HIV prevalence rate in Nigeria was 3.4%. The highest was in the South-South zone (5.5%) and the lowest was in the South-East (1.8%). There is a causal link between STIs and increasing transmission of HIV, consequently prevention and treatment of STIs reduce sexual transmission of HIV infection. High risk sexual behaviour increases both STI and HIV transmission, therefore effective treatment of STIs decreases the amount of HIV in genital secretions and makes HIV transmission less likely. Many STIs / RTIs increase the risk of acquisition and transmission of HIV infection to others by as much as 50–300 times per contact. When a genital ulcer is present, HIV transmission is more likely because HIV can easily pass through breaks in the skin or mucous membranes caused by the ulcer. The virus can attach itself to white blood cells present in inflamed genital tissue and discharges; large amounts of HIV are found in ulcers and genital fluids (semen, cervical secretions) of people with certain STIs.

Although most STIs can be treated and cured, it is more cost effective to prevent them. Furthermore, some of the STIs have no cure. Prevention and control of STIs relies heavily on interventions through community health education on the risk factors and promotion of behaviour change. STI prevention measures revolve around interventions on sexual behavior of the individuals. Different people have different desired outcomes of sex and one intervention approach may not satisfy all. In facilitating behaviour change, it is therefore necessary to provide options to individuals.

2.3 Primary Prevention Measures

Some of the measures that can be employed to prevent STIs include:

1. Abstinence: This might be total abstinence from sex for groups such as adolescent and youths not yet married. These group should be encouraged to practice “postponed sex” till they are ready for marriage.
2. Mutually faithful sexual relationship or “Mutual monogamy”. It is useful if both partners are not already infected.
3. Correct and consistent use of condoms and other safer sex practices. This intervention is recommended for those who cannot abstain and yet cannot have mutually faithful relationships.
4. Vaccination – Vaccines have been developed for STIs such as HPV and Hepatitis B virus infections

2.4 Secondary Prevention Measures

This may be achieved by:

1. Encouraging STI care seeking behavior through:
 - a. Screening for STIs
 - b. Providing non-stigmatizing and non-discriminatory health facilities.
 - c. Providing quality STI care.
 - d. Ensuring a continuous supply of highly effective drugs.
 - e. Ensuring continuous supply of condoms.
2. Rapid and effective treatment of people with STIs
 - a. Comprehensive case management of STI syndromes.

- b. Training of service providers on case management.
- 3. Case findings
 - a. Examining minimally symptomatic women attending clinics for maternal and child health as well as family planning.
 - b. Partner notification and treatment.
 - c. Health education, investigation and treatment of targeted population groups who may have placed themselves at risk of infection such as sex workers long distance truck drivers, uniform services and young people both in and out of school.

2.5 Tertiary Prevention Measures

- 1. Limitation of disability
- 2. Rehabilitation including psychosocial support

2.6 STIs / RTIs Intervention Strategies

- 1. Training of service providers
- 2. Effective primary prevention of STIs / RTIs
- 3. Promotion of appropriate STI / RTI care seeking behavior
- 4. Effective case management which include Syndromic Management
- 5. Contact tracing and management
- 6. Condom Programming
- 7. Routine prevention of ophthalmia neonatorum
- 8. Availability of affordability of drugs
- 9. STI case finding and screening

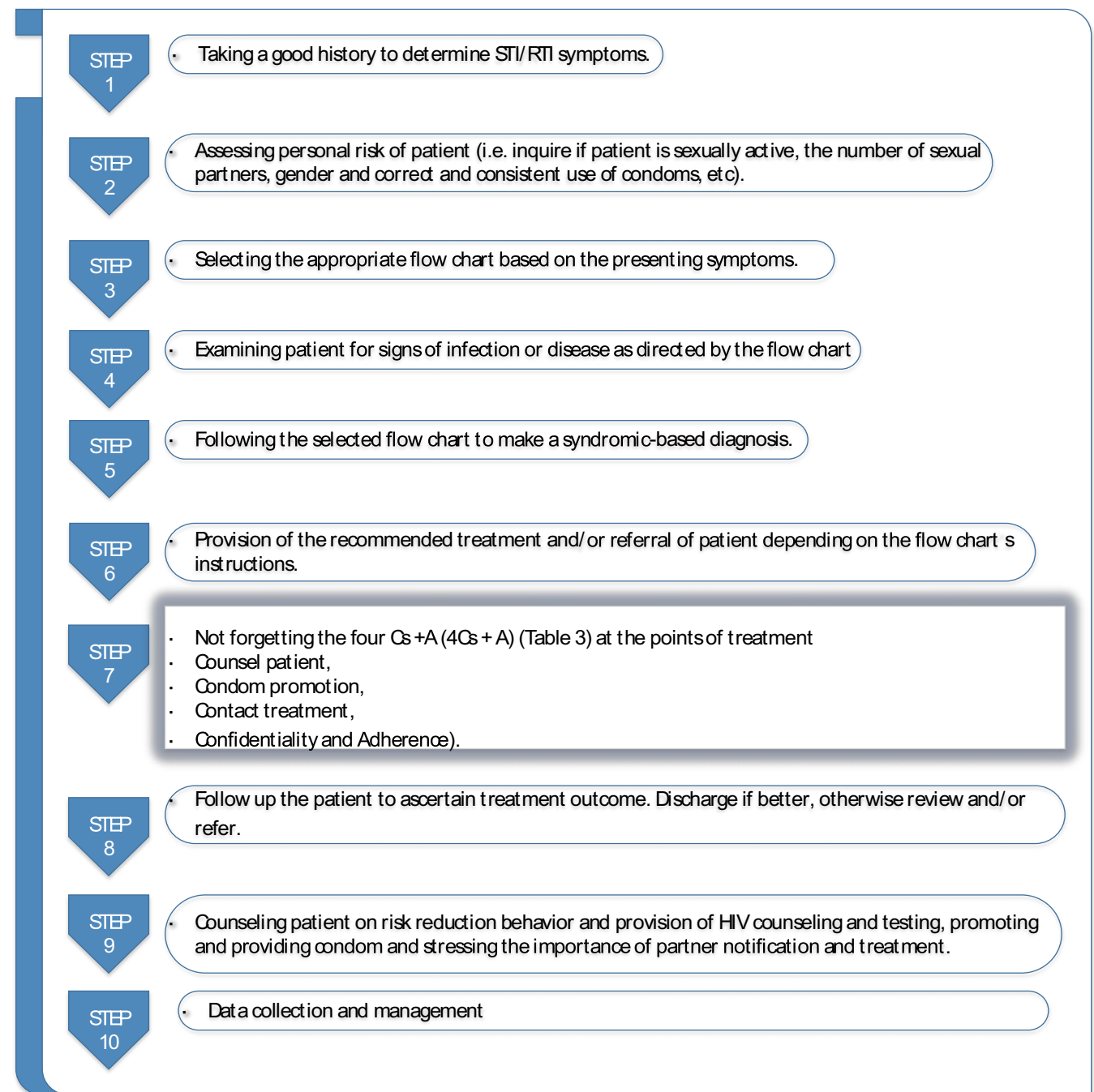
10. Monitoring and supervision

11. Vaccination

CHAPTER THREE

SYNDROMIC APPROACH TO STIS/RTIS MANAGEMENT

3.1 Steps in Syndromic Management



3.2 Components of Syndromic Management

1. Building the capacity of the Health care provider
2. Provision of counseling for STIs / RTIs generally
 - a. Provision of counseling and testing for HIV on site or through referral
 - b. Provision of condoms
3. Identifying and treating all STIS / RTIS syndromes
4. Conducting risk assessment using the 5Ps (Past STISs / RTISs, Partners, Practices, Prevention and Pregnancy plans)
5. Specific antimicrobial therapy
6. Partner notification
7. Prevention of ophthalmia neonatorum
8. Prevention of mother-to-child transmission of HIV, syphilis and other STISs
9. Using aetiologic approach of management at secondary and tertiary healthcare levels as well as research settings where facilities are well coordinated
10. Data collection and management

Table 3: The 4Cs + A of good STIs/RTIs management

The 4Cs + A of good STIS/ RTIS Management⁴				
Health Care provider should:				
Counseling	Condoms	Contact treatment	Confidentiality	Adherence
Listen to patient and engage in dialogue	Educate patient on consistent and proper use of condom	Avoid further spread of the infection to others	Protect client clinical records	Ensure completion of treatment regimen even after all the symptoms have disappeared and not to share the medication with partners
Show empathy for patient	Inform patient of proper use of condom as the only alternative	Inform all sexual partners in the last 3 months to seek proper treatment	Ensure and provide privacy during consultations and examination	Avoid self-medication
Counsel patient on the need to avoid risky behavior	Demonstrate the proper use of condom	Avoid re-infection	Keep provided information confidential	Abstain from sex until treatment is completed and infection cured
Educate patient on STIS prevention	Provide condoms to patient			Follow other instructions
Counsel patient on HIV and offer testing				

Table 4: The Syndromic Approach, Strengths and Limitations

SYNDROMIC APPROACH	STRENGTHS	LIMITATIONS
<p>This is a presumptive clinical diagnosis based on identification of a consistent group of symptoms and signs of STIs.</p> <p>This is a process where after a syndromic diagnosis has been made, treatment for the majority of organisms likely to be responsible for producing each syndrome is given. This may mean treating for one or more specific infections.</p>	<ul style="list-style-type: none"> • Simple • Prompt and effective • Cost effective • Can be used in remote, hard to reach areas once the required medicines are available • Can be integrated into other services • Proffers behavioural change • Makes provision for follow up • Prevents new infections by providing curative treatment without delay and breaking the chain of infections. • Early treatment reduces the likelihood of complications associated with STIs <p>AVAILABLE, ACCESSIBLE, AFFORDABLE</p>	<ul style="list-style-type: none"> • Every flow chart represents a compromise between diagnostic accuracy, technical and financial realities. • May lead to over treatment • Can easily be misused or abused by untrained personnel • Instances of over treatment may lead to drug resistance. • Vaginal discharge algorithms are not designed to detect the more serious and often symptomatic cervical infections • At present, accurate detection of gonorrhoea and chlamydia cervicitis requires expensive laboratory tests, which are not available in most settings • Treating when there is no STI may lead to marital discord or serious embarrassment to an unmarried patient whose symptoms are not due to STIs.
AETIOLOGIC APPROACH	STRENGTHS	LIMITATIONS
<p>This is a diagnosis based on the isolation and identification of the causative organisms of a disease using various methods like microscopy and culture.</p> <p>Treatment is based on the organisms identified</p>	<ul style="list-style-type: none"> • Treatment is specific • It is very difficult to clinically identify the cause of many STI • Less likelihood of over treatment • Less likelihood of drug resistance • Accurate detection of certain STIs such as gonorrhoeal and chlamydial cervicitis requires expensive laboratory tests 	<ul style="list-style-type: none"> • Majority of STI patients seek care at the Primary Health Care facilities where skills for aetiological diagnosis are few and laboratory facilities are not usually available • Requires sophisticated laboratory equipment • Expensive to maintain the equipment • Expensive to ensure trained personnel • Expensive to run the investigations • Limited to facilities that provide these services • Invasive techniques for specimen collection may be involved • Tests for some STIs e.g. herpes are technically demanding. • Time consuming • Requires repeat visits • Likely to result in delays in initiating treatment with resultant prolongation in periods of infectivity

¹ Note: The 4Cs and A should be adhered to in handling all patients regardless of diagnosis, in order to encourage safe sexual practices.

3.3 STIs/RTIs Syndromes and Causative Organisms

Table 5: STIs/ RTIs Syndromes and Causative Organisms

STISs/RTISs Syndromes	Causative Organisms
<ul style="list-style-type: none"> • Urethral discharge (urethritis) 	<ul style="list-style-type: none"> • <i>Neisseria gonorrhoeae</i> -common • <i>Chlamydia trachomatis</i> – common • <i>Ureaplasma urealyticum</i> - common • <i>Trichomonas vaginalis</i> -uncommon • <i>Herpes simplex</i> – uncommon
Vaginal discharge (Vaginitis / vaginosis) <ul style="list-style-type: none"> • Cervicitis 	<ul style="list-style-type: none"> • <i>Trichomonas vaginalis</i> • <i>Candida albicans</i> • <i>Gardnerella vaginalis</i> • Anaerobes • <i>N. gonorrhoeae</i> • <i>Chlamydia trachomatis</i>
<ul style="list-style-type: none"> • Genital Ulcer Disease (GUD) 	<ul style="list-style-type: none"> • <i>Treponema pallidum</i>(Syphilis) • <i>Haemophilus ducrei</i>(Chancroid) • <i>Herpes simplex</i> (1&2)(Genital herpes) • <i>Klebsiella granulomatis</i>(Granuloma inguinale) • <i>Chlamydia trachomatis</i> serovars 1,2,3 L1, L2,L3(Lympho granuloma venerium)
<ul style="list-style-type: none"> • Lower abdominal pain (Pelvic inflammatory disease) 	<ul style="list-style-type: none"> • <i>N. gonorrhoeae</i> • <i>C. trachomatis</i> • <i>Mycoplasma hominis</i> • Anaerobic bacteria • Other miscellaneous bacteria

<ul style="list-style-type: none"> • Inguinal adenopathy (buboes) 	<ul style="list-style-type: none"> • <i>Chlamydia trachomatis</i> serovars 1,2,3(Lymphogranuloma venereum LGV) • <i>Haemophilus ducreyi</i>(Chancroid) • <i>Treponema pallidum</i> (Syphilis)
<ul style="list-style-type: none"> • Painful scrotal swelling (epididymo-orchitis) 	<ul style="list-style-type: none"> • <i>N. gonorrhoeae</i> • <i>C. trachomatis</i> • Other miscellaneous bacteria
<ul style="list-style-type: none"> • Conjunctivitis with pus in the New born (ophthalmia neonatorum) • Gonococcal • Non gonococcal 	<ul style="list-style-type: none"> • <i>N. gonorrhoeae</i> • <i>C. trachomatis</i>
<p>Genital growths</p> <ul style="list-style-type: none"> • Condylomata acuminata (warts) • Syphilitic • Molluscum contagiosum 	<ul style="list-style-type: none"> • <i>Human papilloma virus</i> • <i>T. pallidum</i> • <i>Molluscum contagiosum virus</i>

CHAPTER FOUR

FLOW CHARTS OF STIs / RTIs SYNDROMES

The syndromic approach to diagnosis and management of STIs / RTIs makes treatment accessible and affordable to a large majority of the population because trained health workers at all levels can use it. The syndromic approach does not require sophisticated equipment. It works through the use of FLOW CHARTS, which have been prepared using signs and symptoms (i.e. the syndrome) presented by the patient. It ensures that patients and partners are treated at the point of first contact by making diagnosis based on signs and symptoms without having to wait for laboratory results. The patients are educated and counseled on adherence to the full course of treatment, the importance of partner notification and risk-reduction behavior.

4.1 Initial Assessment at all clinics

1. Taking the history of presenting complaints
2. Examining for STIs / RTIs signs
3. Assessing the risk of STIs / RTIs
4. Taking note of contraceptive method (if any)
5. Offering counseling and HIV testing
6. Screening for syphilis

4.2 Risk Assessment of STI Patients

A patient who falls into two (2) or more of the categories listed below is considered to be “risk assessment positive” (RAP)

1. Having sexual intercourse with partners infected with STI
2. Inconsistent, incorrect or non-use of condoms or lubricants
3. New sex partner(s) within the last 2-3 months
4. Multiple or casual sex partner(s)
5. Patients vulnerable populations (adolescents, youth, previous / current incarceration, uniformed Service Personnel, Long distance drivers, etc.)
6. Key populations (sex workers)

The flow chart below describes steps to be taken in managing a patient with STI using the syndromic approach. Each chart sequentially flows through enquiries into the patient presenting complaint(s) through, history taking and physical examination, decision on treatment and ensuring the 4Cs + A.

4.3 Flow Chart for Genital Ulcer Diseases

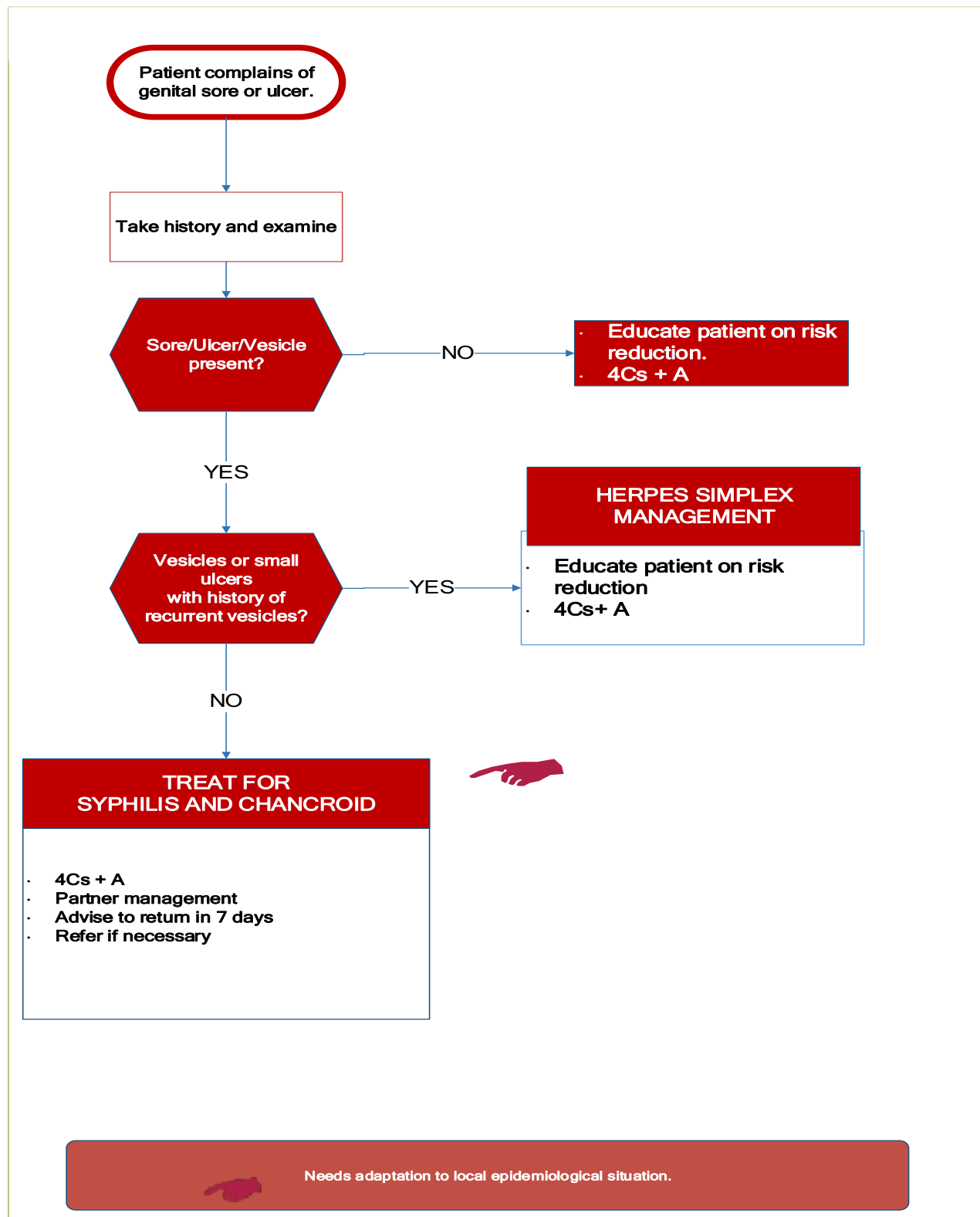
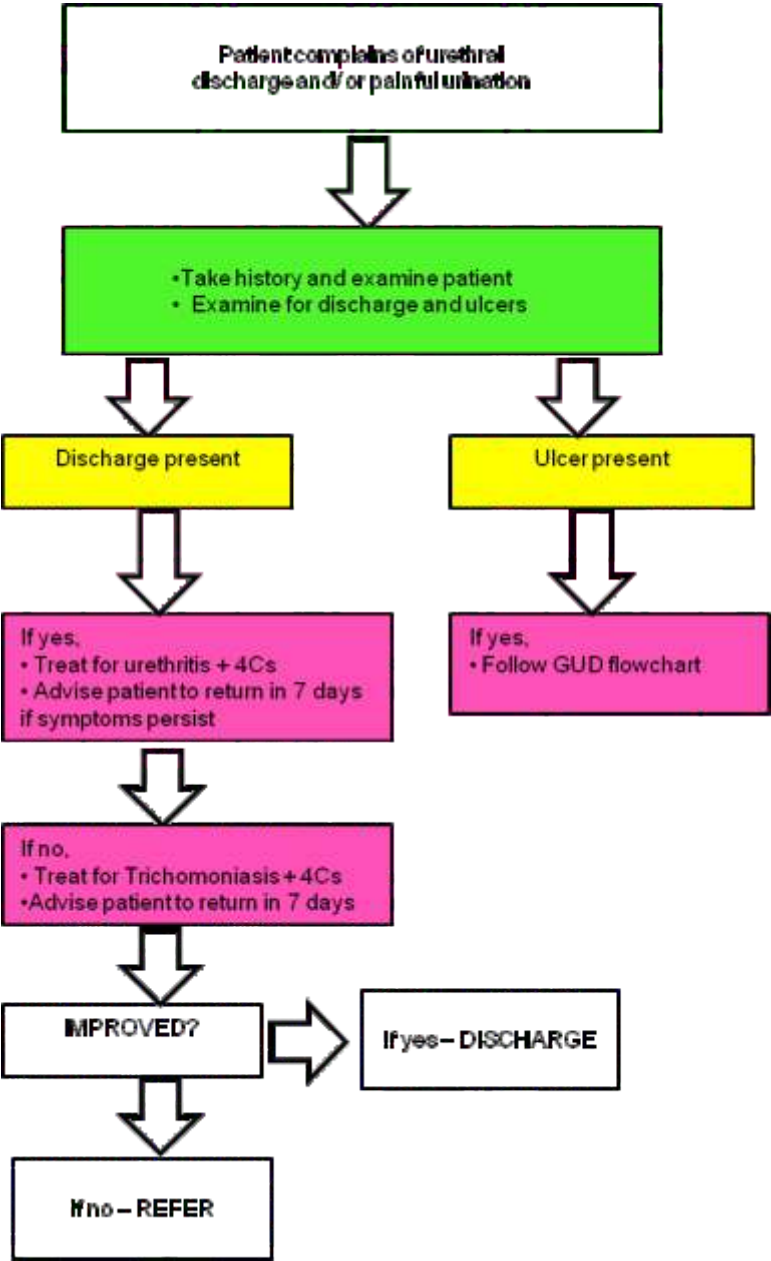


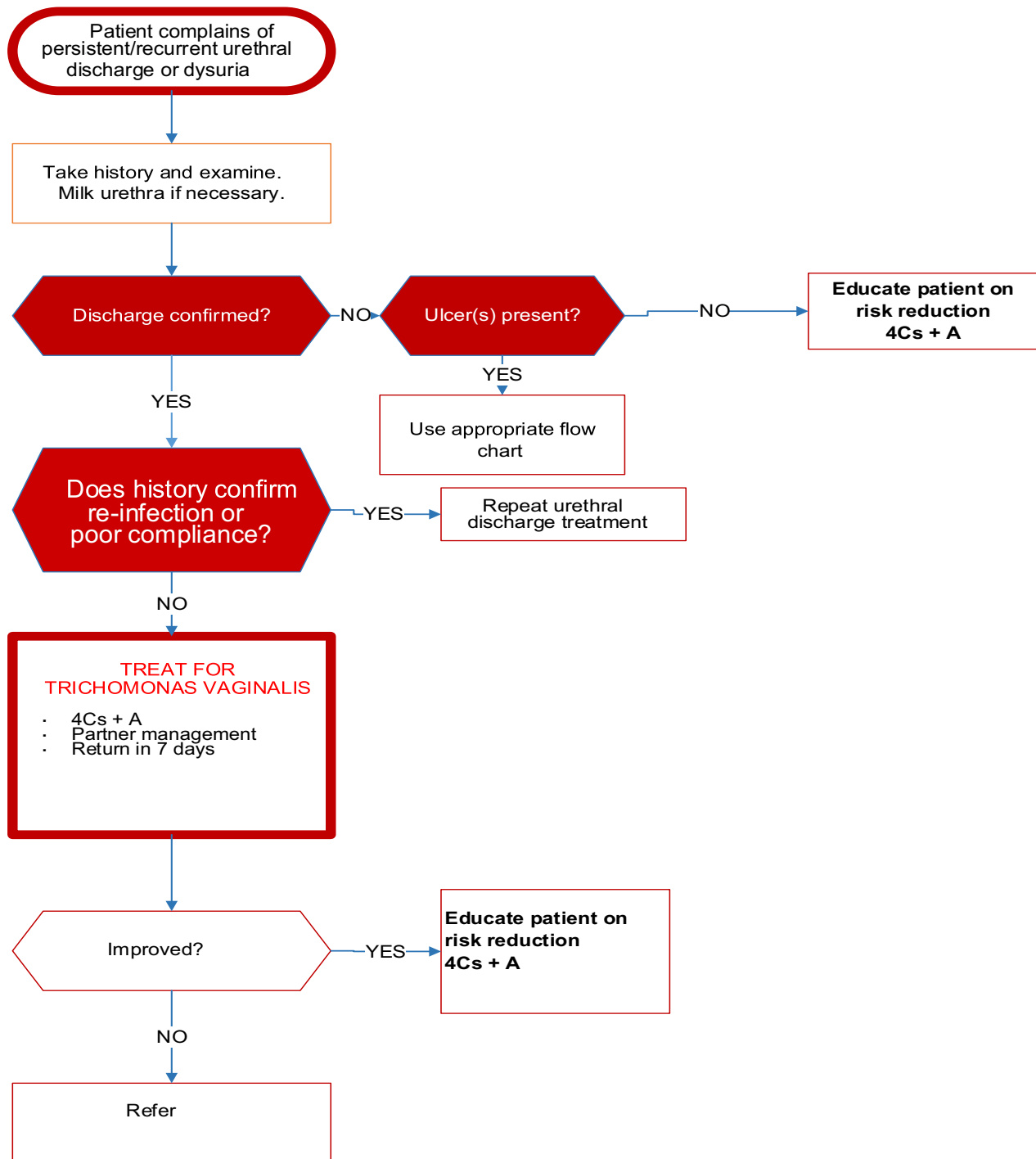
Table 6: Common causes of Genital Ulcers, drugs, regimen and precautions

GENITAL ULCER DISEASE			
MOST COMMON CAUSES	DRUGS AND REGIMEN	ALTERNATE REGIMEN	PRECAUTIONS
<p>SYPHILIS Adults</p> <p>Plus</p> <p>Chancroid (Adults)</p> <p>Granuloma inguinale</p> <p>Lymphogranuloma venereum</p>	<p>Benzathine Penicillin 2.4million units IM once 50,000units/kg IM once up to a total of the adult dose</p> <p>PLUS</p> <p>Azithromycin 2g orally once weekly for 3weeks</p>	<p>Procaine Penicillin 2.4million units IM once daily for 10 – 14days</p> <p>PLUS</p> <p>Erythromycin base 500 mg orally 3 times a day for 21 days</p>	<p>Penicillin is the only recommended treatment for syphilis during pregnancy. In case of women allergic to penicillin, refer to the next level of care for possible desensitization. Treatment is the same as in non-pregnant patients for each stage of syphilis For penicillin-allergic non- pregnant patients only - Doxycycline 100 mg orally 2 times a day for 14 days OR - Tetracycline 500 mg orally 4 times a day for 14 days</p>
<i>Herpes simplex</i>	<p>Acyclovir 400 mg orally 3 times a day for 7-10 days OR 200 mg orally 5 times a day for 7-10 days</p>	<p>Famciclovir 18 250 mg orally 3 times a day for 7-10 days OR</p> <p>Valacyclovir 1 g orally 2 times a day for 7-10 days</p>	
<p>SYPHILIS</p> <p>Children(Congenital)</p>	<p>Benzathine Penicillin</p> <p>50,000units/kg IM once (up to a total of the adult dose) every 6hours x 10-14days</p>	<p>Erythromycin base 12.5mg/kg orally 4 times a day for 30 days</p> <p>OR</p> <p>Procaine Penicillin 50,000 units IM once daily for 10days</p>	<p>SYPHILIS</p> <p>Children(Congenital)</p>

4.4 Flow Chart on Urethral Discharge and /or Painful Urination



4.4a Flow Chart on Persistent/Recurrent Urethral Discharge or Painful Urination in Men



N.B. This flowchart assumes effective therapy for Gonorrhoea and Chlamydia to have been received and taken by the patient prior to this consultation

Table 7: Common causes of Urethral discharge, drugs, regimen and precautions

URETHRAL DISCHARGE			
MOST COMMON CAUSES	DRUGS AND REGIMEN	ALTERNATE (ALTERNATE) REGIMEN	PRECAUTIONS
Gonorrhoea Chlamydia	Cefixime 400mg and Azithromycin 1g orally once	Cefixime 800mg orally once <i>PLUS</i> Doxycycline 100mg orally, twice daily for 7 days	In Pregnancy: Azithromycin 1 g orally once OR Amoxicillin 500 mg orally 3 times a day for 7days
Children	Ceftriaxone 25-50 mg/kg I IM (Remove) once (maximum 125mg)		
Trichomoniasis In persistent discharge	Metronidazole 2g orally in a single dose ²	Tinidazole orally stat as a single dose	Avoid alcohol whilst taking Metronidazole

4.5 Flow Chart on Scrotal Swelling and/or Pain

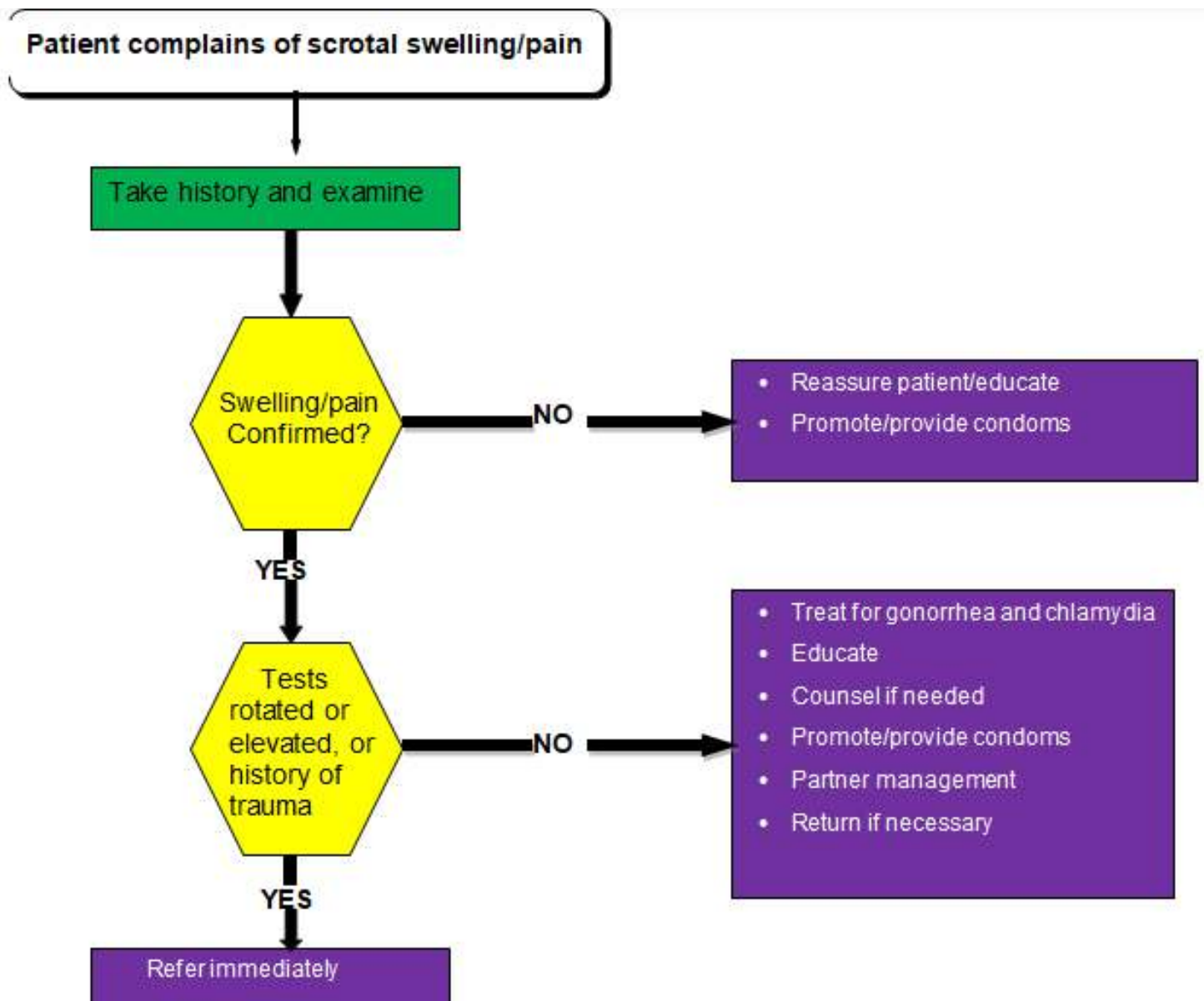


Table 8: Common causes of Scrotal swelling, drugs, regimen and precautions

SCROTAL SWELLING			
MOST COMMON CAUSES	DRUGS AND REGIMENS	ALTERNATE REGIMEN	PRECAUTIONS
Gonorrhoea Chlamydia Adults	Cefizime 400mg+ Azithromycin 1g orally.Stat.		
Children			

4.6 Flow Chart on Scrotal Swelling and/or Pain

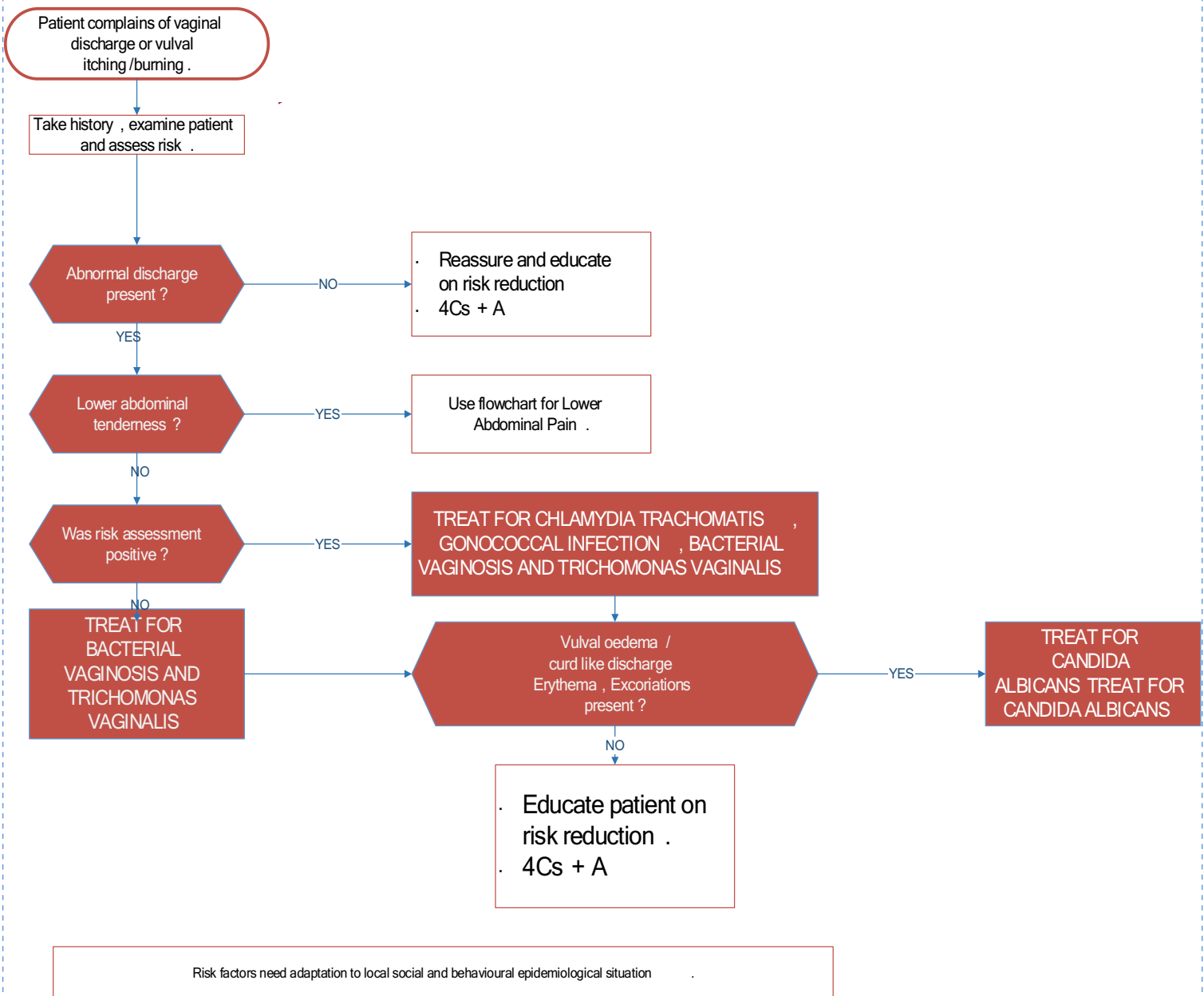
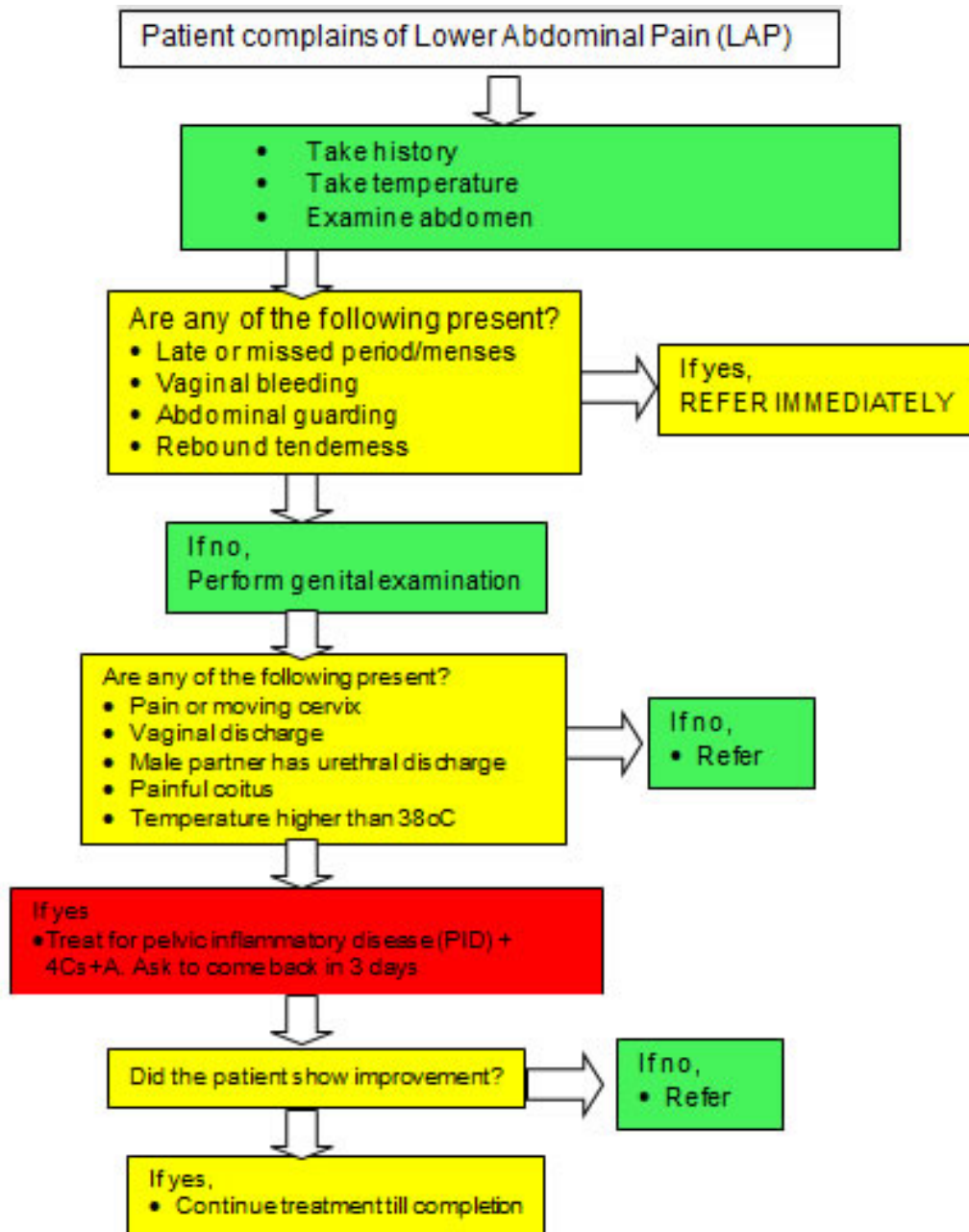


Table 9: Abnormal vaginal discharge			
MOST COMMON CAUSES	DRUGS AND REGIMENS	ALTERNATE REGIMEN	PRECAUTIONS IN PREGNANCY
Vaginitis – if negative risk Candidiasis Trichonomiasis Bacterial vaginosis	Metronidazole 2g orally in a single dose ² <i>PLUS</i> Nystatin Vaginal pessaries 100,000 units inserted every night for 14 days	Metronidazole 2g orally in a single dose AND Clotrimazole vaginal pessaries 100mg inserted every night for 6 days	Tinidazole 2gstat orally stat as a single dose AND Tioconazole 300mg vaginal ovule as a single dose.
Cervicitis	Cefiximen400mg and Azithromicin 1g Orally stat only	Cefixime 800mg orally once <i>PLUS</i> Doxycycline 100mg orally, twice daily for 7 days OR erythromycin 500 mg orally twice a day for 7 days Plus Ofloxacin 200–400 mg orally twice a day for 7 days	Azithromycin 2g orally stat OR Erythromycin base 500mg tab. Orally four times a day (6 hourly) for 7 days

4.7 Flow Chart of Abnormal Vaginal Discharge



4.8 Flow Chart on Lower Abdominal Pain

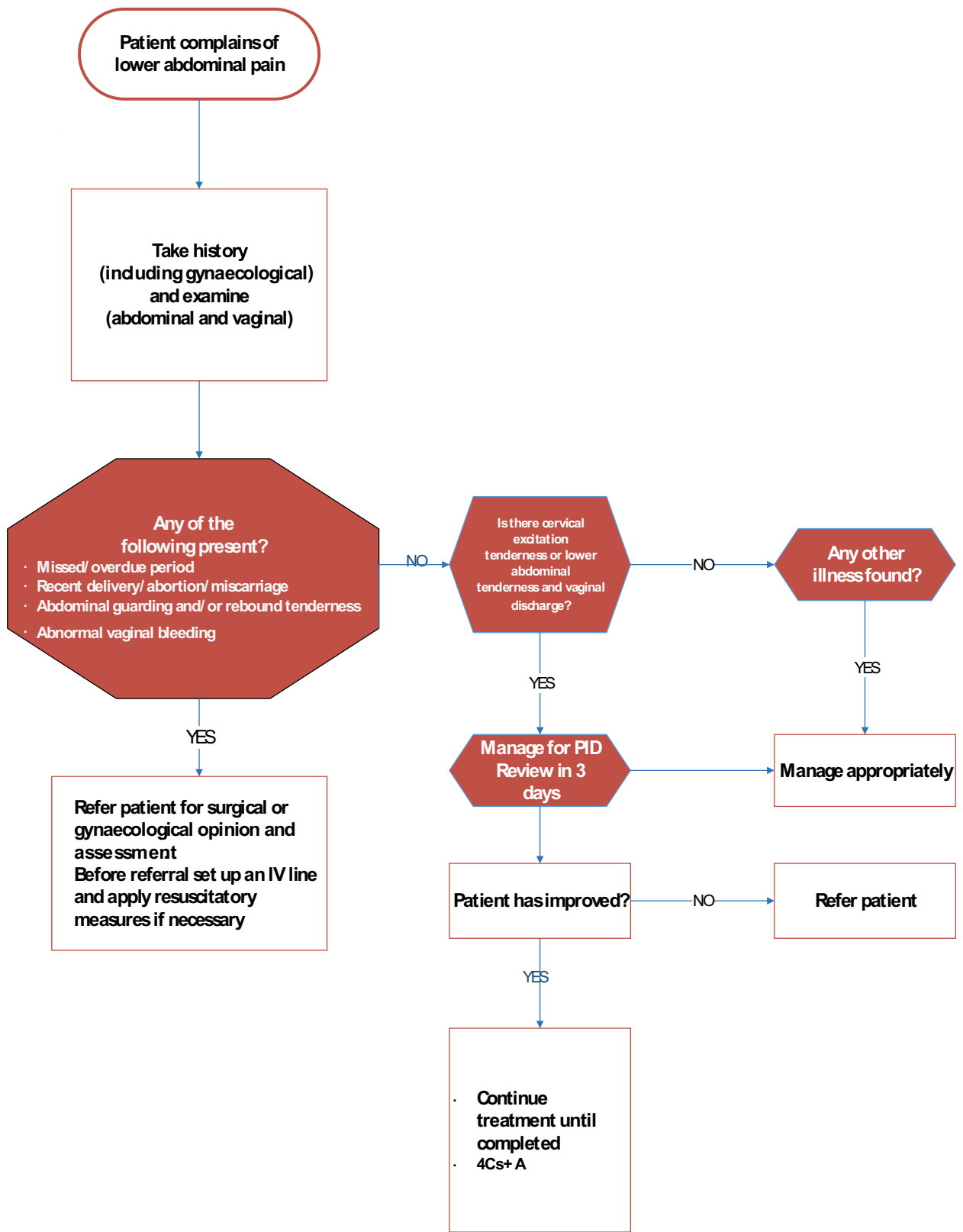


Table 10: Common causes of Female Lower Abdominal Pain (Pelvic Inflammatory Disease)

FEMALE LOWER ABDOMINAL PAIN (PELVIC INFLAMMATORY DISEASE)			
MOST COMMON CAUSES	DRUGS AND REGIMENS	ALTERNATE REGIMEN	PRECAUTIONS
Neisseria gonorrhoeae Chlamydia Anaerobes	Cefixime 400mg + Azithromycin 1g orally once PLUS Metronidazole 400mg orally twice daily for 14 days ⁵	Cefixime 800mg orally once <i>PLUS</i> Doxycycline 100mg orally, twice daily for 7 days PLUS Tinidazole 2g once	In pregnancy, Patients should be referred for hospitalization and treated with appropriate IV parenteral therapy

4.9 Flow Chart on Inguinal Swelling

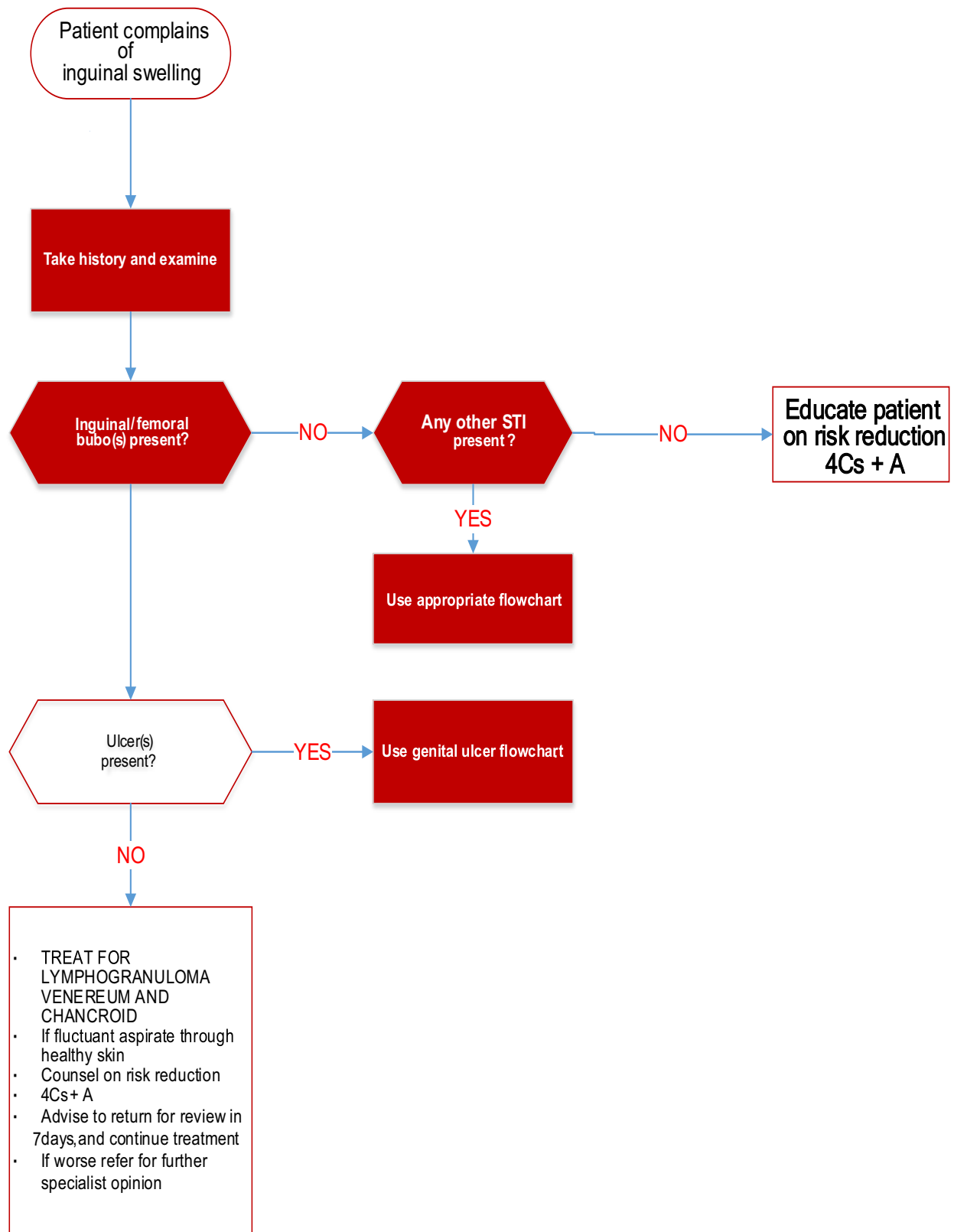


TABLE 11: SWELLING IN THE GROIN (INGUINAL BUBO) Treat as Genital Ulcer Disease(GUD)			
COMMON CAUSES	DRUGS AND REGIMENS	ALTERNATE REGIMEN	PRECAUTIONS
H.ducreyi (Chancroid) Chlamydial L1, 2,3 (<i>Lymphogranuloma venereum</i>)	Azithromycin 2g orally once weekly for 3weeks OR Doxycycline 100mg b d for 7 days	Erythromycin base 500 mg orally 3 times a day for 7 days	Not Applicable

4.10 Flow Chart on ophthalmia neonatorum

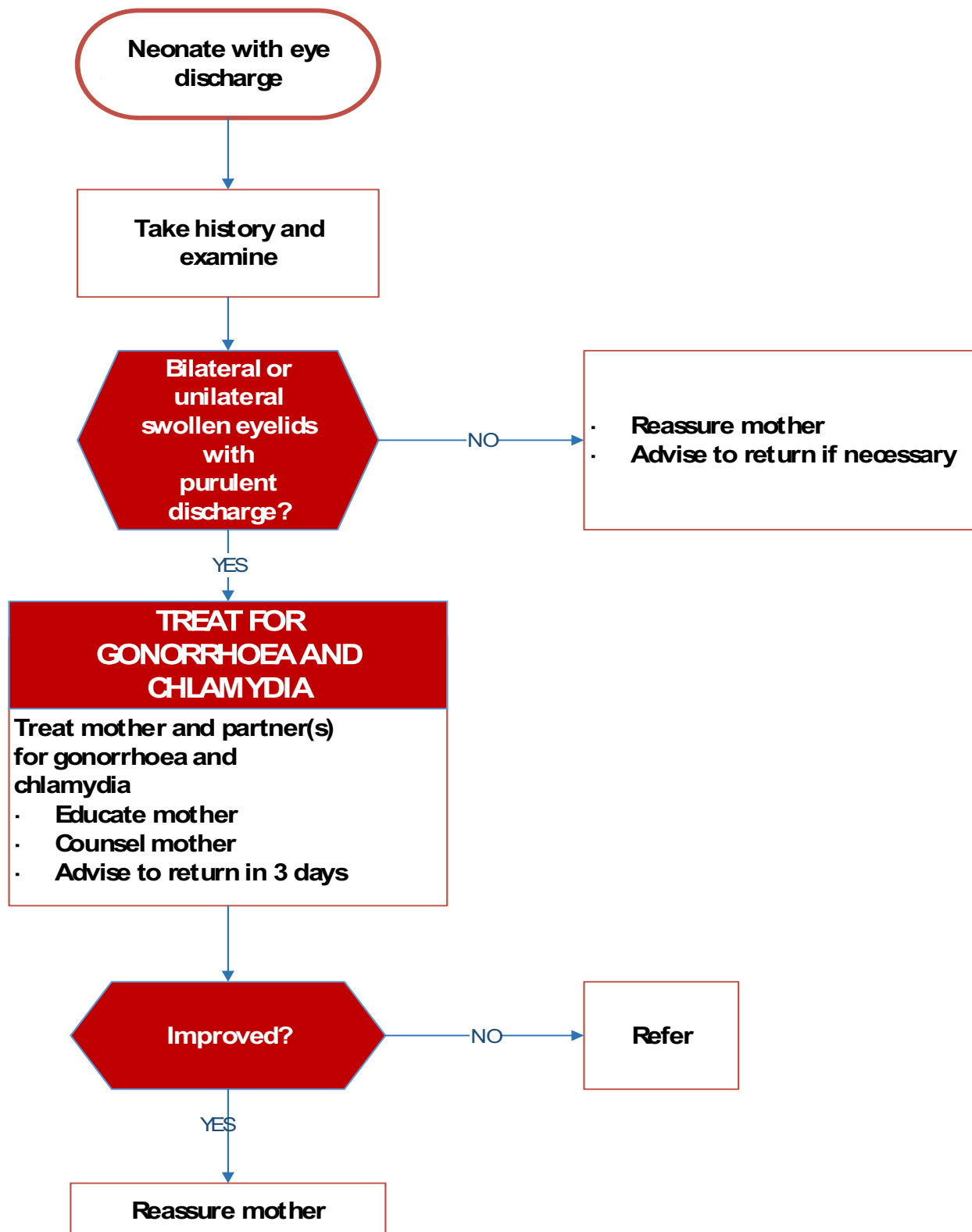
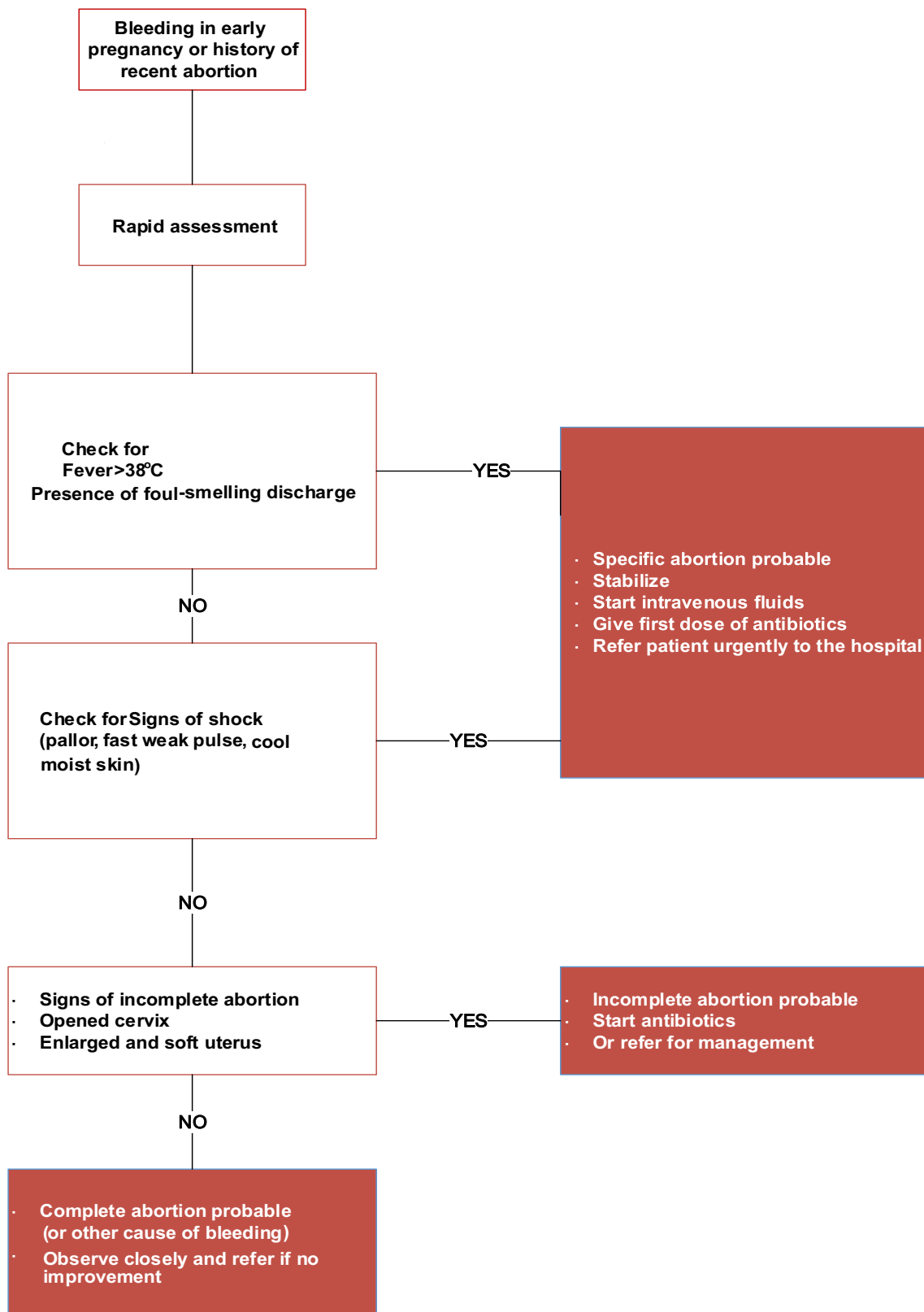


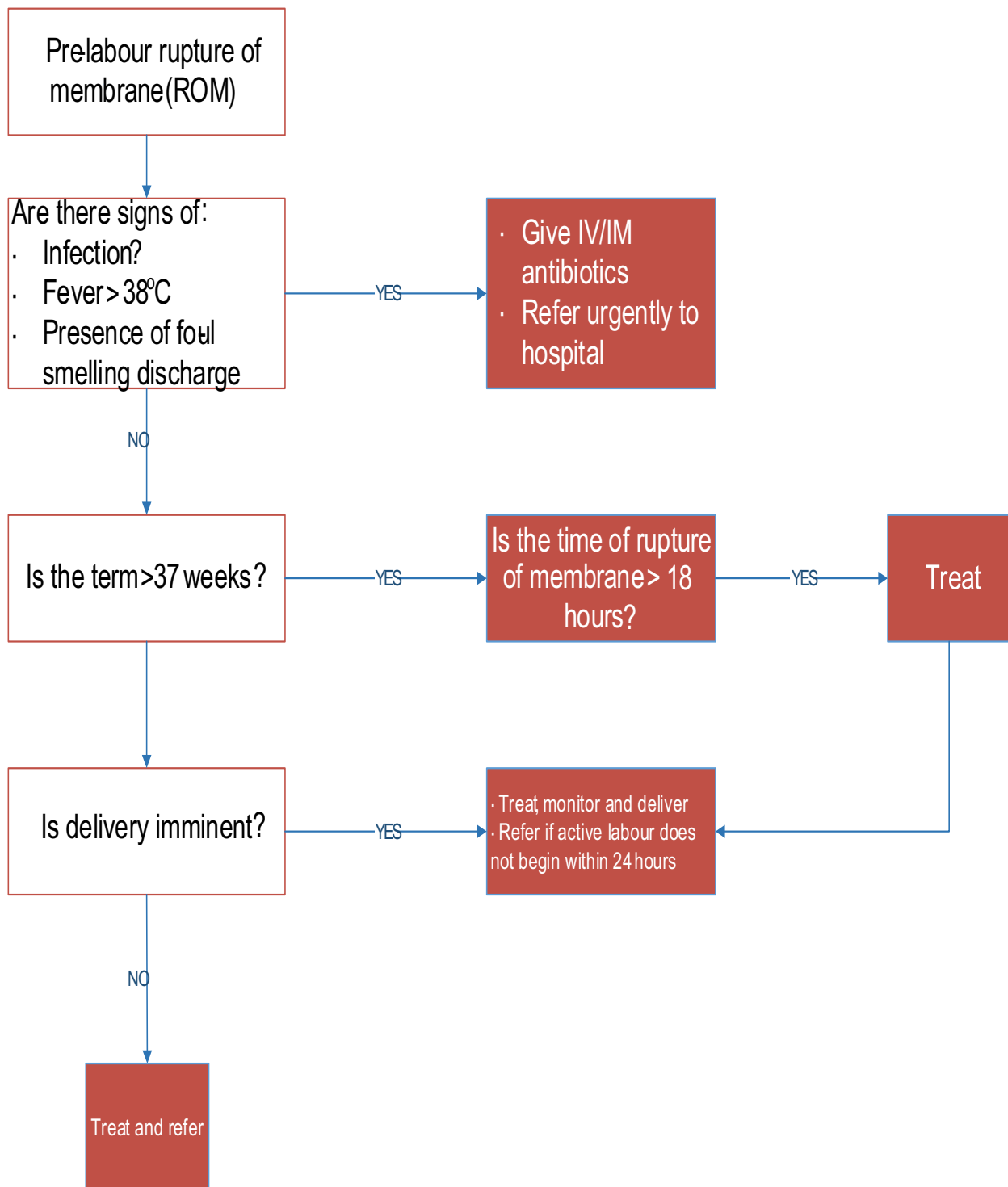
Table 12: Common causes of ophthalmia neonatorum, drugs and regimen

OPHTHALMIA NEONATORUM		
MOST COMMON CAUSES	DRUGS AND REGIMENS	ALTERNATE REGIMEN
Gonococcal infection Chlamydial in <i>Staphylococcus aureus</i>	Ceftriaxone 25 – 50mg/kg IV or IM once daily (maximum 125mg) PLUS Tetracycline 1% eye ointment for 10 days OR Gentamycin 0.3% eye drops for 10days Eye hygiene	Ceftriaxone 50mg/kg body weight (max dosage 125mg) <i>PLUS</i> Erythromycin syrup 50mg/kg per day orally in four divided doses for 14 days <i>PLUS</i> Tetracycline 1% eye ointment at the time of delivery OR Gentamycin 0.3% eye drops for 10days Eye hygiene

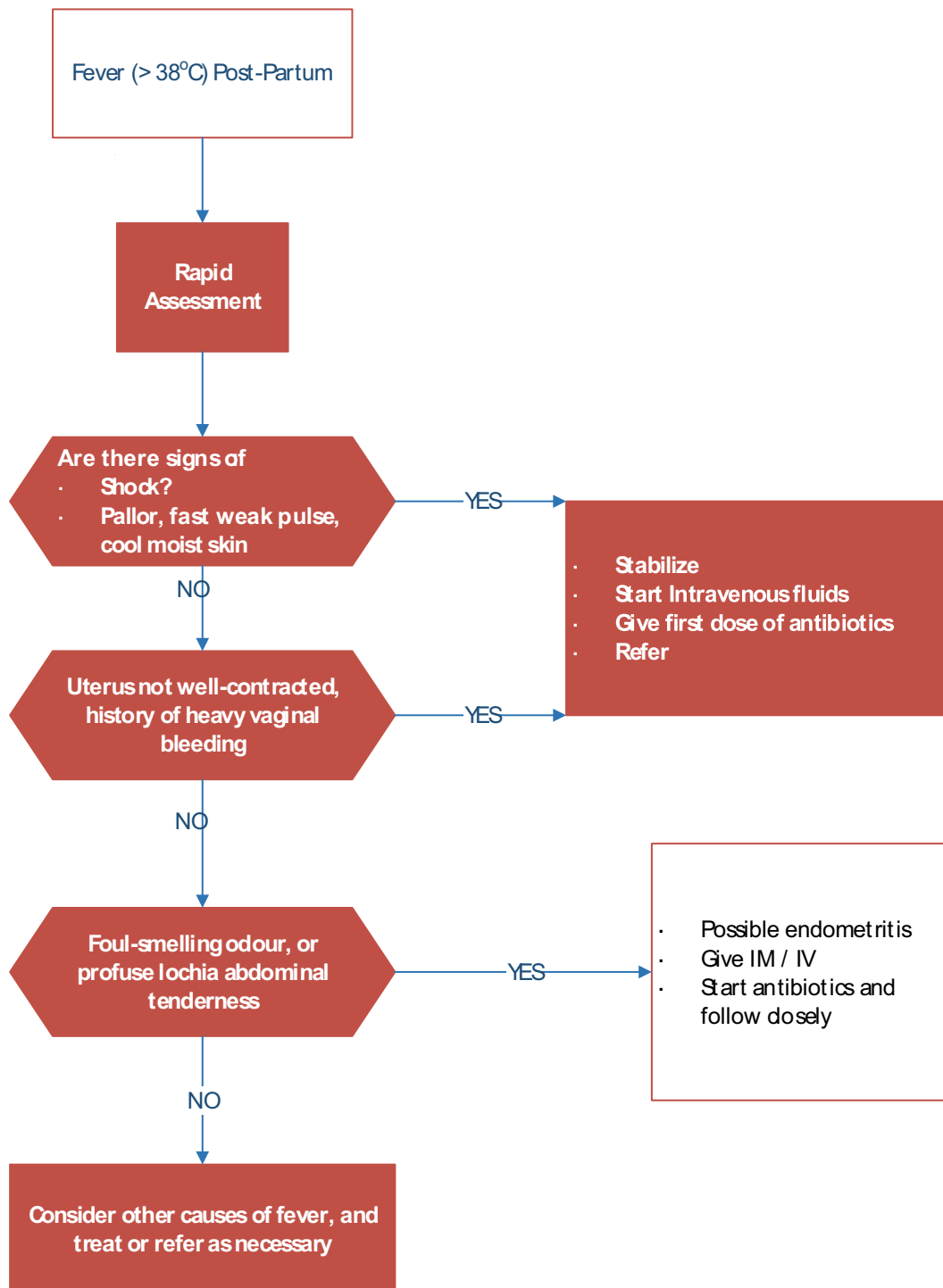
4.11 Flow Chart on Bleeding in Early Pregnancy



4.12 Flow Chart on Pre-Mature Rupture of Membrane (Drainage of Liquor)⁶



4.13 Flow Chart on Postpartum Vaginal Discharge



Key Points in the Syndromic Management of STIs/RTIs

All symptomatic patients should receive counseling on compliance with treatment, risk reduction, and condom use. Treatment should be given to partners of patients with genital ulcer or urethral discharge. Partners of women who are treated for PID or cervicitis should be counseled and offered treatment.

Routine follow-up visits are not necessary for most syndromes, provided the medicines supplied are of high efficacy (above 95%) and the patient completes the treatment and feels better. Women treated for PID should be re-examined 2-3 days after the commencement of treatment or sooner to see if they have fever or, are getting worse clinically.

CHAPTER FIVE

STIs / RTIs IN NEONATES AND PRE-PUBERTAL AGE GROUPS

5.1 Vaginal Discharge

Vaginal discharge can be normal or abnormal. The features for abnormality include copious amount of flow, change in colour, offensive odour, associated vulval redness, vulval swelling, bleeding and itching. Others include dysuria, lower abdominal pain etc.

5.1.1 Vaginal/Eye Discharge in the Neonates

Neonatal vulvovaginitis / ophthalmia neonatorum usually results from contamination of the neonate's vulva / eye by secretions from the mother's genital tract during delivery. Gonococcal vulvovaginitis has an incubation period of 3 days to one week, while chlamydial vulvo-vaginitis has an incubation period of two weeks. For babies with vaginal / eye discharge, ask the mother for history of vaginal discharge and drug history such as use of estrogen containing medications during pregnancy. The mother and her partner should also be treated in line with the abnormal vaginal discharge flowchart. The neonate should be referred for further management.

5.1.2 Vaginal Discharge in Pre-Pubertal Girls

In older children, vulvo-vaginitis may result from contamination of the vulva by organisms infecting the mother or care giver where there is a low level of hygiene. Particularly implicated are infected mother or care givers who share towels with their wards. Girls with abnormal vaginal discharge should be treated for the common vaginal infections (bacterial vaginosis and trichomoniasis). Treatment for yeast infection should be included if relevant clinical signs (vulval itching and redness) are present. Young girls with lower

abdominal pain, and history of sexual exposure should be treated for gonococcal, chlamydia and anaerobic infections, and referred thereafter. All girls with abnormal vaginal discharge should be treated using the appropriate flowcharts.

5.2 Urethral Discharge in Pre-Pubertal Boys

Boys with urethral discharge should be given appropriate treatment using the flowchart for urethral discharge in males. Parents of these children should be given appropriate treatment using the flowchart for urethral discharge in males and vaginal discharge in females. In all cases of sexual abuse or sexual assault, children should be referred for adequate medical management, and for psychological and social support.

CHAPTER SIX

SEXUAL VIOLENCE

Sexual violence is a public health emergency and approach to it should be multi-factorial. Sexual violence is defined as any sexual act obtained by using coercion, threats of harm or physical force, by any person regardless of relationship to the victim, in any setting, including but not limited to home and workplace. It also includes attempt to obtain a sexual act, unwanted sexual comments or advances, or acts of trafficking people for sexual purposes

It can also be described as “Any sexual act, attempt to obtain a sexual act, unwanted sexual comments or advances, or acts to traffic women’s sexuality, using coercion, threats of harm or physical force, by any person regardless of relationship to the survivor, in any setting, including but not limited to home and work.”

Rape is defined as “an act done which causes penetration of one person’s genital organs with the genital organs of another without their consent or where the consent is obtained by force, threats or intimidation of any kind.”

Sexual violence is a serious human rights issue and public health problem the world over. It has devastating effects on the lives of the survivors in terms of long-term consequences on their health and mental wellbeing. Survivors deserve to be supported, treated with dignity and respect, and to see their offenders brought to justice. This requires a comprehensive set of policies, legislations and programmes to effectively respond to these needs.

6.1 Main Areas in the Management of Sexual Assault: Survivor/Victim and Perpetrators

1. Medical assessment and treatment
2. Psychosocial care
3. Forensic Management (enables survivors access justice)
4. Humanitarian issues

6.1.1 Medical examination and treatment

Medical management of sexual violence survivors is essential in mitigating against adverse effects of the violence. This is aimed at managing any life – threatening injuries and providing other post-rape services to reduce the chances of the survivor contracting any sexually related infections including pregnancy. The management of any life threatening injuries, and extreme distress should take precedence over all other aspects of post-rape care, while the management of, for example, minor cuts and abrasions should not delay the delivery of other more time dependent treatments. The steps are

1. Obtaining Consent
2. History taking and examination of patient
3. Take both medical and forensic specimens at the same time for Urinalysis, Pregnancy test, Haemoglobin level, Liver Function Test, syphilis test, Hepatitis B and C, High vaginal swab and rectal swab for evidence of spermatozoa.
4. Do HIV Counselling and Testing

All health facilities should be backed up with up-to-date policies and procedures for managing persons who have experienced sexual violence. Such policies and procedures must, at their best, be in line with local laws. Whether comprehensive services are

provided on site or through referral, providers need to be clear about the protocol to be followed and how to manage crisis situation. They should have the necessary supplies, materials and referral contact information in order to deal confidentially, sensitively and effectively with people who have experienced sexual violence. The management of the alleged perpetrators should be the same as for patients including collection of forensic specimens and counseling.

6.1.1.1 Management of Physical Injury

Identify any injury and manage appropriately. Especially the post traumatic vaccination with tetanus toxoid.

6.1.1.2 Emergency Contraception

A woman who has been raped should first be tested for pregnancy; so as to rule out the possibility of an existing pregnancy before the instance of rape. Emergency contraception must be prescribed early because the sooner they are taken, the more effective they are. Give two tablets of low dose progestogen (e.g. Postinor 2), or combined oral pills for those presenting within 24-48hrs or insertion of intrauterine contraceptive device (IUCD) within 5 days of assault. Refer if client presents after 5 days. All cases after emergency contraception should be referred for further management.

6.1.1.3 Post-exposure Prophylaxis of STIs

STI prophylaxis should be offered to all survivors of sexual violence. It needs not to be given at the same time as the initial doses of PEP and EC as the pill burden can be intolerable. It should preferably be prescribed for the survivor and given for uptake within 24hours, but the client should be allowed to make the decision on whether to accept or wait for results of STI tests.

Drugs used for STI prophylaxis are:

- **Males or non-pregnant adult females:** Azythromycin (1gm stat dose) or Doxycycline (100mg BD for one week) plus Ceftriaxone (250mg IM stat) plus Metronidazole (2gm stat).
- **Pregnant woman:** Ceftriaxone (250mg IM stat) or Amoxicillin (3g) + Probenecid (1g) plus Erythromycin (500mg QDS one week) plus stat dose of Metronidazole (2gm).
- **Children:** Ceftriaxone (25mg-50mg/kg IM stat Max Dose 125mg) plus Erythromycin (10mg/kg QDS one week). Add stat dose of Metronidazole (paediatric dose 7.5- 15mg/kg in two divided doses to max dose of 1gm /day).

PEP for HIV is the administration of a combination of 3 anti-retroviral drugs for 28 days after the exposure to HIV. This has to be started preferably within 72 hours after the assault according to the National HIV/AIDS Guidelines.

6.1.2 Psychosocial care

Survivors of sexual violence react differently to the ordeal. Some survivors experience immediate psychological distress, others short-term and/or long-term psychological problems. The amount and length of social support and/or psychological counseling required by survivors of sexual violence varies enormously, depending on the degree of psychological trauma suffered and the survivor's individual coping skills and abilities.

- Survivor – centred approach to counseling by trained counselor.

The counselor should apply the principles of doing “good” and not “doing harm” in counseling a survivor. When providing services to survivors of sexual violence, counselors should adhere to the following fundamental principles of counseling:

Autonomy: The right of patients to make decisions on their own behalf (or in the case of patients under 18 years of age, individuals acting for the child, i.e. parents or guardians). All steps taken in providing services are based on the informed consent of the survivor.

Others are Beneficence (The duty or obligation to act in the best interests of the survivor), Non-maleficence (The duty or obligation to avoid harm to the survivor), Justice or fairness (Doing and giving what is rightfully due to the survivor).

- Counseling different groups affected by sexual violence
- Counseling environment
- Special individual (psychiatric clients, down syndrome) and children should be given special and support.

6.1.3 Forensic Management of Sexual Violence

- Types of evidence
- Exhibit Management
- Collection and handling of specimen
- Linkage to Civil Society Organization (C.S.O) for subsidized DNA testing and other services.

6.1.4 Humanitarian Issues

Approach on humanitarian issues should assume cross-cutting interventions like;

- Sexual violence in crisis situations

- Minimum interventions in crisis situations
- Involvement of agencies like National Orientation Agency, National Emergency Management Agency, Police, Military.

6.1.5 Follow-up Sessions and other useful information for survivors

- Provide other psycho-social support for victims and refer to support groups
- Information on survivors' rights including legal care
- Reporting to the police
- Referrals of the survivors to other qualified professionals as appropriate to the needs of the survivors.
- Looking at the existing laws on rape and sexual violence in general for possible enforcement and probably making the laws where necessary, stiffer.

6.2 Documentation and Reporting

Development of Pre- and Post- sexual violence care forms / Laboratory rape register.

These documents should include evidence that:

Sexual intercourse has taken place;

- engorgement of the genitals,
- increased epithelial cells in the urine,
- broken hymen,

That ejaculation has taken place;

- presence of semen around the genitalia,

That force was used;

- torn clothes including undergarments,
- bruised genitalia,
- significant levels of epithelial cells in the urine,

Evidence linking the suspect with the sexual offence should be collected for DNA test.

- Pubic hair / head hair
- Mouth swab
- Blood
- Semen
- Fingernail clipping

CHAPTER SEVEN

OTHER STIs/RTIs NOT COVERED UNDER SYNDROMIC MANAGEMENT

7.1 Introduction

Other STIs / RTIs of importance include: HPV infection, scabies and pubic lice. These usually have characteristic features and can be managed based on signs and symptoms.

7.2 HPV Infection and Cervical Cancer Screening

Cervical cancer is a leading cause of cancer – related deaths among women. The global annual incidence of the disease is put at 528,000 and 266,000 women die from it with 85% occurring in developing countries (WHO, 2014). However, there is a dearth of data in Nigeria. Studies have linked the etiology of cervical cancer to infection with the Human Papilloma Virus (HPV) which is sexually transmitted. HPV Serotypes 16 and 18 are responsible for most cases of cervical cancer while Serotypes 6 and 11 cause mainly genital warts (WHO 2016, CDC 2015). HPV infection could also result in anogenital warts.

7.2.1 Prevention Strategies

The availability of vaccines (both bivalent and quadrivalent) against the HPV serotypes commonly implicated in cervical cancer and genital warts means that primary prevention is possible. HPV vaccination is recommended for 11 and 12 years old girls. It is also recommended for girls and women age 13 through 26 who have not been vaccinated or completed the vaccine series and girls beginning at age 9 years (CDC, 2015).

7.2.2 Early Detection and Screening

The use of Visual Inspection with Acetic Acid (VIA) for screening of cervical cancer in six developing countries (Malawi, Madagascar, Uganda, Nigeria, Tanzania and Zambia) have recently been incorporated (WHO, 2016). Using VIA a “Screen and Treat” policy in PHCs can be promoted. Women presenting with symptoms suggestive of sexually transmitted infection should be offered counseling and screening for cervical cancer using VIA and treatment offered where feasible. Papanicolau (Pap) smear remains the method of choice where facilities are available.

7.3 Anogenital Warts

Warts are small soft cauliflower-shaped growths in the anogenital area commonly caused by infection with the Human Papilloma Virus (HPV) Serotypes 6 and 11. They are usually asymptomatic, but depending on the size and anatomic location, they can be painful, pruritic, flat, papular or pedunculated growths on the genital mucosa (CDC, 2015). The treatment for anogenital warts depends on the level of healthcare. Where the capacity is not available, it is recommended that the patient is referred to the next level of care.

Presentation at the clinic includes complaint of growth or swelling on the genital or the anus. History taking and examinations includes to discover any growth in the genital area or anus, also depend on the size. If the size is big, the clinic is expected to refer. There is no oral administration.

Recommended Treatment:

Treatment depends on location. For external anogenital warts (i.e. penis, groin, scrotum, vulva, perineum, external anus and perianus).

- 0.5% podophyllotoxin applied with cotton-tipped applicator twice daily for 3 days.
- After 4 days break of no treatment, repeat treatment for another 3 days.
- Repeat cycle 4 times until warts drop off.
- 10-20% podophylin to be applied by provider
- It should be washed thoroughly after 1 hours of application.
- Repeat treatment twice a week until warts drop off

Other drugs include:

1. Imiquimod ointment applied once daily at night 3 times a week at alternate days,
2. Trichloroacetic acid (TCA) ,80-90% to be applied once weekly
(Apply the agents to the lesions only. Do not apply on the mucosa).

Other forms of treatment include:

1. Cryotherapy with liquid nitrogen or solid carbon dioxide
2. Surgical removal either by tangential scissors excision, tangential shave excision, curettage, laser or electro surgery (CDC, 2015; WHO, 2016)

7.4 Scabies

Scabies is a contagious skin infestation caused by mite *Sarcoptes scabiei*. The most common symptoms are severe itching and a pimple-like rash. These symptoms can be present across most of the body or just certain area such as the volar aspects of the wrists

between fingers or along the genital region. The itch is often worse at night. Scratching may cause skin breakdown and secondary bacterial infection of the skin.

Recommended Treatment:

- 25% benzyl benzoate lotion applied from the neck down at bed time for 2 nights.
Apply, allow to dry and re-apply
- Other forms of treatment include;
 - o Crotamiton lotion 10% and crotamiton cream 10%,
 - o Permethrin cream 5%,
 - o Ivermectin; administered orally for patients who failed the approved topical medications or for prevention.

7.5 Public Lice (*Pthirus pubis*)

These are grey to brown colored parasites that usually live on humans, usually in the pubic hair. Also known as *crab lice*, they cause intense skin itching in the genital area. They are usually acquired by intimate contact between individuals. Parent to child infestations are most likely to occur through routes of shared towels, clothing, beds or closets.

Recommended Treatment:

- Gammabenzenehexachloride sprinkled on affected part; repeat procedure after one week.

CHAPTER EIGHT

ORGANIZATION OF STI SERVICE DELIVERY AND INTEGRATION

8.1 Introduction

The provision of early and effective diagnosis and treatment of STIs/RTIs is the cornerstone for STI prevention and control. Appropriate STI diagnosis and management require provision of non-stigmatizing, acceptable, accessible and affordable services. The most effective way to reach this goal is to provide STI care services within the reach of the community by incorporating them into Primary Health Care (PHC) services, family planning (FP) and Maternal and Child Health (MCH) services. Therefore, all PHC clinics should provide comprehensive health care for the community including care for STIs.

Whenever possible, diagnosis, treatment and education / counseling services for STI patients should be offered during the patient's first visit to the clinic.

8.2 Basic requirements for integrated STIs / RTIs / SRH Services

Basic requirements for STI service delivery in a health facility include:

1. Staff

1. To provide diagnosis, treatment of STIs / RTIs, patient education, counseling, partner / contact tracing and notification were required.
2. Record clerk for registering patients, maintaining records and preparing statistics.

2. Materials, Equipment and Supplies

These include a dedicated consultation / examination room with privacy, examination couch, stirrups (if vaginal examinations will be performed), bed sheets and screens. Other requirements include desk or writing table, chairs, speculum, bowls, angle poised lamp, drinking water, drug box, bucket, emergency kit for treatment of anaphylaxis, condom demonstration models, STI Treatment Guidelines, flow charts and STI cue cards. Consumable items required include: drugs for STI treatment, disinfectant (e.g., Dettol or Jik), record books, related forms, condoms, water for injection, syringes, needles, methylated spirit, gloves, cotton wool, Hand sanitizer, water supply, power supply, cleaning equipment (mops, sweeps).

8.3 Referral and Linkages

Referral is a process by which immediate client needs for prevention, care and supportive services are assessed and prioritized and clients are provided with assistance in identifying and accessing services (AED Center, 2010).

Linkages is the relationship between the health center and services at the hospital or in the community, or between separate clinics organized within the same health center, or between the clinicians and the lab or pharmacy (WHO, 2016).

8.3.1 Referral Networking: It is a system that brings together service providers / SDP that provides different levels of services for the purpose of providing the most appropriate care and support services to clients within a network.

Referral System is a two-way relationship that requires cooperation, coordination and exchange of information between the referral officer/organization and the receiving facility during the referral and discharge of patient from the hospital.

Therefore, a good referral system:

1. Should have a defined package of services provided at different levels of care
2. Encourages an environment in which the core referral center is viewed as a community resource
3. Should be responsive to local situation
4. Should include a properly functioning communication and transport system
5. Is inclusive of the private sector, nongovernmental organizations and community based care including social services.
6. May be for temporary, permanent or partial transfer of responsibility for the care of a patient.
7. Begins when the referring service provider communicates to the receiving health facility.
8. Can be vertical or horizontal

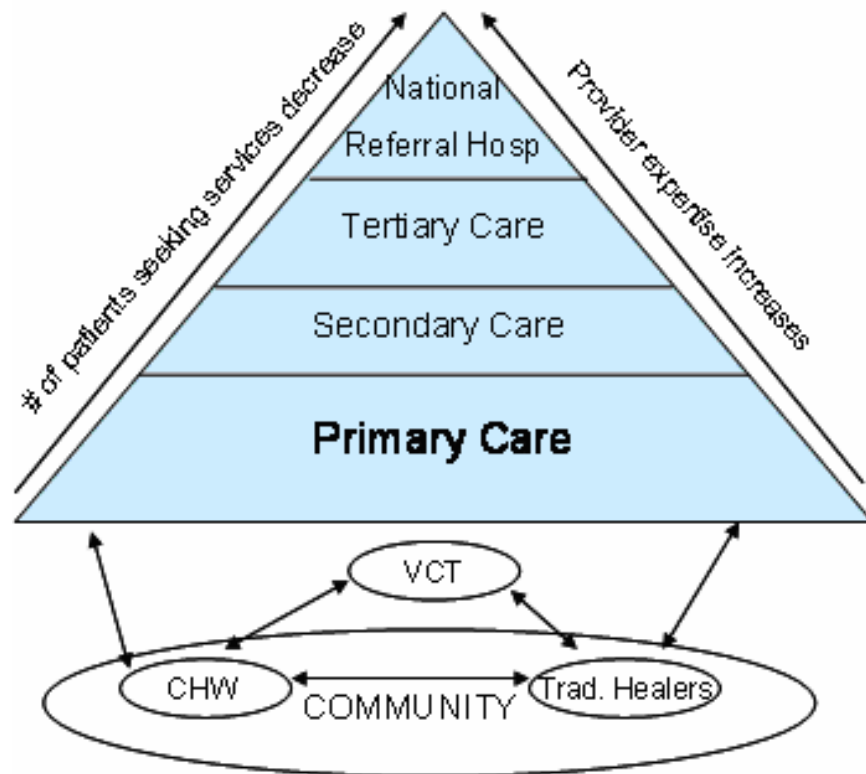


Figure 1:
Referral
Pyramid

8.4 Data Collection and Reporting

8.4.1 Patient Management Process

1. Patient registration and recording of basic information
2. Patient education while waiting to be seen by the HCW (posters, leaflets, educational talks and demonstrations, films).
3. HCW should use appropriate flow chart with emphasis on counseling, patient assurance, health education, partner and contact tracing and notification.
4. Treatment: HCW should initiate appropriate treatment and follow-up schedule.

8.4.2 Reporting Forms

Records of STI service delivery activities form the primary source of data for STI policy formulation. These records are required:

1. To assess the magnitude of the STI epidemic
2. To assess the effectiveness of the services being delivered
3. To plan for the human and material resources needed
4. For monitoring and evaluation activities
5. Facilities should endeavor to provide accurate data on STIs for informed decision making.

8.5 Monitoring and Evaluation

Monitoring and Evaluation is a process that helps improve performance and achieve results. Its goal is to improve current and future management of outputs, outcomes and impact. Monitoring is a continuous process used to promote and maintain the delivery of efficient and high quality services. Monitoring and Evaluation should be done at all levels using a standardized monitoring checklist.

8.5.1 Supportive Supervision

This is one of the most important methods used in monitoring. Supportive supervision is a facilitative approach to supervision that promotes mentorship, joint problem-solving and communication between Supervisors and Supervisees. It should be designed to assess job performance and ensure competence through observation, discussion, support and guidance.

Supervisory checklists that might be used to monitor STI service delivery should include the following elements:

1. Details about the clinic facility, i.e., name, type, location etc.
2. Details about the supervisory visit, i.e., name of supervisor, name of person met, the date and time of the visit etc.
3. List of the established staff at the clinic by name and cadre noting if they were seen during the supervisory visit.
4. List of clinical equipment noting if each item is present and in working order
5. Review of clinical case management by sitting in on patient/clinician sessions and reviewing recent cases from the records - are diagnoses made correctly? Is the proper treatment given?
6. Review of the records to ensure that all data is collected and recorded legibly
7. Review reports from recent months to ensure they were written, that they reflect the primary data kept at the clinic and that they are consistent in comparison to other data such as drug use etc. Record of questions asked and topics discussed with the health unit staff.

The purpose of evaluation is to assess progress towards the program objectives at any given point in time. It assembles information from surveillance, monitoring and supervision to determine whether planned outcomes are being achieved. The evaluation process will include epidemiological surveillance (trends, prevalence and incidence) in order to estimate the degree of achievement of the Program.

8.6 Roles of PHC Workers in Community mobilization for STIs/RTIs services

STI prevention can be improved if Health Workers educate the communities beyond the facilities. This will have a great impact on STI control. Most people neither recognize the signs and symptoms of STIs nor what to do should they experience such symptoms.

Community messages should highlight the following:

1. STIs are a real danger to your health.
2. They make it easier to get HIV infection
3. They can cause other problems like infertility for both men and women.
4. See a health worker If you have any of the following:
 - Swelling of the groin, wound (genital sore),
 - Abnormal vaginal/urethral discharge or
 - Any discomfort around the genitals,
5. Most STIs are curable if treated correctly.
6. You could avoid STIs by abstaining from sex, being faithful to one partner who is not infected and by using condoms correctly for every sexual act.
7. All your sexual partners must also be treated.
8. Abstain or use condoms until the treatment is completed.
9. Take all your medication as instructed even if symptoms disappear or you feel better.
10. After treatment, return to the health worker to be sure you are cured and avoid re-infection, ensure that all your sexual partners receive treatment and use condoms.

8.7 Youth Friendly Approach

It is reported that young people in Nigeria do not have adequate nor equitable access to Sexual and Reproductive Health (SRH) services. Prevailing reproductive health problems facing young people include STIs / RTIs / HIV and adolescent pregnancies.

Factors contributing to these health problems include:

1. Lack of youth friendly services
2. Poor client-provider relationship at health facilities
3. Inadequate human and financial resources to scale up effective YFHS interventions
4. Lack of information available to young people regarding sexuality and services offered at YFHS.
5. Cultural barriers that limit communication of sexuality between youths and parents/adults

When providing STI services to the youth, it is important to note that youth are just beginning to learn about sexuality and may be embarrassed or hesitant to talk about it. They may be dealing with a wide range of issues related to their sexuality, some of which can be very sensitive, such as peer pressure, sexual identity, sexual capability or sexual coercion. By using good communication skills, providers can offer youth the opportunity to express and understand their feelings about this complex subject. This in turn can result in healthy sexuality and more responsible sexual behavior, which can prevent STIs.

Good communication skills include "reflective listening," where the provider paraphrases a statement or question and repeats it back to the youth. This can show understanding of the words, as well as concerns and feelings. Also, open-ended questions, which allow

youths to express themselves freely, should be used. Positive body language, such as nodding to indicate that the provider is paying attention, is also important. Providers can better communicate with youths by being sincere, honest, open-minded, non-judgmental, maintaining privacy and confidentiality. It is helpful to show respect, using a sense of humor, and show that they really care about the young person's situation.

Confidentiality is very important in providing services to youths. Where possible, a young person needs to be assured that information discussed will not be revealed to others, including parents or relatives. It is important to realize that sex education for the youth has been shown to result in delayed sexual activity and in some cases delayed first sexual intercourse. Also, beginning sex education before youths initiate sexual activity can help them develop healthy approaches to sexual behavior before they establish unhealthy practice.

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