NATIONAL PRIMARY HEALTH CARE DEVELOPMENT AGENCY

MODULE 3: OVERVIEW OF DIAGNOSIS, BASIC MANAGEMENT AND PREVENTION OF HIV/AIDS IN PRIMARY HEALTH CARE

Overview of Diagnosis, Basic Management and Prevention of HIV/AIDS in Primary Health Care

3.1	Global/Nigeria Burden of HIV/AIDS
3.2	HIV Testing Services
3.3	Laboratory Diagnosis of HIV Infection
3.4	Antiretroviral Therapy in PHC
3.5	Management and Reporting of (ADRs) of Anti Retroviral (ARVs)
3.6	Management of (STIs) and Prevention of HIV Infection
3.7	Prevention of HIV Infection
3.8	Overview of Prevention of Mother-To-child Transmission of HIV
3.9	PMTCT Intervention In Antenatal Care
3.10	HIV- Exposed Newborn Care after 12 Hours Birth
3.11	Counselling and Support on Safer Infant Feeding Options
3.12	Recording Post- Partum Information

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Learning objectives

01
Explain the Global burden of HIV/AIDS

02
Explain the two types of HIV

03
Discuss the modes of HIV transmission

04
Identify individuals at risk of HIV infection

05
Discuss the HIV/AIDS situation in Nigeria



Session 3.1 Global/Nigeria burden of HIV/AIDS

39 million PLHIV at the end of 2022

The burden of the epidemic continues to vary considerably between countries and regions

Most affected region is **Sub-Saharan Africa**

Over **70%** of PLHIV

As at 2018, Nigeria has an estimated HIV burden of **1.9 million** people, the fourth largest in the world

Epidemiology of HIV in Nigeria

1. In terms of people, the **4th** Largest in the world
2. Currently over **1.6 million** PLHIV are on treatment in Nigeria. Nigeria reported the first case of AIDS in 1986
3. Most affected region is **Sub-Saharan Africa**
4. National HIV prevalence increased from **1.8%** in 1991 peaking at **5.8%** in 2001 and declined through **4.4%** in 2005 to **3%** in 2014.
5. Based on NAIIS report (2018), the current prevalence in individuals aged 15-64 is **1.4%.**
6. As at 2019, Nigeria had an estimated HIV burden of **1.9 million** people, the fourth largest in the world

Transmission Of HIV Infection

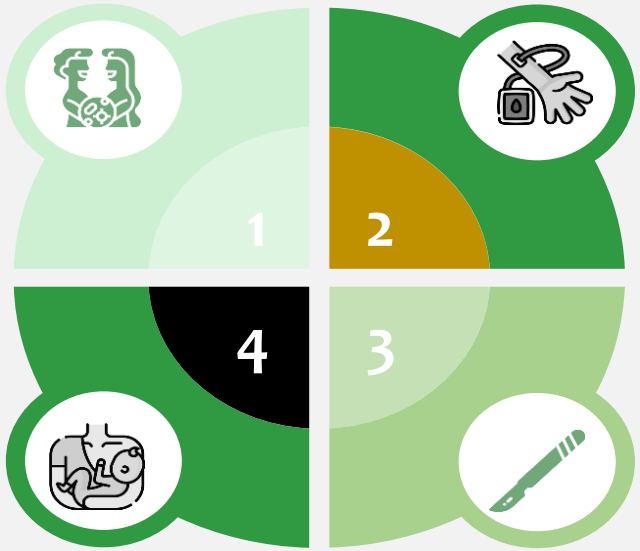
Modes of transmission of HIV

01

Unprotected sexual intercourse with an infected partner

02

Transfusion with infected blood and blood products



04

Mother to Child transmission (Vertical) during pregnancy, labour, delivery and breastfeeding

03

Contact with sharps [scarifications, tattoos, surgical procedures]

- Heterosexual transmission accounts for the majority of HIV transmissions in Nigeria
- Over 90% of HIV transmission is via unprotected sexual intercourse
- Homosexuality contributes disproportionately to the overall National epidemic as MSM accounts for 20% of new HIV infections
- MTCT is a prominent mode of transmission of HIV from the HIV positive mother to her child

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SESSION 3.2.1: OVERVIEW OF HIV / AIDS TESTING SERVICE

Learning objectives



- Define HIV Testing Services (HTS)
- Explain the importance of counseling
- Describe HIV counseling
- Describe the goals and components of HTS
- Explain HTS delivery models

HIV Testing Services

1. Pre-test information
2. Post-test counselling
3. Linkage to appropriate HIV prevention, care, treatment services and other clinical and support services
4. Quality HIV testing - accurate test results and diagnosis
5. Coordination with laboratory services to support quality assurance

Importance of HIV Testing Services

1. Most of those people infected do not know that they are infected
2. Knowing one's HIV status encourages the client to make informed decision and alter their health seeking behavior
3. It provides access to prevention services treatment, care and support services

HIV Counselling and Testing

HIV Counselling

A confidential dialogue between the counsellor and the client designed to help the client cope with the possible outcome of a HIV test and make informed decisions



The 5cs of HIV Testing Services

01
Consent

02
Confidentiality



03
Counselling

04
Correct test results

05
Connection to care and treatment

They apply to all models of HTS and in all circumstances

Importance of Counselling and Testing

1. Effective prevention and care activities require people to know their HIV status
2. CT promotes and sustains behavioral change (prevention)
3. CT facilitates early referral to care and support services including access to antiretroviral therapy
4. CT links with PMTCT, STI, and OI services
5. CT assists in stigma reduction

HTS Delivery Models



CLIENT INITIATED APPROACH

Traditional Voluntary Counselling and Testing (VCT) in which an individual voluntarily seeks counselling and testing services



Provider-initiated Testing and Counselling (PITC) Approach

Health care provider recommends HTS routinely to clients/patients as a routine service offered in the PHC facility

Both approaches are offered at the PHC level with an emphasis on PITC

Provider – Initiated Testing and Counselling

Two strategies commonly used in PITC

- Opt-in
- Opt-out



In the opt-out strategy

- HIV test is routinely recommended to every client and the client is informed of his/her right to refuse the test
- It is a strategy used as part of basic care for ANC clients with TB, STIs, and HIV-related diseases

Qualities of a good Counsellor

1	An ability to earn the trust of the client
2	A good understanding of all available HIV services
3	An understanding of the cultural and psychological factors that affect a client's decision to use HIV service
4	Does not stigmatize HIV clients
5	Non-judgmental; treats clients with respect and kindness
6	Encourages clients to ask questions
7	Ability to listen
8	Recognizes when he or she should refer the clients
9	Appreciates non-verbal communication (body language)
10	Has the ability to maintain strict patient's confidentiality

Steps in pre – test counselling

1. Introduce clients to the process
2. Obtain client information
3. Assess knowledge HIV/AIDS and explore risks
4. Explain the HIV test
5. Help clients to consider his/her options
6. Obtain informed consent and identify support
7. Prepare and carry out the HIV test



PRACTICUM ON PRE-COUNSELLING SESSION

Feedback on the practical

What did they do well?

What do they need to improve on?

What are the lessons learnt?



SESSION 3.2.3: POST TEST COUNSELLING

Learning objectives

01

Interpret HIV test results accurately



02

Manage reactions of clients on receiving HIV test results

04

Discuss ways in which clients can be empowered to engage in risk reduction behaviors and live positively

03

Refer and/or manage the client appropriately if necessary

Post–test Counseling

- One of the aims of post-test counseling is to help clients during acceptance of test results
- Counselors should give clients their test results only when they feel that clients have received adequate counseling
- Giving positive test results can be difficult and uncomfortable
- Counselors may have fears about telling clients their HIV status
- Common fears include
  - Clients will harm themselves or others
  - Clients will leave the session and not return
- These fears are valid, but will often decrease as counselors acquire experience in giving test results

Components of post- test counselling HIV negative results

1	Assess client's readiness to receive the test result
2	Tell the client the test result
3	Negotiate risk reduction plan
4	Identify support for risk reduction plan
5	Counsel client on 'window period' and the need for re- testing
6	Discuss disclosure and partner referral
7	Give Family Planning information
8	Close counselling session
9	Completes all records

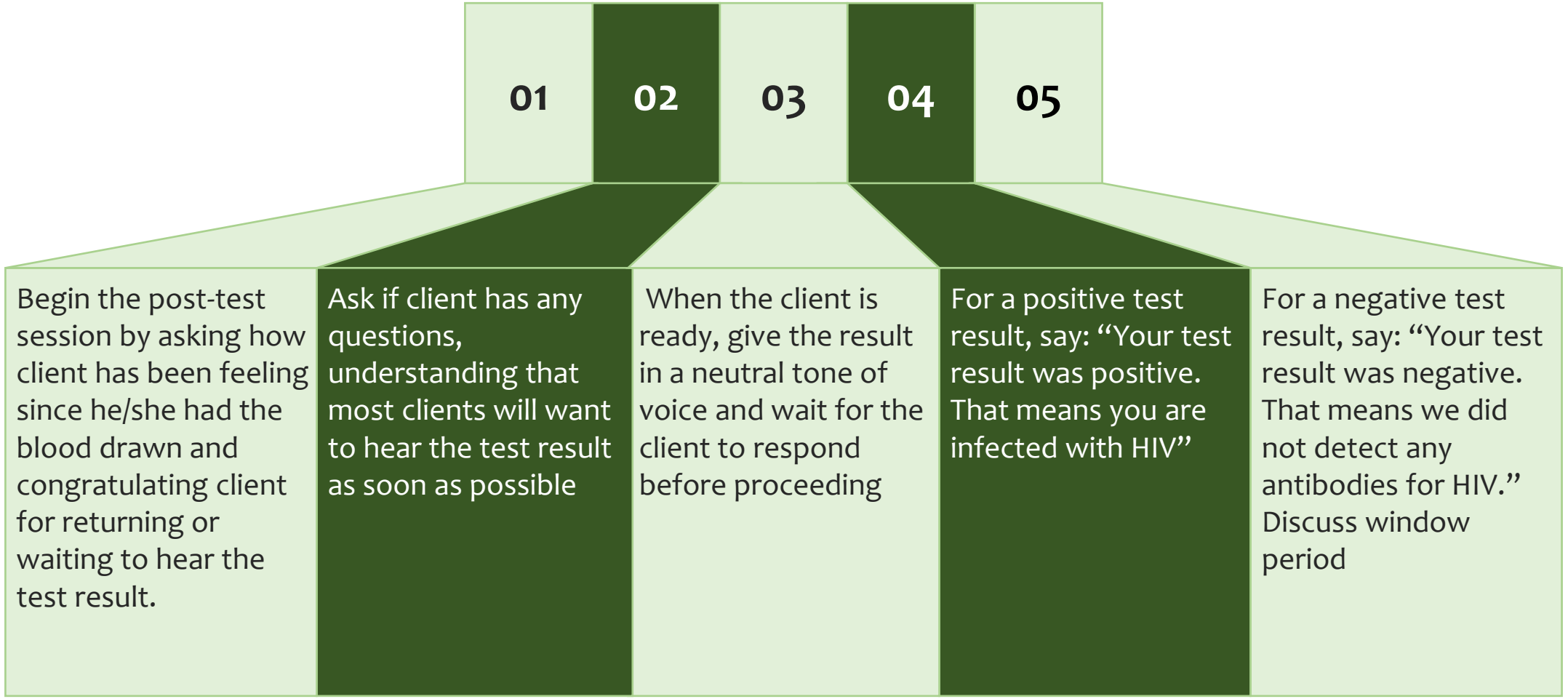
Components of post- test counselling HIV positive results

1. Assess clients readiness to receive the test result
2. Tell the clients the test results
3. Discuss “positive living”
4. Identify sources of support
5. Discuss disclosure and partner referral

Components of post- test counselling HIV positive results 2

6	Address risk reduction issues
7	Counsel client about options for treatment, care and support services
8	Provide referrals to needed HIV-related services
9	Give Family Planning information
10	Close counseling session
11	Complete all records

Suggested steps for giving test results



Conducting a post test counselling session

- Discussion
- Role Play

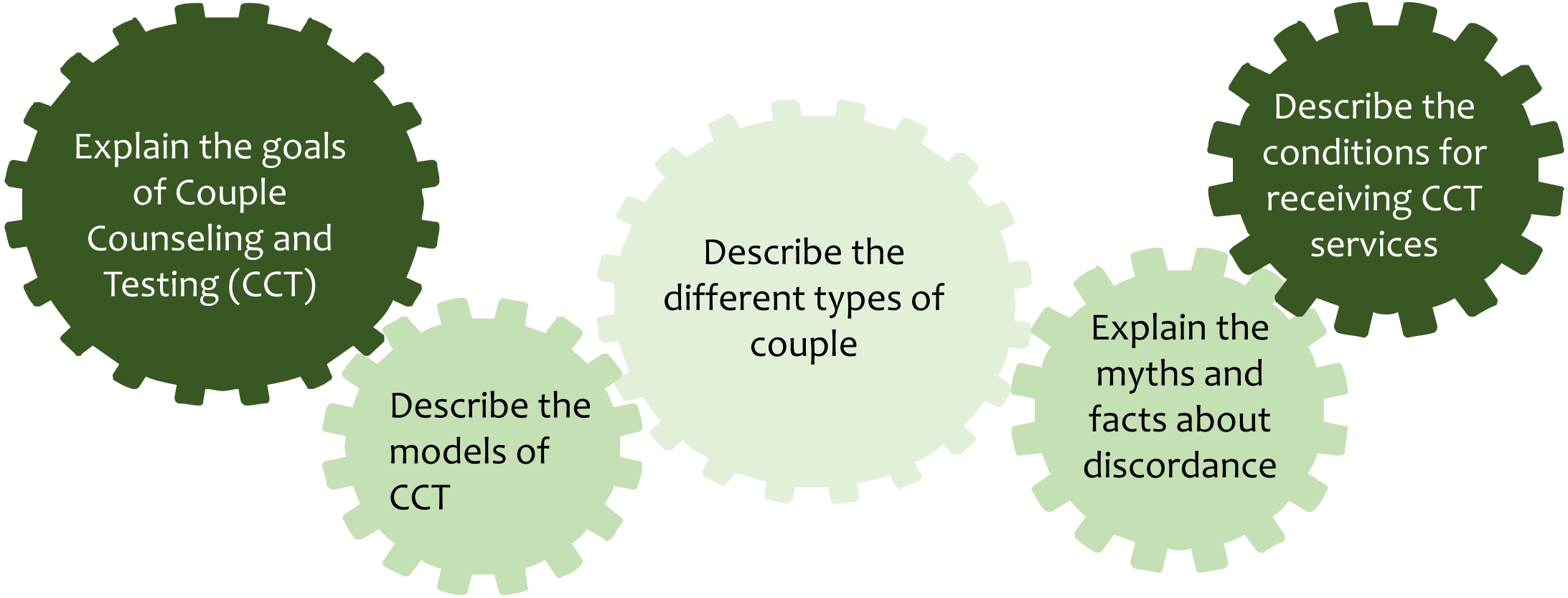


Key points

- HIV testing services include a wide range of services
- HIV testing services are important for effective prevention and care
- HIV testing services should be provided using the 5Cs
- Pre-test counselling is important for assessing client risk and preparing them for HIV test and the results
- Test results should be provided after clients have received adequate post-test counselling

SESSION 3.2.4: INTRODUCTION TO HIV COUPLE COUNSELLING AND TESTING

LEARNING OBJECTIVES



Class assignment?

Let the class define a couple
Let them list the types of couples



ADVANTAGES OF CCT

- Couples can discuss risk concerns in a relaxed mood
- Partners have access to information and messages together which promote likelihood of a shared understanding
- Counselor has the opportunity to ease tension and diffuse blame among the couple
- Individual is not burdened with the need to disclose results and persuade partner to be tested
- Individual is not burdened with the need to disclose results and persuade partner to be tested
- Couple can engage in decision-making for the future
- Create supportive environment for children in the home that may require HTS

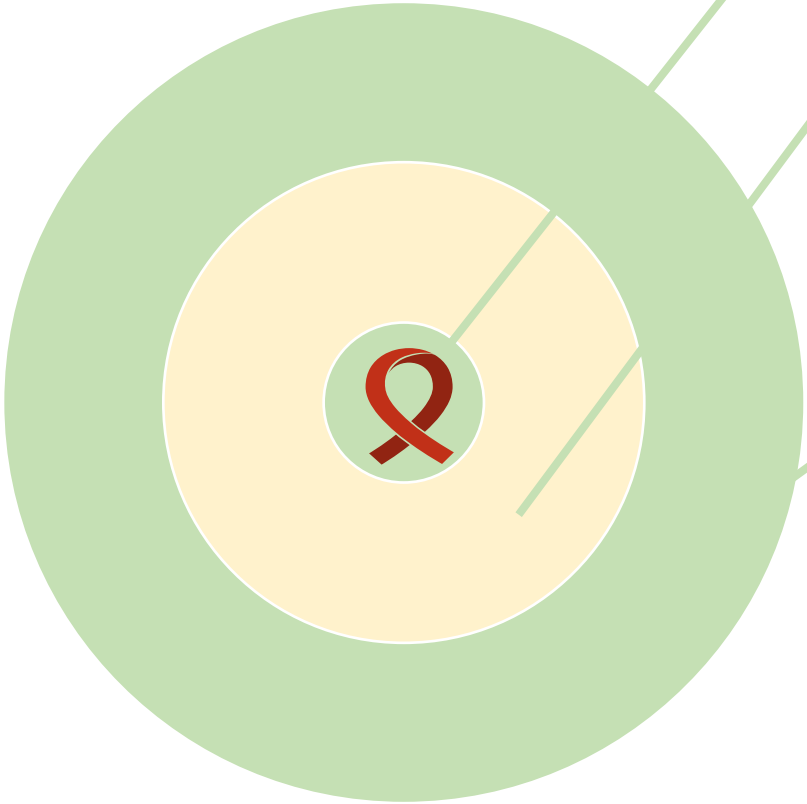
HIV SERO – DISCORDANCE

A concordant couple is one where both partners have the same HIV status – they are both negative or both positive.

A discordant couple has one HIV-positive partner and one HIV-negative.

Discordance is common in countries with high prevalence

MYTHS ABOUT DISCORDANCE



Many believe discordance is not possible

When tested individually, many people assume that their partner's HIV status is the same as their own.

Many believe discordance is a sign of infidelity

CONDITIONS FOR RECEIVING CCT SERVICES

1	Partners agree to discuss HIV risk issues and concerns together
2	Couple is willing to receive results together
3	Knowledge, Attitudes and Practices on health seeking behaviors and existing services (informal and formal)
4	Couple commits to shared confidentiality
5	Disclosure decisions are made mutually

KEY MESSAGES

CCT aims to bring together the views of couples and create a shared vision

In CCT, partners should be willing to agree to discuss HIV risk issues and receive results together

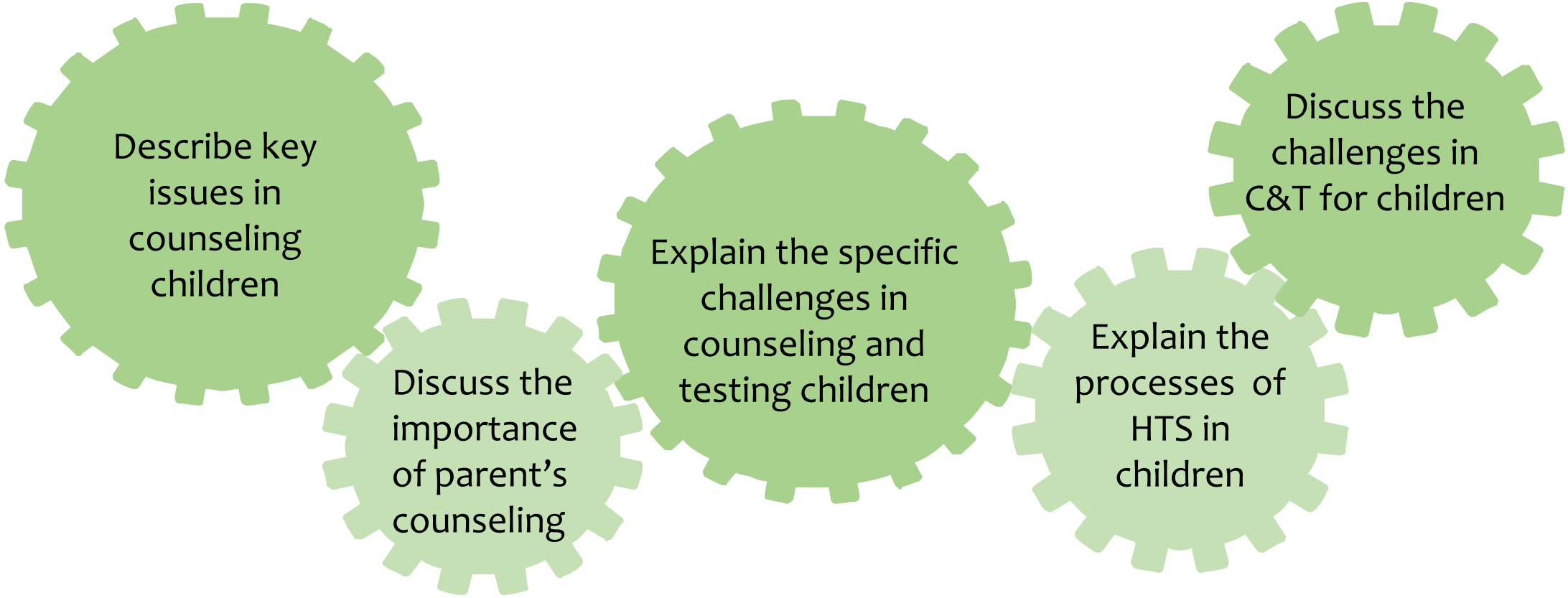


A discordant couple has one HIV-positive partner and one HIV-negative

Transmission risk is high among steady discordant couples who do not take preventive measures

SESSION 3.2.5:COUNSELLING AND TESTING FOR CHILDREN AND PARENTS

LEARNING OBJECTIVES



COUNSELING FOR PARENTS AS PART OF HIV DIAGNOSIS FOR INFANTS AND CHILDREN

When a positive HIV diagnosis is made, The following topic should also be covered:

1	Exploration of the parent's support system and potential for shared confidentiality within the extended family and/or friendship circle
2	Information on ARVs and access as available and appropriate
3	Exploration of the parent/s coping capacity, concerns and fears
4	Information on infant-feeding (Exclusive breast feeding under ART cover) ; the benefits of proper breast feeding and risks of improper breastfeeding

HTS FOR CHILDREN

Children have peculiarities that bring challenges when conducting counselling and testing

- Children are dependent on their parents or guardian
- Their decision-making ability is low
- They lack resources to access services



REASONS WHY COUNSELING AND TESTING IS IMPORTANT FOR CHILDREN



Children are the hardest hit by HIV/AIDS - accounts for 1 in 6 global AIDS related deaths and 1 in 7 new infections



More likely to develop AIDS related symptoms than adults



May be acquired from parents

CONSIDERATION FOR HTS

HTS for children should be considered if a child:

1. Is born to HIV positive parents
2. Has been sexually abused
3. Is symptomatic
4. Has been exposed to other risks such as through contaminated blood or prenatally
5. Cause of parents death unknown
6. Is sexually active

Prior to test providers must also consider CONSENT

CONSENT FOR HTS

Children below 18 years should have the consent of their parents
Health care providers should document the consent form



Young people below 18 years, that are married, pregnant, parents or sexually active, may be considered “mature minors” and should be able to grant consent for HIV testing

CT FOR INFANTS, CHILDREN AND ADOLESCENTS (CONSENT)

1	Infants, children and adolescents who can not legally make health care decisions for themselves must have parents or guardians involved in making these decisions
2	Providers of CT must be well aware of the legal age and criteria that allow adolescents to make their own healthcare decisions without the involvement of their parents
3	Children and adolescents should be provided with information about their health that is developmentally appropriate
4	The opinions and wishes of children and adolescents should be respected when parents are making decisions about their healthcare

COUNSELING FOR PARENTS AS PART OF HIV DIAGNOSIS FOR INFANTS AND CHILDREN CONT..

- Exploration of the parent's support system and potential for shared confidentiality within the extended family and/or friendship circle
- Information on family planning
- Information about treatment, care and support services available and referral for the mother, baby and partner (where present)
- Nutritional advice and seeking early treatment for illnesses



ADVANTAGES OF TELLING CHILDREN THEIR HIV DIAGNOSIS



- To help children cope with their illness, addressing their fears, concerns, and questions in an honest and supportive manner and allowing them to participate in support groups or other coping activities
- To facilitate involvement of the child in his/her care (preventive therapy and ARTs)



Key messages

1. HTS is important for children, particularly those at high risk of exposure
2. Appropriate consent should be obtained before test
3. Age appropriate disclosure to HIV-infected children is critical to their management

SESSION 3.2.6: PROFESSIONAL ETHICS IN RELATION TO HIV TESTING

LEARNING OBJECTIVES



The objectives are to:

1. Discuss ethical issues in relation to HIV testing
2. Demonstrate confidentiality and anonymity in relation to HIV testing

BRAIN STORMING



Can someone tell the class what he/she knows about Informed consent, confidentiality and anonymity?

INFORMED CONSENT

What is informed consent?

In the simplest terms, informed consent means that the provider has shared enough information about the intervention with a prospective subject so that the subject knows what the experience and effects of participating in the activity will be like and, with that knowledge, agrees to participate



PRIVACY



- Refers to a state of being free of unsanctioned intrusion
- Ordinarily, individuals have a right to privacy; that is, control over the extent, timing, and circumstances of sharing themselves, or information about themselves, with others

CONFIDENTIALITY

Refers to an agreement with an individual regarding the treatment of information obtained from or about that individual.

Data are confidential if they will not be disclosed outside the context of the intervention project in a way that reveals or implies a client's identity



ANONYMITY

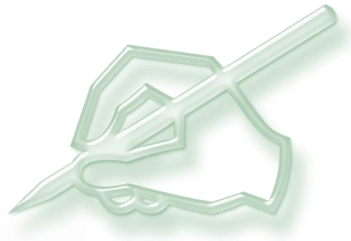
Refers to the complete absence of names or other identifying information

Data are anonymous if it is impossible for the provider--or anyone else--to connect a subject with the data they've provided



Key messages

Privacy, Confidentiality, and Anonymity should be adhered to in the provision of HIV services



SESSION 3.3: LABORATORY DIAGNOSIS OF HIV INFECTION

SESSION 3.3.1: SUPPLIES AND KITS FOR HIV TESTING

LEARNING OBJECTIVES



The objectives are to:

1. List the supplies and kits required for HIV rapid testing
2. Identify all the supplies required for HIV rapid testing
3. Explain what the various items are used for during HIV testing

MATERIALS & SUPPLIES CHECKLIST

- ❑ HIV Rapid testing kits
- ❑ Alcohol 70%, methylated spirit alcohol swabs
- ❑ Cotton Gauze / Wool
- ❑ Sterile Lancets
- ❑ Sharps bin or Disinfectant jar for lancets
- ❑ Pen for marking or labeling
- ❑ Gloves
- ❑ Aprons or laboratory coats
- ❑ Stopwatch, clock, or wrist watch with second hand
- ❑ Disinfectant e.g. Jik, Chlorox
- ❑ Band-Aids or plasters
- ❑ Thermometers
- ❑ Pasteur pipettes, or 50ul pipettes, pipette tips
- ❑ Paper towels (for bench coating, cleaning, and hand washing)
- ❑ Soap for hand washing
- ❑ Plastic bags for biohazard waste and biohazard stickers
- ❑ Positive and Negative control samples
- ❑ Register or book for recording results
- ❑ Spray bottle for making bleach solution
- ❑ Standard Operating Procedures

MEMORY GAME: SUPPLIES & MATERIALS

Instruction:

- Spend 3 min. browsing through the display and learn the items
- Spend 1 min. writing down as many items as possible (without looking)
- Tally up the total number of items you write down
- The person who remembers the most items wins.



GLOVES

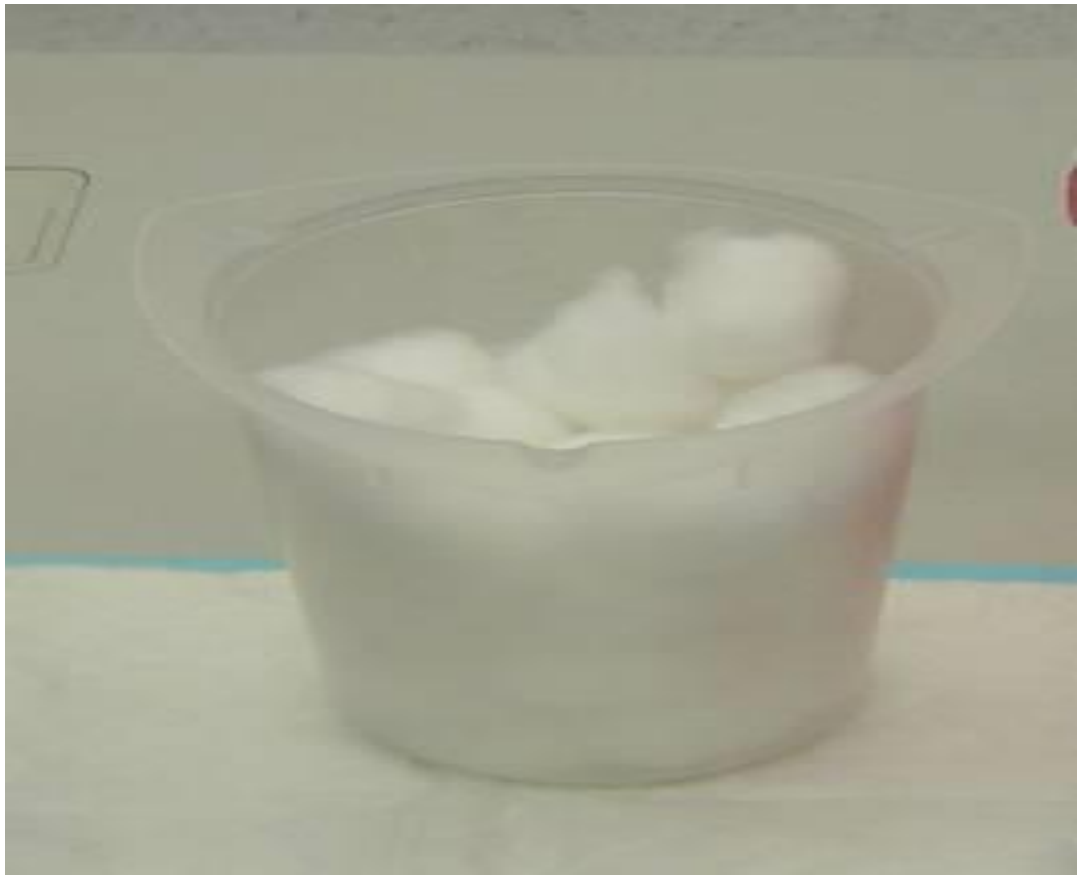

HIGH FIVE
HIGH PERFORMANCE GL
SMALL
** Lowest protein claim allowed **
50 micrograms or less of total water extractable protein per gram
Latex Examination Gloves
Powder-Free ◆ Textured
Manufactured in an ISO 9002-certified facility.
HIGH FIVE
Latex Examination Gloves
Powder-Free ◆ Textured

ALCOHOL SWABS



COTTON GAUZE OR COTTON BALLS





STERILE LANCETS





PIPPETTES





TIMER



STANDARD OPERATING PROCEDURES AND FORMS & SHARPS DISPOSAL BINS

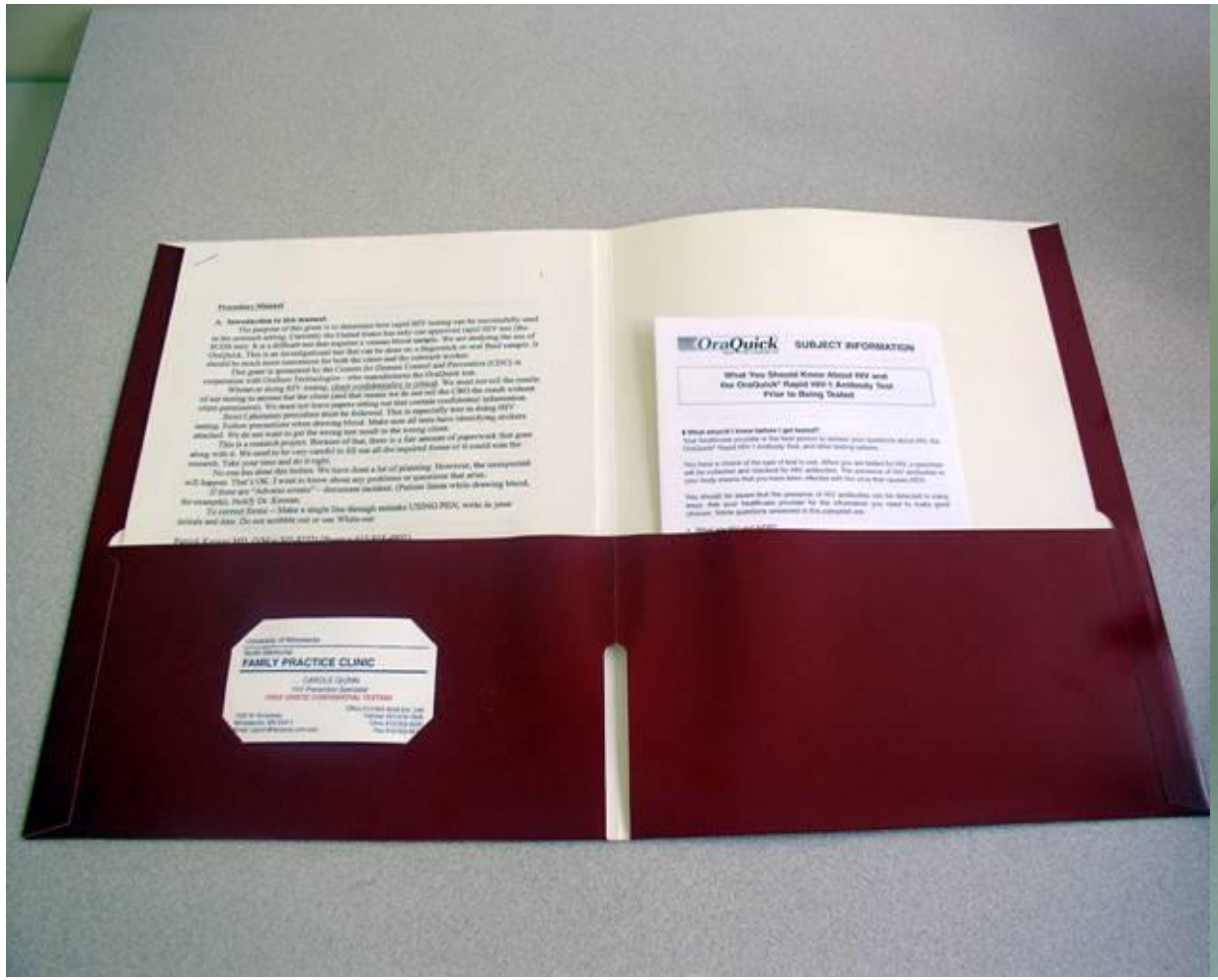


Fig 1: Standard operating procedures and forms



Fig 2: Sharps disposal bins

BIN FOR DISPOSAL OF CONTAMINATED MATERIALS





HOUSEHOLD BLEACH AND CONTAINER & MARKING PENS



Fig 1: House bleach and container



Fig 2: Marking pens

ORGANIZE YOUR WORK AREA



KEY MESSAGES

1. Various material and supplies are required for HIV testing
2. The material and supplies are essential to ensure the quality and safety of HIV testing services



SESSION 3.3.2: PERFORMING HIV RAPID TEST USING SERIAL TESTING ALGORITHM

LEARNING OBJECTIVES

1. Perform HIV rapid tests according to SOP
   - 1.1 Determine®
   - 1.2 Unigold®
   - 1.3 Statpak®
2. Accurately interpret individual test results
3. Perform multiple tests serially
4. Acurrately determine HIV status
5. Discuss personal health and safety practices

DIAGNOSING HIV INFECTION

Two kinds of tests

HIV ANTIBODY DETECTION TEST

Suitable for the diagnosis of HIV infection in adults and children 18 months and above

HIV VIRAL ANTIGEN DETECTION TEST

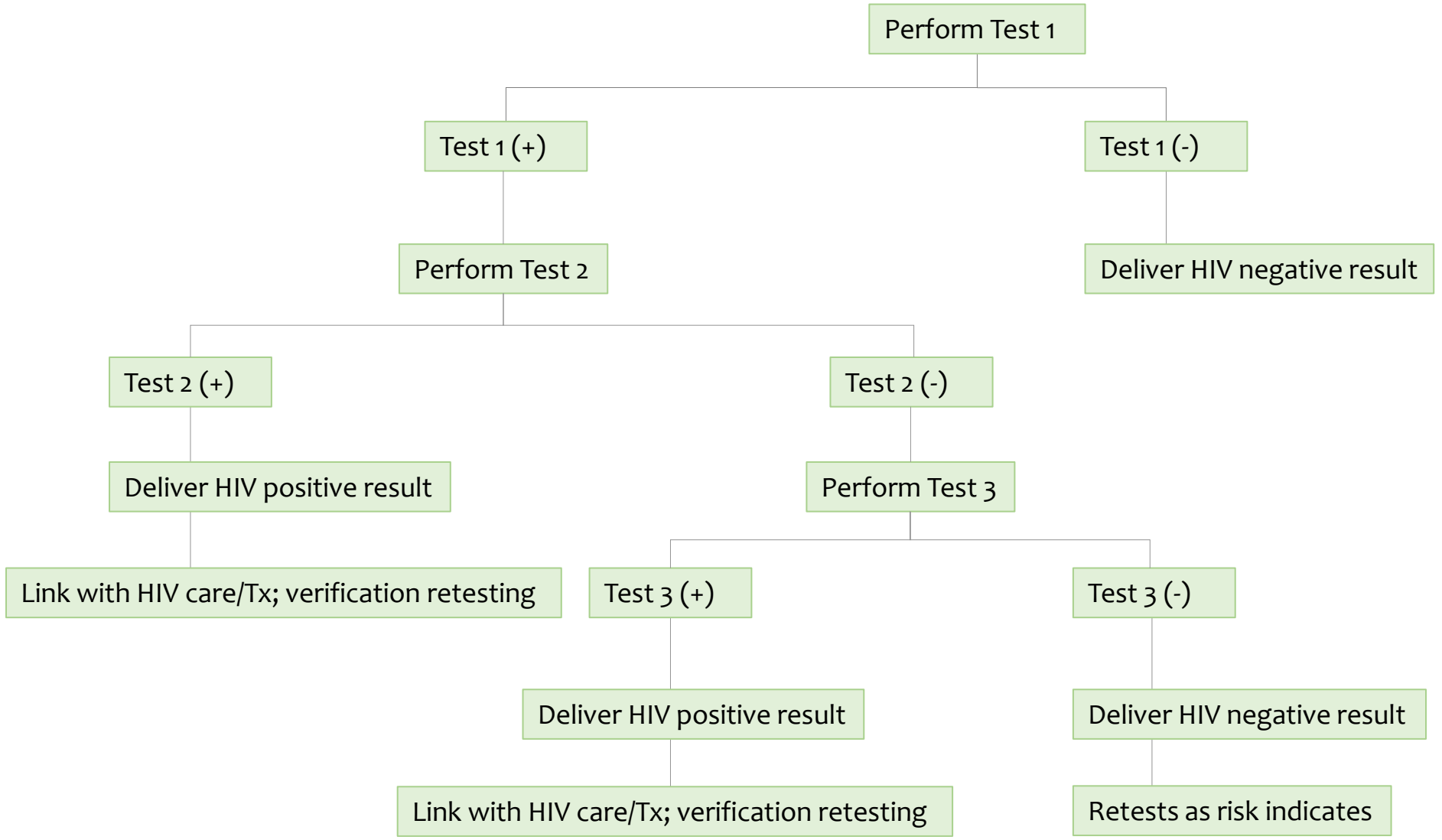
Suitable for the diagnosis of HIV infection in adults and children 18 months and above



SERIAL TESTING ALGORITHM

- Refers to the use of 2 screening tests employed sequentially to test for HIV antibody
- If the initial screening is negative, no further testing is required. If the initial test is positive, it is followed by one more test
- The first test should be the most sensitive test and the second test should be very specific and based on an antigen source different from that of the first test

SERIAL TESTING ALGORITHM



Keys	
Test 1	Screening
Test 2	Confirmatory
Test 3	Tie breaker

HIV TESTING ALHGORITHMS FOR RAPID TEST KITS (RTKs) (1/3)

First line (Screening kit)	Second line (Confirmatory kit)	Tie breaker (Tie breaker)
Alere HIV Combo	Standard Q	
Determine	Frist Response	
	Diaquick	HIV Status
	CareStart	Multisure
	CareUs	Stat Pak
	Unigold	
	Multisure	Stat Pak
		HIV Status
Unigold	Standard Q	Multisure
	First Response	HIV Status
	Diaquick	Stat Pak
	CareStart	
	CareUs	
	Determine	
	Multisure	Stat Pal
		HIV Status
	HIV Status	Stat Pak
		Mutlisure

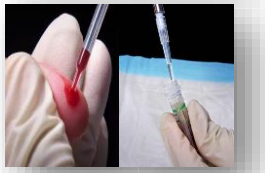
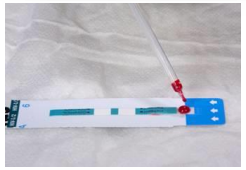
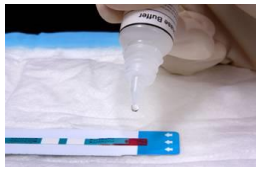
HIV TESTING ALHGORITHMS FOR RAPID TEST KITS (RTKs) (2/3)

First line (Screening kit)	Second line (Confirmatory kit)	Tie breaker (Tie breaker)
HIV Quick Check	Standard Q	Multisure
	First Response	HIV Status
	Diaquick	Stat Pak
	CareStart	
	CareUs	
	Unigold	
	Determine	
	Multisure	Stat Pak
Wondfo	Standard Q	Multisure
Wantai	First Response	HIV Status
	Diaquick	Stat Pak
	CareStart	
	CareUs	
	Determine	
	Unigold	
	Multisure	Stat Pak
		HIV Status
	HIV Status	Multisure
		Stat Pak

HIV TESTING ALHGORITHMS FOR RAPID TEST KITS (RTKs) (3/3)

First line (Screening kit)	Second line (Confirmatory kit)	Tie breaker (Tie breaker)
First Response	Diaquick	Muiltsure
Standard Q	CareStart	HIV Status
	CareUs	Stat Pak
	Unigold	
	Determine	
	Multisure	Stat Pak
		HIV Status
	HIV Status	Stat Pak
		Multisure

DETERMINE TEST KITS (1/2)

Steps	Description	
Getting ready	Collect test items and other necessary lab supplies	
	Use 1 strip per test and be sure to preserve the lot number on the remaining packet of strips	
Collecting specimen	Collect 5µl of specimen using a precision pipette or 1 drop using a plastic transfer pipette	
Applying specimen and buffer to test strip	Apply the specimen to the absorbent pad on the strip	
	For whole blood only add 1 drop of chase buffer to the specimen pad	

DETERMINE TEST KITS (2/2)

Steps	Description
Getting results	Wait 15 minutes (no longer than 60 minutes) before reading the results
	Read together with the patient and record the results and other pertinent info on the worksheet





DETERMINE TEST KITS: INTERPRETATION

Positive



Negative



Invalid



STATPAK TESTKITS -GETTING READY

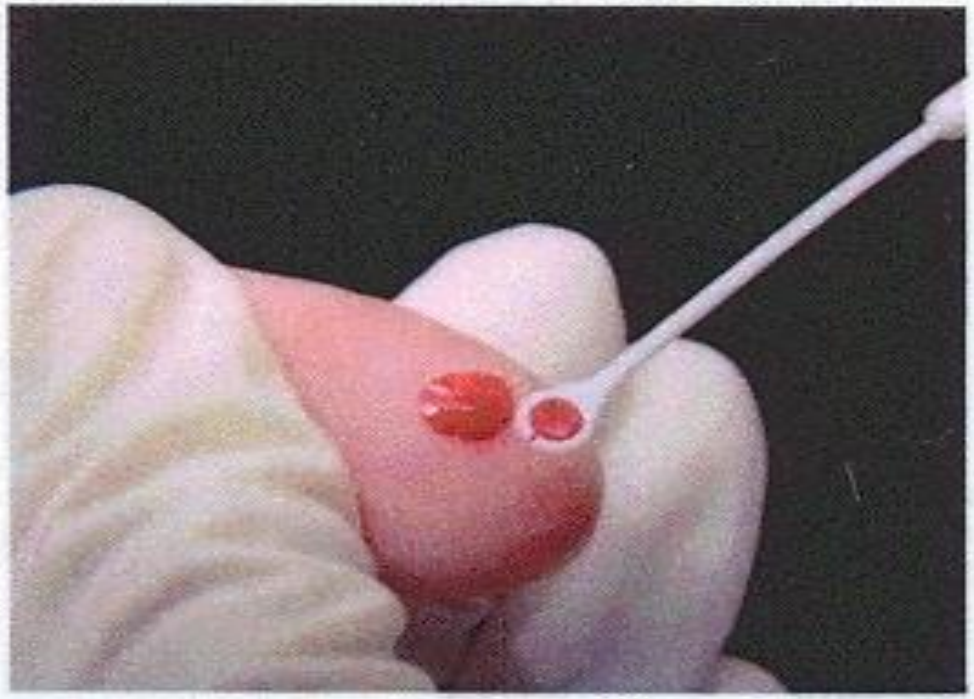


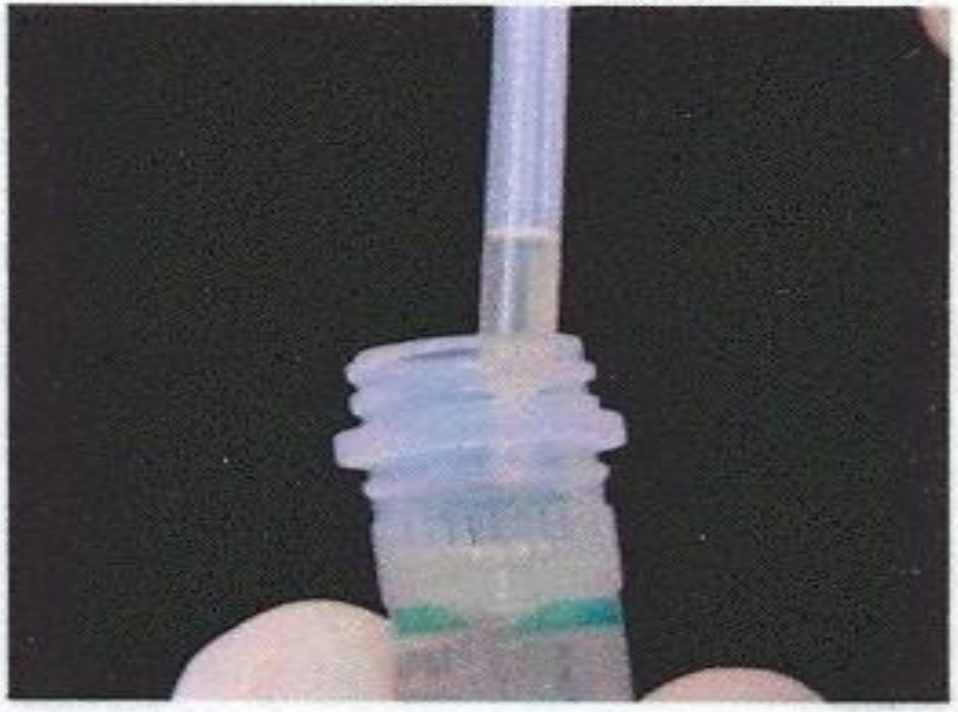
1. Collect test items and other necessary lab supplies.



2. Remove device from package and label device with client identification number.

STATPAK TESTKITS – COLLECTING SPECIMEN





3. Collect approximately 5 µl of specimen using a new disposable loop or pipette.

STATPAK TESTKITS – ADDING SPECIMEN AND BUFFER TO TEST DEVICE

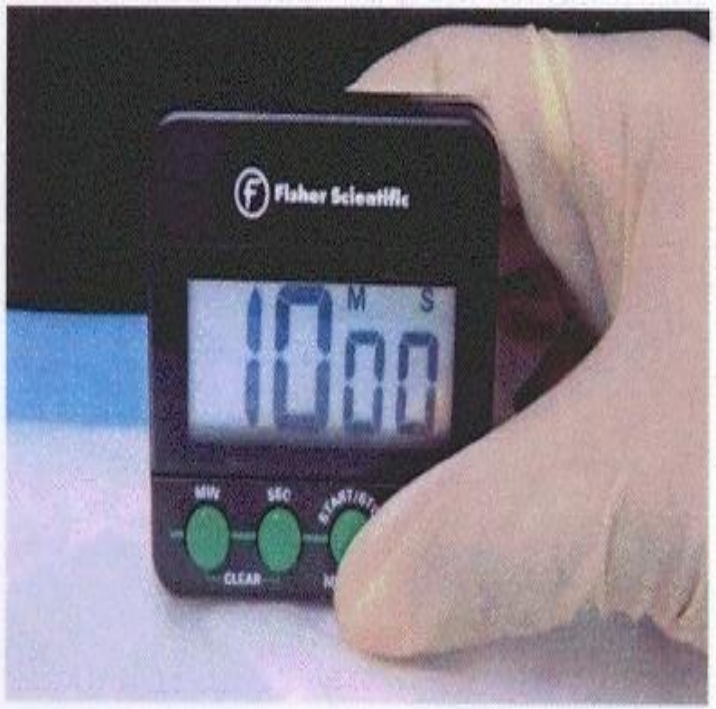


4. Dispense the sample in the center of SAMPLE well.

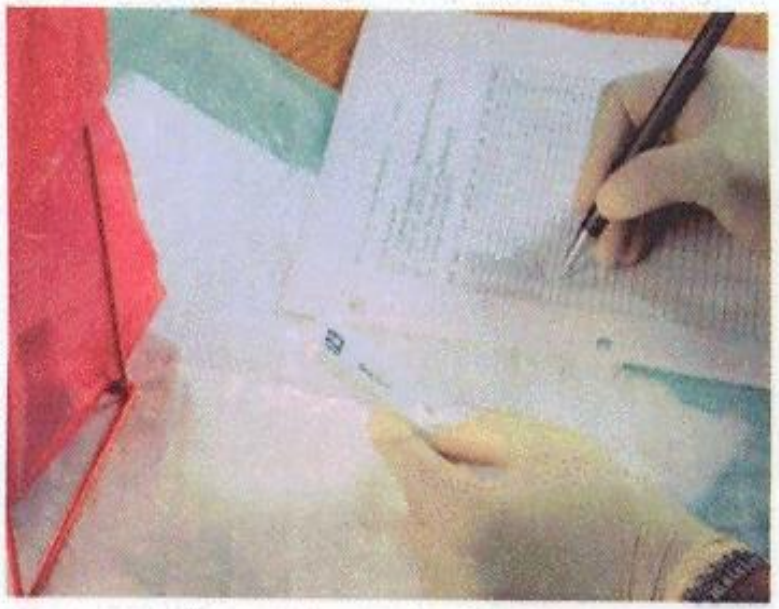


5. Add 3 drops of buffer, holding vial vertically over the SAMPLE well.

STATPAK TESTKITS – GETTING RESULTS



6. Wait for 10 minutes before reading the results.

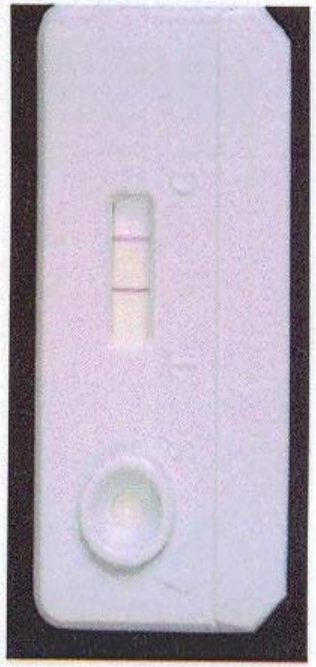


7. Read and record the results and other pertinent info on the worksheet.

STATPAK TESTKITS – TEST INTERPRETATION

Reactive

2 lines of any intensity appear in both the control and test areas.



Non-reactive

1 line appears in the control area and no line in the test area.

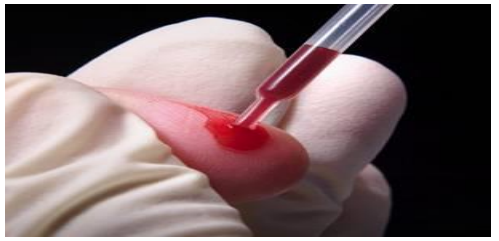


Invalid

No line appears in the control area. Do not report invalid results. Repeat test with a new test device even if a line appears in the test area.



UNI-GOLD TESTKITS (1/2)

Getting ready	Apply the specimen to the absorbent pad on the strip	
	For whole blood only add 1 drop of chase buffer to the specimen pad	
Collecting specimen	Collect specimen using the disposable pipette	 

UNI-GOLD TESTKITS (2/2)

Adding specimen and reagent to test device	Add 2 drops (approx. 60µl) of specimen to the sample port in the device	
	Add 2 drops (approx. 60µl) of the appropriate wash reagent to sample port	
Getting results	Wait for 10 minutes (no longer than 20 min.) before reading the results	
	Read and record the results and other pertinent information on the worksheet	

UNI-GOLD TESTKITS: TEST INTERPRETATION

Positive



Negative



Invalid



KEY MESSAGES

A comprehensive approach is needed to prevent HIV infection in infants and young children.

The four prongs of the comprehensive approach to PMTCT are:

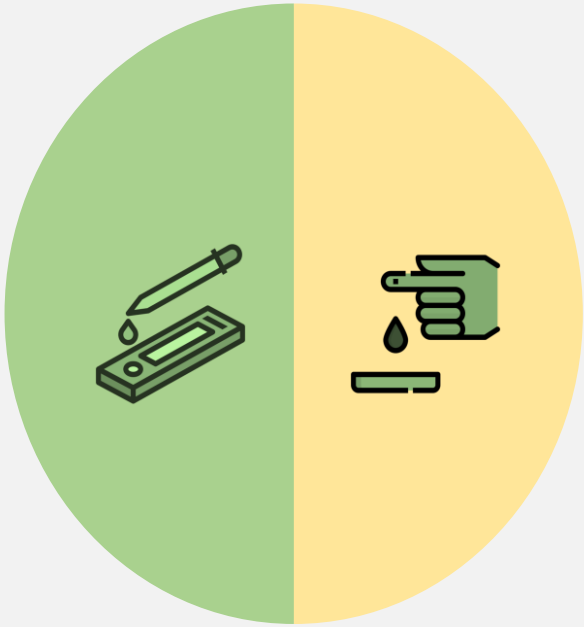
1. Primary prevention of HIV infection
2. Prevention of unintended pregnancies among women infected with HIV
3. Prevention of HIV transmission from women infected with HIV to their infants
4. Provision of treatment, care and support to women infected with HIV, their infants and their families

SESSION 3.3.3: BLOOD COLLECTION

DISCUSS PERSONAL HEALTH AND SAFETY PRACTICES

01

Explain the preparatory tasks required for rapid tests



02

Demonstrate how to collect blood from a finger prick accurately and confidently

DEVELOP PERSONAL SAFE WORK HABITS

Personal safe work habits include

1	Wash hands before and after testing each patient
2	Wear fresh pair of gloves with each patient
3	Wear lab coat or apron
4	Dispose of contaminated sharps and waste immediately after testing
5	Pipetting by mouth is strictly forbidden
6	Never eat, drink or smoke at the test site
7	Keep food out of the laboratory/testing site refrigerator

BRAIN STORMING

Participants should be asked to explain the preparatory tasks required for rapid tests and demonstrate how to collect blood from a finger prick accurately and confidently

1

Ensure all equipment and work surfaces are properly disinfected

2

FINGER PRICK - GETTING STARTED

1. Educate your client on the procedure

2. Collect all supplies needed for the procedure



FINGER PRICK – FINGER PREPARATION

1. Position hand palm-side up. Choose whichever finger is least calloused

2. Apply intermittent pressure to the finger to help the blood to flow



FINGER PRICK – FINGER PREPARATION CONT'D

3 **Clean the fingertip with alcohol. Start in the middle and work outward to prevent contaminating the area. Allow the area to dry**



4 **Hold the finger and firmly place a new sterile lancet off-center on the fingertip**



FINGER PRICK – BLOOD COLLECTION

5 **Firmly press the lancet to puncture the fingertip**



6 **Wipe away the first drop of blood with a sterile gauze pad or cotton ball**



FINGER PRICK – BLOOD COLLECTION CONT'D

7 **Collect the specimen. Blood may flow best if the finger is held lower than the elbow.**



8 **Apply a gauze pad or cotton ball to the puncture site until the bleeding stops**



9 **Properly dispose of all contaminated supplies**





KEY POINTS

- Clients should be educated on the procedure
- Collect all the necessary supplies before the procedure
- It is important to adhere to pre-collection safety precautions

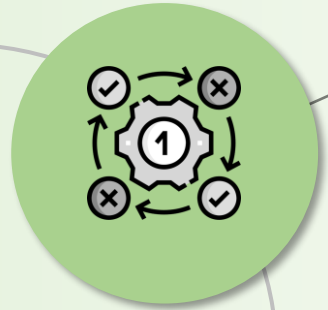
SESSION 3.3.4: QUALITY ASSURANCE FOR HIV TESTING

LEARNING OBJECTIVES

01

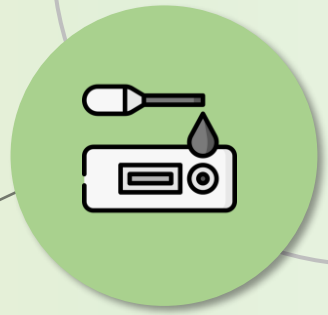
Define Quality Assurance





02

Mention the Quality Assurance Cycle





03

Identify factors that may compromise the quality of HIV rapid testing

04

Explain how to prevent, detect and minimize errors before, during and after testing

THE QUALITY ASSURANCE CYCLE

Quality assurance is ensuring provision of accurate and reliable testing services to all clients every time all the time

Quality assurance in testing services is important because it results in accurate and reliable testing

WHY IS QUALITY SYSTEM IMPORTANT TO RAPID TESTING?

- Enforces hand washing before and after testing each patient 
- Sets the standard for level of quality 
- Meets/exceeds customer expectations 
- Provides means to prevent, detect and correct problems 
- Becomes the core of a monitoring, evaluation, & improvement system 

Even the simplest of testing is not foolproof

WHO IS RESPONSIBLE FOR QUALITY

EVERYONE!



- Facility management
- Program staff who establish quality assurance procedures
- Test site personnel who implement the quality assurance procedures

PREVENTING AND DETECTING ERRORS – BEFORE TESTING

01

Check storage and room temperature

02

Select an appropriate testing workspace

03

Check inventory and expiration date

04

Review testing procedures

05

Record pertinent information, and label test device

06

Collect appropriate specimen



CAUSES OF ERRORS DURING TESTING

Individual responsibilities unclear	1
No written procedures	2
Written procedures not followed	3
Training is not done or not completed	4
Checks not done for transcription errors	5
Test kits not stored properly	6
QC, EQA not performed	7

Errors can occur throughout the testing process

ANALYTIC ERRORS

Some causes include:

1. Country algorithm not followed
2. Incorrect timing of test
3. Results reported when control results out of range
4. Improper measurements of specimen and/or reagents
5. Reagents stored inappropriately or used after expiration date
6. Dilution and pipetting errors
7. Incorrect reagents used

PREVENTING AND DETECTING ERRORS – DURING TESTING

1. Perform and review Quality Control (QC)
2. Follow safety precaution
3. Conduct tests according to written procedures
4. Correctly interpret test results
5. Conduct test according to written procedures

POST ANALYTICAL ERRORS

- Transcription error in reporting
- Report illegible
- Report sent to wrong location
- Information system not maintained

PREVENTING AND DETECTING ERROR AFTER TESTING

1. Re-check patient/client identifier
2. Write legibly
3. Clean up and disposed off contaminated waste
4. Package EQA specimen for re-testing if possible

KEY MESSAGES

Errors can occur throughout the testing process

Quality system is important to rapid testing to prevent, detect and correct errors

Steps should been take before, during, and after testing to assure the quality of results

SESSION 3 .4: ANTIRETROVIRAL THERAPY IN PHC

SESSION OUTLINE

1

ARV Refill for Referred Patients at the PHC Adherence Counselling for Clients

2

Adherence Counselling for Clients



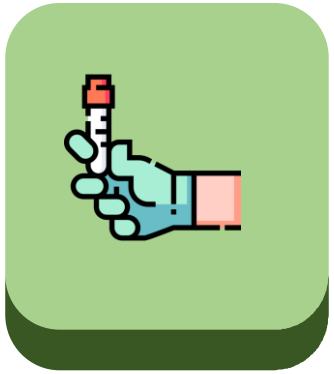
SESSION 3.4.1: ARV REFILL FOR REFERRED PATIENTS AT THE PHC

LEARNING OBJECTIVES

- Define Quality Assurance
- Explain the rationale for ARV-refill in the PHC
- List the steps for ARV re-fill
- Describe the schedule for routine referral of ART clients to the ART centres
- Demonstrate how to fill the ART card/register and various referral forms

WHAT IS ART

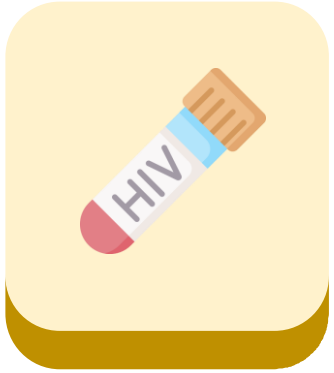
ART is the management of HIV/AIDS using antiretroviral drugs





It involves the use of drugs to suppress the virus, as well as laboratory investigations to monitor the effectiveness of treatment

ART is effective in the treatment of HIV/AIDS and when used appropriately leads to reduction of in morbidity and mortality due to HIV/AIDS





For effective treatment, ART should include at least three ARVs from two different classes

GOALS OF ART

- Provision of optimal treatment for persons infected with HIV at all stages of the disease
- Achievement of rapid and sustained suppression of viral load
- Enhance immunity by increasing CD4+ cell count
- Reduce morbidity (includes morbidity from OIs)
- Prolong life of HIV infected individuals
- Improve quality of life
- Reduce risk of transmission of HIV to infants and sexual partners



RECOMMENDED FIRST LINE ART REGIMENS FOR ADULTS, ADOLESCENTS, PREGNANT, BREAST FEEDING WOMEN AND CHILDREN





First-line ART	Preferred first-line regimen	Alternative first-line regimens
Adults and Adolescent	TDF + 3TC (or FTC) + DTG	TDF + 3TC (or FTC) + EFV400 TAF + 3TC (or FTC) + DTG ABC + 3TC + DTG AZT* + 3TC + EFV400

RECOMMENDED FIRST-LINE ART REGIMEN FOR CHILDREN

Weight (Kg)	Age	Preferred First Line Regimen	Alternative First Line Regimen	Special circumstances
Neonates				
<3kg	< 1 month	AZT + 3TC + DTG* or RAL	AZT + 3TC + LPV/r**	AZT + 3TC +NVP
Infants & Children				
<20kg	< 6 years	ABC+3TC+DTG	ABC+3TC +LPV/r AZT + 3TC +LPV/r ABC (or AZT) +3TC+ RAL**+	ABC + 3TC +EFV*+(or NVP) AZT + 3TC + EFV (or NVP) AZT + 3TC + LPV/r (or RAL)
20 – 30kg	6-10 years	ABC+3TC+DTG TDF***(TAF)** ** + 3TC +DTG	ABC+3TC +LPV/r ABC +3TC + RAL	

Note:
**DTG 5mg and 10mg (scored/dispersible) formulations are available for use in children from 4weeks of age and weighing at least 3kg to children <20kg*
***LPV/r pellets or granules can be used if starting after two weeks of age*
****TDF is used for children aged 6-10 years weighing >30kg*
*****TAF is used for children with weight >25kg*
**+EFV is used for children above 3years (>15kg)*
***+The use of this INSTI could be considered where available in instances of poor tolerability or administration challenges with LPV/r, particularly in settings where the rapid expansion of maternal treatment could lead to infants and children at very high risk of carrying an NNRTI resistance virus.*

WHAT IS ART REFILL



ARV refill simply means resupplying a PLHIV with ARVs to replenish his/her stock

At the present, ARV refills are offered in comprehensive ART centers and some designated PHCs

At the present, ARV refills are offered in comprehensive ART centers and some designated PHCs



STEPS TO REFILLING ARV

All PLHIVs referred to PHCs for ARV-refill must be properly documented using appropriate registers

Conduct routine history taking and basic physical examination

Look out for symptoms and signs such as; cough, boils, skin rash, weight loss, anaemia e.t.c

Record vital signs such as Weight, temperature, BP and Pulse Rate on every visit

Provide basic adherence counselling on every visit prior to re-supplying ARVs

STEPS TO REFILLING ARV CONT..

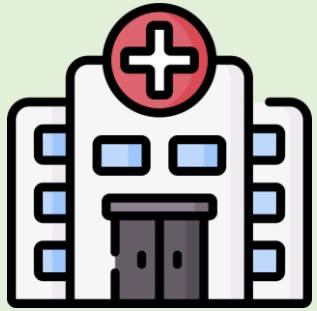


1. Measure adherence using standard checklist
2. Check for presence of side effects using standard check list and job aides
3. Re-supply ARVs for 3-6 months as appropriate
4. Record date of issue of ARVs and filling in date of next refill in patient's appointment card

WHEN TO REFER CLIENTS TO THE ART CENTRE



All clients who following HTS and found to be positive should be sent to the ART centre for treatment initiation



All clients should be sent to the ART centre based on their DSD models, all stable clients must return to the ART centre at least once annually for routine viral load estimation and clinical follow-up

WHEN TO REFER CLIENTS TO THE ART CENTRE CONT..

All clients in the ARV refill programme who have refused to adhere to treatment despite adequate adherence counseling

Any client with symptoms of opportunistic infections should be referred to the ART centre immediately

All clients with ARV drug induced adverse reactions

All clients who suddenly develop conditions requiring hospitalization

KEY MESSAGES

Antiretroviral therapy (ART) involves the use of ARV drugs as well as laboratory monitoring

ART should include at least three ARVs from two different classes



ART should be provided in line with the recommended regimens by the national guidelines

PHC can provide ARV refills to stable patients

SESSION 3.5: MANAGEMENT AND REPORTING OF ADVERSE DRUG REACTIONS (ADRS) OF ANTI RETROVIRAL (ARVS)

LEARNING OBJECTIVES

01 Explain what ARV Adverse Drug Reactions are

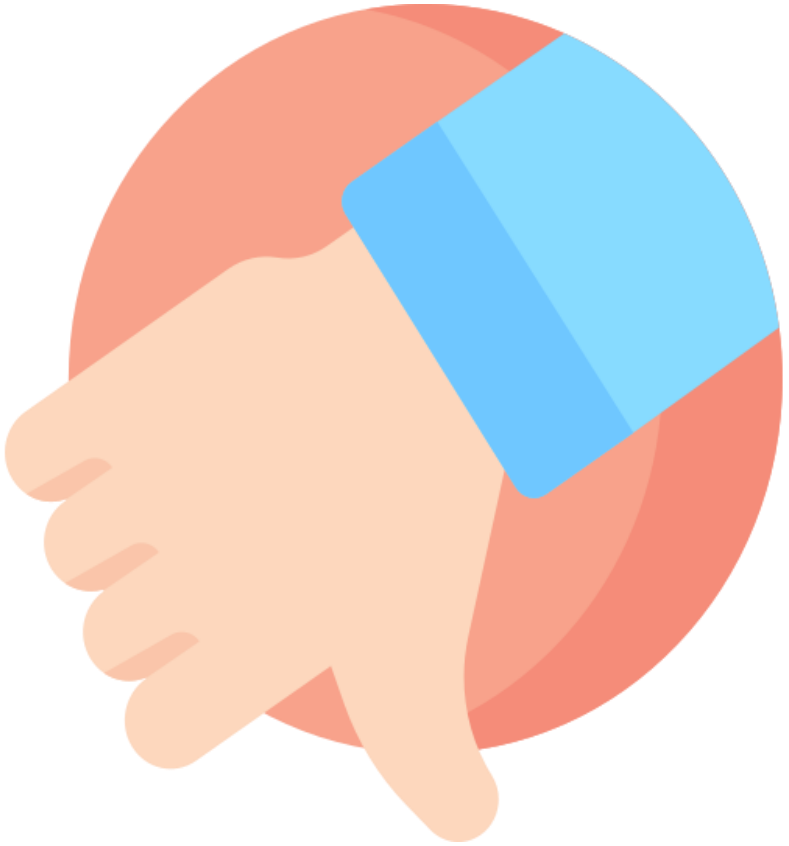
02 Recognize adverse drug reactions

03 Explain reasons for adverse drug reactions

04 Manage adverse drug reactions



WHAT ARE ARV ADVERSE DRUG REACTIONS?



An adverse drug reaction is a response (mild, moderate or severe) to a drug that is noxious and unintended and occurs at doses normally used in humans for the prophylaxis, diagnosis and treatment of disease or for modification of physiological function (WHO)

HOW DO YOU RECOGNIZE ADVERSE DRUG REACTIONS (ADR)?

ADRs are classified into 4 grades based on degree of severity and intervention required

They are:

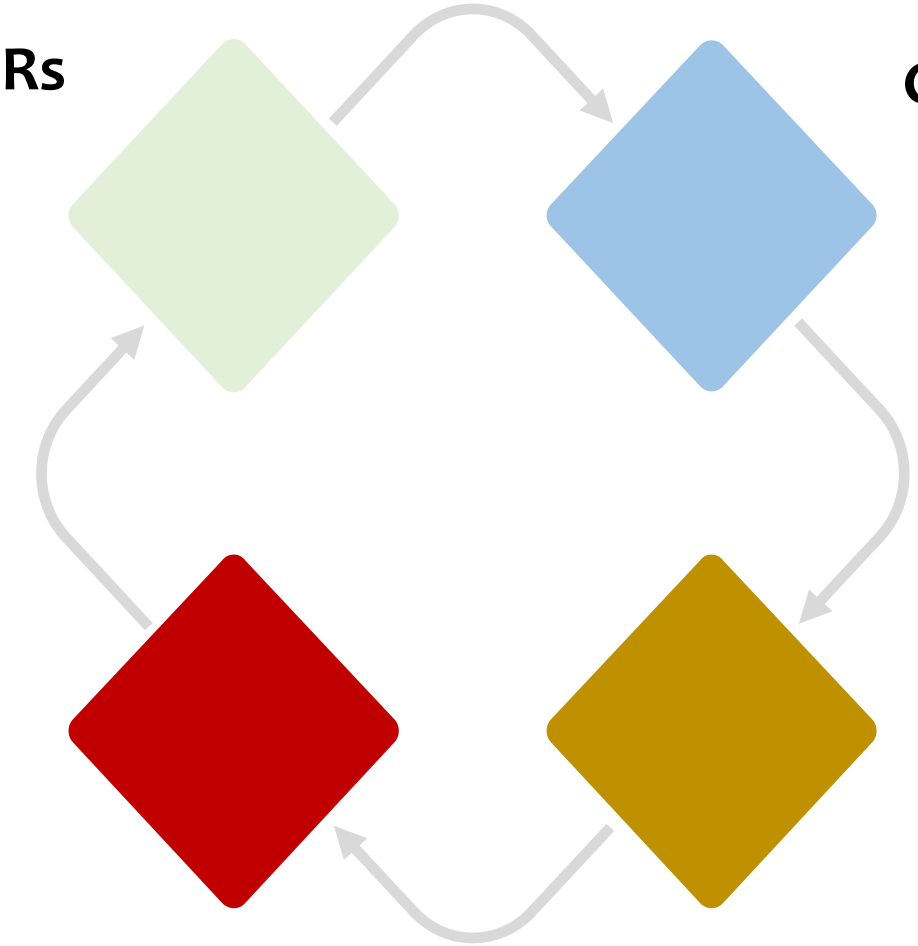
HOW DO YOU RECOGNIZE ADVERSE DRUG REACTIONS (ADR)?

Grade 1 – Mild ADRs

- Transient or mild discomfort
- No limitation of activity

Grade 2 – Moderate ADRs

- Mild to moderate limitation of activity
- Some assistance may be needed
- No or minimal medical intervention required



Grade 4 – Life Threatening ADRs

- Extreme limitation in activity
- Significant assistance required
- Significant medical intervention or therapy required, including hospitalization

Grade 3 – Severe ADRs

- Marked limitation in activity
- Assistance usually required
- Medical intervention or hospitalization required

COMMON ARV ADVERSE REACTIONS

Adverse reactions that are associated with use of ARVs include:

1. Nausea



2. Vomiting



3. Tingling and occasionally painful sensations in the limbs



4. Anemia



5. Uneven fat distribution in the body (buffalo hump etc)



6. Skin rash



7. Signs of CNS impairment; delirium, nightmares etc.



MANAGEMENT OF ADRS

Adverse drug reactions can lead to:

1. Majority of the adverse reactions following use of ARVs are mild and transient.
2. In this situation; reassure the clients that adverse events will resolve with time
3. Perform empirical treatment of minor symptoms such as
    - Mild diarrhoea- use anti-diarrheal
    - Vomiting- use anti-emetics
    - Headache-analgesics

MANAGEMENT OF ADRS CONT..

4. Where adverse events are sufficiently severe to cause serious discomfort for the client, such a client should be referred immediately to the ART centre for specialized care
5. Special care should be taken in cases of skin rash especially with clients on Nevirapine and Abacavir.

KEY MESSAGES

- ADRs are unforeseen medical occurrence after taking drugs
- It is classified into 4 grades based on degree of severity and intervention required.
- Types of Adverse effects: Nausea, Vomiting, Tingling, occasionally painful sensations in the limbs, skin rash etc.
- Perform empirical treatment of minor ADRs but refer if symptom is severe



SESSION .3.6: MANAGEMENT OF SEXUALLY TRANSMITTED INFECTIONS (STIS) AND PREVENTION OF HIV INFECTION

SESSION OUTLINE

Overview of the Management of Sexually Transmitted Infections (STIs)

Prevention of HIV Infection



SESSION 3.6.1: OVERVIEW OF THE MANAGEMENT OF SEXUALLY TRANSMITTED INFECTIONS (STIS)

LEARNING OBJECTIVES

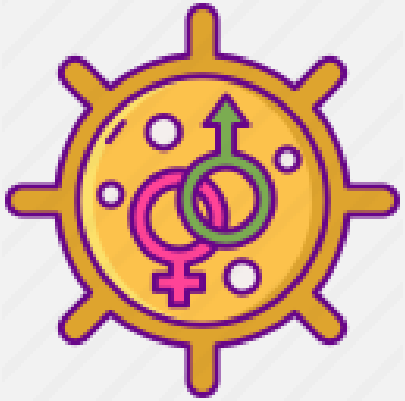
- Define STIs and list the common STIs
- Discuss the factors affecting the spread of STIs
- Explain the importance of STI control
- Explain the rationale for and steps in syndromic management of STIs
- Explain the Risk assessment of STI patients
- Explain the consequences of STIs
- List and explain the principles of good STI management
- Explain the Risk assessment of STI patients



DEFINITION OF STIs

STIs are infections transmitted through sexual intercourse which may be vaginal, oral or anal

The prevalence of STIs is high in HIV/AIDS patients





CLASSIFICATION OF STIs

Curable		Incurable
Ulcerative	Non-ulcerative	
Syphilis 	Gonorrhea 	HIV 
Chancroid 	Chlamydia 	Hepatitis B Virus 
	Trichomoniasis 	Herpes Simplex Virus 
		Human Papilloma Virus 

CONSEQUENCES OF STIs

1 Women

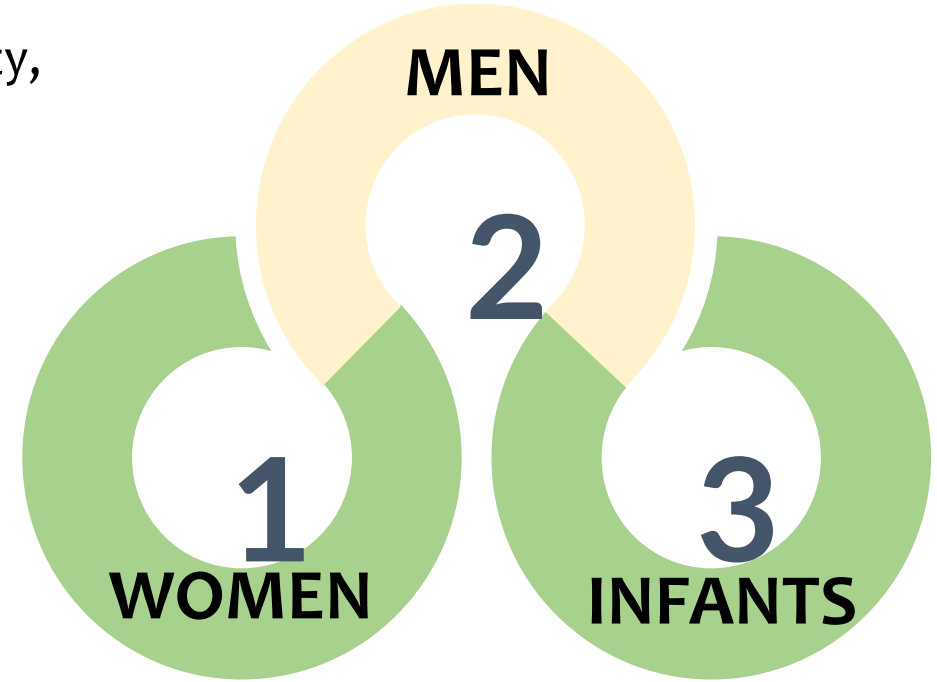
- Pelvic Inflammatory Disease (PID) (infertility, Chronic pelvic pain, ectopic pregnancy)
- Cervical Cancer
- Adverse pregnancy outcome

2 Men

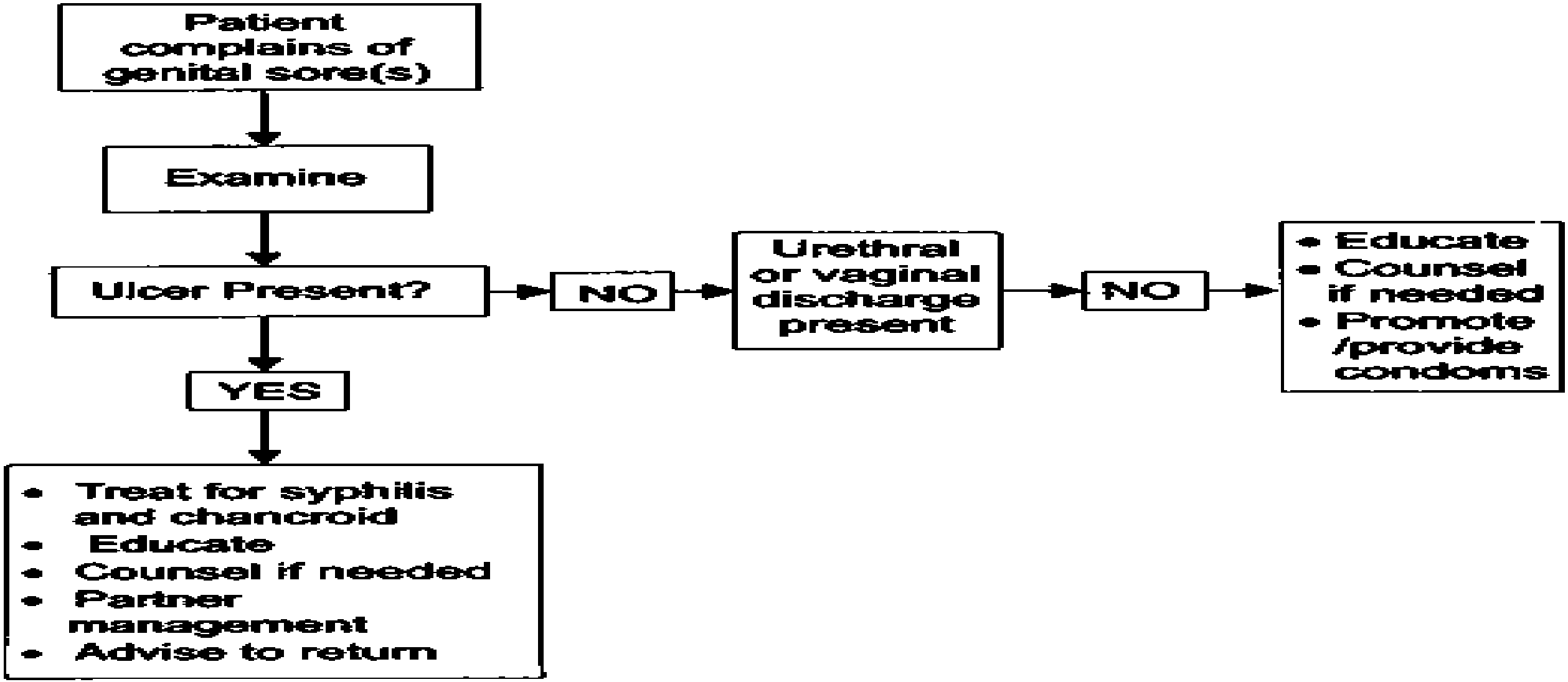
- Infertility, narrowing of the urethra

3 Infants

- Eye infections, blindness, death



FLOW CHART FOR MANAGING STIs



Overview of Diagnosis, Basic Management and Prevention of HIV/AIDS in Primary Health Care

Sessions	Components
13.1	Global/Nigeria Burden of HIV/AIDS
13.2	HIV Testing Services
13.3	Laboratory Diagnosis of HIV Infection
13.4	Antiretroviral Therapy in PHC
13.5	Management and Reporting of Adverse Drug Reactions (ADRs) of Anti Retroviral (ARVs)
13.6	Management of Sexually Transmitted Infections (STIs) and Prevention of HIV Infection
13.7	Prevention of HIV Infection
13.8	Overview of Prevention of Mother-To-child Transmission of HIV (PMTCT)
13.9	PMTCT Intervention In Antenatal Care
13.10	HIV- Exposed Newborn Care after 12 Hours Birth
13.11	Counselling and Support on Safer Infant Feeding Options
13.12	Recording Post- Partum Information

Learning Objectives

At the end of this session, Participants will be able to;

1. Describe the levels of prevention in the context of HIV and AIDS
2. Explain HIV and AIDS prevention strategies
3. Define PrEP and PEP
4. Identify indications for use of PrEP
5. Appreciate the use of PEP in different settings

Overview of general prevention strategies



Prevention of HIV simply means the implementation of measures that reduce or eliminate the transmission of HIV from one individual to another



There are several strategies for the prevention of HIV transmission

HIV prevention strategies should be guided by a proper understanding of the dynamics of HIV transmission. Prevention can be primary, secondary & tertiary.

Interventions to reduce sexual transmission of HIV



- Better recognition of the symptoms of STIs and improved treatment-seeking behaviour
- Better management of STIs
- Sexual abstinence or delayed onset of sex, especially for adolescents
- Fewer sexual partners
- Faithfulness amongst partners
- Safer sex practices, including consistent and correct use of condoms
- Supportive social environment to sustain behavioural change
- Reduced stigma and discrimination against people living with HIV
- Partner notification services
- Behaviour Change Communication

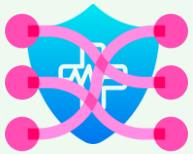
Pre-exposure prophylaxis (PrEP)



Pre-exposure Prophylaxis (PrEP) is the pre-emptive use of antiretroviral (ARV) drugs to reduce the probability of HIV-negative individuals acquiring HIV infection especially persons who engage in high-risk activities



When used daily and consistently PrEP can reduce the risk of HIV among high-risk individuals by as much as 90%



The level of protection is strongly correlated with PrEP drug adherence



PrEP can be even more effective if it is combined with other HIV prevention methods like condom use

Who is eligible for PrEP?



1. Sero-discordant couples
2. Sex workers
3. People who inject drugs (PWID)
4. Individuals who engage in anal sex on a prolonged and regular basis especially
5. Sexually exposed adolescents and young people

Post Exposure Prophylaxis (PEP)

If the source person is HIV negative	No PEP is necessary for the exposed health worker unless there is suspicion that the source is newly infected, and in the 'window period' of sero-negativity.
If the exposed health worker is HIV positive	▪ No PEP is necessary ▪ The health worker should be referred for further counselling and long-term management
If the health worker is HIV negative and the source patient is HIV positive	▪ Give ARV drugs for a period of four weeks ▪ Repeat health worker's HIV test at 3 and 6 months after the initial test ▪ Should the health worker seroconvert during this period, provide appropriate care and counselling, refer for expert opinion and long-term management
If it is not possible to determine the HIV status of the source patient	Assume that the source patient is positive and proceed according to guidelines above

Recommended drug combination for Post Exposure Prophylaxis

- TDF/3TC/DTG (Preferred)
- TDF/3TC/EFV or AZT/3TC + EFV
- Nevirapine should never be used for PEP as the risk of fatal hepatotoxicity outweighs the risk of HIV infection
- Where DTG and EFV is contraindicated, either of the 2drug combinations may be combined with LPV/r, RAL, or DRV/r

- NVP should not be used in children above the age of 2 years.
- A 28-day prescription of antiretroviral drugs should be provided for HIV post-exposure prophylaxis following initial risk assessment.
- Enhanced adherence counselling is suggested for individuals initiating HIV post-exposure prophylaxis.

Recommended schedules of investigations following HIV exposure

Period	Recommended Investigations
Baseline	HIV, HBV, HCV screening, FBC , LFT, Renal function test
Two weeks	Full blood count, Liver function test, Renal function test
Six weeks	HIV screening
3 months	HIV screening
6 months	HIV screening

Post-sexual assault exposure prophylaxis

- When an assailant's HIV status is unknown, the following factors should be considered in evaluating the level of risk:
  - ❖ Occurrence of vaginal or anal penetration
  - ❖ Occurrence of ejaculation on mucous membranes
  - ❖ Involvement of multiple assailants
  - ❖ Presence of mucosal lesions on the assailant or victim
  - ❖ Other characteristics of the assault, victim, or assailant that might increase risk for HIV transmission



Post-sexual assault exposure prophylaxis cont'd



- If PEP is offered, the following should be discussed with the patient:
  - ❖ Benefits and known toxicities of ARV
  - ❖ Follow-up that will be necessary
  - ❖ Benefit of adherence to recommended ARV dosing
  - ❖ Early initiation of PEP to optimize potential benefits (as soon as possible after and up to 72 hours after the assault)

KEY MESSAGES

1. A three-drug ARV regimen should be used for post sexual exposure PEP

2. As with all cases of sexual assault, it is important to arrange for continuous counselling and support for the victim. Emergency contraception should also be considered if applicable

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Learning Objectives

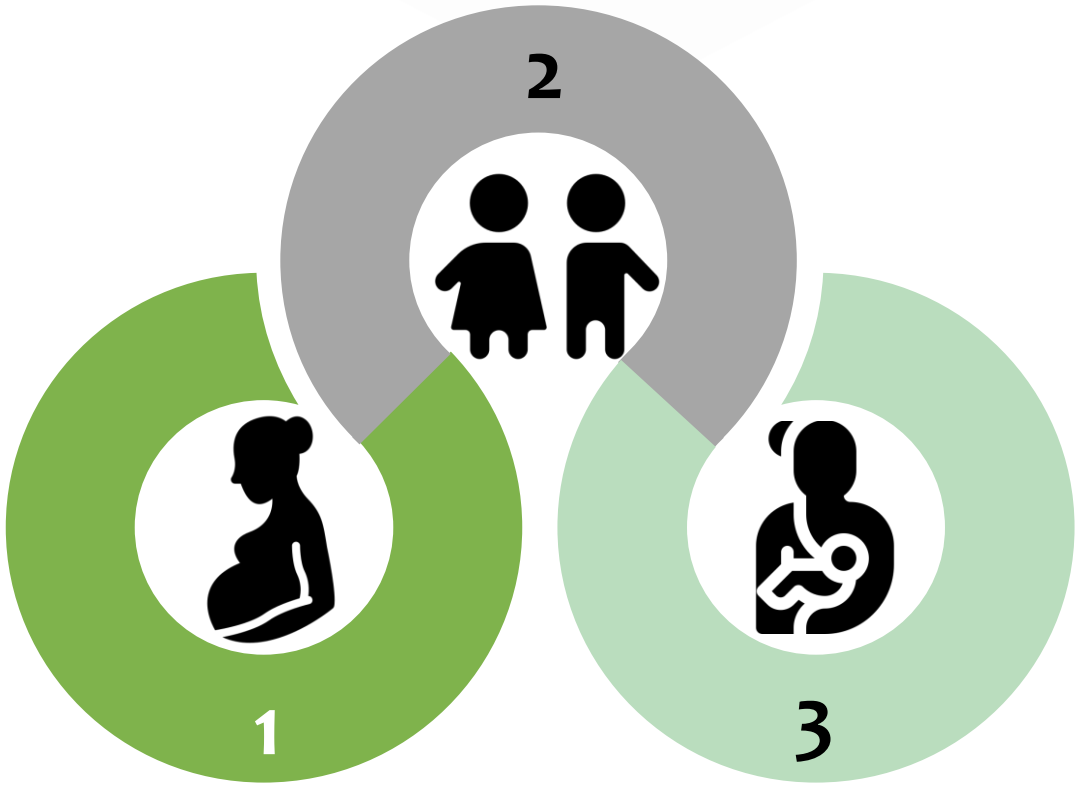
At the end of this session, Participants will be able to;

1. Explain the risk factors for maternal to child transmission of HIV
2. Discuss the 4 prongs approach to HIV prevention in infants and young children
3. Discuss the importance of male/partner involvement in PMTCT intervention.

PMTCT overview and guidance

- Mother-to-child transmission (MTCT) accounts for most new infections in children (0-14 years)
- As a result of scaled-up HIV prevention services, there is a decline in the number of new HIV infections among children globally however, Nigeria still contributes about 10% of all cases of mother-to-child transmission (MTCT) of HIV in the world
- Despite the scale up of PMTCT services in recent years, new infant infections persist due to dropouts along the PMTCT cascade and missed opportunities, hence many children living with HIV remain undiagnosed or present late in the course of their disease
- Strategies to improve case finding for HIV-infected children are necessary to identify HEIs at risk and link to them to care and treatment promptly

Mother to child transmission



Mother to Child Transmission of HIV (MTCT) is the main cause of HIV infection in children, and it can occur during:

1. Pregnancy
2. Labor and children
3. Breastfeeding

Mother to child transmission (without interventions)

100 infants born to HIV infected women who breastfeed, without any interventions

60 to 75 infants will not be HIV-infected

5–10 infants infected during pregnancy

About 15 infants infected during labor and delivery

5–15 infants infected during breast-feeding

25 to 40 infants will be HIV-infected

Risk Factor for Mother –to-Child Transmission of HIV

Mother to child transmission – with interventions

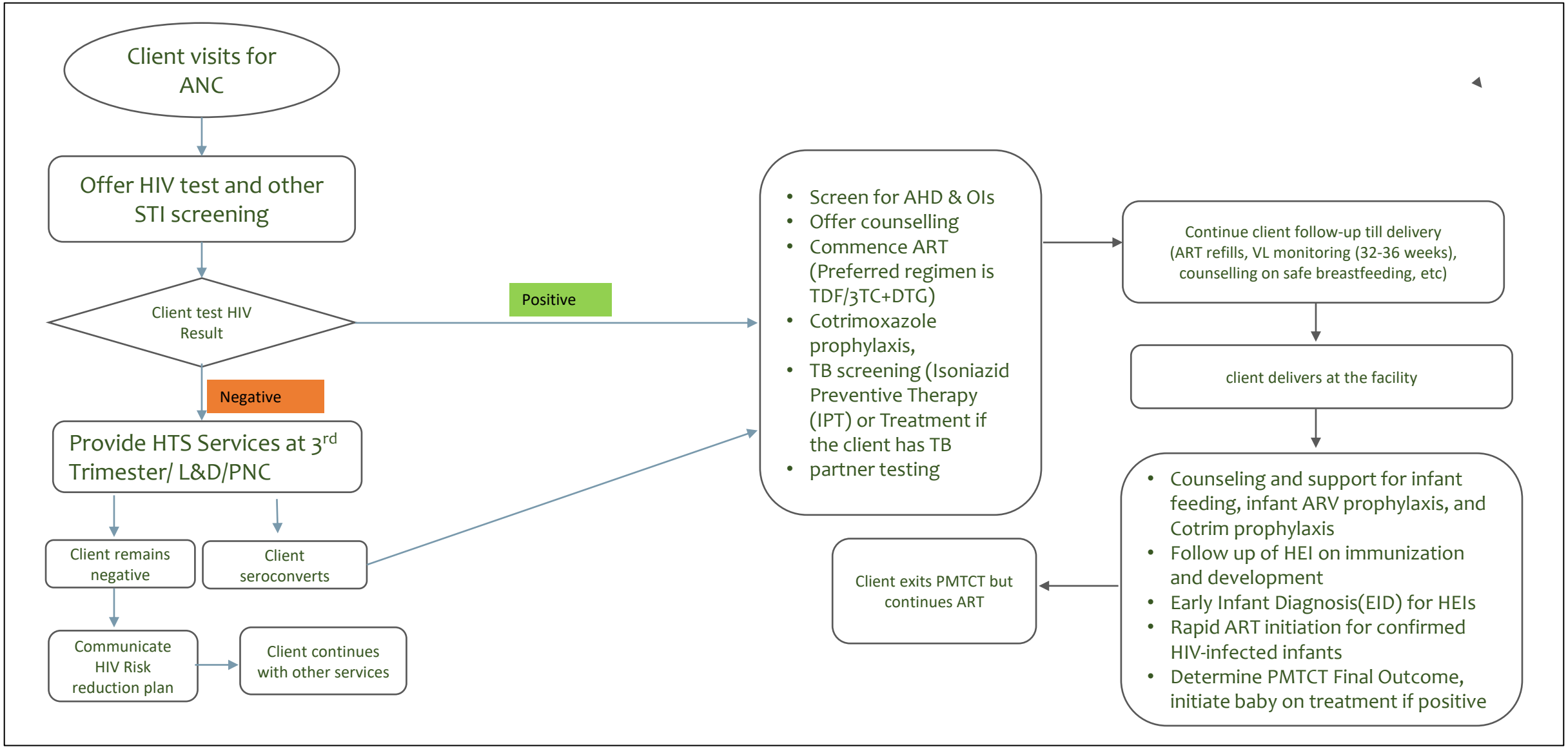
100 infants born to HIV infected women who breastfeed, with any interventions

95 - 98 infants will not be HIV-infected

Effective combination interventions instituted as per national guideline

Only **2** infants will be HIV-infected

PMTCT: Client flow



Risk factors for MTCT

Pregnancy	Labour and Delivery	Breastfeeding
▪ High maternal viral load ▪ Infection ▪ STIs ▪ Malnutrition ▪ Hemorrhage	▪ High maternal viral load ▪ Prolonged rupture of membranes ▪ Invasive delivery procedures ▪ Chorioamnionitis	▪ High maternal viral load ▪ Duration ▪ Early mixed feeding ▪ Breast fissures, infections ▪ Poor maternal nutrition ▪ Oral disease in infant

Comprehensive approach to prevention of HIV infection in infants, young children and adults – Four pronged approach

1. Primary prevention of HIV infection
2. Prevention of unintended pregnancies among women infected with HIV
3. Prevention of HIV transmission from women infected with HIV to their infants (Core PMTCT)
4. Provision of treatment, care and support to women infected with HIV, their infants and their families

MATERNAL AND CHILD HEALTH SERVICES THAT FACILITATE PMTCT

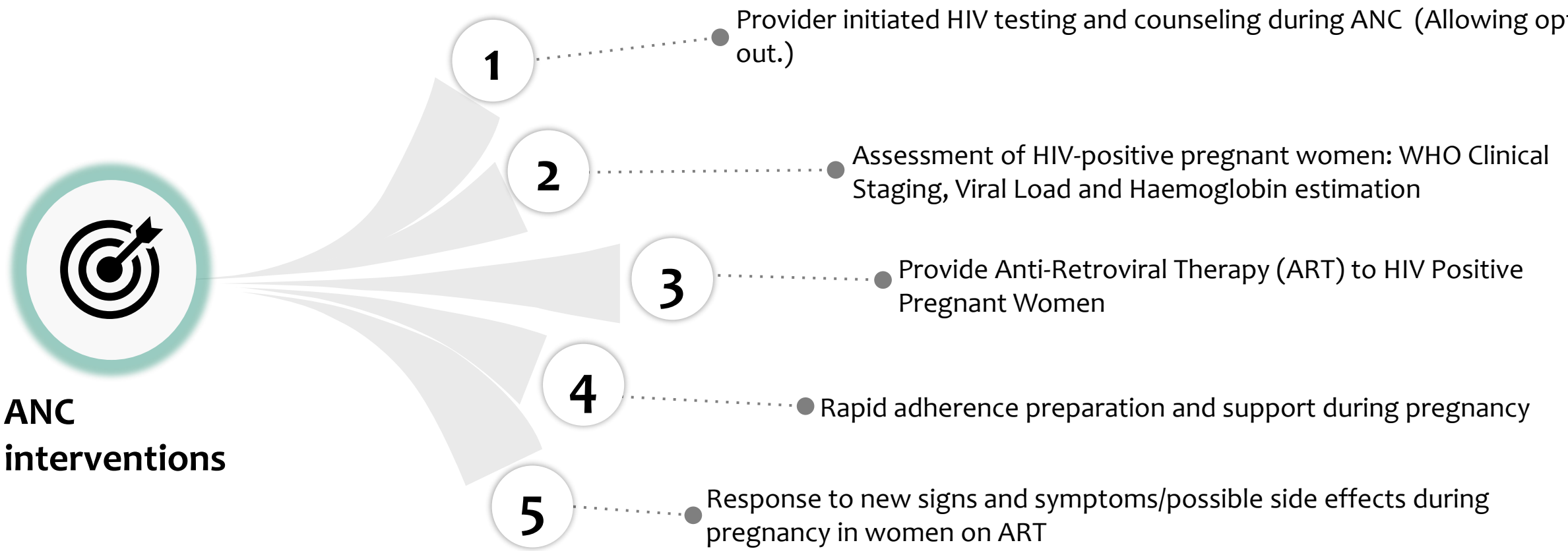
The following services when available at the PHC facility work towards the prevention of MTCT of HIV**:**

- Antenatal care
- Family planning services
- ART Refill
- Safer delivery practices
- Postnatal care, cervical screening services
- Counseling and support for the woman's chosen infant-feeding method



ANC INTERVENTIONS TO PREVENT MTCT

ANC provides unique opportunity for HIV prevention, treatment and control through various services offered during this period.
These include:



SESSION 3.9.2 :HIV TESTING SERVICES DURING LABOUR

SUMMARY OF MATERNAL ART FOR DIFFERENT CLINICAL SCENARIOS

	Scenario	Recommendations
1	Mother diagnosed with HIV before labour and already on ART	Continue ART
2	Mother diagnosed with HIV before labour and not on ART	Initiate maternal ART
3	Mother diagnosed with HIV during labour or immediately postpartum and plans to breastfeed her baby	Initiate maternal ART
4	Mother diagnosed with HIV during labour or immediately postpartum and plans replacement feeding	Initiate maternal ART

HIV RETESTING DURING PREGNANCY

All HIV-negative pregnant women should be counselled and retested 3 months after initial test or in the third trimester or during labour, as appropriate



DOCUMENT AND RECORDING IN PMTCT

There are 2 groups of patient records relevant for PMTCT:

1 Hand Held Cards

Patient-hand- held cards are kept by the patient, and are regularly updated during patient's follow-up health facility visits.

2 Facility records

These records are kept at the facilities.

Patient records relevant for PMTCT is covered in detail in the session on “Record Keeping” in Module 7

STEPS TO CHECK HIV STATUS

If she has been tested HIV-negative	If she has not been tested
▪ Check to see when the woman was tested for HIV and discuss risks of HIV exposure since the last HIV test ▪ Ask whether she feels confident that she had not been exposed to HIV during the 6 weeks just prior to the test or after the test ▪ If there are potential risks for HIV exposure outside of the HIV test window, then offer HIV testing	Recommend HIV testing and counselling, depending on the situation of the woman

Provider Initiated HIV Testing and Counselling: refer to antenatal care in the context of HIV

STEPS TO CHECK HIV STATUS



If she tests HIV-positive

- The woman will receive ARV drugs immediately to lower the risks of passing the virus to her baby
- The baby will also receive ARV prophylaxis as soon as possible after birth
- After delivery, the woman will be provided treatment services for herself, her baby and family

WHEN HIV TEST IS DECLINED

- Address barriers to HIV testing
- Review risk reduction for HIV transmission
- Explain benefits of exclusive breastfeeding, review postnatal care and encourage testing
- Encourage health care visits and return visit

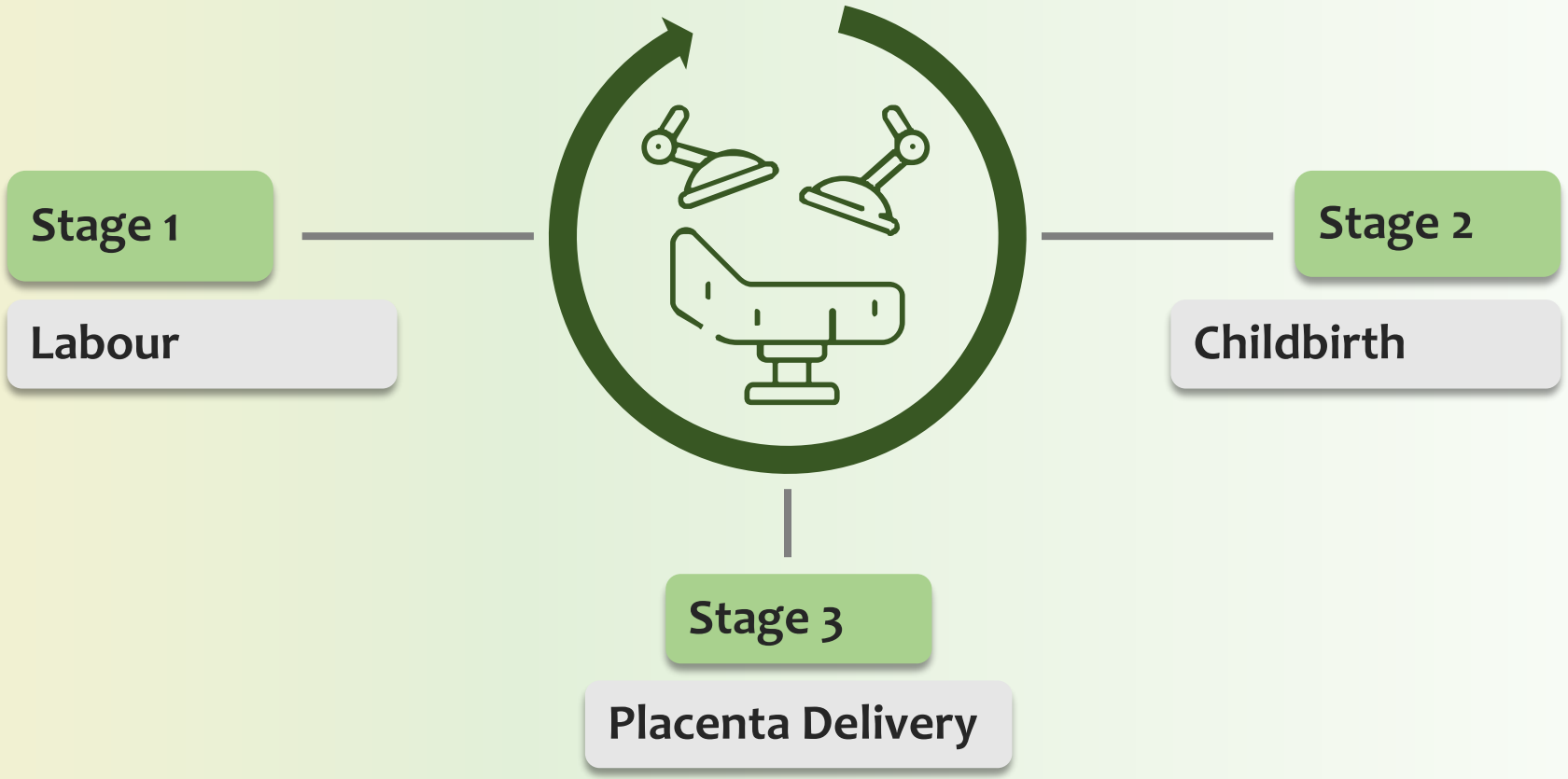
MANAGEMENT OF FIRST, SECOND AND THIRD STAGES OF LABOUR IN HIV POSITIVE WOMAN

Keeping in mind how good management of labour for all women, irrespective of their HIV status can contribute towards

- Reduced risk of MTCT of HIV
- Reduced maternal and neonatal morbidity and mortality
- Increased health worker safety (reduced risk of transmission of HIV and other infectious diseases to the health worker)

PMTCT INTERVENTIONS STAGES DURING LABOUR

MTCT interventions during the three stages of labour are summarized as follows:



LABOUR STAGE 1

1	Ensure that the pregnant woman takes the ARV drugs as scheduled even in labour
2	Ensure presence of a skilled birth attendant
3	Follow standard precautions routinely for all women irrespective of her HIV status
4	Use Partograph to monitor labour progress and respond if unsatisfactory
5	Avoid prolonged labour
6	Avoid routine rupture of membranes
7	Minimize cervical examinations
8	Avoiding invasive foetal monitoring will also reduce MTCT of HIV

LABOUR STAGE 2 (CHILDBIRTH)

1	Adhere to safer delivery practices that reduces foetal contact with maternal blood and secretions
2	Practice standard precautions for all patient care
3	No routine episiotomy
4	Practice careful cord cutting; wrap gauze round cord before cutting cord to prevent splatter, use separate scissors to cut cord and in giving episiotomy
5	Wipe baby with clean dry cloth (wear gloves)
6	Keep the baby warm

LABOUR STAGE 3 (DELIVER PLACENTA)

Avoid PPH by active management of third stage

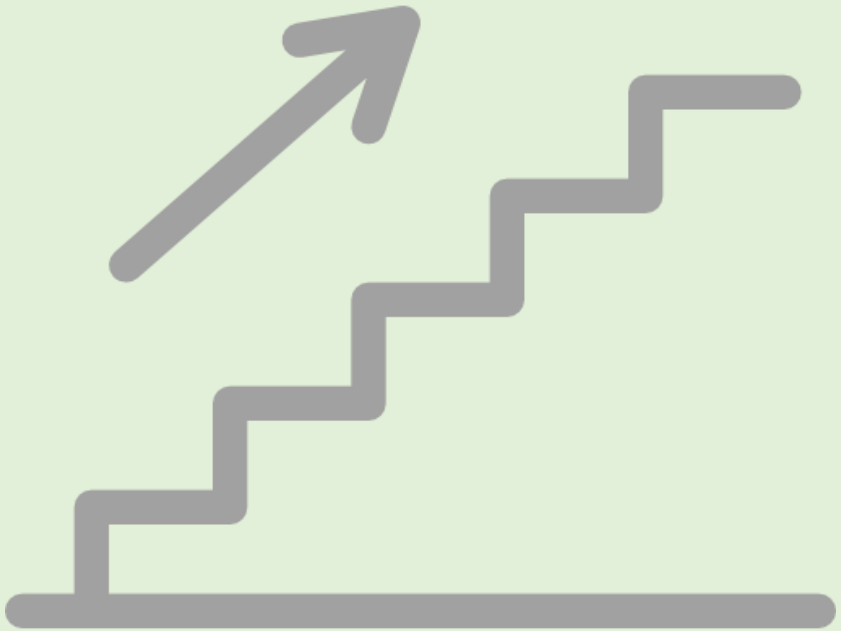
1	Give IM oxytocin 10i.u start
2	Deliver placenta by control cord traction
3	Rub up uterine contractions
4	Inspect the placenta to ensure it is complete
5	Inspect the perineum, repair episiotomy or any perineal laceration if present
6	Ensure the bladder is empty by encouraging woman to void by herself
7	If indicated, ensure safe transfusion practices
8	Protect health workers from HIV or other blood borne infections
9	Routinely adhere to practices of standard precaution

SESSION 3.9.3: PMTCT INTERVENTIONS DURING POST-NATAL AND NEW BORN CARE

Session 3.9.4

POSTNATAL AND NEW BORN CARE 12 HOURS AFTER CHILDBIRTH

STEPS IN POSTPARTUM CARE



Step 1

Ask the woman:

- ❑ When and where did you give birth?
- ❑ When and where did you give birth?
- ❑ Have you had any pain or fever or bleeding since delivery?
- ❑ Do you have any problem with passing urine?
- ❑ How do your breasts feel?
- ❑ Do you have any other concerns?
- ❑ Have you decided on any contraception?
- ❑ Have you been tested for HIV before? What were the results?

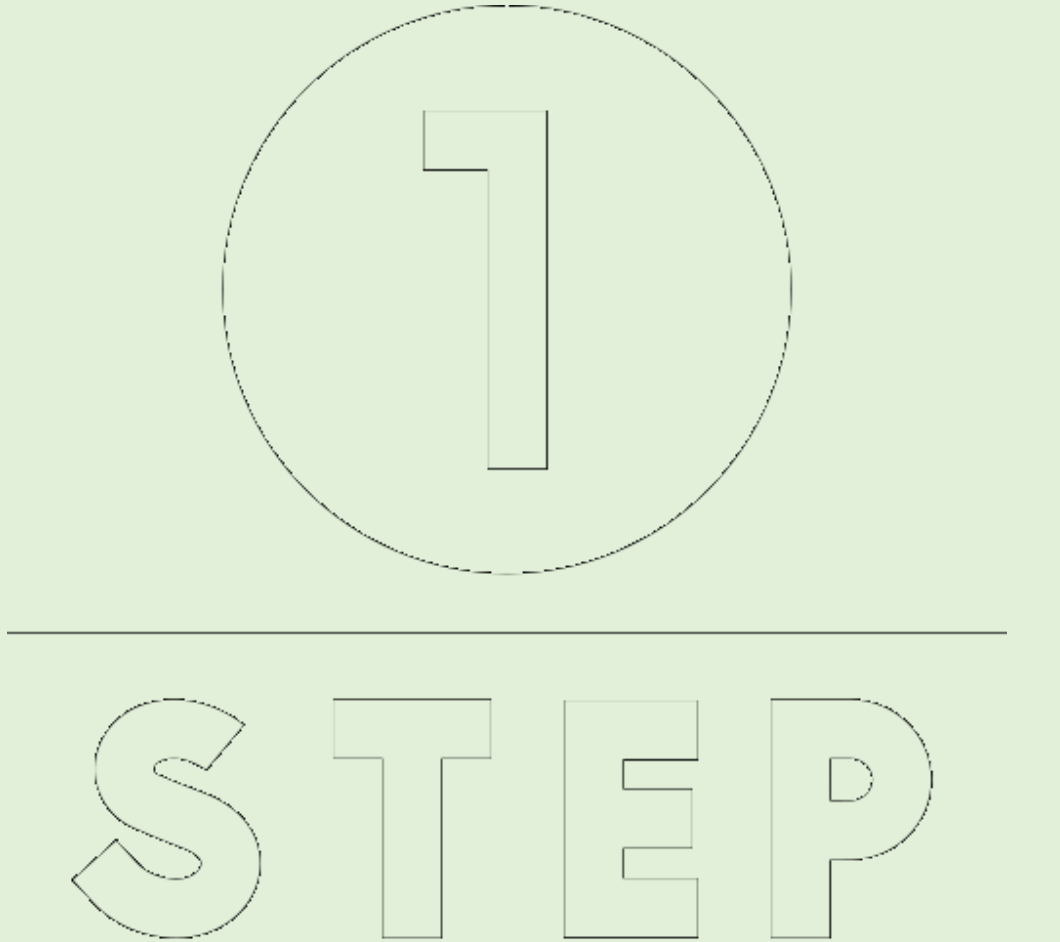
STEPS IN POSTPARTUM CARE

At each postpartum visit:

STEP 1

Check records:

- Any complications during pregnancy or delivery?
- Receiving any treatments, including ARV prophylaxis or ART?
- HIV status



STEPS IN POSTPARTUM CARE

Step 2: At each postpartum visit:

Check for emergency signs:	Perform postpartum examination of the woman:	Look, listen, feel:
The general principle of emergency check during postnatal period is the same as during pregnancy, though some of the emergency conditions in postpartum woman are different from pregnant women.	Assess all postpartum women after discharge from the facility or after home delivery.	• Measure blood pressure, pulse, and temperature. • Look for conjunctival / palmar pallor. • Look and palpate the woman's legs (calves) • Examine and palpate her breasts • Feel the uterus : * Is it hard and round?

STEPS IN POSTPARTUM CARE

Look at vulva and perineum for:

- cleanliness
- tear
- swelling
- pus



1. Look at pad for bleeding and lochia
2. Does it smell?
3. Is it profuse?
4. Ask the woman to feed her baby and assess the feeding, if applicable.
5. Ask about and record any medications the woman is on, including ARV prophylaxis or ART.

STEPS IN POSTPARTUM CARE

Step 3

Respond to observed signs and volunteered problems: Give preventive services, advice and counsel

To all postpartum women, recommend preventive measures, advice and counsel:

- Encourage couple visit and counselling session
- Give tetanus toxoid, if due
- Provide iron/folic acid 1 tablet daily; counsel on adherence and safety and advice to take the tablets with meal
- Provide vitamin A 200,000 IU supplement, if not provided immediately after delivery to baby
- Provide Mebendazole 500 mg once every six months to mother
- Advice and counsel on nutrition and self-care

STEPS IN POSTPARTUM CARE CONT..

Step 3

- Advise on breast care and for the woman to return immediately if she has any breast or breastfeeding problems
- Advise to stop smoking and avoid alcohol, harmful use of drugs if applicable
- Encourage (mother and newborn) sleeping under long lasting insecticide net (LLIN)



- Counsel on family planning; provide method of the woman's choice, if choice not available refer
- Recommend HIV testing for postpartum women, encourage and support partner disclosure and HIV testing and counselling, if not already done

STEPS IN POSTPARTUM CARE CONT..

Step 3

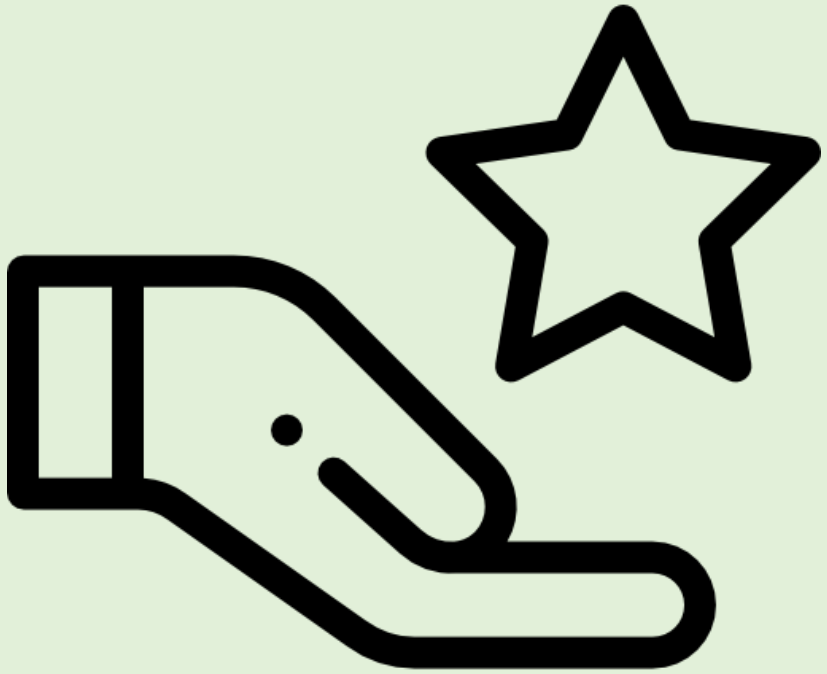
- Advise on safer sex practices and consistent and correct use of condoms to prevent STIs, including HIV.
- A new HIV infection in a breastfeeding mother increases the risks of MTCT of HIV due to the high viral load associated with new infection.



- Provide condoms and instruct on correct and consistent use. Many women may need help preparing to talk with their partners about STI protection, how to use condoms and safe sex practices.
- Advise the woman that lochia can cause infection in other people and therefore blood stained pads/clothes should be disposed safely

STEPS IN POSTPARTUM CARE

Step 4



- Recommend HIV testing and counselling, if not already done for all postnatal women coming for follow up:
- Check HIV status:
- Check the woman's facility record to see if she has been tested for HIV and if the test result is recorded on the woman's maternal card. Or ask the woman:
- Have you had HIV testing and counselling? When? What was the result?

KEY MESSAGES

1. Post partum care for HIV positive women is very vital
2. This ensures that the patients routine management is adhered to
3. It prevents mother to child transmission as she and the baby are closely monitored

Overview of Diagnosis, Basic Management and Prevention of HIV/AIDS in Primary Health Care

Sessions	Components
3.1	Global/Nigeria Burden of HIV/AIDS
3.2	HIV Testing Services
3.3	Laboratory Diagnosis of HIV Infection
3.4	Antiretroviral Therapy in PHC
3.5	Management and Reporting of Adverse Drug Reactions (ADRs) of Anti Retroviral (ARVs)
3.6	Management of Sexually Transmitted Infections (STIs) and Prevention of HIV Infection
3.7	Prevention of HIV Infection
3.8	Overview of Prevention of Mother-To-child Transmission of HIV (PMTCT)
3.9	PMTCT Intervention In Antenatal Care
3.10	HIV- Exposed Newborn Care after 12 Hours Birth
3.11	Counselling and Support on Safer Infant Feeding Options
3.12	Recording Post- Partum Information

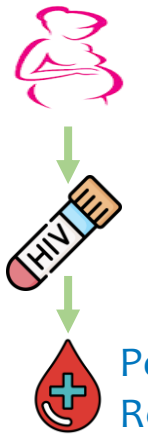
Learning Objectives

At the end of this session, Participants will be able to;

1. Provide routine care and ARV prophylaxis to HIV-exposed infants
2. Support adherence to ARV prophylaxis for the newborn
3. Explain the difference between HIV-exposed and HIV-infected children
4. Describe the guiding principles for safer infant feeding options
5. Recommend HIV-testing and interpret test results in young infants
6. Identify HIV-infected infants early

PMTCT/EID TREATMENT CASCADE

During the antenatal period, all pregnant women must have access to HIV testing services (HTS). Women who test positive for HIV should access a series of HIV preventive, diagnostics and treatment services



Positive Result

Antenatal HIV Testing Service

- Lifelong ART Treatment
- Cotrimoxazole Preventive Therapy (CPT)
- Isoniazid Preventive Therapy (IPT)
- Viral Load Monitoring (32-36 weeks)
- Prophylaxis for HEIs
- Counselling and support for infant feeding
- Infant screening at non-PMTCT entry points
- Early Infant Diagnosis(EID) for HEIs
- Rapid ART initiation for confirmed HIV-infected infants
- Referral for family planning services

ARV Prophylaxis for HIV-exposed infants



- All HIV exposed infants should receive ARV prophylaxis
- Infants at low risk of acquiring HIV from their mothers should receive NVP only once daily for 6 weeks
- Infants born to mothers with HIV who are at high risk of acquiring HIV should receive dual prophylaxis with AZT (twice daily) and NVP (once daily) for the first 12 weeks of life

Category of clients requiring referral to ART centre

They include infants that are:

Born to women with incident HIV infection during pregnancy (this includes women diagnosed in labour) or breastfeeding; OR

Born to women with established HIV infection with viral load >1000copies/mL in the four weeks before delivery; OR



Born to women with incident HIV infection during pregnancy (this includes women diagnosed in labour) or breastfeeding; OR

less than four weeks of ART at the time of delivery. Born to women with established HIV infection who have received ; OR

Identified for the first time during the postpartum period, with or without a negative HIV test prenatally

Overview of managing HEIs

Initiate Prophylaxis in all HIV Exposed Infants

As soon as possible, within 72 hours after birth

Nevirapine syrup (For infants with mothers stable on ART) For 6 weeks

- Birth weight <2.5kg 10mg (1ml)
- Birth weight ≥2.5kg 15mg (1.5ml)

Dual Prophylaxis (For infants at high risk of HIV infection)

- AZT(Twice) and NVP(Once) daily for 6 weeks
  - Birth weight <2.5kg 10mg (1ml per dose for either drug)
  - Birth weight ≥2.5kg 15mg (1.5ml per dose for either drug)
  - 6 weeks – 12 weeks 20mg (2ml) daily NVP & 60 mg (6ml) twice daily AZT

Co-trimoxazole Prophylaxis

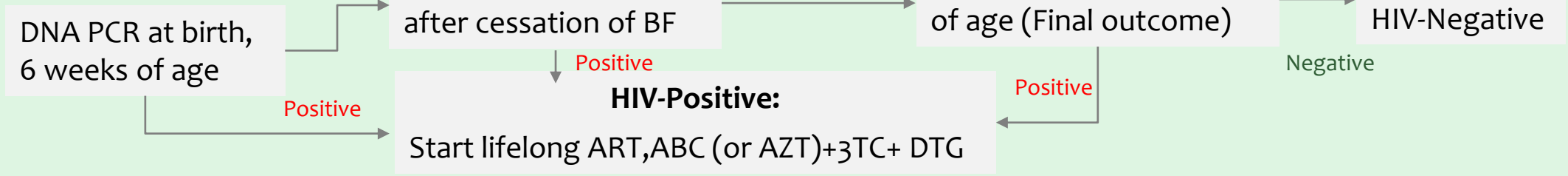
- <6 m or <5kg: 20mg TMP/100mg SMX
- 6 m-14yrs or 5-15kg: 40mg TMP/200mg SMX

} daily dose from 6 weeks of age until risk of HIV transmission has been excluded

IPT

Administer INH if mother has Active TB

Early Infant Diagnosis (EID)



Provide routine immunization per National guidelines and recommend exclusive breastfeeding. If unfeasible, discuss options for replacement feeding

Follow-up visits for HIV-exposed infants

Ensure follow-up care of HIV-exposed infants:

1. At 14 days, then monthly for 3 months, then every 3 months or as per immunization schedule.
2. Advice the mother to bring the infant at any time, if there are new signs and symptom.
3. HIV exposed infants with health problem may need more frequent follow-up visits
4. Follow national immunization schedule and administer all vaccines including BCG to prevent childhood killer diseases
5. Follow vitamin A supplements every 6 months beginning at 6 months of age
6. Initiate Cotrimoxazole prophylaxis at 6 weeks of age and monitor and support adherence
7. Provide INH prophylaxis for the TB- exposed infant or per recommendations of national guidelines;

Referral for HIV-exposed infants

Refer for ART if infant is **HIV-infected:**

1. Positive HIV antibody test after the age of 18 months;
2. Positive HIV virological test at any age;
3. Suspect presumptive severe HIV infection (positive antibody test under the age of 18 months and 2 of the following: oral thrush, severe pneumonia, unexplained severe malnutrition or severe sepsis);

Note: For a child who is < 18 months of age, the interpretation of a positive HIV antibody test result is not the same as in adults because maternal HIV antibodies may pass to the baby during pregnancy.

KEY MESSAGES

1. Identify all HIV Exposed infants early
2. Do follow -up for all HIV Exposed Infants
3. Refer all HIV infected children

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3.12	Recording Post- Partum Information

Learning Objectives

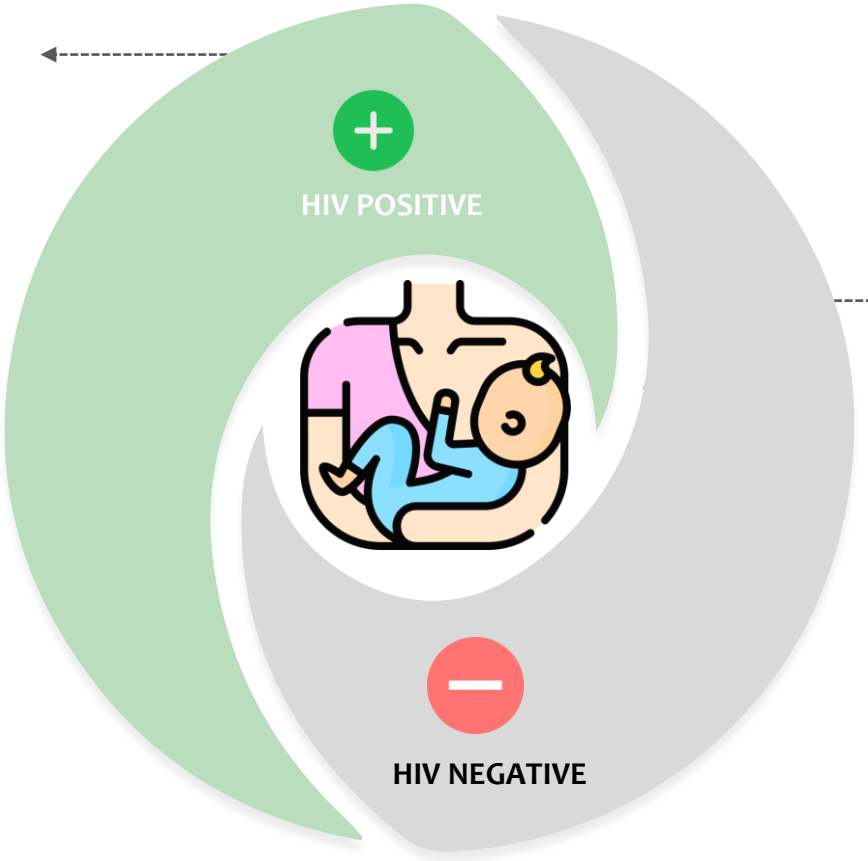
At the end of this session, Participants will be able to;

1. Discuss safer infant feeding options
2. Provide counselling and support on safer infant feeding options

Safer infant feeding options

HIV POSITIVE WOMEN

- All HIV positive women should receive counselling on infant feeding options as part of antenatal and postnatal care.
- If there is no trained infant feeding counsellor, explain to the woman the advantages and disadvantages of available options and explore her home and family situation
- The most appropriate infant feeding option for an HIV-positive woman depends on her decision and circumstances



HIV NEGATIVE WOMEN

- All women who are **HIV-negative** or who do not know their HIV status should be counselled to:
  - ❖ Exclusively breastfeed their babies for the first six months of life,
  - ❖ Followed by complementary feeding with continued breastfeeding for up to two years or beyond.
  - ❖ Women who do not know their status should be counselled to test for HIV

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3.12	Recording Post- Partum Information

Learning Objectives

At the end of this session, Participants will be able to;

1. Identify the different types of postpartum register
2. Record information of HIV positive mother and baby in the appropriate register
3. Track information about HIV positive mother and baby

Introduction

- Administration of ART to the woman and her infant should be carefully recorded on both the maternal and child health card
- It is very important to have organized ways to record information and to track an HIV-positive mother and her baby



Types of Postpartum registers

1

Facility registers

Where there is postpartum register and an under-five register, HIV-related information can easily be integrated into these registers.

- The facility should also use both the HIV care/ART card and ART registers to follow up HIV-positive postpartum women.

2

Maternal health card

Advise the mother to bring her card during each postpartum visit.

3

Child health card

The first dose of ART should be given to the baby:

Immediately after birth.

- ART should also be dispensed for the baby at discharge from the maternity ward
- This information should be recorded on the child health card, and the mother/parents should be informed to bring the child card upon return for postnatal care or for routine child immunization visit.



KEY NOTES

This register is important in providing longitudinal care for HIV-exposed infants.

- All HIV-exposed infants enter care at different points e.g.
  - maternal health services,
  - adult HIV care services,
  - routine child health services,
  - inpatient wards, or
  - referred from other facilities or community services
- All need longitudinal care to ensure:
  - early diagnosis of HIV-infection
  - timely initiation of cotrimoxazole prophylaxis, and
  - access to ART as early as indicated

Session 4.0

Hepatitis B and C Co-infections Management in PHCs

Learning Objectives

- At the end of the session, participants should be able to:
- Describe the modes of transmission of Hepatitis viruses that occur as co-infections with HIV
- List the unique clinical and laboratory features of HIV/Hepatitis co-infections
- Outline the management of HIV/Hepatitis co-infections.

Co-infection with Hepatitis viruses

- HIV infection increases a child's susceptibility to Hepatitis B and C infections
- Hepatitis B or C virus may lead to increase in rate of HIV replication resulting in rapid progression to severe disease
- Infants born to mothers who are co-infected with HIV and HCV are at significantly increased risk of developing HCV infection.

Hepatitis B/C Co-infection

Mode of transmission:

- Mainly perinatally or less commonly via breastfeeding
- Via blood transfusion and contaminated sharps

The risk of ARV-induced hepatotoxicity increases with active Hepatitis B infection

Features of HBV: may be asymptomatic

- Other features: malaise, fever, right hypochondrial pain and jaundice.

Diagnosis: Clinical features plus lab investigations:

- HBV Serology: HBsAg, HBeAg, anti-HBs, anti-HBe, anti-HBc, LFTs
- HCV Serology: anti-HCV if >18 months or HCV PCR if <18 months
- Liver biopsy
- HCV/HCV Viral load

Therapy for HIV/Hepatitis co-infection *cont.....*

- Antiretroviral therapy (ART) should be initiated in all HIV/Hepatitis co-infected individuals regardless of stage of liver disease.
- Refer all complicated cases for specialist care.
- *NB: Drug-drug interactions (DDIs) should be carefully considered, and the appropriate ARV or hepatitis drug substitutions/dose adjustments made before commencing treatment.*

- ***NB: Refer all cases of Hepatitis B and C co infection with HIV to a secondary health facility***

Therapy for HIV/Hepatitis co-infection *cont…..*

HIV/HBV Coinfection:

- Recommended ART for HIV/HBV coinfected PLHIV is TDF + 3TC (or FTC) + DTG.
- TDF and 3TC are active against HBV
- There is increased risk of hepatic failure with treatment interruption of ARVs when drugs used include 3TC and Tenofovir
- Use Tenofovir with 3TC or FTC in children <10 years if feasible.

HIV/HCV Coinfection:

- Sofosbuvir-Daclatasvir is the recommended DAA.
- Antiretroviral therapy should be initiated first in HIV/HCV co-infected patients before commencing Direct Acting Antivirals (DAAs) for HCV treatment.

Prophylaxis for HBV

Prophylaxis for HBV should include both passive and active measures:

- HBIG 0.06ml/kg + HBV vaccine x 3 doses
- HIV infected patients with negative HBV markers should receive recombinant HBV vaccine.

Key Points

- HIV infection can increase the susceptibility to Hepatitis B and C
- Co-infection with these viruses hastens progression of HIV disease
- Antiretroviral therapy (ART) should be initiated in all HIV/Hepatitis co-infected individuals regardless of stage of liver disease in secondary or tertiary facilities


Thank
you