Republic of Kenya
MINISTRY OF HEALTH

NATIONAL HIV INTEGRATED TRAINING CURRICULUM

NASCOP

MODULE 3:

PREVENTION OF HIV TRANSMISSION

National AIDS and STI's Control Programme (NASCOP)
2018 Edition

MODULE 3:
PREVENTION OF HIV TRANSMISSION

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FOREWORD

The Ministry of health-NASCOP led the process of developing the National HIV Integrated Training Manual for Health Care workers in 2010-2012. This was done through a wide consultative process, with the support and expertise of multiple stakeholders including universities, funding agencies, multilateral organizations and implementing partners. It is a modular, competency-based, role-specific curriculum that is largely self-learning and incorporates adult learning principles. It also includes face to face interaction with a mentor based at a health facility, in order to reinforce the learning and oversee the acquisition of skills.

In July 2016, the MOH made a paradigm shift in management of HIV infection and launched guidelines on use of antiretroviral drugs for treating and preventing HIV infection in Kenya. The key highlights in the revised guidelines included treating all HIV infected persons regardless of clinical or immunological status, differentiated care service delivery models, partner notification services and self-testing under HIV testing services and use of ARVS for Pre exposure prophylaxis among HIV negative persons. In view of the rapidly changing evidence in the field of HIV as well as decentralization of services, there constantly remains a need to maintain the currency of the curriculum.

The national Programme has updated revised basic HIV curriculum for Health Care Workers to improve quality of care for the PLHIV as one of the key impetus to achievement of the 90:90:90 strategy and achievement of epidemic control. The information contained is based on the most updated Guidelines and policies for HIV care in the country. It also contains new units such as the PrEP, Differentiated care; Gender based violence and Positive Health Dignity and Prevention. The integrated curriculum has also been translated to online platform to increase access to the training.

The target audience for this Training Manual includes all practicing health care workers including interns. It is also adaptable to pre-service institutions for the training of students so that they are competent in provision of HIV care upon completion of their course.

It is hoped that the implementation of the revised National HIV Integrated Training Manual for Health Care workers is entrenched within the training framework for human resource for health in all counties. The competencies acquired through this training model will translate to better quality of care for persons living with HIV in Kenya.

Dr Kigen Bartilol
Head: National AIDS/STI Control Programme

ACKNOWLEDGEMENT

The revision of the National Integrated HIV Training Manual National is a result of various efforts coordinated by NASCOP through the NHITC Revision Committee and the Secretariat. The members were drawn from Ministry of Health staff, HIV implementing partners, university faculty and private sector stakeholders that were represented and the individuals who brought their expertise on board.

Special thanks to the NASCOP Programme Managers who took the lead in this process and to PEPFAR through University of Maryland, Baltimore-PACE-Kamilisha programme for funding the process.

ABBREVIATIONS AND ACRONYMS

ABC	Abstinence, Be faithful, use Condoms
AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Therapy
ARVs	Antiretrovirals
CAGE	Cut, Annoy, Guilty and Eye-opener
CD4	Cluster of Differentiation 4
CITC	Client Initiated Testing and Counselling
Cr	Creatinine
CrCl	Creatinine Clearance
DAST	Drug Abuse Screening Test
EBIs	Evidenced Informed Behavioural interventions
eMTCT	Elimination of Mother to Child Transmission
HBsAg	Hepatitis B Surface Antigen
HIV	Human Immune Deficiency Virus
HTS	HIV testing Services
IEC	Information, Education and Communication
ICF	Intensive Case Finding
KP	Key Populations
MAT	Medication Assisted Treatment
MIPA	Meaningful Involvement of PLHIV
MSM	Men who have Sex with Men
NASCOP	National AIDS and STIs Control Programme
NSP	Needle and Syringe exchange Programme
OI	Opportunistic Infection
PEP	Post Exposure Prophylaxis
PHDP	Positive Health Dignity Prevention
PITC	Provider Initiated Testing and Counselling
PLHIV	PLHIV
PP	Priority Population
PrEP	Pre-Exposure Prophylaxis
PWID	People Who Inject Drugs
SRH	Sexual Reproductive Health
STI	Sexually Transmitted Infection
SW	Sex Workers
TB	Tuberculosis
UNAIDS	United Nations Programme on HIV/AIDS
UNODC	United Nations Office on Drugs and Crime
VL	Viral Load
VMMC	Voluntary Medical Male Circumcision
WHO	World Health Organization

INTRODUCTION

Global prevention efforts have gained momentum towards achieving the vision of zero new HIV infections in line with the UNAIDS 2016-2021 strategy "on the fast track to ending AIDS".

In order to provide HIV prevention services, the HIV-care provider must be competent in implementing prevention activities in the clinic and in the community settings. Elimination of mother to child transmission (PMTCT), and Voluntary Male Medical Circumcision (VMMC), are covered as separate modules.

MODULE OBJECTIVES

By the end of this module you should be able to:

i. Explain the approaches in HIV prevention
ii. Apply knowledge of HIV prevention interventions in community and facility settings
iii. Demonstrate ability to communicate effectively information to clients on HIV prevention interventions
iv. Formulate and package HIV prevention interventions for different contexts.
v. Effectively conduct evaluation and monitoring of HIV prevention interventions

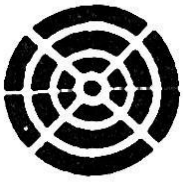
UNIT 3.1: OVERVIEW OF PREVENTION OF HIV INFECTION

Unit Outline

3.1.1 Introduction

Prevention is an essential component of Kenyan national HIV response strategies. In the first unit of this module we shall briefly look at primary prevention strategies in general, then in the subsequent units of this module you will be learning about specific interventions.

3.1.2 Unit objectives



By the end of this unit you will be able to

i. Describe the recommended strategies for HIV prevention
ii. Describe how primary prevention strategies apply the day to day service provision

3.1.3 Strategies for prevention of HIV infection

Let us begin this section with a case scenario.

Exercise 3.1.1

Naliaka has visited your facility for a minor complaint and you decide that you have an opportunity to talk to 18-year-old Naliaka about HIV. In assessing her risk for HIV and STIs you discover that she first had sexual intercourse at the age of 15 years (even though she did not want to at the time). She has since been with 3 other men in the past year, has never used condoms, but is now concerned about the risk of pregnancy.

What is important for Naliaka to understand and address to prevent both

HIV infection and pregnancy based on her history?

_____

_____

Primary prevention focuses on preventing acquisition of HIV infection among persons who are uninfected. This should be a key focus for any health care provider whenever they interact with clients who seek their services.

The following is a list of some of the key combination HIV prevention strategies and interventions that have been shown to be effective:

A. Behavioural interventions/strategies:

i. Risk perception counselling and training
ii. Supporting adherence to preventive interventions such as PrEP, eMTCT and ART
iii. Life skills especially for young persons

B. Bio-medical interventions/ strategies

i. HIV testing and counselling
ii. Condom use
iii. Voluntary Male Medical Circumcision
iv. Treatment of sexually transmitted infections
v. Universal treatment of all HIV infected persons
vi. Pre-exposure prophylaxis
vii. Safe blood transfusion

C. Structural interventions/strategies

i. Addressing stigma and discrimination
ii. Addressing social-cultural, economic, political issues e.g., poverty, housing instability, gender based violence that may make it impossible to adhere or utilize HIV prevention services

While it may not be possible to address all issues as the health care provider e.g. economic support, it is important to assess presence of risk factors and refer where necessary.

3.1.4 Application of the HIV prevention strategies

Applying HIV prevention strategies requires that health providers are familiar with the various interventions and the need to provide interventions tailored to an individual's risk. Community mobilization and engagement is critical in ensuring continuity of interventions that are instituted within health facilities, so it is important that we always include the community in HIV prevention strategies.

3.1.5 Summary

- Prevention of HIV infection is achieved through a combination prevention approach Health care workers have an important role to play in primary prevention, both at facility level and in the community; these opportunities are often missed.
- Liaison with the community is necessary to support the integration of HIV prevention messaging and communication in all community health activities.

UNIT 3.2: BEHAVIOURAL INTERVENTIONS FOR HIV PREVENTION

Unit outline

3.2.1 Introduction

Transmission of HIV is mediated directly by human behaviour. In this unit we are going to look at identifying risk behaviours associated with HIV transmission and acquisition, at different types of evidence informed behavioural interventions, and at some social cultural barriers to behaviour change. We will also learn how to effectively communicate with clients to address behaviour change. As a HIV-care provider and counsellor you must be familiar with strategies and interventions known to be effective in preventing sexual transmission of HIV, especially within your context.

3.2.2 Unit objectives

By the end of this unit you will be able to

i. Explain the concept of evidence based behavioural intervention
ii. Identify high risk behaviours associated with HIV transmission
iii. Identify Evidenced Informed Behavioural interventions (EBIs) targeted at risk reduction for different target populations
iv. Describe social cultural barriers to behaviour change
v. Demonstrate effective communication with clients to address behaviour change

3.2.3 Concept of Evidence Based Behavioural Interventions

EBIs have been rigorously evaluated and shown significant and positive evidence of efficacy Behavioural interventions include a range of communication programmes to change sexual behaviour. These programmes use various communication channels (e.g., mass media, community-level, and interpersonal) to disseminate messages. The messages are designed to encourage people to:

- Reduce behaviours that increase risk of acquiring HIV
- Increase behaviours that are protective (e.g., benefits of condom use).

Behavioural interventions increase knowledge and skills (e.g. communication, negotiation, refusal, condom use) in HIV prevention, change attitudes, and motivate individuals to adopt healthier behaviours. (e.g., elimination or reduction of risky sexual or drug taking behaviours)

3.2.4 High risk behaviours association with HIV transmission and acquisition

In this unit we, we are going to learn about risk factors associated with HIV transmission and acquisition.

Exercise 3.2.1

Based on your knowledge, list as many known high-risk behaviours associated with HIV transmission and acquisition you can think of:

_____

_____

3.2.5 Evidenced informed behavioural interventions

Below are six ways of addressing/eliminating risky behaviours.

i. The ABC Approach

A: Abstinence

B: **B**eing faithful to one partner

C: Correct and consistent use of **C**ondoms

ii. Reduction of sexual partners

Monogamy is an effective way to prevent HIV in long term relationships where both partners have been tested and agree to be faithful to one another.

iii. Delaying Sexual debut

In text question 3.2.2

What do we mean by delaying sexual debut? What are the advantages?

iv. Control Alcohol Consumption, Substance abuse and sharing of needles and syringes

In text question 3.2.3

How does control of alcohol and drug abuse consumption reduce the risk of HIV infection?

_____

_____

3.2.6 Socio-cultural barriers to Behaviour Change

Issues around sex and sexuality are taboo in many cultures which can lead to a reluctance to discuss and address sexual health issues. Taboos are even more pronounced to people who do not conform to socially accepted norms of behaviour.

In text question 3.2.4

As a health care worker, you have been involved in one way or another in the behaviuoral interventions at the community and the health facility. In your opinion what are some of the social cultural barriers could interfere with behaviour change adoption?

_____

_____

3.2.7 Effective communication with clients to address behaviour change

We need to learn how to effectively communicate messages of behaviour change to clients in a way that can promote their uptake.

Rachel's Story

Doc: "What brings you in today?"

Rachael: “I’d like an STI check-up.”

D: “Just a check-up?”

R: “Yes.”

D: “OK, sounds good. I first need to ask you a few questions, OK?”

R: “OK.”

D: “How many sex partners have you had in the past 3 months?”

R: “One.”

D: “Is your partner male or female?”

R: “Male.”

D: “What types of sex do you have; oral, vaginal, anal?”

R: “Oral and vaginal.”

D: “You use condoms pretty much all the time?”

R: “Yes.”

D: “OK, good. Doesn’t sound like you have a lot of risk, but you should always be using condoms, OK? Please feel free to take some when we’re done.”

R: “OK.”

Rachel’s Story – Take 2

D: “What brings you in today?”

R: “I’d like an STI check-up.”

D: “What made you decide to get checked today?”

R: “Well…I’m a bit embarrassed and uncomfortable

D: “I understand. It is not easy to come to a clinic like this, but the more I know about the reason why you came today, the better I can help you. So, what’s up?”

R: “Well, it’s a bit of a story.”

D: “That’s fine. Please tell me what happened.”

R: “Well, I broke up with my boyfriend about 3 months ago and I haven’t had sex since then.”

D: “I see.”

R: “But then about 10 days ago, I went to this bar with a friend. I really wasn’t looking for sex or anything, but I met this cute guy and we kind-of got into it. I guess I had a few glasses too many and we ended up at his place and before I knew it we had sex and…”

D: “Yes?”

R: “Well I’m always very careful, with using condoms I mean, but we didn’t have condoms and now I’m really worried I may have gotten something?”

D: “So what do you think you might be able to do to avoid something like this from happening again?”

R: “I don’t know. Probably avoid bars… You know, I have this friend who is really good at using condoms and talking about them with guys. Maybe I could get some advice from her and practice a little bit.”

D: “Does that seem like something you can do?”

R: “Yes, I think so…I see her a lot, so I will ask her the next time. Do you have any condoms I can take home?”

D: “Yes, here are some. This sounds like a great plan.”

In text question 3.2.5

What is the differences between the two scenarios?

_____

_____

Remember to always approach the client as an individual while putting focus on the issues and the realities that they identify. Use open ended questions to establish dialogue and use your listening skills to achieve effective communication. Offer options and support the individual to make the necessary behaviour change and set up a risk reduction plan.

Take note

Risk Reduction plan must be:

- Client driven
- Based upon client readiness
- Ability to adopt safer behaviour

3.2.8 Summary

In this unit we have explored concepts of evidence informed behavioural interventions

Known evidence based behavioural interventions include: the ABC approach, correct and consistent condom use, reduction of sexual partners, delaying sexual debut, alcohol prevention or treatment programme and ART prevention.

There are social cultural factors, gender inequalities, power dynamics, substance abuse, legal structures and cultural norms that may hinder the adoption of healthy behaviour.

Behaviour change communication should ensure that the information is communicated and packaged to meet the individual need and support decision making for adoption of behaviour change.

UNIT 3.3 POSITIVE HEALTH DIGNITY PREVENTION (PHDP)

Unit outline

3.3.1 Introduction

Hello, we welcome you on this module on PHDP.

3.3.2 Unit objectives

By the end of this unit you will be able to:

i. Explain the importance of prevention for PLHIV
ii. Discuss the importance of HIV care and treatment settings
iii. Explain why prevention recommendations are critical for PLHIV
iv. Describe the key prevention interventions and messages to give to PLHIV
v. Explain how patient concerns can be addressed
vi. Discuss the challenges of behaviour change for PLHIV

3.3.3 What is PHDP?

Let's begin the session by asking ourselves a question:

In text question 3.3.1

What is PHDP?

PHDP is a framework that emphasizes the health and rights of PLHIV, including reducing risk of onward transmission of HIV.

PHDP interventions target individuals who are 15 years and older and is delivered at both individual (Clinical PHDP) and group level (Community PHDP). Clinical PHDP) is delivered by Health Care providers, Community PHDP by Health Care Providers, counsellors and/or Peer Educators.

3.3.4 Importance of HIV Prevention for PLHIV

Let's begin the session by asking ourselves a question:

In text question 3.3.2

Why is prevention important in PLHIV?

_____

_____

To date, most HIV prevention strategies have focused on providing counselling and testing for those who are HIV-negative. While this is an important strategy, we need to add the strategy of providing prevention recommendations to those who are already living with HIV.

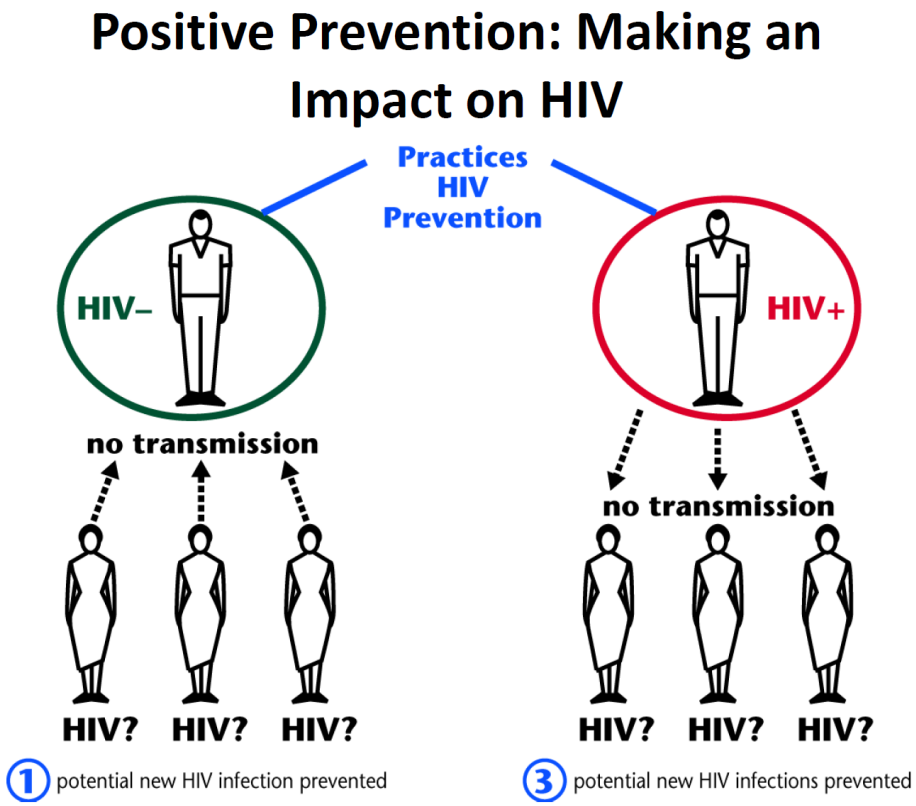


Figure 3.1 Why prevention with PLHIV

Activity 3.3.1

From figure 3.1, who has the potential to create greater impact on HIV epidemic? And why? HIV +'ve OR HIV –'ve person.

_____

_____

If an HIV negative person has **protected** sex with, say, three partners, the HIV negative person will be protected, and one HIV infection may have been prevented. If an HIV positive person has **protected** sex with, say, three partners, three infections (that of each sexual partner) may have been prevented.

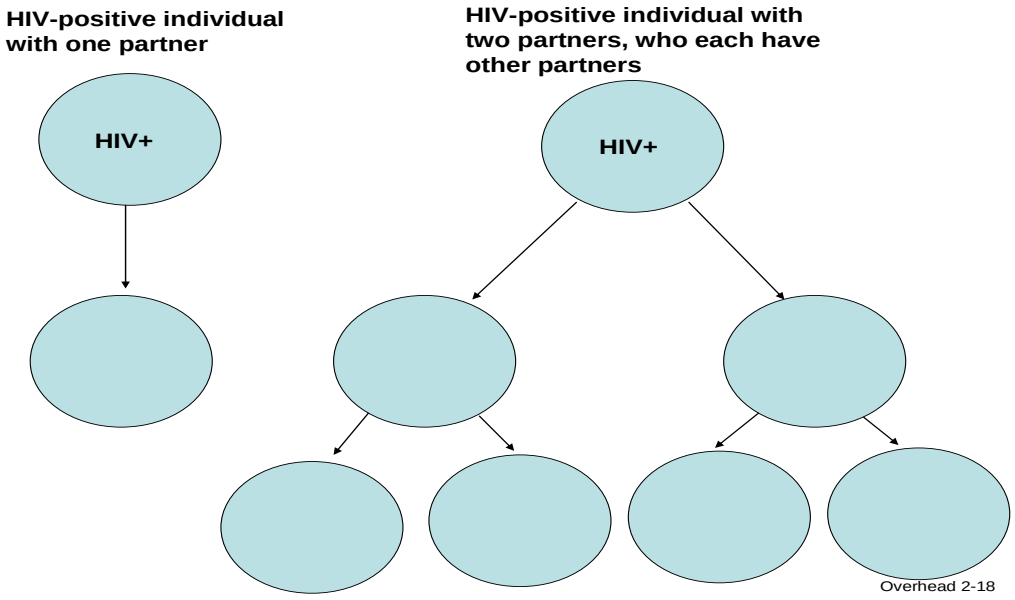


Figure 3.2: Multiple partnerships diagram

If an HIV-infected individual has only one sex partner, only one person is at risk for HIV. However, if the HIV-infected individual has multiple partners, and each of those partners has multiple partners, HIV can spread quite rapidly. First and foremost, all PLHIV persons should be encouraged to use condoms every time they have sex. In addition, PLHIV should be encouraged to have only one partner. Individuals with more than one partner should be encouraged to reduce their number of partners.

Take note

Giving recommendations about prevention to your PLHIV patients can have potentially big impact on the HIV epidemic in your community.

3.3.5 Modes of Delivery

At an individual level PHDP services should be accessed at all departments in the facility. Not only do facilities see many HIV-infected individuals on a day-to-day basis, but this visit may be the patients' only opportunity to receive information about PHDP. This gives Health Care Providers a unique opportunity to deliver prevention messages to a large number of PLHIV and make a real difference in slowing the spread of HIV.

At group level, Facility and Community Support Groups are used as avenues for delivery of PHDP.

At both individual and group level, delivering PHDP takes only a few minutes and focuses on the prevention strategies scheduled for discussion. PLHIV are likely to adopt safer sexual practices if recommendations are reinforced over time, at individual and group level.

3.3.6 PHDP Interventions and Strategies for PLHIV

The following interventions are recommended for PLHIV in improving the process of managing his or her own health and wellbeing.

1. **Knowledge of HIV Status**

   PHPD programmes focus on getting all the persons living with HIV identified and linked to HIV care and treatment.

2. **HIV Testing Services (Family and Partner testing)**

Ensuring that partners of individuals with HIV receive testing and counselling on safe sexual practices is an essential part of basic prevention care package.

3. **Disclosure**

In text question 3.3.3

Thomas is living with HIV. He is married with a wife and has four children. He feels somewhat ashamed of having HIV and has not told his wife. How would Thomas benefit from telling his wife about his HIV infection?

_____

_____

Disclosure, especially to sexual partner, facilitates effective prevention of sexual transmission of HIV, allows eMTCT, enhances treatment adherence, and increases use of protection methods such as condoms.

4. Linkage to ART and Adherence

Provision of ART and enhancing adherence to PLHIV reduces the risk of HIV transmission by reducing the viral load (VL).

5. Risk reduction counselling (Condoms use, demonstration, and issuance, reduction of sexual partners, Counselling on Alcohol and Drug abuse)

HIV transmission and /or acquisition is largely driven by behavioural factors. Individual and small group behavioural interventions designed for use by persons with HIV to reduce sexual HIV transmission through abstinence, condom use, and partners' reduction must be promoted and expanded.

6. Family Planning and safer pregnancy counselling)

Provision of Family Planning education and services is critical for PHDP efforts. Information on safer pregnancy should also be readily available.

7. STI diagnosis and treatment

STIs increase risk of HIV transmission and acquisition and should routinely screen for and treated appropriately.

8. OI management including TB

OIs should be actively sought and managed, TB is screened for at each visit using the ICF tool.

9. Home follow up visits (Nutritional Assessment)

PLHIV are encouraged to take a balanced diet and drink plenty of clean safe water at each meal.

10. Meaningful Involvement of PLHIV (MIPA)

To effectively reduce HIV transmission, PLHIV should be active leaders in PHDP efforts. MIPA helps prevent discrimination and ensure that PHDP is mutually beneficial for infected and uninfected individuals. It entails engaging them at the level of design, planning, development, implementation and monitoring their health care programmes. MIPA may include for instance engaging Adolescents Peer Educators, Adult Peer Educators, Mentor Mothers, as well as Community Health Workers/Volunteers in treatment support initiatives.

3.3.7 HIV Prevention Messages for PLHIV

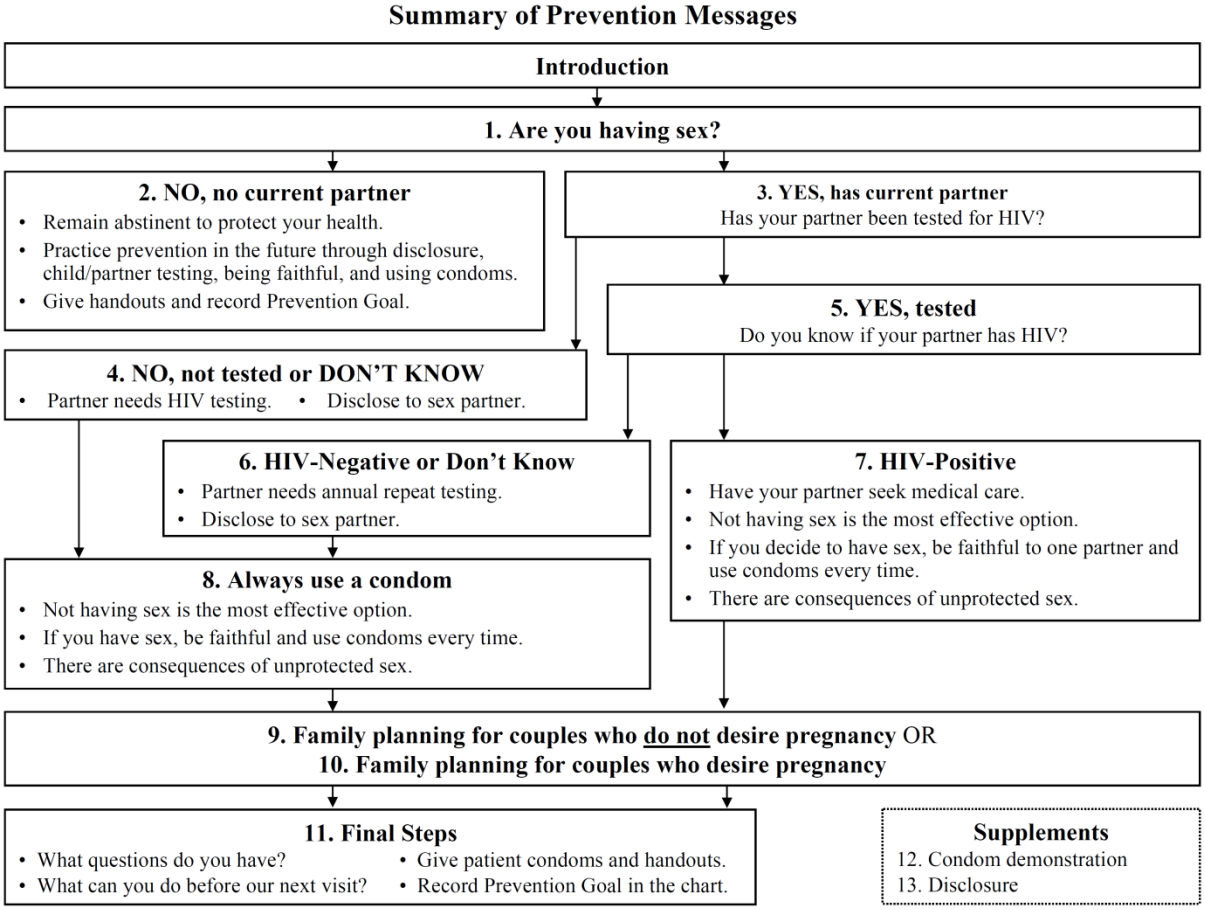


Figure 3.3: Summary of Prevention Messages

The session will be conducted according to the patient's answers.

If the patient answers "no" to question 1 (i.e. **abstinent patient**) "Are you having sex?", then they will be counselled according to item 2.

If patient answers “yes” to questions 1, then proceed to item 4 if the **partner is not tested**. From item 4, proceed to items 8, 9 & 11.

If patient answers “yes” to questions 1, then proceed to item 5 if the **partner is tested**. From item 5, proceed to item 6 if partner is **HIV negative or status not known**. Then proceed to 8, 9 & 11.

If patient answers “yes” to questions 1, then proceed to item 5 if the **partner is tested**. From item 5, proceed to item 7 if partner is **HIV positive**. Then proceed to 9 & 11.

As the patient leaves the session, here are some pointers on how to conclude:

1. **Encourage your patient**

“I believe you are strong and will do your best to protect your health and the health of your partner. What questions do you have about protecting yourself and your partner from getting HIV and other infections?”

“I would like you to work on the things we talked about today. Which of these things can you work on before our next visit? [Encourage patient to commit to a Prevention Goal].”

2. **Give supply of condoms to patient.** (making sure they are informed on correct use)
3. **Record Prevention Goal(s) agreed upon.** Some examples include:
    - Abstain
    - Use condoms every time
    - Disclose to sex partner
    - Get sex partner or child tested
    - See family planning provider for contraception
4. **Give handouts –** as appropriate
5. **Refer patients for other prevention resources as needed, such as:**
    - Social workers or counsellors
    - Support groups or post-test clubs
    - Family planning services
    - Prevention of mother-to-child transmission services
    - Assessment and counselling on pregnancy decision-making
    - Home-based care

Follow-Up at Subsequent Visits

The provider should review what Prevention Goal was discussed at the previous visit. One of the primary objectives for delivering prevention messages at each clinic visit is to reassess whether the patient's risk status has changed. For example, at one visit the patient may not be sexually active, but at the next he may have a sex partner. Another reason to deliver the intervention at every visit is to reinforce appropriate prevention messages.

Activity 3.3.2

Phyllis: An 18-year-old woman who was recently married and is not interested in having children yet. Her husband has not been tested.

Using the summary of prevention Messages, what will you discuss with Phyllis?

_____

_____

The success of these interventions depends on talking to your patients about following through with goals at EVERY visit.

3.3.8 Summary

- Prevention recommendations should be repeated and reinforced at every clinic visit—behaviour change often occurs in small steps.
- Because the same patients return to the clinic several times, you can develop a good rapport with them, which will help in discussing sensitive issues.
- Your patients may be uncomfortable asking questions they need the answers to. You can help these patients by beginning the discussion about HIV and risk behaviours.
- Patients are more likely to discuss risk behaviours if they believe their provider is comfortable talking about sensitive issues.
- Patients are more likely to discuss risk behaviours if the provider is non-judgmental, trustworthy, empathetic, informative, and knowledgeable.
- Patients see you as a trusted source of knowledge; this will help them follow your recommendations.

- By discussing risk behaviour with your patients, you can help patients avoid STIs and possible reinfection with HIV.
- Remember, more HIV infections can potentially be prevented by getting one HIV-infected person to practice prevention than can be achieved by convincing one HIV-negative patient to practice prevention.

3.3.9 References and Further Reading

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UNIT 3.4: HIV PREVENTION AMONG KEY POPULATIONS (KP) AND PRIORITY POPULATIONS (PP)

Unit Outline

3.4.1 Introduction

Hello, we welcome you to this unit on HIV/AIDS Prevention for KPs and PPs. We will be defining these populations and seeing why they are at higher risk of HIV infection, and other STIs. We will then be looking at interventions for risk reduction within these groups.

3.4.2 Unit Objectives

By the end of this unit you will be able to:

i. Understand who are the KPs & PPs.
ii. Describe the risk factors for HIV transmission and acquisition in these populations
iii. Describe interventions for risk reduction measures for these populations

3.4.3 KPs and PPs

In this session we will learn what is meant by the term KP and PP. Let's begin the session by asking ourselves a question.

In text question 3.4.1

Write down what do you understand by the term KP and PP?

_____

_____

MSM, SW and PWID may also be referred to as **marginalised populations** because their acts are criminalised in Kenya, and there is a lot of social stigma attached to their lifestyles. This makes is very hard to reach them with HIV interventions.

Take note

At the facility level, it's important that all health care workers and providers are friendly and non-judgmental to all people who are seeking services.

3.4.4 HIV Risk Factors for KP and PP

In this session, will try to understand why KP and PP have a higher risk of acquiring and transmitting HIV.

The risky behaviours and vulnerabilities of KP and PP result in their being disproportionately affected by HIV in all settings. These disproportionate risks reflect both behaviour common among members of these populations and specific legal and social issues that increase their vulnerability. Yet HIV services for key populations and priority populations remain largely inadequate. In many settings HIV incidence in key populations and priority populations continues to increase, even as incidence stabilizes or declines in the general population

Key risk factors:

Table 3.1 Risk factors for KP and PP

KP	Risk factors
SWs	Multiple sexual partners Higher prevalence of alcohol and substance use Inconsistent and correct condoms use Criminalisation of their acts Social stigma
MSM	Multiple sexual partners Unprotected anal sex Higher prevalence of alcohol and substance use Social stigma Criminalisation of their acts
PWID	Sharing of needles, syringes and equipment Blood flushing Higher prevalence of alcohol and substance use abuse Social stigma Criminalisation of their acts
PP	**Risk factors**
Prisoners	Unprotected anal sex Higher prevalence of alcohol and substance use Restricted access to condoms
Distance truck drivers	Mobility and multiple sex partners Inadequate access and uptake of HIV services and commodities Inconsistent and correct condoms use Higher prevalence of alcohol and substance abuse
Fisher folks	Higher prevalence of substance abuse Multiple sex partners Inconsistent and correct condoms use
Adolescent	Physical and emotional maturation comes with age. Social and cultural factors can affect their health, their ability to make important personal decisions and their ability to access services Peer pressure Inconsistent and correct condoms use Higher prevalence of alcohol and substance use
Migrants	Inconsistent and correct condoms use Inadequate access and uptake of HIV services and commodities Multiple partners Higher prevalence of alcohol and substance use

3.4.5 Interventions for risk reduction measures for these populations

A comprehensive package of interventions comprising the clinical interventions and critical enablers is required for successful implementation of programmes for key populations and priority populations

a) Behavioural interventions for these groups

Behavioural interventions aim to alter behaviours that make individuals more vulnerable to becoming infected or infecting others with HIV. These interventions have generally aimed to increase use of condoms or reduce numbers of partners, injecting safely. The aim of behavioural interventions is relatively simple, but the circumstances in which they operate are often complex and multi-dimensional.

b) Understanding the Biomedical prevention interventions for these groups

Biomedical prevention interventions aim to reduce the risk of HIV transmission by either reducing the risk of an exposure happening or by reducing the risk associated with an exposure that has occurred.

Biomedical prevention interventions include HIV testing Services (HTS), the use of condoms, voluntary medical male circumcision (VMMC), needle and syringe exchange programmes (NSP) and opioid substitution therapy for PWID, treatment of STIs, treatment of mental health conditions and the use of antiretroviral drugs by HIV-negative people (post-exposure prophylaxis and pre-exposure prophylaxis) and HIV-positive people (effective treatment) to prevent transmission.

Improved efforts are needed to make these interventions accessible to those who would most benefit from them. All biomedical prevention interventions should be combined with a comprehensive sexual health plan that includes regular STI testing and treatment and ongoing adherence and risk-reduction counselling to reduce the risk HIV transmission.

c) Understanding the structural interventions for key populations

Structural factors are elements outside of individual knowledge or awareness that have the potential to influence the vulnerability of individuals and groups to HIV infection. They can include social (e.g., stigma and discrimination, gender inequality, age inequality), legal-political (e.g., laws and regulations), cultural (e.g. religious beliefs), and economic (e.g., lack of livelihood opportunity) factors.

Supportive legislation, policy and financial commitment, including decriminalization of certain behaviours of key populations and priority populations, is critical.

In Kenya, some of the interventions in the policy and legal environment include allowing for NSP and medication assisted treatment (MAT) for PWID, sensitization of police and public officers on the human rights and dignity of KP especially the SW, MSM and PWID.

Other structural interventions are

- Ensure that every citizen realizes the right to high quality health services
- Ensure uninterrupted supply for both male and female condoms
- Avail condoms in prisons
- Conjugal visits in prisons
- Make health services available, accessible and acceptable to the KP.
- Community empowerment
- addressing violence against people from these populations

3.4.6 Risk reduction measures for KP

In this session, we are going to learn the measures that can be taken to reduce the risk of HIV transmission and acquisition among the KP and PP.

Table 3.2: Interventions to reduce the risk of HIV acquisition and transmission in KP and PP (WHO recommendations)

HIV Prevention	
1.	The correct and consistent use of condoms with condom-compatible lubricants
2.	Targeted Information, Education and Communication (IEC) for KP and their partners
3.	Oral pre-exposure prophylaxis (PrEP) - discussed in unit 3.6
4.	Post-exposure prophylaxis (PEP) - discussed in unit 3.5
5.	Voluntary medical male circumcision (VMMC)
Harm Reduction for People Who Use Drugs	
6.	All persons who inject drugs should have access to sterile injecting equipment through needle and syringe programmes.
7.	All persons who are dependent on opioids should be offered and have access to opioid substitution therapy such as MAT and other drug dependence treatment.
8.	All persons with harmful alcohol or other substance use should have access to

	evidence-based interventions
HIV Testing Services (HTS)	
9.	Voluntary HTS – CITC and PITC discussed in Module 4
HIV Treatment and Care	
10.	Same access to antiretroviral therapy (ART).
11.	All pregnant women should have the same access to services for elimination of mother-to-child transmission (eMTCT).
Prevention and Management of Coinfections and Co-Morbidities	
12.	Same access to tuberculosis (TB) prevention, screening and treatment services
13.	Same access to hepatitis B and C prevention, screening and treatment services
14.	Routine screening and management of mental health disorders (depression and psychosocial stress) should be provided in order to optimize health outcomes and improve adherence to ART.
Sexual and Reproductive Health	
15.	Screening, diagnosis and treatment of STIs should be offered routinely
16.	Should be able to experience full, pleasurable sex lives and have access to a range of reproductive options.
17.	Offer cervical cancer screening to all women
18.	All women have the same support and access to services related to conception and pregnancy care

HIV Testing Services (HTS)

The following innovative HTS strategies can be used for KP:

i. *Offering moonlight HTS in hotspots:* Efforts to reach KP (especially MSM, SW and PWID) at night in areas most frequented by them offers an opportunity for the groups to access HIV testing and counselling and SRH services while maintaining confidentiality.

ii. *Door to door HTS in hotspots:* This involves offering HTS through home visits in estates and hostels that house SWs, PWID and MSM.

iii. *Accelerating PITC in static health facilities located in KP hotspots:* Establishing contact with the health facilities to ensure effective referral and linkage of KP is

achieved. This might include peer educators to accompany the clients with a referral sheet.

3.4.7 Summary

In this module we have learnt the following:

Key populations and Priority populations are persons who are disproportionately at higher risk for acquiring or transmitting HIV because of their behaviours that predispose them to acquiring HIV. In Kenya, the KP and PP include:

- Male and female sex workers,
- Men who have sex with men (MSM),
- People who use or inject drugs (PWID).

Others include long distance truck drivers (truckers), prisoners, fishing (fisher folk) and beach communities.

HIV risk factors among the KP and PP that make them drivers of the epidemic include multiple partnerships, unprotected sex, alcohol and drug abuse, social stigma etc.

Structural factors to HIV prevention among the key population are elements that are outside of individual knowledge or awareness that have the potential to influence the vulnerability of individuals and groups to HIV infection. These include

- Social stigma
- Gender inequality legal-political (e.g., laws and regulations)
- Cultural (e.g., religious beliefs)
- Economic (e.g., lack of livelihood opportunity)

Some of the structural interventions targeting KP and PP include the following:

- NSP
- Sensitization of police and public officers on the human rights

and dignity of KP especially the SW, MSM and PWID.

3.4.8 References and Further Reading

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National Guidelines for HIV/STI Services for Sex Workers, NASCOP, September 2010

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UNIT 3.5: NON-OCCUPATIONAL POST EXPOSURE PROPHYLAXIS

Unit outline

3.5.1 Introduction

This unit will only focus on non- occupational post exposure prophylaxis (PEP). Occupational PEP is covered in Module 5. PEP is the use of antiretroviral drugs after a single high-risk event to stop HIV seroconversion. PEP must be started as soon as possible to be effective—and always within 72 hours of a possible exposure.

3.5.2 Unit objectives

By the end of this unit you will be able to

i. Describe the rationale for non-occupational PEP
ii. Describe the steps in management of non-occupational exposure of HIV

3.5.3 Rationale for Non- Occupational PEP

Transmission rates in men receiving unprotected anal sex or a woman's exposure during rape or receptive vaginal intercourse with a partner likely, or known to be HIV-positive, are comparable to transmission rates associated with most needle-stick injuries.

We will now review the probability of HIV acquisition based on the different exposures.

In text question 3.5.1

Fill in what do you think is the exposure risk for HIV transmission of the following types of exposure from an infected source?

Exposure type	**Rate for HIV acquisition per 10,000 exposures**
Parenteral	
Blood transfusion	9,250
Needle sharing during injection drug use	63
Percutaneous (needlestick)	23
Sexual	
Receptive anal intercourse	138
Receptive penile-vaginal intercourse	8
Insertive anal intercourse	11
Insertive penile-vaginal intercourse	4
Receptive oral intercourse	Low
Insertive oral intercourse	Low
Other	
Biting	Negligible
Spitting	Negligible
Throwing body fluids (including semen or saliva)	Negligible
Sharing sex toys	Negligible
Source: http://www.cdc.gov/hiv/policies/law/risk.html	

In settings where HIV prevalence is high (for example in Kenya), it is practical to presume that the source is infected and provide the PEP care when the source status is not known and/or cannot be determined.

3.5.4 Management of non-Occupational Exposure to HIV

In this section we will discuss step wise how to manage non-occupational exposure to HIV. Non-occupational exposure refers to the exposure following assault or injury that is not within health care service provision settings.

Exercise 3.5.2

Mary is a 30-year-old, single, employed lady who comes to the OPD on Sunday evening at 11.30 pm. She is in tears, looks dusty and shaken and her skirt is torn. She has bleeding wounds on her forehead and her right shoulder which she is protecting with her sweater. She admits to you that while walking from work at 10.30 pm she met two men who raped her, assaulted her with a knife and took away her handbag. What kind of practical care would you offer Mary?

_____

_____

_____

_____

Good! I know that you have met such cases or worse. Now compare your plan of care with the following recommended management steps;

The following are the steps in management the exposure:

i. First aid

Firstly, it is important to address the immediate threats to the patient's life including: bleeding cuts and injuries. Assess whether there are external and/or internal injuries are and aim to stabilize the patient as a priority.

ii. Counselling

People who have experienced sexual assault have many emotional reactions which include shock, disbelief, denial, fear, anger, hopelessness, shame, anxiety, depression and guilt. It is important that as a healthcare provider you recognize this as an immediate need and provide the client with an environment that allows care and support that lessens the psychological trauma. This can be reflected through the way you talk to the client, mannerism of concern and provision of a safe clinical environment that allows the patient to debrief

iii. Assessment for eligibility for PEP

We are now going to discuss the eligibility criteria for initiating PEP.

In text question 3.5.3

In the management of Mary's sexual assault case, did you give her PEP or not? Give reasons for your answer

Yes, she has a high-risk exposure, within one hour. Her HIV status is not currently known but PEP should be started as this is established

The decision to give PEP is based on an assessment of the client before you. It is based on assessing the risk of exposure, the clients' HIV status and the duration that has elapsed following the exposure.

a. **Time:** PEP is works best when initiated as soon as possible (one hour) following the exposure and within a maximum of 72 hrs. PEP must be started within 72 hours after a recent possible exposure to HIV, but the sooner you start PEP, the better. Every minute counts.
b. **HIV status of client:** PEP is indicated if client is HIV negative. PEP is not indicated if the client is already HIV positive. However, PEP should not be withheld if the client's HIV status is not known and cannot be immediately determined.
c. **Risk of HIV acquisition:** There is either high risk or low risk of HIV acquisition following exposure based on three parameters as summarized in Table 3.3.

Table 3.3: Degree of risk of HIV infection after exposure to various body fluids

Parameter	Low Risk	High Risk
Type of exposure	Intact skin	Mucus membrane/ non-intact skin percutaneous injury
Source	HIV-negative	HIV status unknown; clinically well/unwell Known HIV positive
Material	Saliva, tears, sweat, faces, urine, sputum, vomit	Semen, vaginal secretions, blood.

Now, based on Mary's story, she has come within an hour of exposure. She should therefore be considered for PEP. However, we still need to determine her HIV status, (if HIV testing not available, can provide 1-2 days of PEP to cover until HIV test performed). You offer her the HIV test and she accepts to take it, she is HIV negative. She needs to start PEP immediately. There are important additional baseline tests and assessments that are required since this was a sexual assault case, but again these should not delay starting PEP.

iv. Baseline laboratory work up in preparation for PEP

In text question 3.5.4

As part of work up for a patient starting ARVs, what laboratory tests would you be interested in for Mary?

_____

_____

Good attempt! She is the risk of contracting other sexually transmitted infections, she might also conceive since she is in the reproductive age.

Take note

DO NOT delay the initiation of PEP at a facility that cannot offer immediate HIV test and /or laboratory tests. Starting PEP as soon as possible after a potential HIV exposure is important.

Immediate referral to a facility where the testing services are available is indicated **AFTER** initiating the PEP.

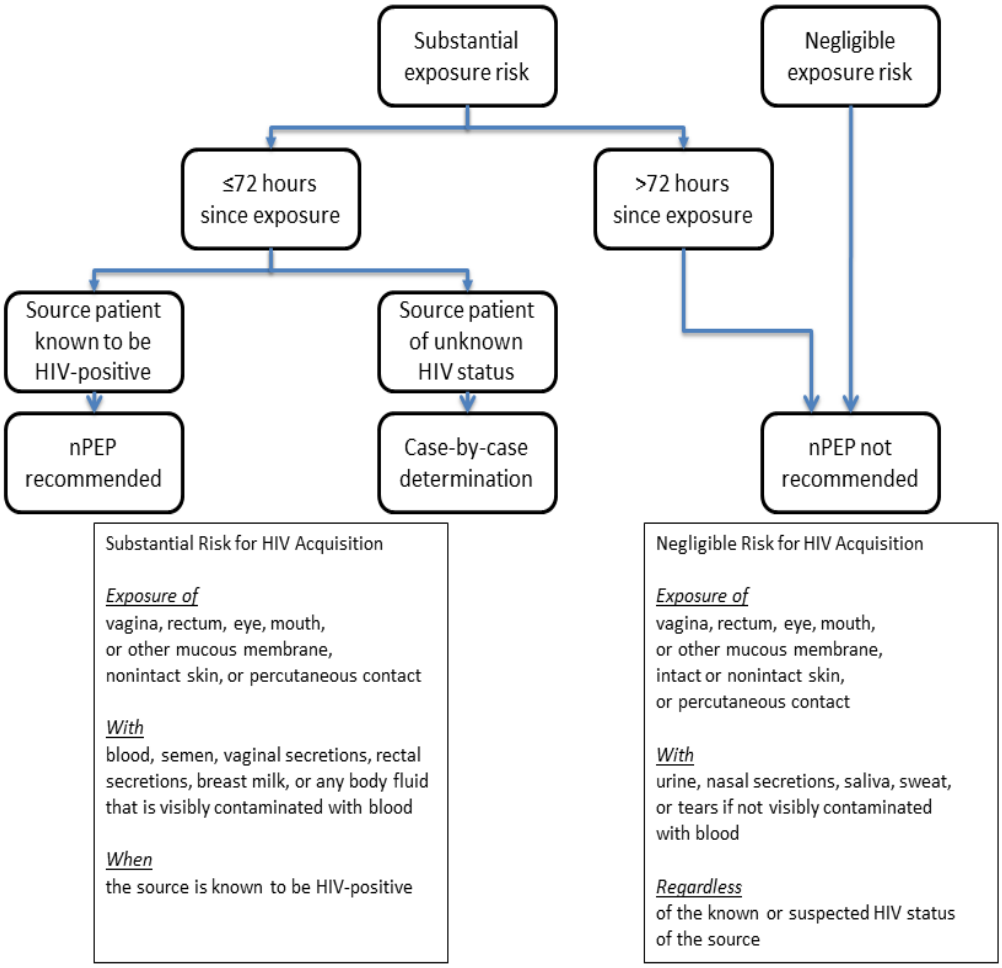

Figure 3.4 Algorithm for evaluation and treatment of possible non-occupational HIV exposures

v. Post Exposure Prophylaxis treatment

Counsel on risks and benefits of PEP; PEP should consist of a 3-drug ART regimen taken for 28 days. The preferred regimen is Tenofovir + Lamivudine + Atazanavir. Be cautious and aware of potential drug interactions.

ARV regimen PEP	Adult: TDF + 3TC + ATV/r	AZT can be used as an alternative when TDF or ABC Cannot be used
	Children: ABC + 3TC + LPV/r	

PEP side effects

It is important that the drugs are taken each day for the entire period. Sometimes individuals taking these drugs may experience side effects. The most commonly reported side effects are

nausea and fatigue. However other side effects are headache, vomiting, diarrhoea, skin rashes, muscle pains. Most of these are mild and reversible, however if they are prolonged or severe the client should be advised to see the clinician. The side effects of these drugs are discussed in detail in the modules covering ART in adults and paediatrics of this training manual.

vi. STI prophylactic treatment

According the Revised STI Syndromic Management charts (URL-http://nascop.or.ke/library/STI/Revised%20ST1Chart%20.pdf).

Adult non-pregnant: P.O Doxycycline 100mg BD x7 days + Norfloxacin 800mg stat
Adult Pregnant: IM injection Spectinomycin 2gm stat + PO Erythromycin 500mg QID x7 days

Children: P.O Amoxicillin 15 mg/Kg/dose TID x7 days + P.O Erythromycin 10 mg /Kg/dose QID x 7 days.

vii. Documentation and referral

Documentation: In addition to standard documentation of service offered in MOH reporting tools, we need to document critical evidence and examination as well as laboratory findings as noted during service provision. This evidence is used in legal settings to prosecute the perpetrators of sexual assault. It is advisable that you preserve as much evidence of the sexual assault including clothing. You will need to refer to the post rape care manual which may be found within health facility for further details.

Referral*:* As already mentioned while discussing laboratory work up, sometimes it might not be possible to provide all health services within the first health facility that the clients walk into. It is important that the health care worker refer the patient as soon as possible to access part or all of the PEP services including laboratory and clinical follow-up. Since sexual assault has both medical and legal implications, the victims should be referred to the nearest legal system including police station or government provincial administrative system for documentation as well as for legal redress.

viii. Patient follow-up after starting PEP treatment

This involves both clinical and laboratory follow up for the patient. The goal is to ensure that the patient HIV status is determined and patient safety following exposure to HIV and the treatment.

1. **Labs follow- up**

   Follow-up HIV testing at 4 weeks, if negative, test again at 12 weeks after which annual testing applies.

   Pregnancy test (four weeks)

2. **Clinical follow up**

   Follow-up and clinical monitoring to determine adherence and to identify and manage side effects should be provided. The minimum recommended follow-up visits are at:

   7 days, 14 days, and 28 days after starting PEP

3. **Counselling follow up**

Appropriate psychosocial support and further treatment assistance should be offered to all people who have received PEP, as and when required.

3.5.5 Summary of PEP

Table 3.4: Summary of PEP

Considerations	Recommendations	

Eligibility must meet all of the following criteria	• Exposed individual is HIV positive at baseline
	• Exposure must have occurred within the past 72 hours.
	• Exposure must be high risk (high-risk type AND source AND material):
	  • Type: mucous membrane; non-intact skin or; percutaneous injury.
	  • Source: HIV positive or of unknown HIV status.
	  • Material: blood or bloody body fluids, breast milk; semen, vaginal secretions, synovial, pleural. pericardial, amniotic fluids, CSF or; HIV cultures in labs.	

Management at Initial contact	• Counsel on risks and benefits of PEP and obtain verbal consent for HIV testing. • Voluntary testing for both exposed and source individuals. • Offer PEP as soon as high-risk exposure is established and exposed individual tests HIV negative. Baseline (if HIV testing not available can provide 1-2 days of PEP to cover Until HIV test is performed). • Pregnancy Testing • Cr (if TDF containing regimen) and Hb (if AZT containing regimen), however PEP should be offered even when lab tests are not available. Do not delay administration of PEP while waiting for lab results. • Hepatitis B vaccination (if not previously immunized and not known HBV positive).	
ARV regimen for PEP	Adult: TDF + 3TC + ATV/r Children: ABC + 3TC + LPV/r	AZT can be used as alternative when TDF or ABC cannot be used.
Time of Initiation	As soon possible after exposure but not later than after 72 hours.	
Duration of PEP	28 days (dispense all 28 days of treatment at the first visit)	
Dose of PEP	Same as indicated for ART; Use weight-based dosing for children	
Follow-up	• Follow-up clients at 7 days, 14 days and 28 days after starting PEP. • Follow – up HIV testing at 4 weeks, if negative, test again at 12 weeks after which annual testing applies. • Asses for and manage side effects due to PEP.	
Counselling	Adherence counselling, risk reduction, trauma and mental health counselling, social support and safety; safe sex practices.	
Other Services for Sexual Assault.	• STI prophylactic treatment to all (treat for vaginal urethral discharge syndrome following the natural STI algorithms) • Emergency contraception for non-pregnant women. • Tetanus toxoid for any physical injury of skin or mucous membranes. • Documentation of clinic evidence of assault and collection of forensic evidence. • Refer to post-rape care guidelines for additional details.	

3.5.6 Summary

In this unit, we have learnt about giving PEP in cases of non-occupational exposure to HIV. You should be clear about when to give ART and when the use of ARVs is not indicated. Remember to offer additional services required by these clients which include counselling, screening and management of STIs, prevention of pregnancies, and collection of evidence for medico-legal reasons. Provision of PEP is not a one-time encounter and the follow-up structure described in this unit must be followed for optimum outcomes.

The decision to give PEP is based on assessment of the client and focuses on the; the risk of exposure, the clients' HIV status and the duration that has elapsed following the exposure.

PEP consists of a 3-drug ART regimen taken for duration of 28 days

3.5.7 References and Further Reading

Guidelines on Use of Antiretroviral Drugs for Treating and Preventing HIV Infection in Kenya – (NASCOP, 2016)

HIV clinical Resource (URL: http://www.hivguidelines.org/clinical-guidelines/post-exposure-prophylaxis/hiv-prophylaxis-for-victims-of-sexual-assault/)

Revised STI Syndromic Management charts (URL: http://nascop.or.ke/library/STI/Revised%20ST1Chart%20.pdf).

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UNIT 3.6: PRE-EXPOSURE PROPHYLAXIS (PrEP)

Unit Outline

3.6.1 Introduction

Welcome to this unit on Pre-Exposure Prophylaxis (PrEP). Following the WHO recommendation in September 2015, that oral pre-exposure prophylaxis (PrEP) should be offered as an additional prevention choice for people at substantial ongoing risk for HIV infection as part of combination HIV prevention approaches, Kenya became one of the first African country to adopt this strategy.

Studies have shown that daily oral PrEP is an acceptable, safe and effective strategy in reducing the risk of HIV infection for people at substantial ongoing risk of HIV infection

PrEP should not replace or compete with effective and well established HIV prevention interventions, but rather be used as part of combination prevention i.e. utilized together with risk reduction counselling, HIV testing, condoms and lubricants, STI screening and treatment, contraception, needle exchange and opioid replacement therapy etc.

In this unit the health care worker will learn about how to provide PrEP safely and effectively, how to follow-up PrEP users, and key PrEP counselling messages.

3.6.2 Unit objectives

By the end of this unit you will be able to:

i. Give an overview of how to provide PrEP safely and effectively
ii. Do a Behavioural Risk Assessment and Screening for substantial ongoing risk of HIV
iii. Perform appropriate testing associated with PrEP
iv. Know how to follow-up PrEP users and offer counselling on any arising issues

3.6.3 Overview of PrEP

Let's begin the session by asking ourselves a question:

In text question 3.6.1

Write down what do you understand by the term PrEP?

PrEP, is a way by which HIV negative persons who are at substantial ongoing risk of getting HIV, take ARV drugs prior to risk exposure to prevent acquisition of HIV

Good! The recommended ART contains is two drugs, (Tenofovir and Emtricitabine or Lamivudine), taken daily, as long as one remains at substantial risk of HIV infection.

Take note

Although the medicines used for PrEP are ARVs, they are not effective for treatment as they utilize 2 drugs from the same class, instead of 3 drugs from 2 different classes.

- PrEP has to be taken daily.
- PrEP does not eliminate the risk of HIV infection; also, it does not prevent STIs or unintended pregnancies. It should, therefore, be offered as part of a combination prevention package that includes risk reduction counselling, HIV testing, condoms and lubricants, STI screening and treatment, contraception, needle exchange and opioid replacement therapy.

3.6.4 Indications for PrEP

We will start the session by going through a case study:

Activity 3.6.1

Monica, a 23-year-old female, is living near a major truck stop, she is single and has no past medical history of note. She has about 5 partners per month mostly truck drivers, she uses condoms about half the time, no prior STI diagnosis.

Does Monica have substantial on-going risk of HIV infection? What are her indications for PrEP? List them:

_____

_____

Great!

PrEP is offered to sexually active HIV-negative individuals who are at substantial risk of acquiring HIV infection as defined by any of the following:

- Sexual partner is known HIV positive and: not on ART, or on ART < 6 months, or suspected poor adherence to ART, or most recent VL is detectable
- Sexual partner/s are of unknown HIV status and are at high-risk for HIV infection (has multiple sexual partners, has had STIs, engages in transactional sex, injects drugs, from high HIV burden settings)
- Engaging in transactional sex
- History of recent sexually transmitted infection
- Recurrent use of post-exposure prophylaxis
- History of sex whilst under the influence of alcohol or recreational drugs as a habit
- Inconsistent or no condom use or unable to negotiate condom use during intercourse with persons of unknown HIV status
- Injection drug use where needles and syringes are shared
- Sero-discordant couples trying to conceive

3.6.5 Criteria for PrEP

To qualify for PrEP, patients must meet ALL of the following criteria:

- Confirmed HIV negative (rapid antibody testing following the HTS algorithm on the day of PrEP initiation is adequate confirmation of HIV-negative status)
- Does not have a current or recent (within past one month) illness consistent with acute HIV infection (fever, sore throat, muscle or joint pains, swollen glands, diarrhoea or headache) in combination with a preceding high-risk exposure for HIV
- Assessed as ready to adhere to PrEP and willing to attend follow-up evaluations including repeat HIV testing and monitoring for side effects
- No contraindication to use of TDF +/- FTC/3TC

Once a decision is made that a client requires PrEP, further assessment (listed in Table 3.5 below) should be carried out to establish safety and suitability of PrEP for the individual client.

Table 3.5 PrEP, further assessment

Complete medical history and examination	Identify medical conditions that could affect the management of PrEP • Past or current kidney disease • Risk of kidney disease (diabetes mellitus, uncontrolled hypertension, chronic NSAID use • Use of other nephrotoxic agents • Past of current liver disease • Current or past chronic hepatitis (B or C) • Acute HIV infection. If acute HIV infection is suspected, defer PrEP until HIV infection is excluded.
Establish eligibility to use PrEP	• Establish willingness to adhere to PrEP and medical follow-up including HIV retesting • Screen for substantial risk of HIV infection • Document HIV status - HIV testing using the national algorithm for HTS • To complete a symptom checklist to exclude acute HIV infection
Baseline laboratory investigations	Urinalysis • Proteinuria is an early indicator of TDF toxicity. An initial urinalysis helps identify pre-existing proteinuria and risk of renal disease and therefore additional testing (creatinine) and closer monitoring after initiation of PrEP
	Serum creatinine and creatinine clearance • To identify pre-existing renal dysfunction. PrEP is contraindicated if the baseline CrCl < 50 ml/min
	Hepatitis B surface antigen • To identify undiagnosed current hepatitis B infection. If negative, consider vaccination against hepatitis B.
	Hepatitis C antibody (especially in people who inject drugs, PWID).

	• If positive, consider treatment for hepatitis C infection.
	Rapid Plasma Reagin • To diagnose and treat syphilis infection.
	Pregnancy testing • To guide antenatal care, contraceptive and safer conception counselling, and to assess risk of mother to child transmission. Pregnancy is not a contraindication to PrEP use
Screening for other STIs	Assess for presence of dysuria, discharge, anorectal itching or pain, rash, or ulcers. Diagnose and treat STI (syndromic or diagnostic STI testing, depending on local guidelines).
Review vaccination history	Depending on guidelines, consider vaccination for hepatitis A, human papilloma virus, tetanus and meningitis.
Brief counselling	• Assess whether the client is at substantial risk of HIV. • Discuss prevention needs and provide condoms and lubricants. • Discuss desire for PrEP and willingness to take PrEP. • Develop a plan for effective PrEP use, sexual and reproductive health. • Assess fertility intentions and offer contraception or safer conception counselling. • Assess intimate partner violence and gender-based violence. • Assess substance use and mental health issues. • If proceeding to offer PrEP, offer detailed initial adherence counselling

3.6.6 Risk Behaviour Assessment

Providers should make every effort to establish rapport with potential PrEP clients, provide adequate privacy and offer assurances of confidentiality. A non-judgemental attitude will contribute towards open conversation where clients will be free to share accurate information on risk and concerns about PrEP. PrEP should only be offered after thorough assessment to establish eligibility, readiness for effective use, commitment to adhere to required follow-up and absence of contraindications to TDF and/or FTC.

General Screening Questions

In the past 6 months:

- "Have you had sex with more than one person?"
- "Have you had sex without a condom?"
- "Have you had sex with anyone whose HIV status you do not know?"

- “Are any of your partners at risk of HIV?”
- “Do you have sex with a person who has HIV?”
- “Have you received a new diagnosis of a sexually transmitted infection?”
- “Do you desire pregnancy?”
- “Have you used or wanted to use PEP or PrEP for sexual exposure to HIV?”
- Have you injected drugs that were not prescribed by healthcare provider? If yes, did you use syringes, needles or other drug preparation equipment that had already been used by another person?
- “Received money, housing, food or gifts in exchange for sex?”
- “Been forced to have sex against your will?”
- “Been physically assaulted, including assault by a sexual partner?”

Screening Questions for People in Discordant Relationships

For the HIV negative individual in a discordant relationship, the following screening questions help to establish the need for PrEP:

- “Is your partner taking ART for HIV?”
- “Has your partner been on ART for more than 6 months?”
- “At least once a month, do you discuss whether your partner is taking therapy daily?”
- “If you know, when was your partner’s last HIV viral load test? What was the result?”
- “Do you desire pregnancy with your partner?”
- “Do you use condoms every time you have sex?”

Exercise 3.6.1

Start a counselling session for Tish. What approach would you use to help the client provide additional information necessary for you to prescribe PrEP?

Very well done!

3.6.7 Contraindications to PrEP

The contraindications for PrEP are:

- HIV infection
- Signs/symptoms of acute HIV infection
- Estimated creatinine clearance of less than 50ml/min

- Adolescents <35kg or age <15 years
- Unable or unwilling to adhere to prescribed PrEP or follow up schedule

In text question 3.6.2

How do you assess for acute HIV infection?

Inquire about the presence of fever, fatigue, myalgia, rash, headache, sore throat, cervical adenopathy, arthralgia, night sweats, or diarrhoea; with high risk exposure to HIV infection within the past month.

Good! I know you mentioned several of the symptoms associated with acute viral infection, but there are some symptoms that occur more commonly than others.

Feature	**Frequency (%)**
Fever	75
Fatigue	68
Muscle pain	49
Skin rash	48
Headache	45
Sore throat	40
Cervical adenopathy	39
Arthralgia	30
Night sweats	28
Diarrhoea	27

HIV testing will follow the national HIV testing algorithm. If there are signs or symptoms of an acute viral syndrome, including a flu like illness, the possibility that acute HIV infection could be the cause should be considered. In such circumstances, consider deferring PrEP for four weeks and have the person re-tested for HIV. This allows time for possible seroconversion to be detected.

In HIV seronegative clients who have had a high-risk exposure to HIV within last 72 hours, provide PEP for 28 days. Obtain a rapid HIV test at 28 days, if the test result is negative, transition to PrEP immediately (if the client has substantial on-going risk of HIV infection)
It is recommended that serum creatinine is measured before the start of PrEP and measured annually thereafter as long the user continues to be on PrEP. More frequent creatinine monitoring may be warranted if there are co-morbid conditions that can affect renal function, such as diabetes mellitus and uncontrolled hypertension.

3.6.8 PrEP Regimens

Table 3.6 provides the recommended regimen for PrEP. The first prescription should be for 30 days to allow for scheduling for the first follow-up visit to assess adherence, tolerability and adverse effects. Subsequently, a 3-month prescription can be given.

Table 3.6 Recommended Regimen for Pre-Exposure Prophylaxis

Preferred	TDF 300 mg/FTC 200 mg once daily as FDC
Alternative 1	TDF 300 mg once daily
Alternative 2	TDF 300/FTC 300 mg once daily as FDC

3.6.9 Follow-up and monitoring of PrEP users

PrEP should be used daily during periods of substantial on-going risk of HIV acquisition.

In text question 3.6.3

Monica has been identified as a suitable candidate for PrEP. What baseline investigations would you offer?

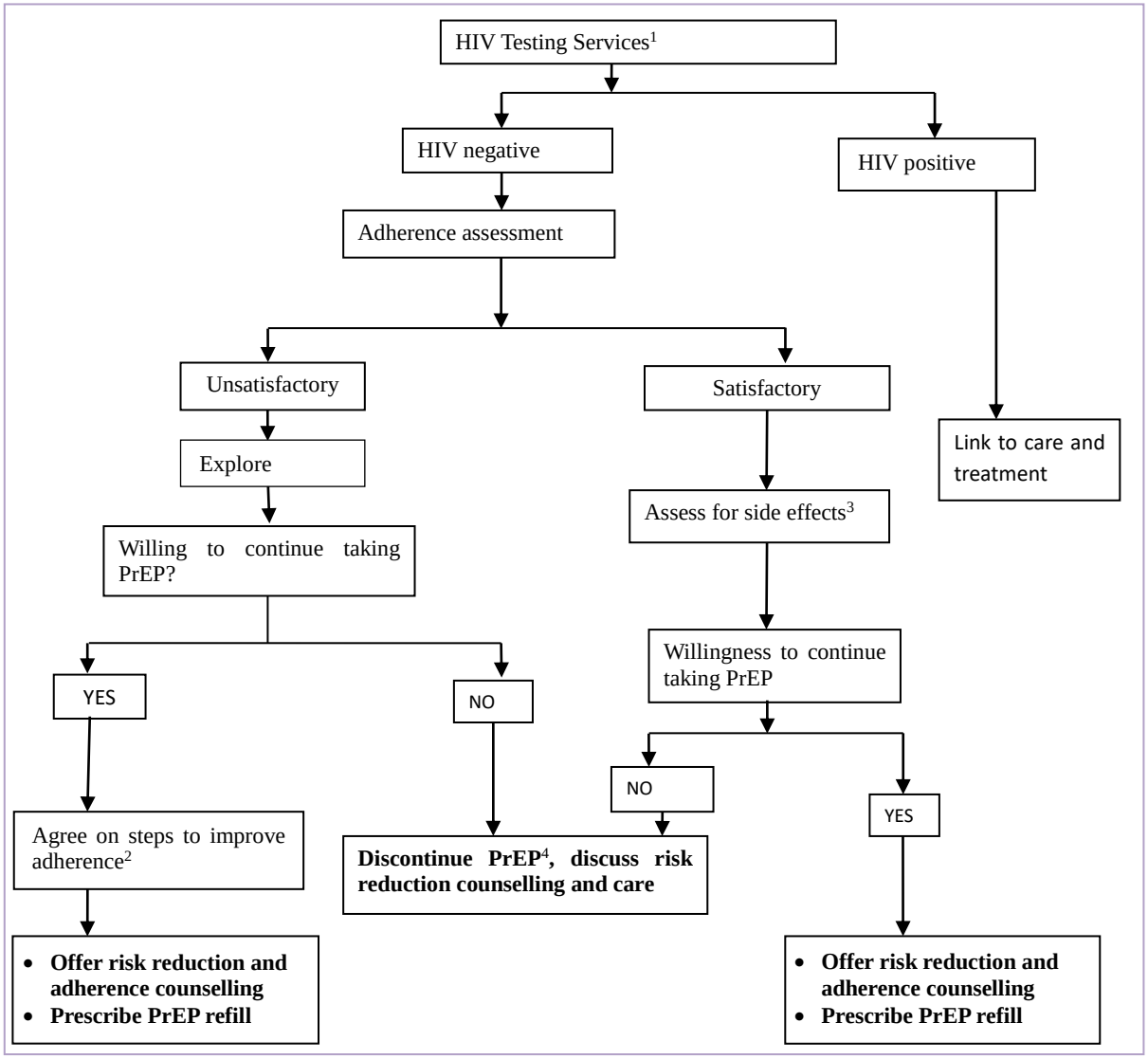
How would you further schedule her follow-up visits?

PrEP should only be prescribed to clients who demonstrate good understanding of/and commitment to regular follow-up visits, initially after one month and at least every 3 months thereafter. The objectives of the follow-up visits are to:

- Assess adherence and provide ongoing adherence counselling and support
- Monitor for and manage side effects
- Exclude HIV infection

- Provide other prevention services including risk reduction counselling, condoms, STI screening and treatment, substance abuse treatment etc
- Review indication for PrEP

Figure 3.5 Follow-up after initiating PrEP



1. HIV Testing and Managing Suspected HIV Infection during PrEP

a. Routine HIV Testing during PrEP

Frequent testing is required for timely identification of PrEP users who become HIV positive. HIV sero-status should be established and documented at the initiation of PrEP, at 1 month and every 3 months after initiation of PrEP. A HIV test should also be done whenever there are symptoms of acute HIV infection.

b. Managing suspected acute seroconversion illness

Continue PrEP, test for HIV at first contact and after 28 days, and if negative, continue with usual follow-up.

c. Managing Confirmed HIV Infection during PrEP

- Counsel the patient and urgently link to care and treatment for initiation of full antiretroviral therapy. Use the standard recommended 1st line regimen as per national treatment guidelines but contact the regional or national TWG. It may be necessary to obtain a baseline VL and DRT to help decide on the optimal first-line ART for the patient.
- Explore with the patient the consistency of PrEP use (assess interruptions and barriers to adherence during PrEP).

2. Improving adherence to PrEP

Approaches to improve adherence include:

a. Encouraging the client to make it a daily habit at any most consistent most convenient time of day
b. Disclosure of PrEP use to a partner or trusted person
c. Use of reminder devices like a cell phone alarm
d. SMS reminders where available and feasible
e. Explore and mitigate other barriers to adherence
f. Encourage peer support

3. Assessing for medication side effects

a. *Minor side effects* - minor side effects like diarrhoea, nausea, decreased appetite, abdominal cramping or flatulence; dizziness or headaches, usually resolve without stopping PrEP. If necessary, symptomatic treatment can be prescribed for a brief period.
b. *Elevated creatinine* - serum creatinine should be estimated at baseline and annually (earlier if the patient is at risk of renal disease). If the creatinine clearance (CrCl) is < 50 ml/min, discontinue PrEP immediately and counsel on other HIV preventive measures; refer for further assessment. Exclude treatable/preventable causes of elevated creatinine such as dehydration, herbal remedies and supplements, NSAID use/abuse, other medications, uncontrolled blood pressure etc.

4. Discontinuing PrEP

Indications for discontinuing PrEP include;

- The client becoming HIV positive, counsel and link to care and treatment
- Change in risk status (low risk)
- Renal dysfunction with sustained creatinine clearance below 50mL/min
- Client request to stop
- Sustained non-adherence
- Sustained viral suppression of the HIV positive partner in a discordant relationship. However, advise the couple to continue using condoms consistently.

PrEP use can be discontinued at least 28 days **AFTER** the last high-risk exposure to HIV.

5. Restarting PrEP

- A client who stops PrEP for more than 7 days and wishes to restart should be assessed for resumption of PrEP as a new client. Importantly, obtain a HIV test. If a high-risk exposure occurred in the previous 7 days (i.e. acute HIV infection is suspected), defer PrEP and obtain repeat HIV test after 30 days, and if negative PrEP can be prescribed if the other criteria are fulfilled.

6. PrEP in Special Circumstances

a. Chronic HBV infection

TDF and FTC are also effective in the treatment of HBV infection. Due to the risk of hepatitis flare-up after discontinuation of PrEP, exercise caution if discontinuing TDF/FTC. Monitor clinical symptoms (nausea, anorexia, jaundice, abdominal pain and dark urine); obtain ALT where available and refer to a physician for a specialised care.

b. Pregnancy/Breastfeeding

- Pregnancy and breastfeeding are not contraindications to PrEP.
- For women at substantial ongoing risk of HIV infection who become pregnant or desire to conceive, PrEP decreases the risk of acute HIV infection during pregnancy.
- There's no evidence that TDF/FTC or 3TC increase the risk of birth defects if used during any gestation of pregnancy.
- Assess for pregnancy intention in all women of reproductive age who are considering PrEP and provide counselling on safer conception options including the use of PrEP. Offer effective contraception unless pregnancy is desired.
- Risk reduction counselling should be intensified for an uninfected individual who becomes pregnant while taking PrEP.

- Once the decision to continue PrEP is made, the client should start antenatal care immediately and followed up monthly until cessation of breastfeeding; with care coordinated between the antenatal and PrEP providers.

Good job! Now we are ready to initiate, follow-up and monitor PrEP clients.

Exercise 3.6.2

Meet Rini, Monica's friend who is 23-year-old who is recently married to a HIV positive husband, Stephen. Stephen, 42-year-old teacher is on ART for the last 3 years and his latest viral count was found to be 5,953 copies/ml, his adherence is unsatisfactory. The couple has been using condoms, but Stephen is not happy to continue using them. Rini has requested for PrEP as she heard it from her friend Monica.

1. Does Rini need PrEP? Why?

   _____

   _____

2. Which other prevention strategies can she use?

   _____

   _____

3. Which advice would you give her on PrEP use in discordance

   _____

   _____

Very well done!

Now let us review the case of Millicent below.

Millicent is a 22-year-old hairdresser who visits your facility because her LMP was about 6 weeks ago and she suspects that she is pregnant. She has several sexual partners who give her money to support with her shopping and rent. Her sexual partners prefer not to use condoms. She was treated for a sexually transmitted infection 3 months ago. She tests negative for HIV and positive for pregnancy. She asks for advice on HIV prevention

1. Is Millicent at risk of HIV? Why?

   Multiple partners, transactional sex, recent STI, no consistent use of condoms

2. Does Millicent qualify for PrEP?

   Yes, she is pregnant and has substantial on-going risk of acquiring HIV

Millicent comes to your clinic 15 months after initiating oral PrEP. She has a 5-month-old baby and has settled on only one sexual partner who has agreed to use condoms. They have tested for HIV together and they are both HIV negative. She is considering stopping PrEP.

3. What is your advice for Millicent?

   PrEP can be discontinued IF more than 28 days have elapsed since her last high-risk exposure

Good work!

3.6.10 Summary

To obtain the full benefits of its use, PrEP must be provided under the supervision of a trained healthcare provider, and as part of a combination of HIV prevention interventions tailored to each individual's vulnerability, risk profile and local HIV infection transmission determinants and burden. The provider will assess the client for suitability to use PrEP, exclude contra--indications to PrEP medications and offer ongoing monitoring, risk reduction and adherence support. PrEP is used only during periods increased ongoing risk of HIV infection. During follow--up, providers assess and determine whether PrEP is still necessary. The duration of PrEP use is determined by the level of risk by an individual PrEP user and the adoption and adherence to other HIV prevention interventions.

3.6.11 References and Further Reading

Guidelines on Use of Antiretroviral Drugs for Treating and Preventing HIV Infection in Kenya – (NASCOP, 2016)

APPENDICES

Appendix I: Answer to Select Review Activities, Intext Questions and Exercises

UNIT 3.1: OVERVIEW OF PREVENTION OF HIV INFECTION

Exercise 3 1.1

What is important for Naliaka to understand and address to prevent both HIV infection and pregnancy based on her history?

- Naliaka needs to identify the risks she is exposed to for both STIs and HIV and how she can overcome them and explore other factors such as social and economic that may place her at increased risk to acquiring HIV.b

UNIT 3.2: BEHAVIOURAL INTERVENTIONS FOR HIV PREVENTION

Exercise 3.2.1

Based on your knowledge, list as many known high-risk behaviours associated with HIV transmission and acquisition you can think of:

- Unprotected sex with a HIV infected person or of unknown status
- Multiple partners - people with multiple partners tend to choose partners with multiple partners, increasing the risk further. Individuals should participate in couples counselling whenever entering a new relationship
- Early Sexual debut - young women are more biologically susceptible to HIV, their bodies are smaller, and they are more likely to experience tearing during intercourse Their reproductive organs are not fully developed, and are more susceptible to infections such as Chlamydia, gonorrhoea, and other infections which predispose them to HIV infection
- Alcohol drinking - Alcohol lowers inhibitions and can cause people to make poor judgments
- Illicit drug use - under the influence of illicit drugs people are more likely to engage in risky sexual behaviours: e.g., sex without a condom. Furthermore, injection drug use, is associated with increased risk of blood-borne diseases - such as HIV and Hepatitis B

- Anal and vaginal sex - the thin mucous lining of the anus and rectum can be easily torn

In text question 3.2.3

How does control of alcohol and drug abuse consumption reduce the risk of HIV infection?

- Individuals with heavy alcohol consumption are more likely to engage in risky sexual behaviours. It is important to assess the alcohol use for all your clients and advise on health risks associated with alcohol consumption.

In text question 3.2.4

In your opinion what are some of the social cultural barriers could interfere with behaviour change adoption?

Some possible factors include:

- Stigma
- HIV status
- Gender inequality
- Substance use
- Power dynamics
- Multiple partners and concurrent partnerships
- Socio-cultural norms
- Legal factors
- Cultural issues e.g., wife inheritance

In text question 3.2.5

What is the differences between the two scenarios?

These are some differences in the extent of communication that transpired between the patient and the doctor in take 1 and take 2. There was communication, plan of action also developed in the take 2 while none in take 1.

UNIT 3.3 POSITIVE HEALTH DIGNITY PREVENTION (PHDP)

In text question 3.3.2

Why is prevention important in PLHIV?

- An HIV-negative person may not have a sexual encounter with a person living with HIV, but a person living with HIV person is very likely to have a sexual encounter with an HIV-negative person.

Activity 3.3.1

From figure 3.1, who has the potential to create greater impact on HIV epidemic? and why? HIV +'ve OR HIV –'ve person**.**

- When you focus prevention recommendations on a person who is uninfected; you potentially prevent infection only for that person. When you focus on an HIV-infected person, you help prevent potential HIV transmission to all the current and future partners of that infected person.

In text question3.3.3

How would Thomas benefit from telling his wife about his HIV infection?

It would:

- Make it easier for the Thomas to request abstinence or protected sex.
- Give the Thomas's wife the motivation to exclusively have protected sex or to remain abstinent.
- Allow Thomas's wife to understand that she needs to be tested, and possibly the children depending on her status
- Enhances opportunities for Thomas to receive support from his wife in obtaining proper medical care and treatment, and take his medication as prescribed
- Allow him and his wife to plan for the future, including whether or not to have children

Activity 3.3.2

Phyllis: An 18-year-old woman who was recently married and is not interested in having children yet. Her husband has not been tested.

Using the summary of prevention Messages, what will you discuss with Phyllis?

Item 4: Phyllis's partner needs HIV testing. Disclose to husband.

Item 8: Always use a condom

- Not having sex is the most effective option, but probably impractical in this situation

- If she has sex, be faithful and use condoms every time.
- The consequences of unprotected sex.
- Item 9: Family planning
- Item 11: Final Steps
- What questions does Phyllis have?
- Give patient condoms and handouts.
- What can Phyllis do before her next visit?
- Record Phyllis's Prevention Goal in her chart.

UNIT 3.4: HIV PREVENTION AMONG KEY POPULATIONS (KP) AND PRIORITY POPULATIONS (PP)

In text question 3.4.1

Write down what do you understand by the term KP and PP?

- Key populations are groups of people who are disproportionately at higher risk for acquiring or transmitting HIV. This is because they engage in risky behaviours that predispose them to acquiring HIV. In Kenya, the KP includes male and female sex workers (SW), men who have sex with men (MSM), people who inject drugs (PWID).
- Priority populations are groups of people who are particularly vulnerable to HIV infection in certain situations or contexts, include long distance truck drivers (truckers), prisoners, fisher folk, adolescent and migrants

UNIT 3.5: NON-OCCUPATIONAL POST EXPOSURE PROPHYLAXIS

Exercise 3.5.2

What kind of practical care would you offer Mary?

- First aid
- Counselling
- Prepare for PEP
- Laboratory investigations
- PEP
- STI prophylactic treatment
- Emergency Contraception if pregnancy test negative

- Tetanus toxoid
- Documentation of clinic evidence of assault and collection of forensic evidence

In text question 3.5.4

As part of work up for a patient starting ARVs, what laboratory tests would you be interested in for Mary?

- Pregnancy test
- HVS for assessment for sexually transmitted infection and assault
- Cr (if she will be taking TDF-containing regimen) and Hb (if AZT-containing regimen)
- HBsAg – if negative start Hep B vaccination programme

UNIT 3.6: PRE-EXPOSURE PROPHYLAXIS (PrEP)

Activity 3.6.3

Does Monica have substantial on-going risk of HIV infection? What are her indications for PrEP? List them:

- Multiple partners
- High risk partners
- Only uses condom half the time

Exercise 3.6.2

1. **Does Rini need PrEP? Why?**

   Rini and Stephen are a discordant couple, the husband doesn't like condoms and is not virally suppressed, therefore Rini is on an ongoing exposure to HIV and will benefit greatly from PrEP.

2. **Which other prevention strategies can she use?**

   Condoms if Stephen will agree

3. **Which advice would you give her on PrEP use in discordance**

   Continue with PrEP until Stephen is virally suppressed and at any time they wish as a couple to conceive and will be having unprotected sex – regardless of Stephen's VL, even if he is now virally suppressed

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