Session Objectives

- Demonstrate knowledge of common Opportunistic Infections among PLHIVs, their signs and symptoms
- Demonstrate an understanding of the syndromic management of Opportunistic infections at home
- Counsel clients on how to prevent and manage common problems related to Opportunistic infections
Opportunistic Infections

- Infections that take advantage of weakened immune system.
- Common microorganisms

Healthy People

- Live in the body for years without causing serious disease

Immuno Compromised People

- Get reactivated and start growing.
HIV, Immune System and OIs
HIV, Immune System and OIs

Infections
Example: Tuberculosis, Herpes
HIV, Immune System and OIs

Body

CD4

HIV
HIV, Immune System and OIs
HIV, Immune System and OIs

- Body
- Herpes
- TB
Result of OIs
LAC and OI Management
Common OIs

- Tuberculosis
- Oral and Pharyngeal Candidiasis
- Cryptosporidiosis
- Toxoplasmosis
- Herpes Zoster
- Cryptococcal Meningitis
- Bacterial Pneumonia
- Pneumocystis Carinii Pneumonia
Tuberculosis

- Chronic, contagious disease.
- Completely curable
- Can cause death, if left untreated.

Types of TB

- Pulmonary Tuberculosis
- Extra Pulmonary Tuberculosis
Symptoms of TB

- **Symptoms of Pulmonary TB**
  - Chronic cough
  - Loss of weight
  - Mild fever
  - Sweating at night
  - Pain in chest or upper back
  - Loss of appetite

- **Symptoms of Extra Pulmonary TB**
  - Lymph nodes - swelling and fever
  - Intestines - pain in the abdomen, diarrhoea and fever
  - Liver - jaundice and fever
  - Brain - meningitis with symptoms of confusion
Treatment for TB

- **Treatment:**
  - Anti Tuberculosis Treatment
  - Usually for 6-8 months
  - Ensure client’s adherence to both treatments
Prevention

✓ Seek early medical attention for cough of any duration.
✓ Cover mouth while coughing.
✓ Spit into a closed container containing disinfectant.
✓ Avoid unventilated space.
✓ Evaluate close contacts for TB.
✓ BCG vaccination for Newborns.
Oral-pharyngeal Candidiasis

- Usually first indication of immune impairment.
- Starts with small white or yellow patches on the mouth cavity and on the tongue.
- Extends to Oesophagus resulting in difficulty in swallowing.
Management of Oral Candidiasis

Home Care

- Scrub tongue and gums gently and then rinse the mouth with a mild salt solution/dilute mouthwash/lemon water.
- Eat soft foods
- Eat bland not spicy foods.
- Use a straw for liquids and soups.
- Have cold foods, drinks or ice, to relieve discomfort.

Medical Treatment

- Symptoms do not respond to home-based management
- Develops difficulty in eating and swallowing.

- Client with oesophageal candidiasis (major OI) must be referred to the Nodal ART centre for treatment.
Applying Gentian violet
Prevention of Oral Candidiasis

**Ensure**
- Oral Hygiene
- Nutritious diet
- Adequate rest.

**Avoid**
- Sweets
- Alcohol
- Smoking
Cryptosporidiosis

- Caused by micro-organism that lives in human intestine.
- Highly infectious.
- Transmitted through water, food, animal-to-human and human-to-human contact.
- Causes watery diarrhoea and malabsorption.
Management of Cryptosporidiosis

Home Care

- Drink more liquids than usual
- Continue to eat
- Avoid self-medications.

Medical Treatment

- If signs of dehydration appear.
- If diarrhoea does not reduce.
Prevention

- Drink bottled/boiled water/Zeoline solution/filtered water.
- Peel and thoroughly wash fruits and vegetables.
- Avoid direct contact with faeces.
- Wash hands properly with soap before eating.
Herpes Zoster

- Painful rash with blisters on the face, scalp, neck, chest, back, stomach or limbs.
- Caused by virus
- Develops if previously infected with chicken pox.
Herpes Zoster contd

• **How rashes appear?**

Rashes starts with a sharp, burning pain, tingling, numbness, itching or aching in or under the skin.

Grape-like clusters of small, clear, fluid-filled blisters on red skin appear.

Healing takes several weeks and leaves discoloured areas.
Management of Herpes Zoster

- Get treatment as soon as possible.
- Treatment
  - Reduces healing time and pain
  - Delays or prevents additional outbreaks/episodes
- Important slide
  - Apply calamine lotion to intact blisters twice daily.
  - Keep area dry and clean
  - Avoid rubbing from clothes.
  - Wear clean, loose-fitting, cotton clothing.
  - Bath sores with warm salt water thrice a day.
  - Apply gentian violet solution or antibiotic skin creams or ointments once a day to broken blisters
Cryptococcal Meningitis

- Caused by an infective organism which reaches the brain via the blood.
- Slowly progressive and ultimately fatal, if left untreated
- Produces:
  - Headache which gradually increases over time and become continuous.
  - Stiff neck
  - Double vision
  - Fever
  - Nausea/Vomitting
  - Altered consciousness
Management of Cryptococcal Meningitis

- **Immediately** refer to general OPD for treatment.
- Support adherence to treatment.

- Family members support to ensure patient’s safety.

Important slide
Toxoplasmosis

- Infection acquired by
  - contact with cats or birds
  - eating undercooked meat
- Affects brain and lymph nodes
- Symptoms
  - Fever and headache (severe and localized)
  - Confusion
  - Vomiting
  - Seizures
  - Altered mental status
  - Paralysis and coma.
Treatment and Prevention

Ensure referral to Nodal ART centre for early diagnosis and treatment.

Prevention

- Proper hand wash and cleaning of kitchen surfaces.
- Avoid handling cat faeces or gardening without gloves.
- Eat completely cooked meats only.
Pneumonia

- Most common symptoms
  - Cough, fever, shortness of breath, chest pain, increased production of sputum.

Seek medical treatment
- Sudden high fever with chills
- Severe chest pain or discomfort
- Sputum colour changes to grey, yellow or green
- Sputum has blood in it
- Severe difficulty in breathing
Treatment for Pneumonia

Medical Treatment

• Complete full course of treatment.

Home Care

• Be active by walking about, turning in bed and sitting up.
• Regular massage or gentle pat on the back of the chest over the lungs.
• Cough and clear the lungs at least four times a day.
• Drink lots of water.
• Breathe steam.
• Apply home remedies for soothing the cough and breathing.
Pneumocystis Carinii Pneumonia(PCP)

- Occurs in advanced stage HIV
- Gradual onset, with **dry cough**, **progressive shortness of breath** not in proportion to the cough, with or without fever.
- Immediately refer to seek medical help.
- Death, if treatment is not started early.
Role of the counsellor in monitoring and managing OIs

- Provide a conducive environment to express feelings and emotions.
- Educate about HIV/AIDS & OIs
- Educate about importance, prevention and early recognition of OIs
- Help the client to seek medical attention at the general OPD for symptoms indicative of OIs
Role of the counsellor in monitoring and managing OIs

- Inform about available treatment and home remedies for symptoms associated with OIs.
- Link the client back to the Nodal ART center, if required.
- Ensure drug adherence and counsel the patient on safe sex, condom usage, proper nutrition and positive living.
- Explain and emphasize appropriate behaviours and habits to contain infections.
Question 1

When a client have Oral Candidiasis, he/she complains of:

a) Small white patches on mouth
b) Heartburn
c) Feeling of obstruction
d) Pain in chest
Question 2

- Toxoplasmosis infection is acquired by
  a) Contaminated water/food
  b) Contact with cats or birds
  c) Eating undercooked meat
  d) All the above
The client is referred to Nodal ART Centre for treatment of all of the following except

a) Oral Candidiasis
b) Pneumocystis Pneumonia
c) Oesophageal Candidiasis
d) Toxoplasmosis
Question 4

- The symptom/s that differentiate Pneumocystis Carinii Pneumonia (PCP) from other pneumonias is/are:
  a) Fever
  b) Cough
  c) Progressive shortness of breath which is not in proportion to the cough
  d) All of the above
Question 5

Which infection develops only if the PLHIV has been previously infected with chicken pox?

a) Measles
b) Herpes Zoster
c) Herpes Simplex
d) Candidiasis
Mr. X, a 25-year-old HIV-positive man, reports that he is having severe headache with fever from the last few days. He is not able to move his neck swiftly as he could do before. Also, nowadays he is facing difficulty in performing the daily tasks as things appear to him as double.

Mr. X may have developed …………………………….. infection.

a) Cryptococcal Meningitis  
b) Herpes Zoster  
c) Oral Candidiasis  
d) Cryptosporidiosis