Peer Linkage and Re-Engagement of HIV-Positive Women of Color

October 26-28: Training Day 1
Peer Linkage and Re-Engagement of HIV-Positive Women of Color
Convening Training

Trainers Today:
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Training Agenda
Day 1

- 9-930  Welcome, Group Agreements, Parking lot, Ice Breaker
- 930-1030  HIV AIDS Frame, Stages of Disease Timeline
- 1030-1045  Break
- 1045-1145  Intervention
- 1145-1230  Viral Life Cycle
- 1230-130  Lunch
- 130-230  VLC, Medication Overlay
- 230-310  Roleplay-Introduce Intervention to clients
- 310-310  Break
- 320-330  Debrief Roleplays
- 330-400  Document Roleplay; Develop Goals
- 4-415  Evaluation- plus/delta
• Parking Lot
• Ground Rules
• Housekeeping
Key Concepts

HIV AIDS Frame
What is HIV?

HIV is the virus that causes AIDS.

H – Human

I – Immunodeficiency

V – Virus
HIV/AIDS Frame

What is AIDS?

AIDS is a result of HIV infection.

A – Acquired

I – Immune

D – Deficiency

S – Syndrome
How do people get infected?
• By having vaginal, anal or oral sex with someone who has HIV
• By sharing needles or syringes with someone who has HIV
• During pregnancy, birth or breast feeding from an infected mother to her baby

Body fluids of an infected person that spread HIV:
• Semen
• Blood
• Vaginal fluid
• Breast milk
• Any other body fluids containing blood
How don’t people get infected?

- People can choose not to have sex or use drugs.

- People can choose ways to be affectionate that do not spread HIV infection or other STD’s/STI’s.

- If people have sex, using a latex condom (barrier) the right way every time greatly reduces the risk of HIV infection and other STD’s/STI’s.
Stages of the Disease

HIV Timeline Activity
Peer Linkage and Re-Engagement of HIV-Positive Women of Color

Project Overview
The Peer Linkage and Re-Engagement intervention targets women of color (WoC)

Goal-Re-engage HIV-positive WoC who have fallen out of care back into HIV primary care

Target Patients:
• Women newly diagnosed
• Out of care

Intervention:
• Up to 4 months
• 2 medical appointments with a doctor, nurse practitioner
• 1 lab visit
• 1 visit with a case manager
• Transition to standard of care
THE HIV LIFE CYCLE

Understanding How Antiretroviral Medications Work
HIV Life Cycle - The Big Picture

**Attachment**
1. HIV binds to receptors on the CD4 T-cell.
- A message is sent to the CD4 T-cell to let the virus in.

**Fusion**
2. Once bound, the virus is allowed to dump its contents into the CD4 T-cell.
- Included in its contents are HIV RNA and reverse transcriptase.

**Reverse Transcription**
3. The HIV RNA is turned into double-stranded DNA within the CD4 T-cell.
- The enzyme reverse transcriptase aids in this process.

**Integration**
4. Once the DNA is formed, it hides itself in the human DNA housed in the CD4 T-cell nucleus.

**Transcription**
5. Copies of HIV DNA are made and released from the nucleus in small packages.
- Each of the small packages contains information for creating a new HIV.

**Assembly**
6. The *protease* enzyme in the cell combines the DNA 'packages' to create active virus.
- The virus steals part of the CD4 T-cell protective coating.

**Budding**
7. Once the new HIV is formed, it pushes itself out of the CD4 T-cell.
DEFINITIONS

• **AIDS (Acquired Immune Deficiency Syndrome):** refers to the late stages of the disease of a person who is infected with the virus called HIV. A CD4 count below 200 and/or an opportunistic infection must be present before a person is said to have AIDS.

• **Antibodies:** are a type of protein that is produced by your body when the virus enters your body.

• **Antiretroviral Agents (ARVs):** are substances used against retroviruses such as HIV.
DEFINITIONS

• **CD4 T-Cell**: Important cells in the human body for mounting the body’s immune defense against infection. These “helper” cells not only fight infection, but recruit other immune cells to the site of infection to help kill infection-causing bacteria and viruses. The HIV uses the CD4 T-cells to make more HIV. By doing this, HIV destroys the CD4 cell. Without CD4 T-cells, the body is not able to defend itself against bacterial and viral infections.
DEFINITIONS

• **Combination therapy**: refers to two or more drugs or treatments used together to achieve the best results against HIV infection and/or AIDS. Combination therapy may be more effective in decreasing viral load.

  Examples:
  – NNRTI + 2 NRTIs
  – 1 or 2 PIs + 2 NRTIs
  – 1 Boosted PI + NRTIs
DEFINITIONS

• **Host:** The animal or cell that another organism lives in. In HIV human CD4 T-cells are the host for HIV.

• **Nucleus:** The core of CD4 T-cells, it contains human DNA.
DEFINITIONS

• **DNA:** The chemical make-up of living things. DNA contains 2 copies of information.

• **RNA:** the chemical make-up of living things. RNA contains only 1 copy of information and needs another copy to replicate.

• **HIV:** A virus that can only survive in host cells. It carries with it RNA, but must make DNA to replicate.
• **Retrovirus:** A type of virus that has RNA instead of DNA as its genetic material. It uses an enzyme called reverse transcriptase to become part of the host cell’s DNA. This allows many copies of the virus to be made in the host cell.
DNA versus RNA
OVERVIEW

• Several steps must occur for the HIV to survive
  – Entry of virus into host cell
  – Copying RNA into DNA
  – Hiding HIV DNA in host cell nucleus
  – Multiplication of the virus within cell
  – Budding of virus
ATTACHMENT

- HIV binds to receptors on CD4 T-cell
- A message is sent to the CD4 T-cell to let the virus in
FUSION

- Once bound, the virus is allowed to dump its contents into the CD4 T-cell
- Included in its contents are HIV RNA and reverse transcriptase
REVERSE TRANSCRIPTION

- The HIV RNA is turned into double-stranded DNA within the CD4 T-cell
- The enzyme reverse transcriptase aids in this process
INTEGRATION

• Once the DNA is formed, it hides itself in the human DNA housed in the CD4 T-Cell nucleus
• Copies of HIV DNA are made and released from the nucleus in small ‘packages’
• Each of the small ‘packages’ contains information for creating a new HIV
ASSEMBLY

• The protease enzyme in the cell combines the DNA ‘packages’ to create active virus
BUDDING

- Once the new HIV is formed, it pushes itself out of the CD4 T-cell
- The virus steals part of the CD4 T-cells protective coating
HIV

- Virus is in the bloodstream but also hides in other cells (e.g. lymph nodes)
  - Drugs don’t reach these sequestered cells*
  - That’s why there is no cure
- Virus destroys CD4 cells which lead to:
  - Immune suppression
  - Opportunistic infections and AIDS

*HIV hides in cells in certain organs which are “protected” by the body: lymph nodes, the brain, reproductive organs. Not enough meds can get to those cells.
How Medications Work: 
*Drug Classes and Side Effects*
Medication Names

• Medications have 3 names:
  1. Trade Name or Brand Name
  2. Generic Name
  3. Abbreviation

Examples:
Reyataz       Truvada
Atazanavir    emtricitabine/tenofovir
ATV           FTC/TDF
What Do Your Medications Look Like?

• Keep a list of Medications of both Trade Brand and the Generic Names
• Know what they look like
  – Are they blue, peach or white
  – Round, oblong
  – capsules or tablets
• Ask your Pharmacist or Doctor for a list of your medications
Interactions

• Show Doctors and Dentists your list of medications in case you are prescribed meds:

• Some medications
  – Lower your HIV medication levels
  – Raise your HIV medication levels
    (in either case resistance can occur causing you to have to switch regimens or you could experience side effects)

• Ask Pharmacists for a list of meds you should not take including:
  – Creams, ointments, patches, gels
  – Inhaled or injectable, nose sprays
  – Over the counter (cough/cold, pain meds, St. John’s Wart, garlic supplements)
  – Recreational Drugs

• Use Same Pharmacy for all medications
Eat or Not Eat

- Medications
  - Liquids
    - best taken with water (tea, coffee, fruit juices)
    - Avoid grapefruit juice
  - Food (take meds within 30 minutes of eating)
    - Snack or meal
    - Do not take with shakes or protein drinks
  - Reasons why eating is required:
    1. Protect the stomach
    2. Increase the amount of drug absorbed

- Know how and when to take medication
Medication Combination

• Ask your Doctor, Pharmacist or Peer if you can take HIV Medications all together with other meds:
  • Blood pressure
  • Cholesterol
  • Mental health
• Know when to take your medications - Once or twice a day, morning, night
• Ask your provider what you should do if you miss your dose
• Know the side effects so you can plan in advance
Classes of Drugs

- Fusion Inhibitors
- Entry Inhibitors or CCR5 antagonists
- Nucleoside Reverse Transcriptase Inhibitors (NRTIs)
- Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTIs)
- Protease Inhibitors
- Integrase Inhibitors (INSTIs)
FUSION INHIBITORS (Entry Inhibitors)

- Inhibit first step of HIV replication
- Prevent fusion of HIV to CD4 T-cell
- Virus is prevented from using host for replication

- **Enfuviritide (Fuzeon®)-BID**
  (Rarely prescribed medication)

- **Selzentry**
  (Twice daily, depends on other medications used or your physician)
Fusion Inhibitors
Side Effects

• Skin reactions or Injection site reactions (ISRs). IRS’s might appear as mild slight redness that can include itching, swelling, pain hardened skin, or hard lumps that might last up to a week.
• Pneumonia
• Allergic reactions are possible
• Common Side Effects: headache, pain and numbness in feet or legs, dizziness, and loss of sleep
• Good agent for people with kidney, liver function problems, and drug interactions with other medications. This drug has no long-term side effects and is the only anti-HIV drug not processed through the liver.
NON-NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITORS (NNRTIs)

- Inhibit reverse transcriptase—the enzyme responsible for turning HIV RNA into DNA
- Prevents virus from replicating
  - Efavirenz (Sustiva®)-daily
  - Etravirine (Intelence®)-2x daily
  - Rilpivirine (Edurant®)-daily
    (Rarely prescribed medication)
  - Delavirdine (Rescriptor®)-3x daily
  - Nevirapine (Viramune®)-BID
NON-NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITORS (NNRTIs)

Side Effects

• Easily resistant (lose the entire drug class)
• Rash
• Headaches, Nausea, Vomiting
• Fatigue, Elevated Liver Enzymes
• Insomnia, Peripheral Neuropathy,
• Lypodystrophy
• Skin discoloration, ingrown toenails.
• Increased Triglycerides-Sustiva
• False positive tests for Marijuana
NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITORS (NRTIs)

- Inhibit reverse transcriptase. Drug binds to the enzyme at a different place than the NNRTIs
  - Lamivudine (Epivir®)-1 to BID
  - Abacavir (Ziagen®)-BID
  - Emtricitabine (Emtriva®)-daily
  - Tenofovir (Viread®)- daily
  - Truvada -daily
  - Epizcom- daily

(Rarely prescribed medication
  - Videx-daily
  - Combivir- bid
  - Trizivir-BID
  - Zidovudine (Retrovir®)-BID
  - Didanosine (Videx®)-1 to BID
NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITORS (NRTIs)
Side Effects

- Pancreatitis
- Lactic Acidosis
- Increased Triglycerides - Zerit
- Lipoatrophy – alteration of fat deposits Zerit & Retrovir (AZT) may also be linked to other drugs
- Anemia, Liver Dysfunction, “Drunkenness, Odd Dreams, Hallucinations
- Central Nervous System Disturbances
- Common Side Effects- headaches, fevers, fatigue, upset stomach, vomiting, diarrhea, rash, nausea
INTEGRASE INHIBITORS

• Newest class of drugs that work within the cell nucleus.
• Blocks viral DNA and keeps HIV from binding to the host cell DNA.
• Prevents viral replication.

• **Raltegravir (Isentress) – 1 to BID**
• **Tivicay–one 50 mg tablet**
  (Rarely prescribed medication)
• **Elvitegravir (Vitekta) 1to BID w/atazanavir or Kaletra**
  Elvitegravir is taken as one 150 mg tablet, darunavir, fosamprenavir or tipranavir
  Elvitegravir is also included in Strivid as 150 mg once daily boosted with cobicistat 150 mg.
  Elvitegravir should be taken with food
INTEGRASE INHIBITORS
Side Effects

• Diarrhea
• Nausea
• Headaches, fevers
PROTEASE INHIBITORS

- Prevent the piecing together of HIV DNA into small ‘packages’
- Prevents formation of new HIV

- Lopinavir/ritonavir (Kaletra®)-1 to bid
- Atazanavir (Reyataz®)-daily
- Prezista (Darunavir®)- 1 to bid
- Atazanavir sulfate/cobicistat (Evotaz)-1 bid w/food
- Darunavir/cobicistat (Prezcobix)- 1 to bid w/food
- Norvir (Ritonavir®)-1 to bid

(Rarely prescribed medication)

- Nelfinavir (Viracept®)-2 to 3x
- Tipranavir (Aptivus®)-
- Agenerase (Amprenavir®)-1 to bid
- Aptivus (Tipranavir®)- 1 to bid
- Fosamprenavir (Lexiva®)-1 to bid
- Indinavir (Crixivan®)-tid
- Saquinavir (Invirase®, Fortovase®)-2 to3x
PROTEASE INHIBITORS

Side Effects

- Increased Cholesterol and Triglycerides
- Lipodystrophy
- Onset or worsening of Diabetes (hyperglycemia)
- Liver toxicity, Kidney Stones
- Increased bleeding in Hemophiliacs
- Common Side Effects: headaches, fevers, fatigue, upset stomach, vomiting, explosive diarrhea, rash, nausea, pain in stomach area
- Yellowing of eyes
- Immune reconstitution inflammatory syndrome (IRIS), a condition that sometimes occurs when the immune system begins to recover after treatment with an HIV medicine. As the immune system gets stronger, it may have an increased response to a previously hidden infection.
Once-Daily Regimen

- **Atripla** (Efavirenz/Emtricitabine/Tenofovir Disoproxil Fumarate ®) – taken once a day
  - Side Effects: related to class of drugs (i.e., it contains Sustiva, so there might be odd dreams)
- **Complera** (Rilpivirine, Tenofovir, Emtricitabine)-taken with a meal
  - Side Effects: depression or mood changes, insomnia, headache, rash
- **Genvoya** (Elvitegravir, Cobicistat, Emtricitabine, Tenofovir, alafenamide)
  - nausea, diarrhea, headache and fatigue (cobicistat can cause increase in kidney function-serum creatinine)
- **Stribild** (Elvitegravir, Cobicistat, Tenofovir, Emtricitabine) taken once a day
  - Side Effects: fatigue, diarrhea, headache, nausea, rash, elevated cholesterol levels
- **Triumeq** (abacavir/dolutegravir/lamivudine)-taken once a day with or without a meal
  - Side Effects: diarrhea, headache, nausea
  - Lactic acid and possible liver problems
Long Term Complications

- **Hyperglycemia**
  - Increased blood sugar levels
  - 40% who start on PIs develop diabetes, causes insulin resistance and glucose intolerance

- **Lactic Acidosis**
  - Rare
  - Potentially fatal
  - High levels of Lactic acid in the blood

- **Decreased Bone Mineral Density**
  - Avascular Necrosis of the hip joint where the blood supply is decreased in your hip joint bone therefore there is decreased nutrients in the area
  - Not clearly understood
  - Drug Therapy include Calcium and Vitamin D
  - Weight Bearing Exercises
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<th>Adverse Reaction</th>
<th>NRTIs</th>
<th>NNRTIs</th>
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<tr>
<td>Lactic Acidosis</td>
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<td>Lipid Changes</td>
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<td>Insulin Resistance</td>
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<td>Fat Redistribution</td>
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Goals Of Therapy

- Viral Suppression
- Improve quality of life
- Preserve medications for future use
- Restore immune function
Your Medications at Work in the Cycle

Activity:

*HIV drug medications list*

“Medications at Work in the Cycle” handout
Demonstration and Practice

INTRODUCING THE INTERVENTION
Peer Linkage and Re-Engagement of HIV-Positive Women of Color

ELEMENTS OF COMMUNICATION

OPEN QUESTIONS
POSITIVE FEEDBACK
REFLECTIVE LISTENING
SUMMARIZING
Peer Linkage and Re-Engagement of HIV-Positive Women of Color

ASKING QUESTIONS

- **Open** questions invite dialogue and conversation
- **Closed** questions invite only a “yes” or “no” answer

Examples
- Closed: “Is it going to rain today?”
- Open: “What will the weather be like today?”

- Closed: “Are you feeling well?”
- Open: “How are you feeling?”
**Peer Linkage and Re-Engagement of HIV-Positive Women of Color**

**ATTENTIVE LISTENING**

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<th><strong>Hearing:</strong></th>
<th>Listening carefully to make sure you understand what someone is saying.</th>
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<td><strong>Interpreting:</strong></td>
<td>Confirming your understanding of what you have heard.</td>
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<td><strong>Evaluating:</strong></td>
<td>Asking questions regarding what you have heard.</td>
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Peer Linkage and Re-Engagement of HIV-Positive Women of Color

REFLECTIVE LISTENING

“So you feel...”

“It sounds like you...”

“You’re wondering if...”
Hi, my name is _____ and I am a peer. A peer is someone who is living with HIV and has learned to manage and control it.

I’ve been positive since ______ and have overcome many obstacles because I got the support that I needed to manage my HIV.

One of the things that helped me the most was learning about the disease and how to control it, and hearing how others were coping with their diagnosis and the things they did to overcome the stress, fear, and anxiety associated with being HIV-positive.

My role is to give you health information and be someone you can turn to for support for the next 4 months. Our goal together over the course of the next 4 months is to get you back in to:

- Get your lab work done
- See your doctor
- See a/your case manager

But today, let’s talk about what your needs are and how I can help you address those.
Demonstration and Practice

DOCUMENTATION AND GOAL SETTING
## SMART Goals

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