Ministry of Health and Population
National AIDS Program
Arab Republic of Egypt

Training Manual for the Management of Sexually Transmitted Infections

USAID
FROM THE AMERICAN PEOPLE

Impact Implementing AIDS Prevention and Care Project

fhi Family Health International

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Development of this manual was a fully collaborative effort with the Egyptian Ministry of Health and Population (MOHP), Family Health International (FHI) and the United States Agency for International Development (USAID). These activities were funded by the USAID through FHI's Implementing AIDS Prevention and Care (IMPACT) Project, Cooperative Agreement HRN-A-00-97-00017-00.The views expressed in this manual do not necessarily reflect the views of USAID.

Developed by:

Dr. Cherif Soliman, Family Health International

Reviewed by:

Dr. Adel Botros - Cairo Skin and STI Hospital

Dr. Doaa Oraby - Family Health International

Ms. Dina Khaled - Family Health International

Dr. Abdel Salam El Sherbiny - Consultant

Introduction

The Egyptian Ministry of Health and Population (MOHP) has made tremendous strides in upgrading services for the detection and treatment of sexually transmitted infections (STIs). This Training Manual, in conjunction with the National Guidelines for the Management of Sexually Transmitted Infections, form a comprehensive package for the standardized implementation of STIs services nationwide.

This manual serves as the basis for training programs designed for enhancing the skills of service providers on the detection and treatment of STIs. The manual consists of two components. Firstly, Facilitator's Guidelines, which includes a description of the Training Manual, outlines of the sessions, recommended instructions on the training format and sample forms, including agendas and evaluation forms. The second section of the manual includes the training slides, both printed and electronic versions.

Together, these materials facilitate the training of trainers, thereby contributing to the creation of a cadre of services providers versed in standardized protocols for the detection and treatment of STIs.

Special gratitude is due to Family Health International (FHI) and the United States Agency for International Development (USAID), for their support in upgrading STI services in Egypt, including the development of this Training Manual, the National Guidelines for the Management of Sexually Transmitted Infections, and the establishment of the Pilot STI Clinics in Cairo and Alexandria.

Special thanks are also due to the staff of the National AIDS Program and the Department of Dermatology and STIs at the Cairo Skin and STI Hospital (El Hod El Marsoud), for their on-going contribution to these activities.

I look forward to the success of these activities in maintaining the good health of all Egyptians.

Dr. Nasr El Sayed

First Undersecretary
Ministry of Health and Population

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Appendices

FACILITATOR'S GUIDELINES

STIs Training Manual

1. Components of the STIs Training Manual

The complete training manual includes one set of each of the following:

- Facilitator's guidelines
- Printed version of training slides
- CD of training slides
- National guidelines for the management of sexually transmitted infections

National guidelines for the management of sexually transmitted infections should be distributed for participants by the end of the training. Participants' handouts can be readily drawn from any section of the manual and the related CD that is designed to stand on its own to the extent that it can be used as a self-teaching manual. The course is designed to ensure that a critical body of information is transferred to the trainers and that a consistently high standard of training is maintained.

The following additional training aids are also included in the training manual as appendices:

- Sample of workshop agenda
- Samples of pre-and post-test questionnaire
- Course evaluation form
- Data collection instruments

Other training aids required for the training course include:

- Flip-charts and marking pens
- Data Show
- Penis models and latex condoms to demonstrate correct condom use

2. Training Sessions

The training manual contains materials for training sessions that can be selected from and adapted to the needs of different audiences. Following is the brief description of the contents of the training sessions.

Session 1: Introduction to the Workshop sets the tone of the workshop, clarifies the objectives, addresses participants' expectations and establishes ground rules. This session will include the following:

- To conduct the pre-test
- To introduce facilitators and participants to the workshop and to each other
- To review the workshop agenda
- To establish ground rules for the workshop

Session 2: The STIs Situation describes the current STI situation in the world and in Egypt.

Session 3: Facts about STIs should cover the following:

- To identify how STIs are transmitted and the factors that influence transmission
- To sensitize to the serious complications which some STIs can cause

Session 4: RTIs/STIs/HIV sensitizes participants to understand the relation between HIV, STIs and other RTIs and the importance of STI control in the era of AIDS. It points out that individuals who suffer from STIs are a particular important target group for preventive behavioral interventions as well as curative ones.

Session 5: Steps of the Comprehensive Management of STIs teaches the meaning of comprehensive case management including diagnosis, treatment, patient education, condom demonstration, and partner management. It also introduces the concept of STI risk assessment. This session should include materials to accustom the participants with every step involved in STI case management.

Session 6: Communication Skills helps participants become more aware of the importance of establishing a non-judgmental and trusting rapport with their patients. It initiates the process of "attitude restructuring" and introduces effective communication skills. This session should include the following:

- To recognize the major barriers to an effective communication related to STIs
- To develop more effective communication skills

Session 7: Health Education Messages (The 4Cs) familiarizes participants with the basic health education messages and gives them an opportunity to practice their communication skills. While facilitating this session the following things should be accomplished:

- To make the participants familiar with the following four basic health education messages:
  - Compliance to treatment
  - Counseling/education
  - Condom use; demonstration of correct use
  - Contact tracing and treatment

Session 8: Approaches for Case Management of STIs gives the rationale for the syndromic approach and sets the foundation for sessions on the management of specific syndromes. This session should include the following:

- To compare between different approaches to STIs diagnosis
- To present the rationale for the syndromic approach
- To clarify some problems regarding laboratory investigations
- To classify the main causative agents by their clinical syndromes
- To describe general guidelines on the use of flow-charts

Sessions 9-16: STIs Syndromes familiarizes participants with syndromic flow-charts for seven STI syndromes: Urethral Discharge in Men; Genital Ulcer; Inguinal Swelling (bubo); Scrotal Swelling

and Pain; Vaginal Discharge; Lower Abdominal Pain in Women; Neonatal conjunctivitis; and other STIs including Molluscum Contagiosum, Scabies, Condyloma Accuminata and Pediculosis Pubis.

Each session includes:

- Background information on common etiologies and complications
- The corresponding syndromic flow-chart
- Therapeutic recommendations
- Clinical slides
- Case studies

Treatment recommendations are based on the experience from different service facilities and the availability of drugs for the STI case management that are included in flow-charts and their explanations.

Session 17: STIs Data discusses the importance of routine collection of data, data management, record keeping and reporting.

Session 18: Closing session concludes the training and should include:

- Post-test questionnaire
- Course evaluation
- Closing

Sessions for practicing clinical skills: these should be undertaken after completing the theoretical component of the training. The following should be included in these sessions:

- To practice the correct use of syndromic approach to STI case management under the guidance of the trainer at specialized clinics
- To learn and practice how to collect specimen for basic laboratory diagnosis in case of vaginal discharge. These sessions will deal with the following laboratory tests related to STI screening:
    - Gram stain smear
    - Saline wet mount
    - KOH and pH testing

3. Recommended Training Format and Strategies

Methodologies to be used during training session include:

- Presentations
- Interactive discussions
- Slides demonstrating clinical cases
- Case studies
- Group work, and
- Practical demonstration

The manual contains materials for variety of training sessions that you can select from depending on the participant requirements and the duration of the training workshop. The estimated time required will depend on the background of the participants and their specific requirements. The materials needed are indicated at the top of the "facilitator's guidelines". A sample agenda for a five-day workshop for the Physicians is included in **(Appendix-A**). You are strongly advised to pre-test the sessions with your intended audience before finalizing your training schedule.

As a general rule, didactic presentations are minimized and interactive/participatory sessions are maximized.

For most of the sessions, **Power Point Slides** will be used for two reasons: (1) with slides the lights stay on and participants are less likely to doze off; (2) slides are easier to update and add to during a workshop. During the sessions on different syndromes, **Clinical slides** and **Case Studies** will be used as additional support. The **Flow-Charts for Syndromic Case Management of STIs and Explanations for Use** are designed for the service providers and these can be used as wall charts or pocket charts.

Participants in general tend to be more eager to learn about the latest therapeutic recommendations and are less inclined toward the preventive aspects of the training. Keeping this in mind, we advise that the sessions be strategically scheduled in such a way as to optimize participation in these less popular sessions. Awarding a certificate of attendance only to those who attended all the sessions is another incentive as participants often appreciate these certificates that they can frame and exhibit at their clinics.

4. Introduction to the Workshop

Objectives

- To introduce the facilitators and participants to the workshop and to each other
- To review the workshop agenda
- To establish ground rules for the workshop

Materials and Supplies

- Power point slides and data show
- Flip-charts and marking pens
- Participants Handouts
  - List of facilitators & participants
  - Workshop agenda
  - Ground rules

Group Introductions

- Name
- Current occupation/position
- Experience with STIs/AIDS
- One expectation for the workshop

Everyone should receive the **workshop agenda** along with the list of facilitators. A list of the participants should also be given to all the workshop participants. These introductions allow participants to establish their roles in the group, and for you to assess the experience and backgrounds of the participants.

Begin the session by introducing yourself. Let other facilitators/ resource persons introduce themselves. Then give each participant the opportunity to introduce him/herself. Each person should say a little about his/her **background (current position, experience with STIs/HIV/AIDS**) and to present **one expectation** he/she has for the workshop. Make note of the individual expectations on a flip-chart as they are reported so that you can let participants know early if they have expectations that will be met during this workshop.

Workshop Agenda

Session 1: Introduction to the Workshop
Pre-test questionnaire

Session 2: The STIs Situation

Session 3: Facts about STIs

Session 4: RTIs/STIs/HIV

Session 5: Steps of the Comprehensive Management of STIs

Session 6: Communication Skills

Session 7: Health Education Messages: *The 4Cs*

Session 8: Approaches for STIs Case Management

Session 9: Urethral Discharge in Men

Session 10: Genital Ulcer

Session 11: Inguinal Swelling (Bubo)

Session 12: Scrotal Swelling and Pain

Session 13: Vaginal Discharge

Session 14: Lower Abdominal Pain in Women

Session 15: Neonatal Conjunctivitis

Session 16: Other STIs

Session 17: STIs Data

Session 18: Post-test questionnaire
Course Evaluation
Closing

Practical sessions of clinical skills

Distribute and go over the workshop agenda (fill in appropriate dates and times or prepare your own agenda). This is a good time to let participants know if they have expectations that will not be met in the workshop. Acknowledge that the following topics are not within the scope of the workshop: HIV pre and post-test counseling, clinical management of HIV positive individuals or AIDS patients, laboratory diagnosis of STIs etc...

Ground rules of the workshop

- Confidentiality
- Each is entitled to his/her own opinion (No judgments of what others say)
- Explain that although the format of the workshop includes a number of short didactic presentations, it will emphasize interactive sessions that will require their full and active participation.

In order for the group to operate smoothly it is important to have a set of agreed upon rules that are observed during the entire workshop. This will enhance the trust you develop with the participants and among the participants themselves. Explain each rule as follows:

- **Confidentiality:** it is important to stress confidentiality to establish an environment where participants can talk honestly and openly.
- Each is entitled to his/her opinions: let participants know that all opinions are equally valid and valued, even if more people hold an opposing opinion.

Inform the participants that they should ask questions if something is not clear, including words and instructions given during the exercises.

5. Evaluation

During the training, evaluation of trained individuals will be through:

- Questions and answers
- Quick feedback
- Practical exercises

Also the training manual includes two types of evaluation forms:

(1) Pre-/post-test questionnaire **(Appendix-B)** which is administered before and after the workshop to measure changes in participants' knowledge and attitudes.

(2) Course evaluation form **(Appendix-C)** which is administered at the end of the workshop so that participants can rate the quality and usefulness of the course contents and materials, and make any comments or suggestions on how the course might be improved.

It is suggested that:

- All evaluation exercises are conducted anonymously;
- All written comments/suggestions in the course evaluation be shared with all the participants for further feedback and discussion;
- Results of the pre and post-tests questionnaire (proportion of correct answers for each question before and after the training) be available before the end of the workshop (this can be completed while the course evaluation comments are being reviewed) so that any areas of weakness or confusion can be identified and remedied on the spot.

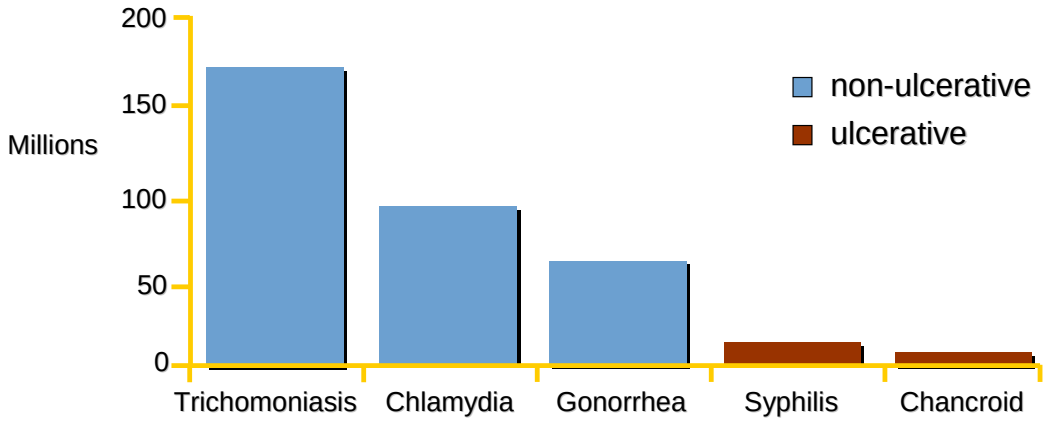
Finally, the true outcome of the training could only be assessed by evaluating its impact on participants' STI management practices. This is not an easy undertaking but can be accomplished through supervision/monitoring and or follow-up surveys.

TRAINING SLIDES

The STIs Situation

Global Incidence of Curable STIs

340 million new cases occurred in 1999, ages 15-49



Source: WHO, 2005

How Accurate are STIs Figures?

There is an underestimate of STIs in the general population

- Asymptomatic patients
  - 70% of women and 30% of men with chlamydia
  - 80% of women and 10% of men with gonorrhea

- In developing countries, despite that STIs are notifiable:
  - Many patients do not seek treatment (auto-medication…)
  - Treatment is done by non-professionals
  - Difficulty accessing STIs clinics
  - Weak reporting system
  - Inefficient surveillance system

STIs in the Developing World

- Lack of reliable STIs data
- High incidence and prevalence in some populations
- High rate of complications and sequelae
- Serious problem of antibiotic resistance
- Dramatic interaction with HIV infection
- Major impact of socio-economic factors
- Control programs, inadequate or non-existent

STIs in Egypt

- Information about STIs is quite limited
- Reviewing of the available data confirms their presence
- The conservative environment created by cultural, religious and social values helps maintain the low rates of STIs
- Several trials for the introduction of syndromic approach for the management of STIs

STIs Services in Egypt

- Private versus Governmental
  - STIs clinics
  - Dermatology
  - OB/GYN
  - ANC
  - Urology
  - PHC
- Auto medication
- Pharmacists
- Others

Results of STIs Studies in Egypt

A few reliable studies were conducted,
But should be interpreted with methodological concerns

- RTIs/STIs are present
- Higher rates among high-risk populations
- Most prevalent: Trichomonas, Chlamydia, Gonorrhea, Human Papilloma virus, Herpes
- Less prevalent: Syphilis and other ulcerative STIs

Evaluation of Selected Reproductive Health Infections in Various Egyptian Population Groups in Greater Cairo

Cairo, 1998 - 2000

STIs Prevalence by Group

	Prostitutes (n=52) %	MSM (n=80) %	Drug users (n=150) %	ANC (n=604) %	FP (n=108) %
Syphilis (TPHA)	5.8	7.5	1.3	0.0	0.0
Gonorrhea	7.7	8.8	2.7	2.0	2.8
Chlamydia	7.7	8.8	2.7	1.3	2.8
Trichomoniasis	19.2	1.3	0.7	0.7	2.8
Any STI	36.5	23.8	5.3	4.0	8.3

Source: El Sayed N., et al., 2002

Current MOHP Efforts to Standardize Quality RTIs/STIs Activities

MOHP with FHI technical assistance and USAID funding

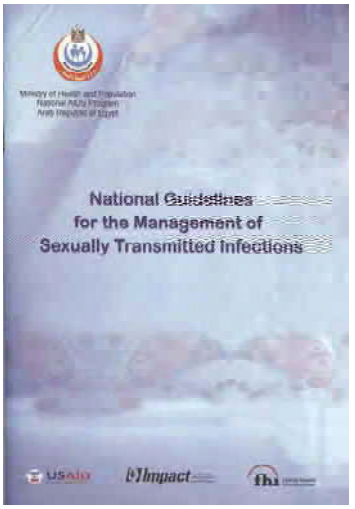
Combination of Curative and Preventive Care

- National HIV/STIs Surveillance Plan
- National Guidelines for the Management of STIs
- STIs Training Manual
- Establishment of Pilot STIs Clinics:
  - Cairo Skin and STIs Hosp. (El Hod El Marsoud)
  - Alexandria Skin and STIs Clinic (Mina El Basal)

National Guidelines for the Management of STIs

WHO Standard Flow Charts adapted to the local context :

- Etiologic profiles
- Antibiotic resistance patterns
- Availability of examination facilities
- Availability of laboratory support
- Availability of drugs



MOHP Central Laboratories

Referral Laboratories

- Departments: bacteriology and virology
- Sophisticated techniques and qualified personnel
- Gold Standard tests: PCR, LCR
- Research, Quality control ….
- Not for daily screening for RTIs/STIs

Facts about STIs

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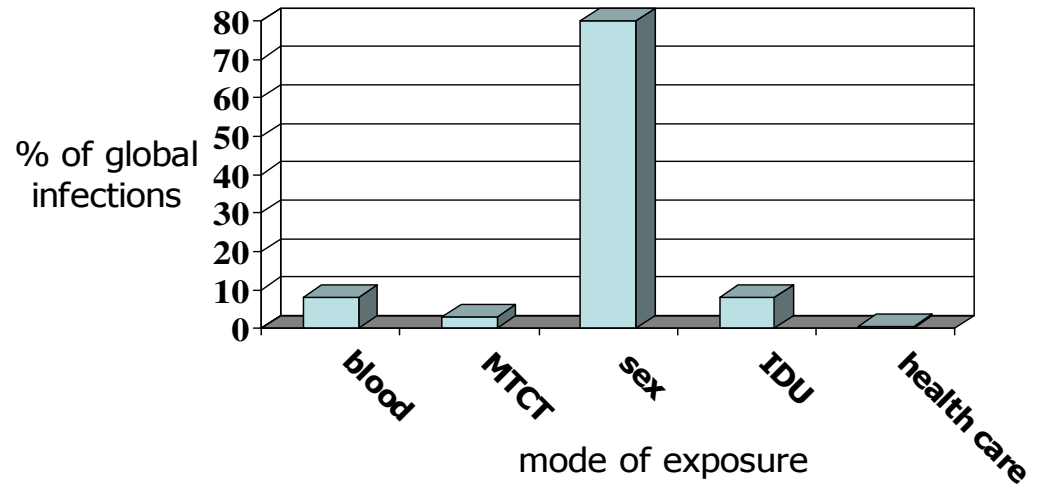
Modes of STIs Transmission

- Unprotected penetrative sexual intercourse (vaginal or anal): *all STIs*
- Mother-to-child:
  - During pregnancy: *HIV – Syphilis*
  - At delivery: *HIV – Gonorrhoea – Chlamydia – Herpes*
  - After birth (lactation): *HIV*
- Transfusion or other contact with blood *(Syphilis – HIV)*
- Close contact: *Scabies, molluscum contagiosum ……*

Global HIV Infections by Mode of Exposure



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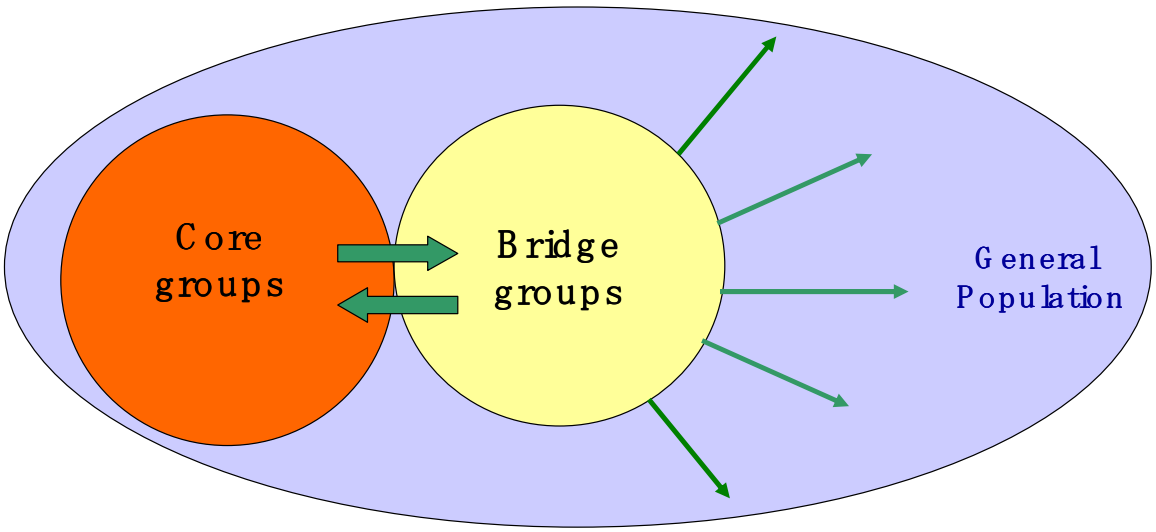
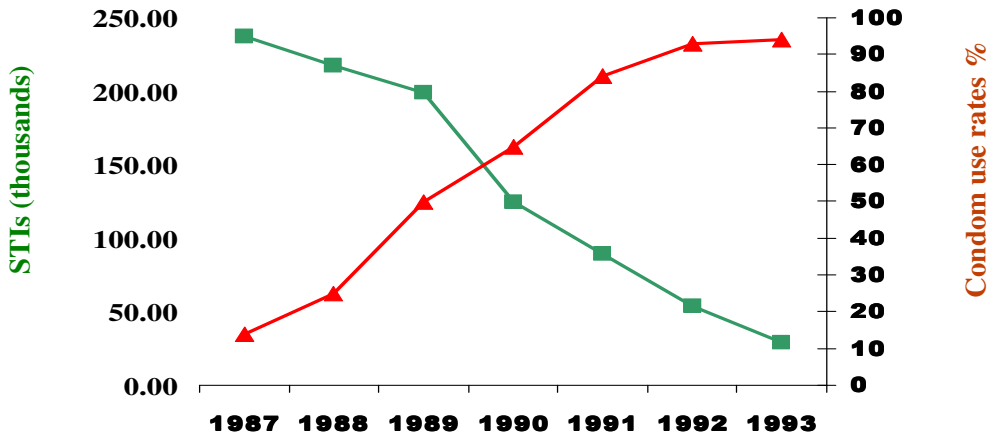
STIs/HIV Transmission Dynamics at the Population Level



MYTH: "*Condoms are not effective against HIV/STIs*"

- *Condoms are effective* at protecting against HIV/STIs when used consistently and correctly.
- When used correctly, condoms rarely break (2% of the time in the US).
- When condoms do break, it is generally due to incorrect use, and not because of poor quality.
- HIV/STIs cannot pass through intact latex condoms.

STIs and Condom Use Rates in Female Sex Workers in Thailand



Source: Hannenberg, R, et al., 1994

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MYTH: "*Only high risk groups are at risk for the disease*"

- That is simply not true
- It is not who you are that puts you at risk, it's what you do

"HIV/AIDS/STIs do not discriminate"

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MYTH: "*Sexually transmitted infections are often transmitted non-sexually*"

STIs include:

- Chlamydial infection
- Trichomoniasis

"STIs are Sexually transmitted"

MYTH: "*High-Risk Behaviors are not common in our community*"

"High-Risk Behaviors do exist in our community"

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Women at Risk

- Low status may limit ability to negotiate safer sex, obtain information and receive health care
- Vaginal surface is larger and more vulnerable to infection than penis
- Female adolescents are more vulnerable to STIs due to cervical ectopy
- STIs are often asymptomatic in women and go untreated

Ray Witlin / World Bank

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Socio-Economic Factors Facilitating Transmission of Infections

- Social mobility
- Stigma and denial
- Political and social instability
- Cultural factors
- Poverty
  - Early marriage
  - Delay in getting STIs treatment
  - Non-compliance to treatment
- Drug abuse

Behaviors Likely to Increase the Risk of Getting an STI

- Having more than one partner
- Frequent partner change
- Having sex with casual partners
- Having sex with those known to have many partners

Cultural Issues

- Providers are often embarrassed to talk about STIs
- Counseling is rarely done
- Partners are often not treated, nor counseled
- Condoms are not promoted, nor demonstrated

Results:

- Failure to follow safe sex practices, such as using condoms
- Failure to bring in sexual partners for treatment

Complications of Untreated STIs

- HIV infection
- Spontaneous abortion
- Chronic abdominal pain or infertility in women
- Sepsis, ectopic pregnancy, cervical cancer and death
- Blinding eye infections
- Pneumonia in infants
- Newborn congenital malformation
- Urethral stricture in men
- Infertility in men
- Social consequences: beating and divorce

Complications of Untreated STIs *(cont.)*

- 55-85% of women with PID may become infertile
- PID increases the risk of ectopic pregnancy by 7-10 folds
- 10-30% of men with gonorrhea develop epididymitis
- 20-40% of the epididymitis cases become infertile
- Neonatal conjunctivitis may cause permanent damage of vision of 1-6% of the affected infants

RTIs / STIs / HIV

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Reproductive Tract Infections

- Endogenous infections
  - overgrowth of normally present organisms
- Iatrogenic infections
  - introduced by medical procedures
- Sexually transmitted infections
  - primarily introduced during sexual intercourse

Common Curable STIs: *Ulcerative*

Cause genital sores and ulcers

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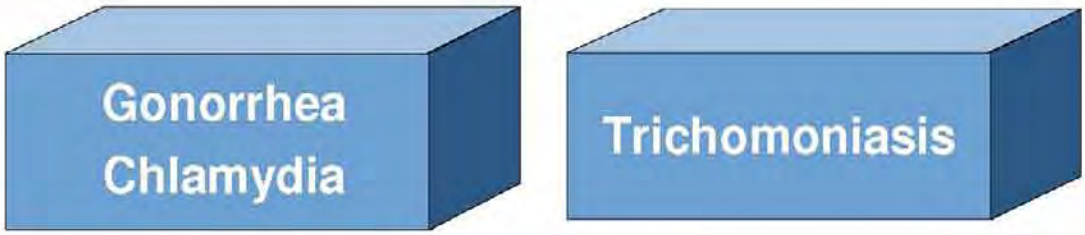
Common Curable STIs: *Non-Ulcerative*



Women:
Usually asymptomatic
Possible vaginal discharge
Men:
Usually urethral discharge

Women:
Usually vaginal discharge

Men:
Usually asymptomatic

Other curable non STIs: Candidiasis and Bacterial vaginosis

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HIV/AIDS Global Estimates for Adults and Children (end 2005)

- People living with HIV/AIDS ---------- 40.3 million
- New HIV infections in 2005 ---------- 4.9 million
- Deaths due to HIV/AIDS in 2005 ---------- 3.1 million

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Adults and Children Estimated to be Living with HIV/AIDS (end 2005)

Total: 40.3 million

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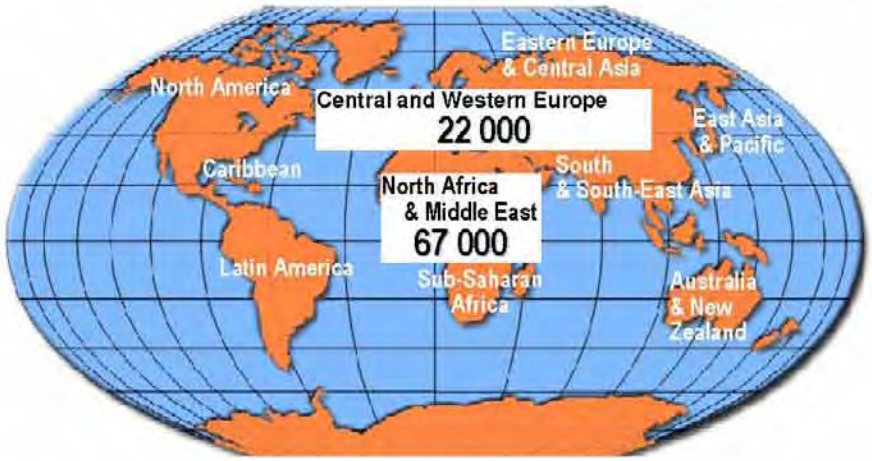
Estimated Number of Adults and Children Newly Infected with HIV (end 2005)



Total: 4.9 million

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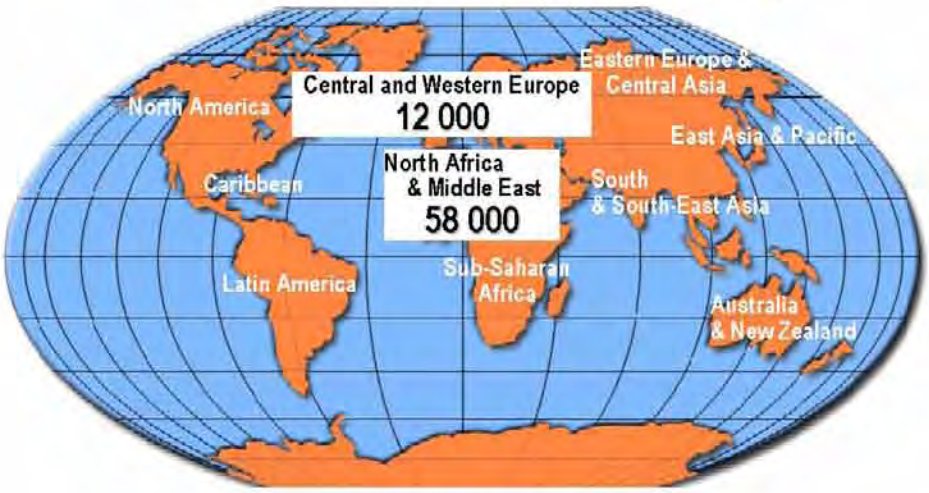
Estimated Adult and Child Deaths from HIV/AIDS (end 2005)



Total: 3.1 million

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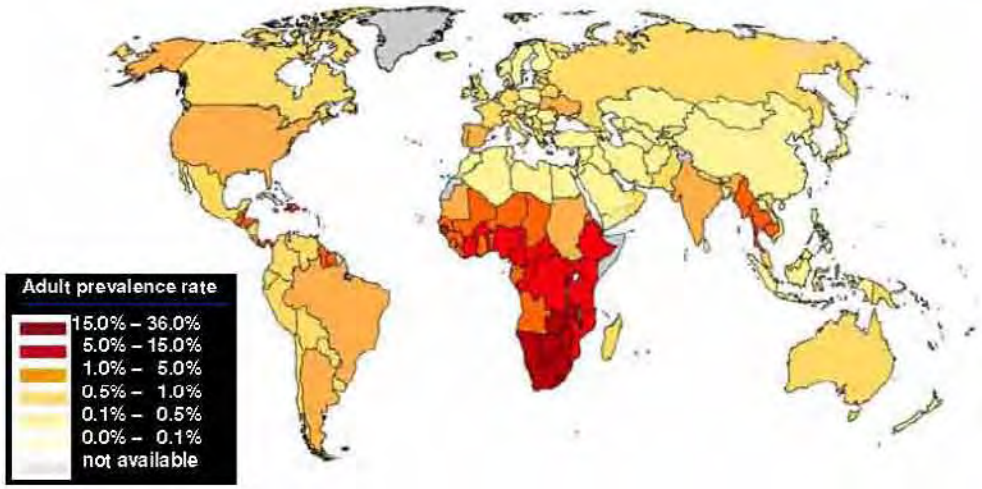
A Global View of HIV Infection



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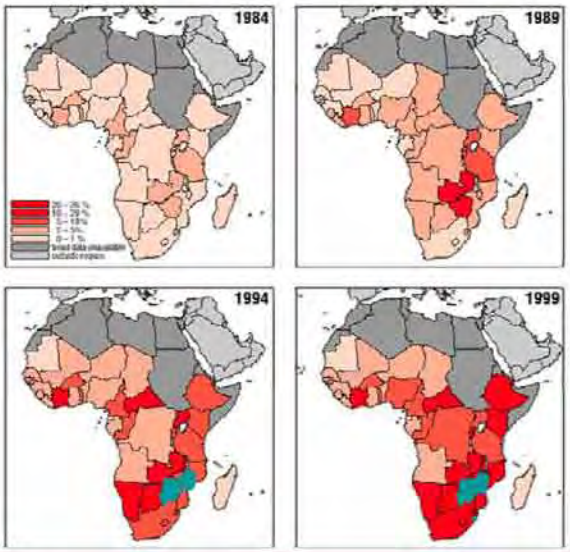
Spread of HIV over Time in Sub-Saharan Africa, 1984 to 1999



Estimated percentage of adults (15–49) infected with HIV

- 20.0% – 36.0%
- 10.0% – 20.0%
- 5.0% – 10.0%
- 1.0% – 5.0%
- 0.0% – 1.0%
- trend data unavailable

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Epidemiological Synergism between HIV and other STIs

"HIV and STIs greatly amplify each other"

– STIs facilitate HIV transmission

– HIV contributes to the spread of other STIs by prolonging their duration and infectiousness

STIs Facilitate HIV Transmission

- by causing disruption of the epithelium
- by eliciting inflammation and attracting lymphocytes

Relationship between STIs and Increased Risk of HIV

"STIs increase risk of HIV"

Chancroid	+++
Syphilis	+++
Chlamydial infection	++
Gonorrhea	++
Trichomoniasis	+
Herpes simplex	+

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Both Ulcerating and Non-Ulcerating STIs Facilitate HIV transmission

Chlamydial and Trichomonas infections may far outweigh the transmission of HIV more than genital ulcers because in most populations, such infections are far more common.

HIV and Non-ulcerative STIs

Body fluid (eg. Semen, vaginal fluid) in an HIV positive person without an STD.

Body fluid (eg. Semen, vaginal fluid) in an HIV positive person with an STD.

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STIs in the Presence of HIV Infection

STIs

- More persistent
- More frequent recurrences
- More frequent treatment failure
- Atypical clinical presentations
- Predispositions to complications

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The Impact of STIs Control on the Spread of HIV

STIs Control and HIV Prevalence among Sex Workers in Ivory Cost

	HIV Prevalence
• Without STIs treatment	16.5%
• With basic treatment for STIs	7.9%
• STIs intensified treatment	5.5%

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Positive Impact of STIs Control on the AIDS Epidemic

- Synergism between HIV and STIs
- HIV and STIs share similar risk factors such as behaviors
- The target audiences for HIV and STIs are often the same
- Early and effective STIs care will prevent HIV transmission

Steps in the Comprehensive Management of STI Cases

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The 7 Steps of the Comprehensive Case Management of STIs

Step 1 :	Take history
Step 2 :	Conduct physical examination
Step 3 :	Provide curative or palliative therapy
Step 4 :	Provide health education messages (the 4 Cs)
Step 5 :	Demonstrate and provide condoms as appropriate
Step 6 :	Offer treatment for partner
Step 7 :	Schedule clinical follow-up as appropriate

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Step 1 : Take a History

- Obtain reason for consultation (infection, fear of infection…)
- Reassure patient that absolute confidentiality will be maintained
- Find out what symptoms and signs if any prompted the visit
- Conduct a behavioral risk assessment
- Obtain information on drug allergies & current medications

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History Taking

History taking will consist of the following:

- Personal history
- Present illness
- Medical history
- Sexual history

History Taking: Personal History

This should include the following:

- Age
- Marital status
- Number of children
- Locality
- Education
- Employment
- For women: if lactating or pregnant

History Taking: Present Illness

- Ask the patient about the presenting complaint and duration
- You may concentrate on a specific STI syndrome
- You may ask related questions such as:
  - **Scrotal swelling:** ask about the history of trauma
  - **Lower abdominal pain:** ask about missed period; recent delivery/abortion; vaginal discharge/bleeding
  - **Genital ulcer: r**ecurrent vesicular painful lesions
  - **Vaginal discharge:** risk assessment

History Taking: Medical History

While taking medical history ask about the following:

- History of past STIs
- Other illness
- Medications taken
- Drug allergy

History Taking: Sexual History

Ask specific questions for:

- Risk assessment
- Currently active sexually
- Sex partner(s) in the last six months
- Condom use in the last six months
- Condom use in the last time had sex

Appropriate counseling is based on assessing risk and barriers to change patients sexual behavior

Step 2 : Conduct Physical Examination: Male Patients

- Ask the patient to stand up and lower his pants/trousers, so that he is undressed from chest down to knees
- Inspect while the patient is standing up or laying down
- Palpate the inguinal region for enlarged lymph nodes and buboes
- Palpate the scrotum, feeling for testis - epididymis - spermatic cord
- Examine the penis, noting any rashes or ulcers, then ask the patient to retract the foreskin and examine
- If no obvious urethral discharge, ask the patient to milk the urethra
- Record the findings

Step 2 : Conduct Physical Examination: Female Patients

- Ask the patient to remove her clothing from the chest down, and then lie on the coach
- Use a sheet to cover the parts of the body you are not examining
- Ask the patient to bend knees and separate her legs, then examine the vulva, anus and perineum
- Inspect external genitalia for irritation and ulcers
- Palpate the inguinal region for enlarged lymph nodes and buboes
- Palpate the abdomen (superficial and deep) for pelvic masses and tenderness

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Step 2 : Conduct Physical Examination: Female Patients

- Conduct a speculum examination (visualization of the cervix):
  - Swab the cervix with a clean gauze and wait for 1-2 minutes to watch cervical discharge, friability as well as ulcers
  - While withdrawing the speculum watch the vaginal epithelium for discharge and ulcers
- Conduct a bimanual examination and note for cervical motion tenderness
- Record the findings

Step 3 : Provide Curative or Palliative Therapy

"Do not substitute drugs and doses that are recommended in the National Guidelines for the Management of STIs"

- Ineffective or sub-therapeutic treatment:
  - loosing the confidence of your patient
  - spread of the infection
  - emergence of drug resistance

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Step 4 : Provide Health Education Messages (the 4 Cs)

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Step 5 : Demonstrate and Provide Condoms as Appropriate

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Step 6 : Offer Treatment for Partner

- Partner notification and treatment is especially important for female partners
  - women are frequently asymptomatic
  - women are unaware of their infection

- Consider providing the patient with additional treatment for the partner.

Step 7 : Schedule Clinical Follow-up as Appropriate

- Patients are advised to return if symptoms persist
- Follow-up is most important for patients with genital ulcer disease, pelvic inflammatory disease and scrotal swelling & pain;

Urethral Discharge in Men :	1 week
Genital Ulcer:	1 week
Vaginal Discharge:	return if symptoms persist
Lower Abdominal Pain:	3 days
Scrotal Swelling and Pain:	1 week
Inguinal Swelling (Bubo):	1 week
Neonatal Conjunctivitis:	3 days

Communication Skills

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Ways to Establish Good Rapport with a Client/Patient

- Verbal skills: the way we talk to the client/patient and ask questions
- Non-verbal skills: how we behave towards the patient

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Examples of Behaviors that Can Make a Patient Feel Uncomfortable

- Not greeting or looking at the client
- Not giving your full attention (reading or looking impatiently at your watch)
- Sitting while the client stands
- Being judgmental and showing disapproval (using a harsh tone of voice, unpleasant facial expressions)
- Not respecting issues of privacy and confidentiality (allowing your conversation to be overheard by others)

Examples of Behaviors of an Uncomfortable Patient

- Does not answer
- Will not tell the truth
- Will not share important information with you
- Will not remember what you tell him/her
- Does not trust you
- Does not come back

Opinions, Attitudes and Beliefs

Values Clarification

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Possible Statements

1. AIDS is a punishment for sinful acts
2. A person who is carrying a condom is prepared to have sex and is therefore a “loose” and “immoral”
3. Most men have more than one sexual partner in their lifetime
4. A man would be offended if his doctor suggested that he should use a condom when he engages in casual sex
5. A man would be offended if his wife suggested that he uses a condom
6. In the family, prevention of pregnancy and disease are a woman's responsibilities

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Sexual Words

- Providers should become familiar and comfortable with the local terms people use
- To communicate more effectively with clients and not to become personally disgusted or embarrassed when they are used

List of Sexual Words

1. STI
2. Gonorrhea
3. Condom
4. Ejaculation
5. Anus
6. Vagina
7. Masturbation
8. Anal Intercourse
9. VD
10. Syphilis
11. Penis
12. Testicles
13. Buttocks
14. Breast
15. Vaginal Intercourse
16. Oral Sex

Major Barriers for Communication

- A judgmental attitude that stems from differences in values, opinions and beliefs
- Issues of privacy and confidentiality
- A discomfort discussing sexual matters

Communicating WELL

- **W**elcome your clients
- **E**ncourage your clients to talk
- **L**ook at your clients
- **L**isten to your clients

Use of Encouragers

[S for statement, R for response]

S : "I have pain and white stuff from down there"

R : "Can you tell me more about it?" *or*
"How long have you had this problem? "

S : "I didn't come sooner because I had no transport"

R : A simple nod is appropriate, *or*
"Yes, finding transportation can be difficult and expensive"

S : "I know I shouldn't fool around with many ladies, but it is hard not to"

R : "I'm glad that you are aware that your behavior is not safe. What precautions do you take ?"

Use of Encouragers *(cont.)*

[S for statement, R for response]

S : "I don't know how to use condoms"

R : "Many people don't. I will be glad to teach you"

S : "My husband will beat me if I tell him I have this disease"

R : An empathic nod or "hmm" *or*
"How can I help you?"

S : "I have to go with many men so I have money for my children"

R : "Being a single parent must be very hard on you" *or*
"If you must engage in such activities to support your family, are you taking any precautions to protect your health?"

Main Points for Effective Communication

- Ensure privacy for the patient so that your conversation cannot be overheard and the examination is not seen by others
- Respect the opinions, attitudes and beliefs of the patient even if they are different from your own values (try not to be judgmental)
- Use a vocabulary that is at once clear and acceptable to both you and your patient
- Welcome, encourage, look at and listen to your patient

Health Education Messages
The 4Cs

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The Four Basic Health Education Messages (the 4 Cs)

1. **C**ompliance with treatment
2. **C**ounseling/Education
3. **C**ondoms use; demonstration of correct use
4. **C**ontact Tracing and Treatment

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The First C:
Compliance with Treatment

Advise the patient to :

- take all the drugs as directed even if the symptoms resolve
- abstain from sex until the treatment is completed, the infection is cured and partner has been treated
- Return for a follow up

Reasons for Non-compliance with Drug Treatment

- Patient does not understand the instructions
- Treatment schedule is too complicated
- Drugs are too expensive: patients may not want to purchase the full treatment or may save some for ‘next time’
- Symptoms have resolved so patient stops treatment
- Unpleasant side effects

Ways to Improve Compliance with Treatment

- Give instructions in a way that the patient can understand
- Ask the patient to repeat the instructions
- Write down all details and give it to the patient
- Use symbols for the patients who cannot read
- Explain that it is important to complete the treatment even after the symptoms have gone
- Discuss potential compliance problems such as multi-drug schedules, drug cost and side effects

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The Second C: Counseling/Education

Messages tailored for each patient :

- how the disease was contracted (sex with an infected partner)
- potential complications if not treated early and effectively
- mode of transmission of STIs, including HIV/AIDS
- STIs augment the risk of HIV transmission
- information about safer sex practices
    - **A**bstinence
    - **B**eing faithful,
    - **C**ondom use; consistently and correctly

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Counseling and Education

- offer referrals for VCT for HIV and for syphilis serology
- advise for follow-up visit and for the need to treat sexual partners
- assess the patient's risk factors with careful sympathetic questions
- help the patient decide to change his or her sexual behavior in order to avoid further infection

  "It is not quite enough to have the patient agree to chose the safer sexual behavior"

The Third C:
Condoms use: (Demonstration of Correct Use)

- Explain how to prevent future STIs including HIV infection (ABC)
- Demonstrate correct condom use as appropriate
- Dispense condoms as appropriate

Advantages of Condom Use

- Prevents STIs including HIV/AIDS
- Prevents unwanted pregnancy
- Slows down ejaculation and thereby prolongs pleasure
- Feels more secure
- Shows caring about partner
- Saves the cost and embarrassment of seeking treatment
- Can add erotism to foreplay

Disadvantages of Condom Use

- Slows ejaculation
- Prevents wanted pregnancy
- May be less enjoyable
- Hard to discuss subject with partner
- Can interrupt love-making
- Can cause vaginal irritation
- May require additional lubricant
- Requires advance planning
- Can tear or slip off
- Costs money
- Few men are allergic to latex

Steps for Use of Male Condom

- DO NOT use condoms which are dry, dirty, brittle, discolored, sticky, melted, damaged or past their expiration date
- Carefully open the package. DO NOT use your teeth or sharp object
- DO NOT unroll the condom before putting it on
- If not circumcised, pull the foreskin back
- Squeeze the air out at the tip of the condom
- Continue to squeeze while unrolling the condom directly onto the hard penis till it covers all of the penis
- Always put on condoms before penetration

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Steps for Use of Male Condom

- DO NOT use grease, oils, lotions or vaseline to make the condoms slippery (condom might break)
- Use glycerin or other water based lubricants if desired
- After ejaculation, hold the rim of the condom and pull the penis out (before it gets soft)
- Slide the condom off without spilling the semen
- Tie and wrap the condom (in paper, if available) and throw it in a dustbin
- DO NOT reuse condoms
- Store a supply of fresh condoms in a cool, dry place

Reasons for Non Compliance with Condom Use

- Dislike of condoms
- Problems of condom accessibility, availability or affordability
- Difficulty raising the subject of condom use in a relationship or negotiating its use
- Unfamiliarity with the condom and its use

Ways to Increase Condom Use

- Educate the patient about the advantages of condom use
- Ensure that a patient is familiar with the appearance, the texture and the correct use of a condom
- Educate the patient about where to obtain quality condoms
- Make helpful suggestions on how the patient can negotiate its use in a way that is appropriate for a particular relationship

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The Fourth C:
Contact Tracing and Treatment

Educate the patient about :

The importance of notifying recent sexual contact even if he/she is asymptomatic and encouraging them to get treatment

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Partner Notification

Patient referral (notification done by the patient)

Possible ways of partner management

- Providing additional treatment for the partner
- Encouraging partners to come to the clinic to receive treatment

Ways to Improve Partner Notification & Treatment

- Explain ‘ping pong’ infections: the patient may get re-infected by his/her untreated partner (who is frequently asymptomatic).
- Warn the male patient that his female partner may develop serious complications if untreated including infertility. If she is pregnant she may pass the infection to her child.

Priority Groups for Partner Notification

Wife or female sexual partners of male STIs patients

- frequently asymptomatic
- unaware of their infection
- potential complications are serious

Treating Partners

For All Syndromes:
"Partners should receive treatment even if they are asymptomatic"

Except for :
- Vaginal discharge (Vaginitis)
- Anaerobic infections

Bacterial vaginosis Candidiasis Anaerobic infections	>	are not sexually transmitted

N.B. Mother and her sexual partner should be treated in case of Neonatal conjunctivitis

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Practicing the 4 Cs: Case Study 1

A 27 years old man presents to you with a thick purulent discharge from his penis.

He tells you that normally he only goes with his wife but a couple of nights ago his friends took him drinking and they ended up with women.

Practicing the 4 Cs: Case Study 2

A single 20 years old sex worker comes to you with a vaginal discharge.

After examination, you prescribe the following medications : ciprofloxacin 500 mg in a single dose, doxycycline 100 mg twice daily for seven days, metronidazole 2 g in a single dose, clotrimazole 200 mg vaginal pessary each night for 3 nights.

Approaches for STIs Case Management

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Approaches for Diagnosis and Treatment

- Three approaches:
  - laboratory-based (etiologic)
  - clinical without laboratory support
  - syndromic management

- All approaches work only if infected person:
  - has symptoms
  - seeks health care
  - receives proper treatment

Laboratory-Based Approach

Laboratory tests used to identify infectious agent

- Most precise method
- Requires substantial resources
- Treatment usually delayed
- False Results
  - Syphilis: window period , false results
  - Chlamydia & Chancroid
  - Gonorrhea: not sensitive in females
  - Trichomonas (hot climate)

"Often low sensitive laboratory techniques are used"

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Clinical Approach without Laboratory Support

Depends on signs and symptoms

- Based on clinical judgment
- Least reliable method
- Single STI is typically identified and treated
- Examples:
  - Masked by other treatment
  - Chancre and Chancroid
  - Gonorrhea and Chlamydia
  - Vaginitis and cervicitis

"Moreover non experts are using clinical approach"

Syndromic Approach

"Based on the recognition of syndromes and treatment which deals with the majority of likely causative agents"

- Clients treated for all major causes of syndrome
- Algorithms should be adapted to local prevalence of STIs
- Can be used where laboratory services are unavailable
- Accuracy improves when supplemented with simple laboratory tests and minimal clinical signs *(Enhanced Syndromic Approach)*

One or Multiple Pathogens for Each Syndrome

Common Causative Pathogens for STI Syndromes	
Syndrome	**Common Pathogens**
Urethral Discharge	*Neisseria gonorrhea, Chlamydia trachomatis*
Genital Ulcer	*Treponema pallidum, Haemophilus ducreyi, Herpes simplex virus*
Vaginal Discharge	*Neisseria gonorrhea, Chlamydia trachomatis, Trichomonas vaginalis, Candida albicans, pathogens causing non-specific vaginitis*
Lower Abdominal Pain (women)	*Neisseria gonorrhea, Chlamydia trachomatis, Anaerobic bacteria*
Scrotal Swelling	*Neisseria gonorrhea, Chlamydia trachomatis*
Inguinal Swelling (Bubo)	*Lymphogranuloma venereum chlamydia, Haemophilus ducreyi*
Neonatal Conjunctivitis	*Neisseria gonorrhea, Chlamydia trachomatis*

Advantages of the Syndromic Approach

- Reduces probability of incorrect clinical diagnosis
- Specialized equipment unnecessary
- Clinical protocols are standardized
- Uniformity in collecting data
- Can be used by any level of health care providers
- Diagnosis and treatment can be provided at first visit
- In many cases, referral is not needed

"First visit may be the last visit"

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Disadvantages of the Syndromic Approach

- Undue exposure to potential side effects of drugs due to over treatment
- Health care providers feel uncomforted not to use his/her clinical experience
- Algorithms not equally accurate

Syndromic Approach: *Accuracy*

Syndrome	Accuracy of algorithm
Genital ulcer Urethral discharge	Good
Lower abdominal pain Vaginal discharge (vaginitis)	Moderate
Vaginal discharge (cervicitis)	Poor

"Accuracy varies with each syndrome"

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One Algorithm does not Fit All Settings

- Clinical setting
- Disease prevalence:
  - » High sensitivity approach is preferred in high prevalence
  - » High specificity approach is preferred in low prevalence
- Level of clinical/ laboratory evaluation
- Available resources

Proper Implementation of Appropriate Algorithm

- Training : theoretical and practical on field
- Successful model
- Adequate Support
- Data and drugs
- Adapted to context
- Monitoring and supervision
- Promotion
- Complete package

Possible Laboratory Tests and Syndromic Approach

- Bed side Lab tests for woman with vaginal discharge
- Site Lab tests for Syphilis serology, confirmation of diagnosis, resistant cases
- Referral Lab tests for Syphilis serology, confirmation of diagnosis, resistant cases, research studies, validation of protocols, antibiotic sensitivity…

Syndrome Management Studies in Women

- RTIs (not necessarily STIs) are prevalent
- Symptoms of vaginal discharge is not a prediction of Gonorrhea or Chlamydial infection - rather Bacterial vaginosis and Trichomoniasis
- Majority of women with Gonorrhea or Chlamydial cervical infection will not have symptoms

Syndrome Management Studies in Women

- Diagnostic accuracy of laboratory screening tools for Gonorrhea or Chlamydial infection is poor
- Even “Gold standard” tests underestimate prevalence
- Application of simple risk assessments appear feasible and acceptable in general clinic settings
- Clinical skills of providers influence the performance of decision model

Selection of Approaches

- Symptomatic:
  - Enhanced syndromic approach
- Asymptomatic: (Mainly women)
  - Syphilis serology screening at ANC
  - Partner treatment
  - Surveillance

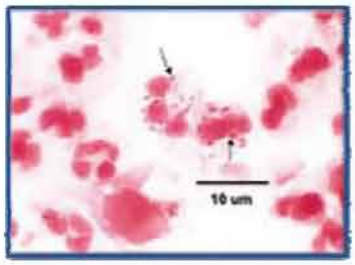
Possible Approaches for High Risk Groups

- Proper outreach
- Targeted treatment protocols
- Selective presumptive treatment for asymptomatic high risk females
- Periodic screening for Syphilis
- STI services for men and clients of CSWs
- Prepackage therapy for drug stores/pharmacies

Syndromic Management of STIs

Urethral Discharge in Men

Chlamydia trachomatis



Neisseria gonorrhea

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The Urethral Discharge Syndrome

- is the most common STI syndrome in men
- is the characteristic manifestation of urethritis
- is characterized by discharge, frequently accompanied by pain or burning when passing urine (*dysuria*) and sometimes by urethral itching
- can be associated with scrotal pain and swelling (*epididymitis*) which tends to be unilateral

Types of Urethritis

- Gonococcal urethritis (GU) caused by:
  - *Neisseria gonorrhoea*
- Non-gonococcal urethritis (NGU) caused by :
  - *Chlamydia trachomatis (20-55%)*
  - *Ureaplasma urealyticum (20-40%)*
  - *Trichomonas vaginalis (2-5%)*

Common pathogens:	*Neisseria gonorrhoea* *Chlamydia trachomatis*

Aspects of the Urethral Discharge

The discharge can be quite variable in appearance:

- purulent or mucoid
- clear, white or yellowish-green
- copious or scant
  (perhaps only detected in the morning or noted as crusting at the meatus or staining on underwear)

Gonococcal versus Non-gonococcal Urethritis

No conclusive distinction between gonococcal and non-gonococcal urethritis on clinical grounds

- both infections cause the same signs and symptoms
- mixed gonococcal and chlamydial infections are common
- the prior ingestion of antibiotics can significantly alter the course and clinical manifestations of the disease

Post-Gonococcal Urethritis (PGU)

The incubation period of *N. gonorrhoea* is shorter than that of *C. trachomatis*

- Men who acquire gonococcal and chlamydial infections simultaneously frequently develop a biphasic illness
- They usually get treated for gonorrhea unless the treatment also eradicates C. trachomatis
- Symptoms of urethritis often reappear 1-2 weeks later as post-gonococcal urethritis (PGU)
- Unfortunately the symptoms of PGU are often too mild and the patient will often remain untreated and infectious to his sexual contacts

Management of the Urethral Discharge Syndrome in Men

- Since it is not possible to make a conclusive distinction between gonococcal and non-gonococcal urethritis on clinical grounds
- Since mixed gonococcal and chlamydial infections are common
- Since a significant proportion of men with mixed infections will become subclinical carriers and transmitters of chlamydial infection
- Since laboratory diagnosis for chlamydia is difficult and expensive
- Since gonococcal and chlamydial infections lead to serious complications, particularly in women and their infants

It is recommended To treat all men presenting with urethral discharge for both gonococcal and non-gonococcal urethritis simultaneously at the first visit

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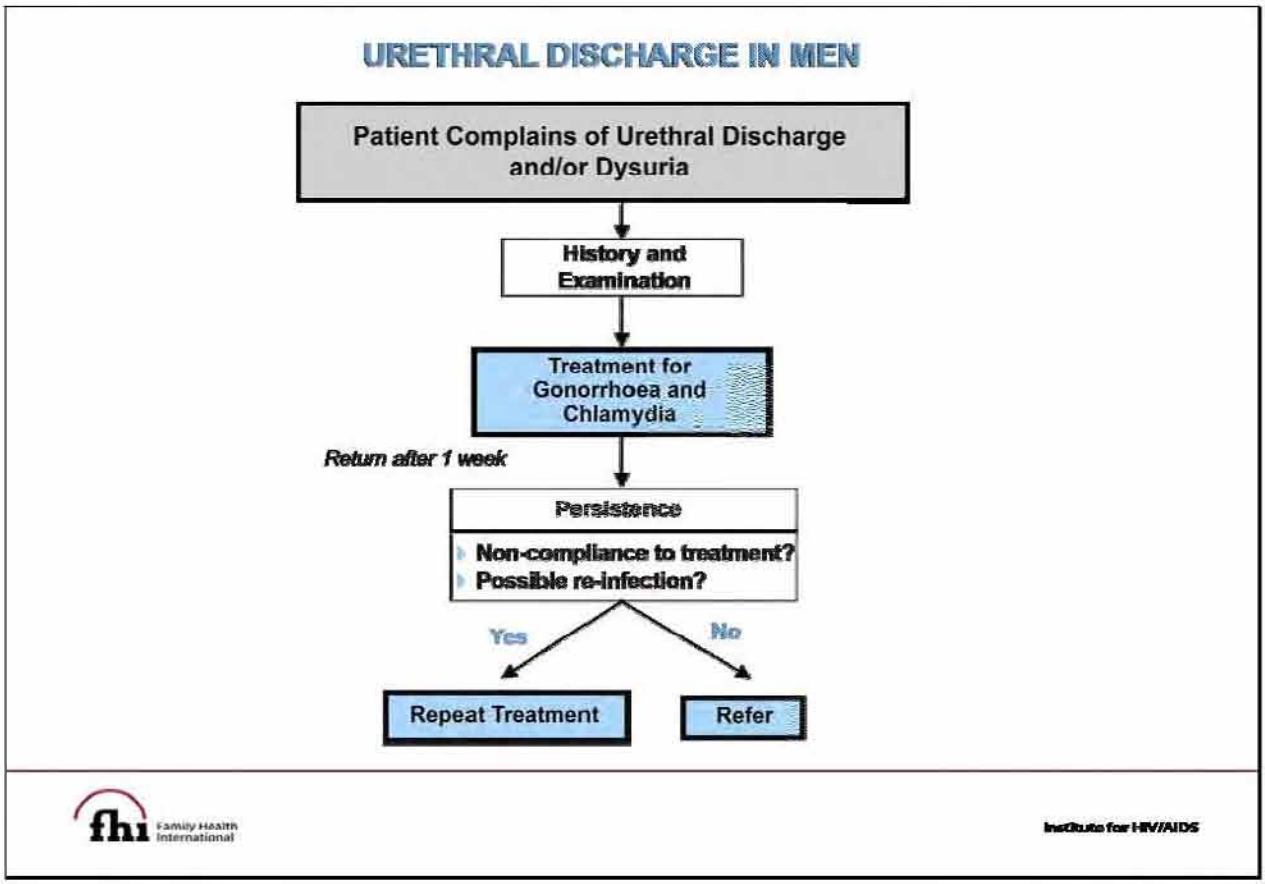
Consequences of Untreated Urethritis in Men

- Female partners are often unaware of their infection until they or their infants develop serious complications
- The most common complication in men is epididymitis which can lead to decreased fertility or sterility
- Other complications in men include urethral strictures and periurethral abscess
- Untreated urethritis in men (and the resulting cervicitis in women) facilitates the acquisition and transmission of HIV infection


URETHRAL DISCHARGE IN MEN
Patient Complains of Urethral Discharge and/or Dysuria
History and Examination
Treatment for Gonorrhoea and Chlamydia
Return after 1 week
Persistence
Non-compliance to treatment?
Possible re-infection?
Yes
No
Repeat Treatment
Refer
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Treatment Regimen for Urethral Discharge in Men

Recommended Treatment for Gonorrhea:

- Ceftriaxone 250 mg intramuscular (IM) in a single dose

Alternative Treatment for Gonorrhea:

- Ciprofloxacin 500 mg orally in a single dose

or

- Spectinomycin 2 g IM in a single dose

PLUS

Recommended Treatment for Chlamydia:

- Azithromycin 1g orally in a single dose

or

- Doxycycline 100 mg orally twice daily for 7 days

Alternative Treatment for Chlamydia:

- Tetracycline 500 mg orally 4 times a day for 7 days

or

- Erythromycin 500 mg orally 4 times a day for 7 days

Single doses of treatment should be administered during the initial clinic visit.

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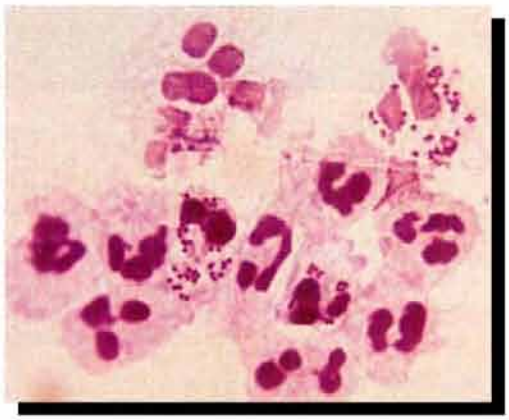
Gram-Stained Smear of Urethral Exudate

Gram-stained smear of urethral exudate showing intracellular gram-negative diplococci



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Case Study 1

A 40 years old married man complains of burning pain when he passes urine. This has been going on for two days now.

Yesterday morning he noticed a yellowish discharge from his penis. He took some capsules right away. It seemed to help a little but this morning it is much worse. Now it hurts so much that he cannot pass urine.

a) What is your diagnosis?

b) What is the appropriate management?

Case Study 2

A 33 years old man complains of a scanty, thin discharge from his penis and pain when he passes urine.

He has only been back a few days from a 10 day business trip. He is very embarrassed by the situation.

He is worried that he may have infected his wife but has decided to keep it a secret from her. He denies any previous treatment.

a) What is your diagnosis?

b) What is the appropriate management?

He returns after 1 week and still has burning and discharge.

c) What might be the reason(s)?

d) What would you do now?

Case Study 3

A 19 years old man comes to you looking quite anxious. His friends took him out drinking and persuaded him to go to a sex worker. The young man has heard about AIDS and is afraid he might have caught it or some other disease.

He wants your advice on what he should do. He denies burning, discharge or any genital lesions. He denies taking any medication. His exam is unremarkable.

a) What is the diagnosis?

b) What is the appropriate management?

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Case Study 4

A 23 years old single student from a wealthy family develops a thick purulent discharge and burning. He is too embarrassed to go to the doctor.

After several days he finally consulted his best friend who suggested that he take some ciprofloxacin. The pharmacist gave him 500mg of ciprofloxacin.

His symptoms improved dramatically, almost overnight. But one week later he started to have burning again.

a) What is your diagnosis?

b) What is the appropriate management?