

HIV Care Continuum



OBJECTIVES

At the end of this unit, participants will be able to:

- Describe how Community Health Workers (CHWs) fit into achieving the National HIV/AIDS Strategy Updated to 2020, which include engaging people in care and retention
- Describe the HIV Care continuum in more detail
- Identify factors that impact a person's ability to achieve the steps in the HIV Care continuum



INSTRUCTIONS

1. Prior to the session, visit the website www.hiv.gov for any updated data about the care continuum and update slides accordingly. If you do not have access to Microsoft PowerPoint, you can write the contents of the slides on flip chart to share with participants.
2. Welcome participants.
3. Review the unit objectives.
4. Review slide 3 about the National HIV/AIDS Strategy Updated to 2020.
5. Facilitate think-pair-share discussion about how CHWs can help achieve the National HIV/AIDS Strategy Updated to 2020 and record responses on a flipchart.
6. Review slides 4 & 5 about the HIV care continuum and proportion of people engaged at each step.
7. Facilitate think-pair-share discussion about gaps in care.
8. Wrap up. Ask participants for any questions about the HIV care continuum and share that next we are going to discuss more specifically CHWs' role in the HIV care continuum.



Related C3 Roles

Care coordination, case management, system navigation

Related C3 Skills

Service coordination, navigation skills



Method(s) of Instruction

Large group discussion



Estimated time

15 minutes



Key Concepts

HIV care continuum



Materials

- Computer with internet access and projector
- PowerPoint slides
- Flip chart
- Markers

Handouts

- *HIV Care Continuum*

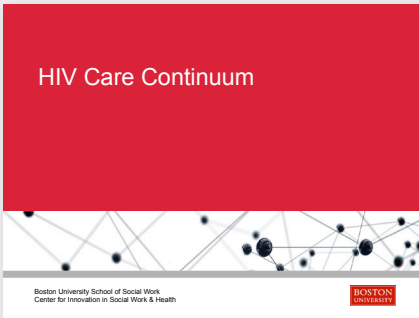


Resources

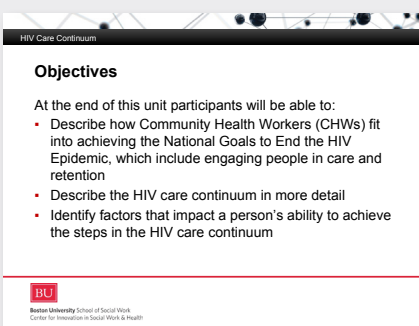
Websites:

www.hiv.gov, <https://www.cdc.gov/hiv/>

National Goals to End the HIV Epidemic infographics, available at <https://www.hiv.gov/federal-response/national-hiv-aids-strategy/nhas-update>

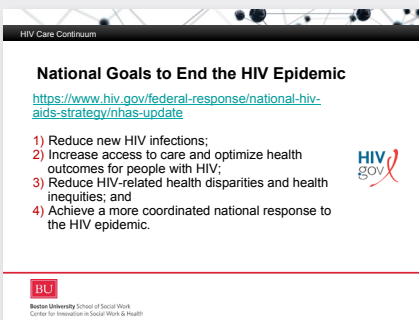


SLIDE 1



SLIDE 2

Review objectives.



SLIDE 3

- Review the National HIV/AIDS Strategy Updated to 2020. Ask participants if they have heard of this national plan. If respondents have heard of the plan, where did they learn about it?
- The National Plan to End the Epidemic is the federal government's national strategy to address the HIV/AIDS epidemic in the United States.
- Ask participants to read each goal.
- Ask participants for examples of how a Community Health Worker (CHW) might play a role in achieving these goals.

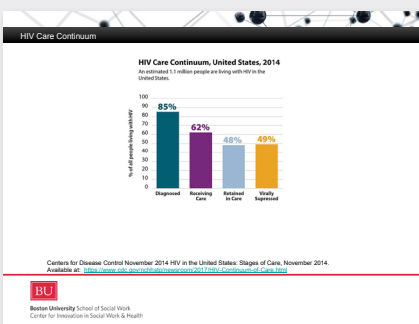
Sample answers to share:

- Reduce new infections: CHWs can help screen and test people at risk for HIV infection; help educate partners of people with HIV to take medications, called PrEP, that can reduce HIV transmission; educate the community about risk reduction techniques including safer sex practices such as condom use and not sharing needles with IV drug use to prevent HIV transmission.
- Increase access to care: Help people with HIV find a HIV care provider or clinic; provide support and education about antiretroviral treatment; support clients with transportation assistance to appointments and other basic needs, like food, so they can get the medical care they need.
- Reduce disparities: Educate members of their community about how HIV affects them; provide information about where to access treatment, especially for people who may be at risk.



SLIDE 4

Review the HIV care continuum model. The care continuum outlines the sequential steps or stages of HIV medical care that people with HIV go through from initial diagnosis to achieving the goal of viral suppression (a very low level of HIV in the body).



SLIDE 5

The care continuum also shows the proportion of people with HIV who are engaged at each stage. It is the framework for which HRSA/HAB measures Ryan White HIV/AIDS programs' success.

Describe Health Resources and Services Administration's (HRSA) specific definitions for each stage:

- Linkage to care: within 30 days of diagnosis
- Retained in care: 2 appointments at least 90 days apart in a 12-month period, or no gaps in care of 6 months or greater in a 24-month period
- Prescribed antiretroviral treatment
- Viral suppression: < 200ml/copies

The Centers for Disease Control (CDC) has found that there are many gaps in our health care system that make it challenging for a person to achieve this continuum of care. This is what the current HIV care continuum looks like across the United States (review the data on the slide).

Think-pair-share activity. Ask participants to discuss in pairs:

- What are some of the reasons for these gaps in care for people with HIV?
- What are some of the factors that impact whether someone is diagnosed?
- What impacts linkage to care?
- What impacts engagement/retention in care?
- What impacts whether someone is prescribed medications?
- What impacts whether someone can achieve viral suppression?

Ask participants to share responses; record on flip chart sheets.

To close, ask, "How is your work as a CHW unique in impacting the HIV care continuum?"

HIV Care Continuum

HIV CARE CONTINUUM:

THE SERIES OF STEPS A PERSON WITH HIV TAKES FROM INITIAL DIAGNOSIS THROUGH THEIR SUCCESSFUL TREATMENT WITH HIV MEDICATION



Introduction to Community Health Workers in HIV Care



OBJECTIVES

At the end of this unit, participants will be able to:

- Describe how Community Health Workers (CHWs) can fit into the HIV care continuum, within the context of the national CHW movement
- Identify CHW roles



INSTRUCTIONS

- Before the session begins, print or draw a poster of the HIV care continuum and distribute post-it notes and markers. If you don't have access to Microsoft PowerPoint, write the components of the HIV care continuum on a flipchart.
- Welcome participants to the session. Have presenters and participants share their names, the organization they represent, their role, and one fun fact about themselves.
- Review the unit objectives.
- Review the components of the HIV care continuum slide (or flipchart).
- Facilitate a Think-Pair-Share activity (slide 4): Share the handouts on C3 roles. Ask participants to review the C3 roles that they might do as a CHW and a concrete activity they could do with a person living with HIV/AIDS or in the community to improve the outcomes at each stage. For example:
 - Ask, "What are things that you do that might help people learn their HIV status?"
 - Ask, "What are some tasks that you could work with a person living with HIV individually to achieve the goals of the care continuum?"
- Ask participants to write 3–5 tasks on sticky notes that CHWs could improve the HIV Care Continuum outcomes.
- Have volunteers place their sticky notes on the care continuum.
- Ask for volunteers to share their CHW role and tasks to achieve the outcomes.
 - Ask, "What are some roles that a CHW could do within the HIV care team and your staff in your agency to work on the care continuum?"
 - Ask, "What are key roles for you as a CHW on the community level to impact the HIV Care Continuum?"
- Write responses on a flipchart.
- Ask, "How do roles and skills relate to HIV care continuum in your region?" Did we miss any key tasks?
- Wrap up. Show final slide 6 with suggestions for how CHWs can learn about HIV services and activities in their region and state. Refer to C3 Roles handout, and close the session with any questions and thank everyone for their participation.



Related C3 Roles

Advocating for individuals and communities, conducting outreach

Related C3 Skills

Advocacy skills, outreach skills, professional skills and conduct



Method(s) of Instruction

Brief presentation, interactive activity and discussion



Estimated time

15 minutes



Key Concepts

HIV care continuum, C3 roles, C3 skills



Materials

- Identify CHW roles
- Computer with internet access and projector (optional)
- PowerPoint slides (optional)
- Flipchart with components of the HIV care continuum
- Markers
- Post-it notes
- Poster: HIV care continuum diagram

Handouts

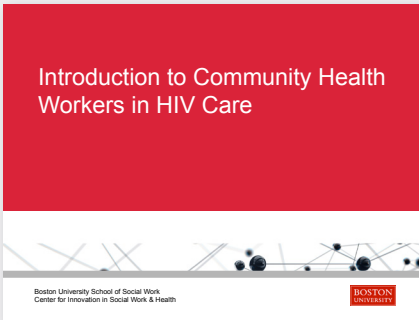
- C3 Project: CHW Roles and Sub-Roles
- C3 Project: Skills and Sub-Skills
- HIV Care Continuum



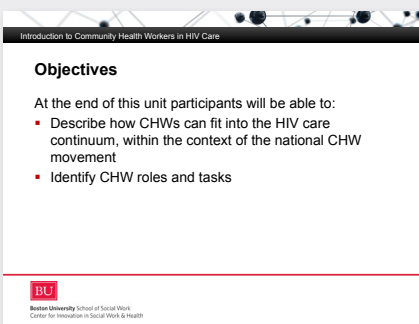
Resources

- Report: Understanding Scope and Competencies: A Contemporary Look at the United States Community Health Worker Field <https://sph.uth.edu/dotAsset/28044e61-fb10-41a2-bf3b-07efa4fe56ae.pdf>
- HIV care continuum: <https://www.hiv.gov/federal-response/policies-issues/hiv-aids-care-continuum>

Introduction to Community Health Workers in HIV Care



SLIDE 1



SLIDE 2

Review objectives.



SLIDE 3

Review the diagram. The HIV care continuum follows a person from the time they are first diagnosed to achieving viral suppression (a very low level of HIV in the body). However researchers observed that in order for people with HIV to benefit from the available treatment, a person must first know their diagnosis, engage in HIV medical care and see a prescribing health care provider regularly, and receive and adhere to antiretroviral therapy. Many people do not make it through all these stages due to several obstacles. Ask participants: "Why might people not complete the steps of the HIV Care Continuum?"

CHW can play a role in each step of the continuum and reduce the gaps in each stage of the continuum. For example, CHWs can provide health information, conduct testing, and refer clients to a health provider and other resources.

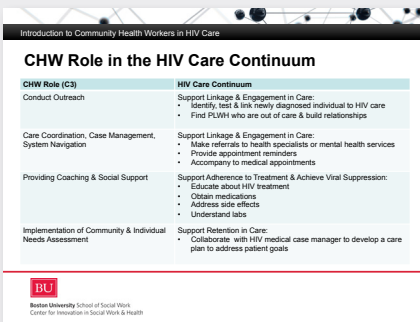
Introduction to Community Health Workers in HIV Care



SLIDE 4

Think-pair-share activity

- Ask participants to review the handouts, paying particular attention to the C3 roles they might do as a community health worker.
- Have participants pair up to discuss a concrete activity they could do with a person with HIV to improve outcomes at each stage. For example, what are things that you can do to help people learn their HIV status?
- Ask participants to write on post-it notes 3–5 tasks that could improve HIV care continuum outcomes.
- Ask volunteers to share their CHW roles and tasks to achieve the outcomes.
- Discuss: Did we miss any key tasks?
- Show the next slide and refer to C3 roles.



SLIDE 5

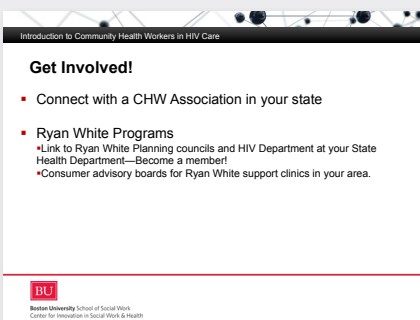
Review CHW roles in the HIV care continuum listed on the slide.

Resume activity:

- Have participants place their post-it notes on the appropriate stage on the care continuum poster.

Discussion:

- Ask, "What are some one-on-one tasks that you could do with a person with HIV to achieve the goals of the care continuum?"
- Ask, "What are some roles for you as CHW on the HIV care team in your agency, within the care continuum?"
- Ask, "What are key roles for you as a CHW at the community level to impact the HIV care continuum?"
- Ask, "How do roles and skills relate to the HIV care continuum in your region?"
- Open discussion for other questions and answers.



SLIDE 6

Share information about how CHWs can learn about HIV/AIDS services in their community by connecting to their State Health Department or local Ryan White Planning Council.

HIV Care Continuum

HIV CARE CONTINUUM:

THE SERIES OF STEPS A PERSON WITH HIV TAKES FROM INITIAL DIAGNOSIS THROUGH THEIR SUCCESSFUL TREATMENT WITH HIV MEDICATION



CHW Core Consensus (C3) Project: CHW Roles and Sub-Roles

	Role	Sub-Roles
1	Cultural Mediation among Individuals, Communities, and Health and Social Service Systems	<ul style="list-style-type: none"> a. Educating individuals and communities about how to use health and social service systems (including understanding how systems operate) b. Education systems about community perspectives and cultural norms (including supporting implementation of Culturally and Linguistically Appropriate Services [CLAS] standards) c. Building health literacy and cross-cultural communication
2	Providing Culturally Appropriate Health Education and Information	<ul style="list-style-type: none"> a. Conducting health promotion and disease prevention education in a manner that matched linguistic and cultural needs of participants or community b. Providing necessary information to understand and prevent diseases and to help people manage health conditions (including chronic disease)
3	Care Coordination, Case Management, and System Navigation	<ul style="list-style-type: none"> a. Participating in care coordination and/or case management b. Making referrals and providing follow-up c. Facilitating transportation to services and helping to address other barriers to services d. Documenting and tracking individual and population level data e. Informing people and systems about community assets and challenges
4	Providing Coaching and Social Support	<ul style="list-style-type: none"> a. Providing individual support and coaching b. Motivating and encouraging people to obtain care and other services c. Supporting self-management of disease prevention and management of health conditions (including chronic disease) d. Planning and/or leading support groups
5	Advocating for Individuals and Communities	<ul style="list-style-type: none"> a. Advocating for the needs and perspectives of communities b. Connecting to resources and advocating for basic needs (e.g. food and housing) c. Conducting policy advocacy
6	Building Individual and Community Capacity	<ul style="list-style-type: none"> a. Building individual capacity b. Building community capacity c. Training and building individual capacity with CHW peers and among groups of CHWs
7	Providing Direct Service	<ul style="list-style-type: none"> a. Providing basic screening tests (e.g. height and weight, blood pressure) b. Providing basic services (e.g. first aid, diabetic foot checks) c. Meeting basic needs (e.g. direct provision of food and other resources)
8	Implementing Individual and Community Assessments	<ul style="list-style-type: none"> a. Participating in design, implementation, and interpretation of individual-level assessments (e.g. home environment assessment) b. Participating in design, implementation, and interpretation of community-level assessments (e.g. windshield survey of community assets and challenges, community asset mapping)
9	Conducting Outreach	<ul style="list-style-type: none"> a. Case-finding/recruitment of individuals, families, and community groups to services and systems b. Follow-up on health and social service encounters with individuals, families, and community groups c. Home visiting to provide education, assessment, and social support d. Presenting at local agencies and community events
10	Participating in Evaluation and Research	<ul style="list-style-type: none"> a. Engaging in evaluating CHW services and programs b. Identifying and engaging community members as research partners, including community consent processes c. Participating in evaluation and research: <ul style="list-style-type: none"> a. Identification of priority issues and evaluation/research questions b. Development of evaluation/research design and methods c. Data collection and interpretation d. Sharing results and findings e. Engaging stakeholders to take action on findings

Rosenthal, EL, Rush, CH, Allen, C. (2016). Understanding Scope and Competencies: A contemporary look at the United States Community Health Worker Field. Available at: http://www.healthreform.ct.gov/ohri/lib/ohri/work_groups/chw/chw_c3_report.pdf

CHW Core Consensus (C3) Project: CHW Skills and Sub-Skills

	Skill	Sub-Skill
1	Communication Skills	<ul style="list-style-type: none"> a. Ability to use language confidently b. Ability to use language in ways that engage and motivate c. Ability to communicate using plain and clear language d. Ability to communicate with empathy e. Ability to listen actively f. Ability to prepare written communication, including electronic communication (e.g. email, telecommunication device for the deaf) g. Ability to document work h. Ability to communicate with the community served (may not be fluent in language of all communities served)
2	Interpersonal and Relationship-Building Skills	<ul style="list-style-type: none"> a. Ability to providing coaching and social support b. Ability to conduct self-management coaching c. Ability to use interviewing techniques (e.g. motivational interviewing) d. Ability to work as a team member e. Ability to manage conflict f. Ability to practice cultural humility
3	Service Coordination and Navigation Skills	<ul style="list-style-type: none"> a. Ability to coordinate care (including identifying and accessing resources and overcoming barriers) b. Ability to make appropriate referrals c. Ability to facilitate development of an individual and/or group action plan and goal attainment d. Ability to coordinate CHW activities with clinical and other community services e. Ability to follow-up and track care of referral outcomes
4	Capacity Building Skills	<ul style="list-style-type: none"> a. Ability to help others identify goals and develop to their fullest potential b. Ability to work in ways that increase individual and community empowerment c. Ability to network, build community connections, and build coalitions d. Ability to teach self-advocacy skills e. Ability to conduct community organizing
5	Advocacy Skills	<ul style="list-style-type: none"> a. Ability to contribute to policy development b. Ability to advocate for policy change c. Ability to speak up for individuals and communities
6	Education and Facilitation Skills	<ul style="list-style-type: none"> a. Ability to use empowering and learner-centered teaching strategies b. Ability to use a range of appropriate and effective educational techniques c. Ability to facilitate group discussions and decision-making d. Ability to plan and conduct classes and presentations for a variety of groups e. Ability to seek out appropriate information and respond to questions about pertinent topics f. Ability to find and share requested information g. Ability to collaborate with other educators h. Ability to collect and use information from and with community members
7	Individual and Community Assessment Skills	<ul style="list-style-type: none"> a. Ability to participate in individual assessment through observation and active inquiry b. Ability to participate in community assessment through observation and active inquiry
8	Outreach Skills	<ul style="list-style-type: none"> a. Ability to conduct case-finding, recruitment, and follow-up b. Ability to prepare and disseminate materials c. Ability to build and maintain a current resources inventory

CHW Core Consensus (C3) Project: CHW Skills and Sub-Skills (cont.)

9	Professional Skills and Conduct	<ul style="list-style-type: none"> a. Ability to set goals and to develop and follow a work plan b. Ability to balance priorities and to manage time c. Ability to apply critical thinking techniques and problem solving d. Ability to use pertinent technology e. Ability to pursue continuing education and life-long learning opportunities f. Ability to maximize personal safety while working in community and/or clinical settings g. Ability to observe ethical and legal standards (e.g. CHW Code of Ethics, Americans with Disabilities Act [ADA], Health Insurance Portability and Accountability Act [HIPAA]) h. Ability to identify situations calling for mandatory reporting and carry out mandatory reporting requirements i. Ability to participate in professional development of peer CHWs and in networking among CHW groups j. Ability to set boundaries and practice self-care
10	Evaluation and Research Skills	<ul style="list-style-type: none"> a. Ability to identify important concerns and conduct evaluation and research to better understand root causes b. Ability to apply the evidence-based practices of Community Based Participatory Research (CBPR) and Participatory Action Research (PAR) c. Ability to participate in evaluation and research processes, including: <ul style="list-style-type: none"> a. Identifying priority issues and evaluation/research questions b. Developing evaluation/research design and methods c. Data collection and interpretation d. Sharing results and findings e. Engaging stakeholders to take action on findings
11	Knowledge Base	<ul style="list-style-type: none"> a. Knowledge about social determinants of health and related disparities b. Knowledge about pertinent health issues c. Knowledge about healthy lifestyles and self-care d. Knowledge about mental/behavioral health issues and their connection to physical health e. Knowledge about health behavior theories f. Knowledge about public health principles g. Knowledge about the community served h. Knowledge about United State health and social service systems

Rosenthal, EL, Rush, CH, Allen, C. (2016). Understanding Scope and Competencies: A contemporary look at the United States Community Health Worker Field. Available at:
http://www.healthreform.ct.gov/ohri/lib/ohri/work_groups/chw/chw_c3_report.pdf

HIV 101



OBJECTIVES

At the end of this unit, participants will be able to:

- Clear up misconceptions regarding how HIV is transmitted
- Provide a brief overview of HIV and AIDS facts
- Help clients understand basic concepts about how HIV infection affects the body



INSTRUCTIONS

1. In preparation for the workshop, review the content of the worksheets and answer keys for the group activity. Arrange the room into small circles for group work, with four to five participants per group (depending on number of participants).
2. Welcome participants.
3. Review the unit objectives.
4. Distribute three handouts with worksheets and facilitate the activity and review correct answers.
5. Review slides 4 and 5 on definitions of HIV and AIDS.
6. If time allows, facilitate discussion about HIV and AIDS myths (slide 7). State 1 or 2 myths and ask participants to describe why it is a myth.
7. Review slides 6–9 about how HIV is and is not transmitted, and stages of HIV/AIDS progression. If time allows ask the class the following:
 - Who can explain what an unsuppressed viral load is to a client?
 - Who can explain what it means to be undetectable?
8. Ask participants “Are there new words/terms we learned and/or reviewed in this unit?” Have participants take turns calling out the new words/terms they learned and write them on newsprint.
9. Wrap up. Thank participants for their work.



Related C3 Roles

Building individual and community capacity, providing direct service

Related C3 Skills

Capacity building skills, professional skills and conduct, knowledge base



Method(s) of Instruction

Small group activity, facilitator-led group discussion, question and answer



Estimated time

60 minutes



Key Concepts

HIV, AIDS, STD/STIs, virus, acute, asymptomatic, symptomatic

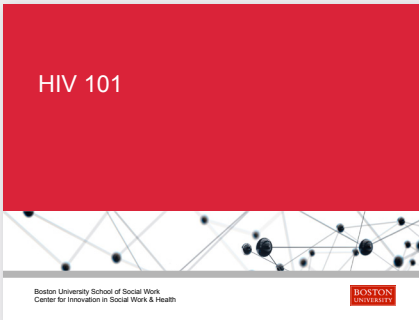


Materials

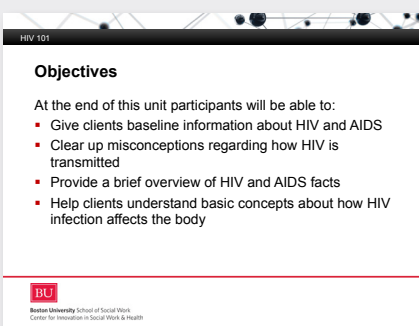
- Computer with internet access and projector
- PowerPoint slides
- Flip chart
- Markers

Handouts

- Worksheet #1: HIV 101—Understanding HIV and AIDS
- Worksheet #2: Modes of HIV Transmission
- Worksheet #3: What Stage Am I?
- The Stages of HIV Infection
- Worksheet #1 (Answer Key): HIV 101—Understanding HIV and AIDS
- Worksheet #2 (Answer Key): Modes of HIV Transmission
- Worksheet #3 (Answer Key): What Stage Am I?



SLIDE 1



SLIDE 2

Review the objectives.

Acknowledge that for some participants, this will be a review of what they already know, however, for others this is new information.



SLIDE 3

Worksheets and discussion

- Ask participants to complete the worksheets in their groups. Say, "Using your group's collective knowledge of HIV and AIDS, you will have 10 minutes to complete all 3 worksheets. Groups will write in their answers or best guess to each question." Explain the following details:
- Worksheets should be completed in order:
 - Worksheet #1: HIV 101 – Understanding HIV and AIDS
 - Worksheet #2: Modes of HIV transmission
 - Worksheet #3: What stage am I?
- The worksheets include fill in the blank, true/false, and multiple-choice questions.
- Each group should select two people: one recorder to write answers, and one reporter to give answers when the facilitator calls on the group.
- Each group will receive one point per each correct answer; no half points will be given, it's all or none.
- If a group gives an incorrect answer, the next group will have the opportunity to answer the question.
- If no group gives the correct answer, the facilitator will give the correct answer.
- Encourage participants to ask questions if they need assistance.

(continued)



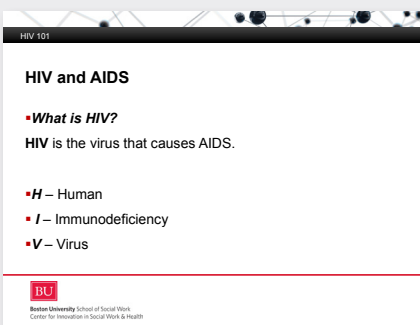
SLIDE 3 (continued)

Call on the groups to answer questions as follows:

- Group A, please answer question 1 on worksheet #1, HIV 101—Understanding HIV & AIDS.
 - What do the letters HIV and AIDS stand for?
 - What is HIV?
 - What is AIDS?
 - Now we've defined the acronyms HIV and AIDS.
 - Group A (you have 1 point)
- Group B, next question.

Continue with each group until all worksheet questions have been answered.

Bring attention to the last handout, Stages of HIV Infection, to be used as a resource. Point out that if people who acquire HIV remain untreated and do not engaged in medical care and/or take anti-retroviral HIV medications, most succumb to AIDS.



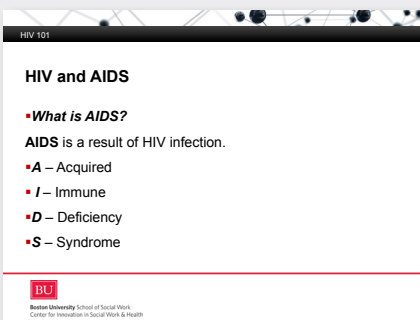
SLIDE 4

What is HIV?

The virus that causes AIDS

What do the letters H-I-V stand for?

- H-Human (one can only acquire HIV from humans, person-to-person, blood-to-blood, sexual contact and/or fluids).
- I-Immunodeficiency (affects the immune system, making it too weak to fight off disease and infection).
- V-Virus—it's survival depends on cells in the host.



SLIDE 5

What is AIDS?

AIDS is a result of HIV infection.

What do the letters A-I-D-S stand for?

- A-Acquired (must get it from someone)
- I-Immune (collection of cells and substances that act like soldiers against germs)
- D-Deficiency (weakens immune system causing opportunistic infections)
- S-Syndrome (collection of symptoms or illnesses)

HIV 101

HIV and AIDS

How **do** people contract HIV?

- 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 a mother with HIV to her baby

Body fluids of a person living with HIV may include:

- Semen
- Blood
- Vaginal fluid
- Breast milk
- Any other body fluids containing blood

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SLIDE 6

Review the slide.

Additional notes:

- Injection drugs used either legally or illegally
- Safety precautions should be used for tattoos and body piercings

HIV 101

HIV and AIDS

How can people prevent contracting HIV?

- People can choose not to have sex or use drugs.
- People can choose ways to be affectionate that do **not** transmit HIV or other STDs/STIs.
- If people have sex, using a latex condom (barrier) the **right way every time** greatly reduces the risk of contracting HIV and other STDs/STIs.

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SLIDE 7

Review the slide.

Additional notes:

- Protected sex using a latex condom greatly lowers risk
- PrEP and HIV medication—PrEP means Pre-Exposure Prophylaxis, and it's the use of anti-HIV medications to keep HIV negative people from becoming infected. PrEP is approved by the FDA and has been shown to be safe and effective in preventing HIV infection
- Recent research indicates that people with HIV who have an Undetectable viral load are Untransmittable (otherwise known as U = U).
- These safety precautions will be discussed in more detail in later units.

If time allows, lead discussion about HIV and AIDS myths. Give two myths and ask participants to say why it is a myth.

People in the community say that a person with HIV is also living with AIDS. Why is this a myth?

Answer: This is a myth because people often call everything AIDS; but there is a difference. HIV is a virus; AIDS is a syndrome. Also, a person's CD4 count that is below 200 and/or has an opportunistic infection may be diagnosed by their doctor with AIDS. A person with CD4 above 200 is said to have HIV.

You can get HIV from a blood transfusion. Why is this a myth?

Answer: The risk of becoming infected with HIV from a blood transfusion in the United States is extremely low. Since donor interviews for HIV risks began in 1983 and HIV-antibody testing began in 1985, the risk of HIV-contaminated blood entering the blood supply has dropped dramatically. In 1992, antibody testing was expanded to include HIV-2 (in addition to HIV-1).

HIV 101

People Cannot Get HIV Through:

- Everyday social activity or through casual contact
- Handshakes
- Coughs or sneezes
- Sweat or tears
- Food
- Drinking fountains
- Straws, spoons, or cups
- Mosquito bites & other bug bites (ticks, lice, etc.)
- Sharing:
 - Toilets
 - Telephones
 - Office equipment
 - Clothing
 - Cooking or eating utensils
- Hugging, touching
- Attending church, school, or going to any public place with a person with HIV
- Working with someone who is HIV positive

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SLIDE 8

Review the slide.

The bottom line is, *people do not get HIV from casual contact.*

HIV 101

Stages of HIV/AIDS

- **Person contracts HIV**
- **Acute Infection** – occurs 2 to 4 weeks after initial transmission.
- Person may have flu-like symptoms:
 - Fever
 - Headache
 - Tiredness
 - Enlarged lymph glands
- **Chronic HIV Infection** – also called asymptomatic HIV infection or clinical latency. Chronic signs and symptoms are not present. Person may look healthy and feel well. People with chronic HIV infection may not have any HIV-related symptoms, but they can still transmit HIV to others (i.e. unless the person living with HIV has been undetectable for at least 6 months).
- **AIDS** - The virus weakens and eventually destroys the immune system. When a person with HIV develops AIDS, his or her body has lost most of its ability to fight off certain bacteria, viruses, fungi, parasites, and other germs.

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SLIDE 9

Review the slide.

HIV 101

Stages of HIV/AIDS

HIV Progression

Before HIV Infection Acute HIV Infection Chronic HIV Infection AIDS

Weeks to Months Years

CD4 cell HIV

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SLIDE 10

Review the slide. Participants can also follow along on the handout.

To conclude the session, ask participants to recall any new words or terms they have learned so far. Write them on the flip chart.

If time allows, ask participants the following:

- Who can explain what an unsuppressed viral load is to a client?
- Who can explain what it means to be undetectable?

To close, thank the participants for their participation and for doing a good job.

HIV 101: Understanding HIV and AIDS



Name: _____

Date: _____

1. Fill in the Blank: What does each acronym stand for?

H- _____
I- _____
V- _____

A- _____
I- _____
D- _____
S- _____

True or False

- _____ AIDS is a virus that can cause the immune system to fail if left untreated.
- _____ HIV is the virus that can lead to AIDS.
- _____ You can become “undetectable” while living with AIDS even if your CD4 count is not above 200..
- _____ You can have HIV without acquiring AIDS.
- _____ Symptoms for HIV and AIDS are different for each person.
- _____ A viral load that is not suppressed and undetectable viral load are the same.

Fill in the Blank

- AIDS** is a _____ or collection of conditions and symptoms, including infections and cancers caused by HIV. It is considered the _____ **stage of HIV**.
- HIV is a virus that can lead to infections and destroys your _____ .
A person is considered to have **AIDS** when their CD4 count is less than _____ or if they have certain opportunistic infections.
- AIDS** is _____ meaning that you only get it after being infected with **HIV**, and it progresses over time.

HIV 101: Understanding HIV and AIDS - Answers



Name: _____

Date: _____

1. Fill in the Blank: What does each acronym stand for?

H- Human

A- Acquired

I- Immunodeficiency

I- Immune

V- Virus

D- Deficiency

S- Syndrome

True or False

2. False AIDS is a virus that can cause the immune system to fail if left untreated.

3. True HIV is the virus that can lead to AIDS.

4. True You can become “undetectable” while living with AIDS even if your CD4 count is not above 200.

5. True You can have HIV without acquiring AIDS.

6. True Symptoms for HIV and AIDS are different for each person.

7. False A viral load that is not suppressed and undetectable viral load are the same.

Fill in the Blank

8. **AIDS** is a syndrome or collection of conditions and symptoms, including infections and cancers caused by HIV. It is considered the final or end stage of HIV.

9. HIV is a virus that can lead to infections and destroys your immune system.

A person is considered to have **AIDS** when their CD4 count is less than 200 or if they have certain opportunistic infections.

10. **AIDS** is acquired meaning that you only get it after being infected with **HIV**, and it progresses over time.

HIV 101- Modes of HIV Transmission

True or False

1. _____ Modes of HIV Transmission are the ways that a person can contract HIV.
2. _____ There is a zero risk of transmission through oral sex.
3. _____ HIV can be spread through saliva, sweat, and tears, or coughing/sneezing.
4. _____ Kissing always poses a zero risk for being exposed to HIV.

Fill in the Blank

5. There are _____ actions of transmission and _____ fluids.

Modes of Transmission

A. Actions	B. Fluids
1.	1.
a.	
b.	2.
b.	
2.	3.
3.	4.

HIV 101- Modes of HIV Transmission- Answers

True or False

1. **T** Modes of HIV Transmission are the ways that a person can contract HIV.
2. **F** There is a zero risk of transmission through oral sex.
3. **F** HIV can be spread through saliva, sweat, and tears, or coughing/sneezing.
4. **F** Kissing always poses a zero risk for being exposed to HIV.

Fill in the Blank

5. There are **3** actions of transmission and **4** fluids.

Modes of Transmission

A. Actions	B. Fluids
1. Condomless Sex <ol style="list-style-type: none">a. Analb. Vaginalb. Oral sex	1. Semen (cum or pre-cum)
2. Sharing needles/Drug “works”	2. Blood
	3. Vaginal, Anal, or Rectal fluids
3. Breastfeeding	4. Breast Milk

HIV 101: Stages of HIV/AIDS

Name: _____

Date: _____

Stages of HIV Infection – Complete questions 1-3 using the terms below:

Chronic HIV Infection

AIDS

Acute HIV Infection

1. _____ CD4 count of less than 200 cells/mm³ or if they have certain opportunistic infections*. This is the final, most severe stage of HIV infection; without treatment patients are at high risk of opportunistic infections the body can't fight off.
2. _____ During this stage, HIV continues to multiply but at very low levels. HIV related symptoms may not be present; CD4 cell count and viral load is monitored for progression of HIV disease.
3. _____ Develops about 2 to 4 weeks after initial infection with HIV. During this stage, the virus undergoes massive replication; some people have flu like symptoms, such as fever, headache, and rash.

*Opportunistic infections are infections and infection-related cancers that occur more frequently or are more severe in people with weakened immune systems than in people with healthy immune systems.)

True or False

- _____ People in the Acute stage may not feel sick, but the level of HIV in the blood is very high; this increases risk of HIV transmission.
- _____ The Chronic stage sometimes called asymptomatic HIV infection can last decades; most don't advance to AIDS even if the person is not taking HIV medication.
- _____ AIDS is the most severe phase of HIV infection. Without treatment, the CDC estimates the average survival rate to be three years once AIDS is diagnosed.
- _____ A person cannot have AIDS related symptoms or opportunistic infections if their CD4 count is above 200.

HIV 101: Stages of HIV/AIDS - Answers

Name: _____

Date: _____

Stages of HIV Infection – Complete questions 1-3 using the terms below:

Chronic HIV Infection

AIDS

Acute HIV Infection

1. **AIDS**

CD4 count of less than 200 cells/mm³ or if they have certain opportunistic infections*. This is the final, most severe stage of HIV infection; without treatment patients are at high risk of opportunistic infections the body can't fight off.

2. **Chronic HIV Infection**

During this stage, HIV continues to multiply but at very low levels. HIV related symptoms may not be present; CD4 cell count and viral load is monitored for progression of HIV disease.

3. **Acute HIV Infection**

Develops about 2 to 4 weeks after initial infection with HIV. During this stage, the virus undergoes massive replication; some people have flu like symptoms, such as fever, headache, and rash.

*Opportunistic infections are infections and infection-related cancers that occur more frequently or are more severe in people with weakened immune systems than in people with healthy immune systems.)

True or False

True

People in the acute stage may not feel sick, but the level of HIV in the blood is very high; this increases risk of HIV transmission.

False

The Chronic stage sometimes called asymptomatic HIV infection can last decades; most don't advance to AIDS even if the person is not taking HIV medication.

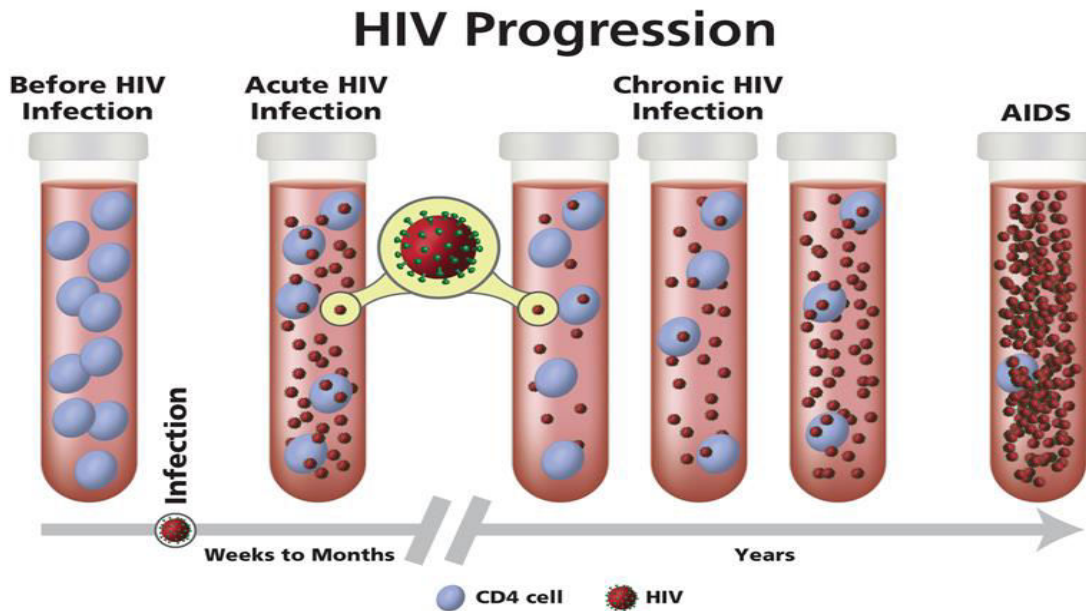
True

AIDS is the most severe phase of HIV infection. Without treatment, the CDC estimates the average survival rate to be three years once AIDS is diagnosed.

False

A person cannot have AIDS related symptoms or opportunistic infections if their CD4 count is above 200.

The Stages of HIV Infection – Understanding HIV/AIDS



There are three stages of HIV infection:

1. Acute HIV Infection

Acute HIV infection is the earliest stage of HIV infection, and it generally develops within 2 to 4 weeks after infection with HIV. During this time, some people have flu-like symptoms, such as fever, headache, and rash. In the acute stage of infection, HIV multiplies rapidly and spreads throughout the body. The virus attacks and destroys the infection-fighting [CD4 cells](#) of the immune system. During the acute HIV infection stage, the level of HIV in the blood is very high, which greatly increases the risk of HIV transmission.

2. Chronic HIV Infection

The second stage of HIV infection is chronic HIV infection (also called asymptomatic HIV infection or clinical latency). During this stage of the disease, HIV continues to multiply in the body but at very low levels. People with chronic HIV infection may not have any HIV-related symptoms, but they can still spread HIV to others. Without treatment with HIV medicines, chronic HIV infection usually advances to AIDS in 10 years or longer, though in some people it may advance faster.

3. AIDS

AIDS is the final, most severe stage of HIV infection. Because HIV has severely damaged the immune system, the body can't fight off [opportunistic infections](#). (Opportunistic infections are infections and infection-related cancers that occur more frequently or are more severe in people with weakened immune systems than in people with healthy immune systems.) People with HIV are diagnosed with AIDS if they have a CD4 count of less than 200 cells/mm³ or if they have certain opportunistic infections. Without treatment, people with AIDS typically survive about 3 years.

Fact sheet courtesy of [AIDSinfo](#), a service of the U.S. Department of Health and Human Services.

Sources: <https://aidsinfo.nih.gov/understanding-hiv-aids/fact-sheets/19/46/the-stages-of-hiv-infection>

From HIV.gov: What Are HIV and AIDS?

From the Centers for Disease Control and Prevention (CDC): About HIV/AIDS

HIV Life Cycle and Medications at Work



OBJECTIVES

At the end of this unit, participants will be able to:

- Describe the stages of HIV replication using the mnemonic AFRITAB
- Communicate how the HIV life cycle works, how HIV enters the CD4 cell, replicates, and damages the immune system
- Identify the different classes of antiretroviral medications used for treatment of HIV
- Practice identifying antiretroviral medications by brand name, generic name, and abbreviation
- Demonstrate where each antiretroviral medication works to interrupt HIV replication



INSTRUCTIONS

1. In preparation, review all slides and notes along with activity instructions.
2. Welcome participants.
3. Introduce the topic and lead discussion.
4. Review the unit objectives or write objectives on a flip chart.
5. Review slides 4–15 on the HIV life cycle.
6. Facilitate practice activity with AFRITAB mnemonic (slide 16).
7. Provide a break before beginning the next section.
8. Review slides 17–27 about HIV medications.
9. Facilitate HIV drug classification activity.
10. Wrap up. Debrief the activity. Ask participants:
 - “Why is it important for people with HIV to understand how HIV replicates?”
 - “Why is it important for people with HIV to understand how HIV antiretroviral medications work to block replication?”
 - Allow participants the opportunity to share “ah-ha” moments or other relevant comments.
11. Thank participants for their contributions.



Related C3 Roles

Providing coaching and social support, providing culturally appropriate health education and information

Related C3 Skills

Education and facilitation skills, communication skills, knowledge base



Method(s) of Instruction

Lecture, discussion, teach-back, large group activity



Estimated time

150 minutes



Key Concepts

HIV life cycle, CD4, stages of HIV, HIV medications, how HIV medications work, antiretroviral medications, HAART



Materials

- Computer with internet access and projector
- PowerPoint slides
- Flip chart
- Markers

Handouts

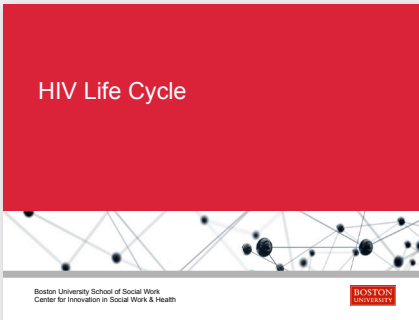
- HIV Life Cycle—The Big Picture
- Medication At Work in the HIV Life Cycle
- HIV Life Cycle Worksheet



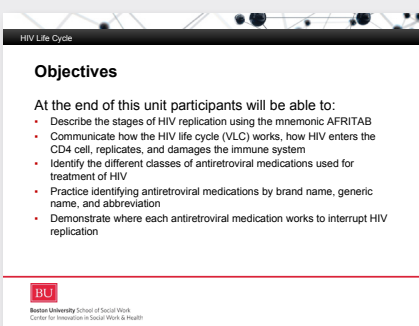
Resources

Current HIV antiretroviral medication list (Use an online resource like https://www.poz.com/drug_charts/hiv-medications or printed versions provided by pharmaceutical companies.)

HIV Life Cycle and Medications at Work

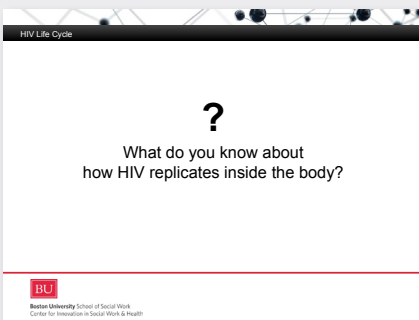


SLIDE 1



SLIDE 2

Review objectives.



SLIDE 3

Since the emergence of the HIV epidemic, there have been myths, misconceptions, and fears about HIV's affect on the body. Disturbing images of patients clinging to life at the onset of the HIV/AIDS crisis have remained a prominent perspective for many, even though medical breakthroughs in treatment have made living with HIV manageable. In this next section we will learn how HIV uses our immune cells to make more of itself and how antiretroviral medications interrupt HIV replication. We will describe each stage of HIV replication using an easy format to aid memorization. Understanding HIV replication has the potential to radically shift the perception of HIV as a "boogeyman" to recognizing the virus as a chronic, treatable medical condition.

Ask participants to consider what they know about how HIV replicates inside the body.

- **Ask, "What did you learn about how the virus impacts a person's health once they have been infected?"**
- **Ask, "What do you know about how HIV replicates inside the body?"**

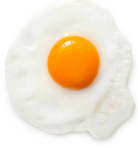
Ask participants to keep these messages in mind to determine if they are confirmed or disproved.

HIV Life Cycle and Medications at Work

HIV Life Cycle

Think of a Fried Egg

- **HOST CELL** = CD4 or T-cell
- The CD4 cell is the host cell for HIV.
- **NUCLEUS** = The center of core of the CD4 cell. It contains DNA.



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SLIDE 4

Define some key terms that will be instrumental to describing the process of viral replication.

Host cell: A host is an animal or plant (or specific part of an animal or plant) in which another organism or microorganism lives. HIV targets the CD4/T-cell as its host cell.

The **CD4 cell** is one member of a collection of cells and substances that make up the immune system. It is responsible for stimulating other immune cells to respond to infection. In this way, it is often thought of as the general of the immune system's army.

This fried egg is made up of two distinct parts, the egg white and the egg yolk. Without getting too technical, let's think of the CD4 cell as a fried egg. This image illustrates two parts of a cell, the nucleus (egg yolk) and cytoplasm (egg white).


The center of the CD4 cell is called the nucleus. Imagine that the egg yolk is the nucleus of a CD4 cell. The nucleus is important because it contains human DNA that will be used in the process of making more HIV.

To summarize, HIV uses the CD4 cell as a host. Inside of the CD4 cell there is a core called the nucleus. The nucleus holds human DNA that will be used in the process of HIV replication.

HIV Life Cycle

RNA vs. DNA

- **RNA**
- HIV carries RNA
- Contains **1 strand** of genetic information



- **DNA**
- Humans carry DNA
- Contains **2 strands** of genetic information

RNA Ribonucleic acid
DNA Deoxyribonucleic acid

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SLIDE 5

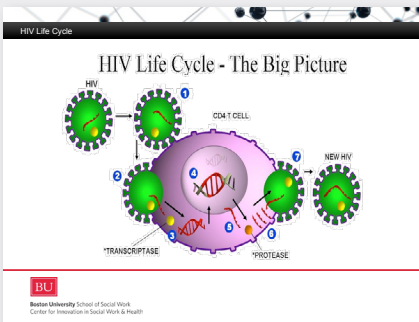
There are two types of genetic material found in all living things, **DNA** (Deoxyribonucleic Acid) and **RNA** (Ribonucleic Acid). The main distinction that is important to understand how HIV replicates, is knowing that HIV contains RNA, which is a single strand of genetic material. DNA is the genetic material stored in the nucleus of the CD4 cell and it contains 2 strands of genetic material (see slide image).

Review definitions:

DNA (Deoxyribonucleic Acid): One of two types of genetic material found in all living cells and many viruses. (The other type of genetic material is RNA.) Deoxyribonucleic acid (DNA) carries the genetic instructions for the development and function of an organism. DNA allows for the transmission of genetic information from one generation to the next.

RNA (Ribonucleic Acid): One of two types of genetic material found in all living cells and many viruses. (The other type of genetic material is DNA.) There are several types of ribonucleic acid (RNA). RNA plays important roles in protein synthesis and other cell activities.

HIV Life Cycle and Medications at Work



SLIDE 6

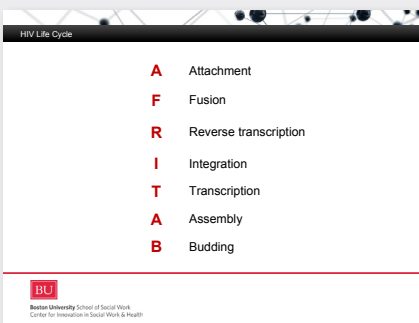
Distribute Handouts: “HIV Life Cycle—The Big Picture” and “HIV Life Cycle—Worksheet” for reference.

Using the slides, explain what happens at each phase of replication following the talking points. Remember to emphasize using the mnemonic AFRITAB to remember each stage.

The image above depicts the steps of HIV replication. HIV must follow several steps in order to make more HIV. The green images represent the journey of one HIV virion* using a CD4 cell (the purple image) to replicate.

*A virion is the complete, infective form of a virus outside a host cell, with a core of RNA or DNA and a capsid (a protein shell).

In the next few slides we will describe what occurs at each one of the 7 steps.



SLIDE 7

We will use the mnemonic AFRITAB to make it easier to remember each step of HIV replication. Each letter of AFRITAB represents a different step in the process of HIV making more of itself. Let’s review the names for each step before we describe what happens during the individual phases.

Step 1

The letter **A** represents the first step of viral replication which is **Attachment**.

Step 2

The letter **F** stands for **Fusion**.

Step 3

The letter **R** represents the process known as **Reverse transcription**.

Step 4

The letter **I** stands for **Integration**.

Step 5

The letter **T** refers to the fifth stage called **Transcription**.

Step 6

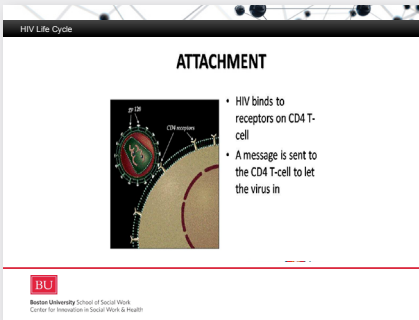
The letter **A** stands for the process known as **Assembly**.

Step 7

The letter **B** represents the final step of viral replication known as **Budding**.

Take a minute to review the chart above so that you’ll become more familiar with the names of each stage. Be sure to use AFRITAB to support memorization. You might find it helpful to write AFRITAB vertically on a piece of paper and write the name of each corresponding step, essentially duplicating the chart above. This will help you to commit the information to memory.

HIV Life Cycle and Medications at Work



SLIDE 8

Encourage participants to write each stage of viral replication on the HIV Life Cycle worksheet as they follow along.

Step 1

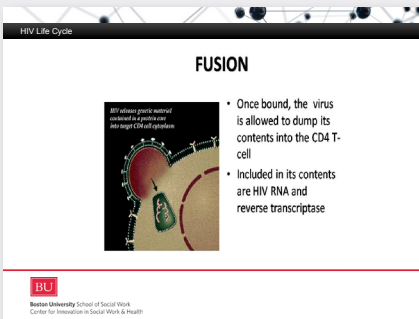
A = Attachment.

The first step in the HIV life cycle is Attachment.

Look at the image and you'll see on the left an HIV virion (green and red image). The tan image on the right shows a portion of the CD4 cell. The image illustrates how HIV has located and attached itself to a CD4 cell (host cell). Notice the "Y" like structures on the outside of the CD4 cell. These structures are called CD4 receptors. HIV attaches (binds) to the receptors on the CD4 cell and sends a message to the CD4 to let the virus enter.

HIV must connect to the CD4 cell receptors in a specific way in order for the message to the CD4 cell for entry to occur. If HIV does not attach correctly to the CD4 cell, the message for entry is not sent and that HIV virion will not be allowed entry into the cell.

In summary, the first step of the HIV life cycle replication is Attachment. **HIV attaches to the CD4 cell** and sends a message to the CD4 cell to gain entry.



SLIDE 9

Step 2

F = Fusion

Step 2 of the HIV life cycle is Fusion.

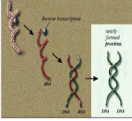
After HIV successfully attaches to the CD4 cell, it is ready to move to the second step called Fusion. Once bound, HIV enters and dumps its contents into the CD4 cell. The image illustrates the RNA and enzymes* carried inside of HIV.

*An enzyme is a molecule, usually a protein, that catalyzes (increases the rate of) chemical reactions in the body. Enzymes are essential to all body functions. HIV requires specific enzymes, such as reverse transcriptase or integrase, to replicate

Remember, the second step of viral replication is Fusion, when **HIV enters the CD4 cell and dumps its contents**. The contents include HIV RNA and reverse transcriptase (an HIV enzyme) along with other enzymes that will be described later.

HIV Life Cycle

REVERSE TRANSCRIPTION



The diagram shows a red HIV RNA strand being converted into a double-stranded DNA structure. A small green sphere representing reverse transcriptase is shown near the RNA. The resulting DNA is labeled 'each strand forming'.

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

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SLIDE 10

Step 3

R = Reverse Transcription

Step 3 in the HIV life cycle is Reverse Transcription.


We learned at the last stage that HIV dumps HIV RNA and reverse transcriptase* into the CD4 cell. During the third step of viral replication the HIV RNA makes a copy of itself to become double-stranded HIV DNA within the CD4 cell. The enzyme reverse transcriptase (pictured as the little ball next to the RNA in the image above) aids in the process of HIV RNA becoming HIV DNA. HIV RNA *must* become HIV DNA in order to accomplish the next step in viral replication.

*Reverse Transcriptase: An enzyme found in HIV (and other retroviruses). HIV uses reverse transcriptase to convert its RNA into viral DNA, a process called reverse transcription.

The process of reverse transcription can be summarized as **1 strand** of genetic material (RNA) **becoming 2 strands** of genetic material (DNA) using the enzyme reverse transcriptase.

HIV Life Cycle

INTEGRATION



The diagram shows a green HIV DNA strand being inserted into a circular human DNA structure. The HIV DNA is labeled 'HIV DNA' and the human DNA is labeled 'Human DNA'.

- Once the DNA is formed, it hides itself in the human DNA housed in the CD4 T-Cell nucleus

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SLIDE 11

Step 4

I = Integration

Step 4 in the HIV life cycle is Integration.

Once the HIV DNA has been formed it moves into the nucleus of the CD4 to combine with the human DNA. The integrase* enzyme is used to integrate the HIV DNA into the human DNA. Again, Integration occurs when **HIV DNA inserts itself, or integrates, into the host CD4 cell's DNA.**

*Integrase: An enzyme found in HIV (and other retroviruses). HIV uses integrase to insert (integrate) its viral DNA into the DNA of the host CD4 cell.

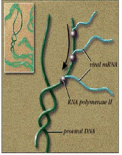
So far we have covered the first four steps of viral replication. It is a good time to review what we have learned so far.

1. **A = Attachment.** In step 1, Attachment occurs when HIV attaches to the CD4 cell.
2. **F = Fusion.** In step 2, Fusion happens when HIV enters CD4 cell and dumps its contents.
3. **R = Reverse transcription.** During step 3, HIV RNA becomes HIV DNA (1 strand of genetic material becomes 2 strands of genetic material).
4. **I = Integration.** In step 4, Integration happens when HIV DNA combines with the human DNA in the nucleus of the CD4 cell.

HIV Life Cycle and Medications at Work

HIV Life Cycle

TRANSCRIPTION



- 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

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SLIDE 12

Step 5 T = Transcription

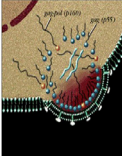
Step 5 in the HIV life cycle is Transcription.

After integration, HIV uses the CD4 cell like a manufacturing factory to create "packages" for making new HIV. The nucleus releases long chains of HIV RNA and proteins that contain information to make new HIV.

The key idea to remember about transcription is **information for making new HIV is released from the nucleus in long chains of proteins.**

HIV Life Cycle

ASSEMBLY



- The protease enzyme in the cell combines the DNA 'packages' to create active virus

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SLIDE 13

Step 6 A = Assembly

Step 6 in the HIV life cycle is Assembly.

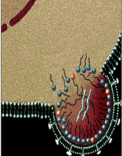
Once the long chains are released from the nucleus, an enzyme called protease* is used to break down the long chains into smaller "packages" that line up along the edge of the CD4 cell in preparation for the final stage of the HIV life cycle. Everything needed to make new HIV is present at this point; however, it is not infectious.

*Protease: A type of enzyme that breaks down proteins into smaller proteins or smaller protein units, such as peptides or amino acids. HIV protease cuts up large precursor proteins into smaller proteins. These smaller proteins combine with HIV's genetic material to form a new HIV virus.

In short, remember this is the stage where **the "packages" of information for making new HIV line up along the edge of the CD4 cell.**

HIV Life Cycle

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

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SLIDE 14

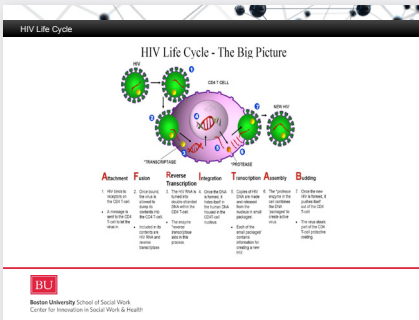
Step 7 B = Budding

The seventh and final step in the HIV life cycle is Budding.

Once the **newly formed HIV** has assembled along the cell wall, it **pushes itself out of the CD4 cell, stealing part of the cell's protective coating.** The new virus matures and becomes infectious and seeks to attach to another host to begin the process again.

We've outlined the process of a single HIV virion's journey of replication; however, this process happens repetitively by multiple HIV virions, which can produce billions of copies daily.

HIV Life Cycle and Medications at Work



SLIDE 15

We have covered the seven steps of the HIV Life Cycle and used the mnemonic AFRITAB as a learning and memory aide. Lets review the steps one more time as repetition helps to anchor information into memory.

1. **A = Attachment.** Attachment occurs when HIV attaches to the CD4 cell.
2. **F = Fusion.** Fusion happens when HIV enters CD4 cell and dumps its contents.
3. **R = Reverse transcription.** HIV RNA becomes HIV DNA (1 strand of genetic material becomes 2 strands of genetic material).
4. **I = Integration.** Integration happens when HIV DNA combines with human DNA in the nucleus of the CD4 cell.
5. **T = Transcription.** Information for making new HIV is released from the nucleus in long chains of proteins.
6. **A = Assembly.** Packages of information for making new HIV line up along the edge of the CD4 cell.
7. **B = Budding.** During the final step of replication, newly formed HIV pushes itself out of the CD4 cell, stealing part of the cell's protective coating.

Knowing how HIV replicates is important because it provides an explanation of what happens after someone contracts HIV. It is clear that HIV is a virus that uses the CD4 cell as a host to make more HIV. The process eventually destroys the CD4 host cell, which leads to poor immune function and makes it harder for the body to fight infection. Scientists use knowledge about the HIV life cycle to build an arsenal of HIV medications that are able to block replication at multiple stages of the process. When HIV medications are skillfully used, the amount of HIV in the body is drastically reduced, immune function is preserved and people live healthier lives.

SLIDE 16

Let's practice together! Now it's your turn to teach the HIV Life Cycle using the mnemonic AFRITAB.

Instructions:

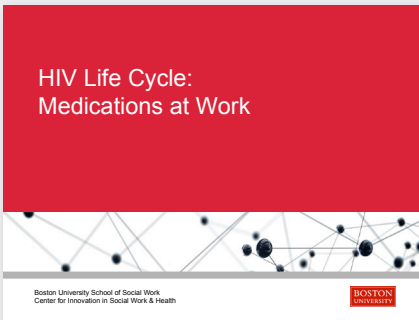
- On a flip chart sheet, write AFRITAB vertically down the left side.
- Solicit a volunteer to write the name of the stage beginning with A, and describe what takes place during that phase of replication. Continue with F and so on encouraging a new volunteer to describe the subsequent steps.
- Be sure the verbal description for each step is factually accurate.
- Ask participants to follow along by filling in the blanks on the HIV Viral Life Cycle worksheet.

Optional variations for this practice segment:

- Participants can form dyads or small groups to "act out" each stage of replication.
- Participants can form small groups, each assigned one step of replication. Distribute flip chart sheets to each group along with markers. Ask each group to draw and present their step in the correct order of replication.

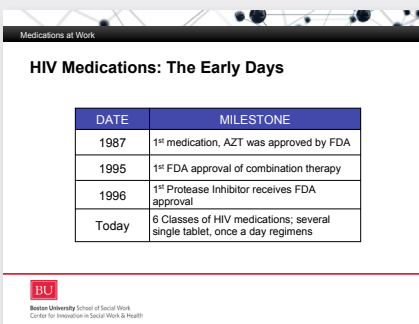


HIV Life Cycle and Medications at Work



SLIDE 17

Next we'll discuss how HIV medications work.



SLIDE 18

Advances in HIV medications have been a hallmark achievement for extending the lives of people with HIV. When HIV was first identified in the early 1980's there was little that could be done to help those who were diagnosed with HIV. It wasn't until 1987, that the first drug, AZT, was approved by the FDA. AZT was useful in blocking replication until viral mutations caused resistance, decreasing AZT's efficacy as a single-agent treatment.

Monotherapy (use of one drug) was the standard of care until 1995 when the FDA approved combination therapy (use of two or more drugs) with AZT and 3TC (Epivir). Both AZT and Epivir worked to block HIV replication during the process of Reverse Transcription, when HIV RNA converts to HIV DNA. It wasn't until the following year, in 1996, that the first Protease Inhibitor was approved for use in combination therapy, which allowed for interruption of viral replication at two different steps of the HIV life cycle.

Since HIV can easily develop resistance to single drug treatments, combination treatment was a game changer for many living with HIV. Life expectancy increased, but it was at the expense of treatment regimens containing numerous pills and multiple doses per day.

The progress was slow during the onset of the epidemic; however, the new millennium brought a surge in newer, more tolerable therapies that have significantly lowered pill burdens. In fact, today there are multiple single-dose, once-a-day regimens that contain at least three different medications to fight HIV. Further, there are six different classes of medications, many with several medication options all designed to block HIV replication at different steps. Several more medications are in development or in clinical trials to verify their effectiveness and gain FDA approval for use.

Finally, antiretroviral medications are not a cure for HIV; however, their benefits are significant for public health, life expectancy, and quality of life. HIV treatment medications help lower the amount of HIV in the blood, slow disease progression, reduce HIV transmission when undetectable, and enable people with HIV to live healthy, productive lives.

Note: The use of more than one drug is referred to multiple ways including, combination therapy, drug/treatment cocktails, medication regimen, HAART, ART and cART (see below for explanation of abbreviations).

HAART—Highly Active Antiretroviral Treatment

ART—Antiretroviral Treatment

cART—Combination Antiretroviral Treatment

HIV Life Cycle and Medications at Work


Medications at Work

HIV Medications: 3 Names

HIV Medications are referred to by 3 names

	EXAMPLE 1	EXAMPLE 2
Brand Name	Prezista®	Sustiva®
Generic Name	darunavir	efavirenz
Abbreviation	DRV	EFV

[2017 HIV Drug Chart - Positively Aware](#)

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SLIDE 19

Before we talk about the different classes of HIV medications, it's important to know that each HIV medication has 3 names:

1. Brand name
2. Generic name
3. Abbreviation

In example 1, Prezista is the brand name, darunavir is the generic name, and DRV is its abbreviation. Example 2 shows Sustiva as the brand name, efavirenz as the generic, and EFV as its abbreviation.

This information is useful to know when reviewing lab results, client charts, providing adherence counseling, researching side effects, and more. In fact, you may hear different disciplines use certain names more frequently. For example, a physician may refer to an HIV medication by its abbreviation or generic name when discussing a case study, but a CHW might refer to the medication's brand name when working with a client. While it may not be a priority to remember the brand, generic, and abbreviation for every HIV medication, it is useful to know that a current HIV medication chart can be used as a quick reference guide. Medication charts often organize HIV medication by their class, list all three names per drug, show an image, and common dosage.

See an example of an HIV medication chart by clicking the link on the slide or copy and paste the link below into your web browser.

2018 HIV Drug Chart—Positively Aware


<https://www.positivelyaware.com/issues/positively-aware-hiv-drug-chart-2018>

Medications at Work

HIV Medication Classes

There are 6 Classes of HIV medications:

1. NRTIs = Nucleoside Reverse Transcriptase Inhibitors
2. NNRTIs = Non-Nucleoside Reverse Transcriptase Inhibitors
3. PIs = Protease Inhibitors
4. IIs = Integrase Inhibitors
5. Entry Inhibitors
6. Boosters = Pharmacokinetic Enhancers

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SLIDE 20

There are 6 Classes of HIV medications. HIV medications are grouped into drug classes according to how they fight HIV.

1. NRTIs = Nucleoside Reverse Transcriptase Inhibitors
2. NNRTIs = Non-Nucleoside Reverse Transcriptase Inhibitors
3. PIs = Protease Inhibitors
4. IIs = Integrase Inhibitors
5. Entry Inhibitors
6. Boosters = Pharmacokinetic Enhancers

In the next few slides we will discuss each class of HIV medications and how they work to interrupt the HIV life cycle. You should recognize several of these terms from our previous discussion of the HIV Life Cycle.

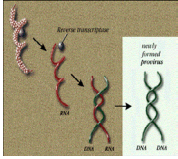
Facilitator's Note: Please check current HIV medication drug charts for the most recent list. New developments occur and new classes may exist.

Medications at Work

Nucleoside Reverse Transcriptase Inhibitors (NRTIs)

NRTIs Inhibit Reverse Transcription.

- Descovy®
- Emtriva®
- Epivir®
- Epzicom®
- Truvada®
- Viread®
- Ziagen®



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SLIDE 21

NRTIs = Nucleoside Reverse Transcriptase Inhibitors

Nucleoside Reverse Transcriptase Inhibitors are **often referred to as NRTI's or "Nukes."** This class of medications **prevent HIV RNA from making HIV DNA**, part of the HIV life cycle known as Reverse Transcription. NRTIs block the enzyme reverse transcriptase. If the HIV RNA is not converted into HIV DNA, it cannot continue on to the next phase of the life cycle. Essentially replication is stopped when the medications intervene effectively.

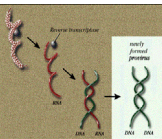
Some commonly used medications in this class are listed on the slide.

Medications at Work

Non-nucleoside Reverse Transcriptase Inhibitors (NNRTIs)

NNRTIs Inhibit Reverse Transcription.

- Edurant®
- Intelence®
- Sustiva®



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SLIDE 22

NNRTIs = Non-Nucleoside Reverse Transcriptase Inhibitors

Non-Nucleoside Reverse Transcriptase Inhibitors are also **known as NNRTIs or "Non-Nukes."** Non-Nukes also work at reverse transcription by blocking a specific protein HIV uses for replication at this stage. This group of inhibitors also **prevent HIV RNA from making HIV DNA** by targeting a different point during Reverse Transcription.

Non-nukes are known for their sensitivity to cross resistance. According to the U.S Department of Health and Human Services *AIDSinfo*, "Cross resistance is when resistance to one HIV medicine causes resistance to other medicines in the same HIV drug class. As a result of cross resistance, a person's HIV may be resistant even to HIV medicines that the person has never taken. Cross resistance limits the number of HIV medicines available to include in an HIV regimen."

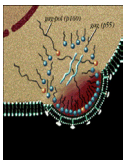
Common NNRTIs are listed on the slide.

Medications at Work

Protease Inhibitors (PIs)

Protease Inhibitors help prevent the piecing together of HIV DNA into small "packages."

- Evotaz®
- Prezcoibix®
- Prezista®
- Reyataz®



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SLIDE 23

Protease Inhibitors

Protease Inhibitors are also **called PIs.** Protease inhibitors **prevent the protease enzyme from cutting long chains of proteins into smaller "packages"** that are used form new HIV. These medications work at Assembly, the sixth stage of the viral life cycle.

Common PIs are listed on the slide.


HIV Life Cycle and Medications at Work

Medications at Work

Integrase Inhibitors (IIs)

Integrase Inhibitors help to block HIV DNA from binding to the host cell DNA.

- **Isentress®**
- **Tivicay®**



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SLIDE 24

II = Integrase Inhibitors

Integration Inhibitors are also **known as IIs** and work to **prevent HIV DNA from binding to the CD4 host cell's DNA** by disabling the integrase enzyme. Integrase Inhibitors are a newer class of medications that gained FDA approval in 2007. They are potent antiretroviral agents that are well tolerated and provide options for people who may have developed resistance to several medications in other classes.

Common IIs are listed on the slide.

Medications at Work

Entry Inhibitors (Fusion Inhibitors)

Fusion Inhibitors help to block HIV's entry into the CD4 cell.

- **Selzentry®**



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SLIDE 25

Entry Inhibitors

Entry Inhibitors block HIV's entry into the CD4 host cell. Selzentry, the most commonly used Entry Inhibitor is called a CCR5 antagonist because it blocks HIV from attaching to the CCR5 receptors on the surface of the CD4 cell. Another less commonly used medication in this category is Fuzeon. Fuzeon is a Fusion Inhibitor and prevents HIV from entering the CD4 cell to dump its contents for replication. Both medications block HIV's entry into the host cell in different ways and that's why this class is best categorized as entry inhibitors. Entry inhibitors work at the Attachment and Fusion stages of the viral life cycle.

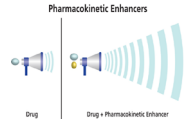
The most common medication is listed on the slide.

Medications at Work

Pharmacokinetic Enhancers (Boosters)

Boosters are used to boost the effectiveness of another drug.

- **Norvir®**
- **Tyboost®**



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SLIDE 26

Boosters = Pharmacokinetic Enhancers

The sixth class of HIV medications is Pharmacokinetic Enhancers.

Pharmacokinetic Enhancers are **more commonly known as Boosters**. Boosters are medications that are **taken with another drug** are used to **increase the effectiveness of the other drug**. They work by helping the other drug stay in the body longer at higher concentrations without increasing toxicity. Boosters are often included in single tablet regimens. These drugs do not interfere with the HIV life cycle, but they boost the effects of accompanying HIV medications.

Common Boosters are listed on the slide.

Medications at Work

Once-daily HIV Medications

- **Atripla®** (efavirenz, emtricitabine, tenofovir disoproxil fumarate)
- **Biktarvy®** (bictegravir, tenofovir alafenamide, emtricitabine)
- **Complera®** (rilpivirine, tenofovir, emtricitabine)
- **Delstrigo®** (doravirine, tenofovir disoproxil fumarate, lamivudine)
- **Genvoya®** (elvitegravir, cobicistat, emtricitabine, tenofovir alafenamide)
- **Juluca®** (dolutegravir, rilpivirine)
- **Odefsey®** (rilpivirine, tenofovir alafenamide, emtricitabine)
- **Stribild®** (elvitegravir, cobicistat, tenofovir, emtricitabine)
- **Triumeq®** (abacavir, dolutegravir, lamivudine)
- **Symfi® and Symfi Lo®** (efavirenz, lamivudine, tenofovir disoproxil fumarate)
- **Symtuza®** (darunavir, cobicistat, emtricitabine, tenofovir alafenamide)

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SLIDE 27

This final group isn't considered an official class of HIV medications, but it is useful to see them grouped together in this way. This is a grouping of **once-daily medications**.

Each medication is comprised of 2 or more medications that work together to block HIV replication. This group has revolutionized HIV treatment regimens and are a great support of medication adherence. Once-daily regimens empower people with HIV by helping to stop HIV progression, reducing the amount of HIV virus in the body, and increasing convenience for taking the daily dose. Continued advancements in HIV treatment move closer to a cure and provide hope for those living with this chronic, treatable medical condition.

Medications at Work

Activity: HIV Medications at Work

Share the following:

- The name of the medication
- The drug class to which it belongs
- Locate the stage of replication where the medication interrupts HIV replication

• Example

- Selperia®
- Entry Inhibitor
- Selperia® stops HIV from entering the CD4 cell.

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SLIDE 28

Activity: HIV Medications at Work

- Distribute handout: Medication At Work in the HIV Life Cycle
- Distribute an up-to-date HIV medication chart, for example: https://www.poz.com/drug_charts/hiv-drug-chart
- Examples of a Prescribed HIV Regimen (reference the slide with once-daily regimens)

Now that we have gained knowledge of how HIV medications work in supporting viral suppression, we will do an activity that can be life-changing for clients who are challenged with adherence.

- The purpose of the activity is to understand at what stage of the HIV life cycle a medication works to impede replication.
- Invite volunteers to choose a single tablet regimen from the medication chart or once-daily medication slide (variation: participants can work in teams).
- Ask participants to which drug class the medication belongs.
- Ask participants to identify what stage of the HIV life cycle is interrupted.
- Ask participants to locate the stage of the HIV life cycle on the Medication At Work in the HIV Life Cycle handout.
- Next, ask for volunteers to describe how the medications work to interrupt viral replication, while remaining participants follow along.

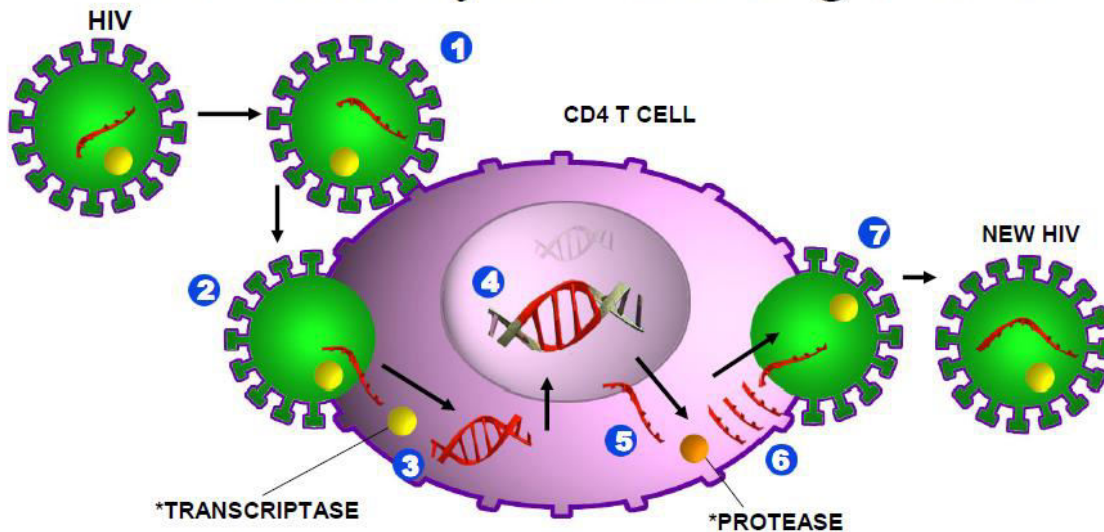
Example:

- **The name of the medication**
 - Biktarvy® (bictegravir, tenofovir alafenamide, emtricitabine)
 - Biktarvy® is comprised of bictegravir, tenofovir alafenamide and emtricitabine.
- **The drug class to which it belongs**
 - Locate each medication on the drug chart and note the class to which it belongs.
 - bictegravir is an Integrase Inhibitor.
 - tenofovir alafenamide + emtricitabine belong to the Nucleoside Reverse Transcriptase Inhibitor (NRTI) class of medications.
- **Locate the stage of replication where the medication interrupts HIV replication**
 - Since bictegravir is an Integrase Inhibitor, it works at the HIV life cycle stage called Integration. Bictegravir blocks HIV DNA from integrating with human DNA in the nucleus of the CD4 cell. In short, it blocks integration.
 - The other medications, tenofovir alafenamide + emtricitabine are NRTIs and work at the HIV life cycle stage called Reverse Transcription. These medications block HIV RNA from making HIV DNA.

Biktarvy® is a single tablet regimen made of 3 medications that block HIV replication in 2 places of the life cycle.

If discussing as one large group, repeat a few times as time allows. If participants have been broken into groups, facilitate a large group share. Participants can reference the slide to guide their responses.

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 **T**ranscription

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 CD4T-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.

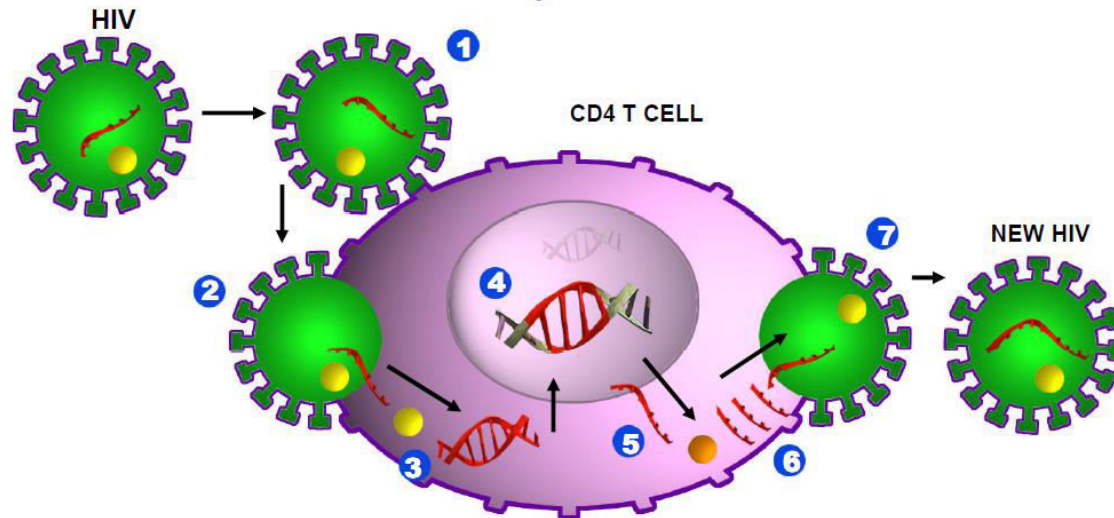
Assembly

6. The **protease* enzyme in the cell combines the DNA 'packages' to create active virus.

Budding

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

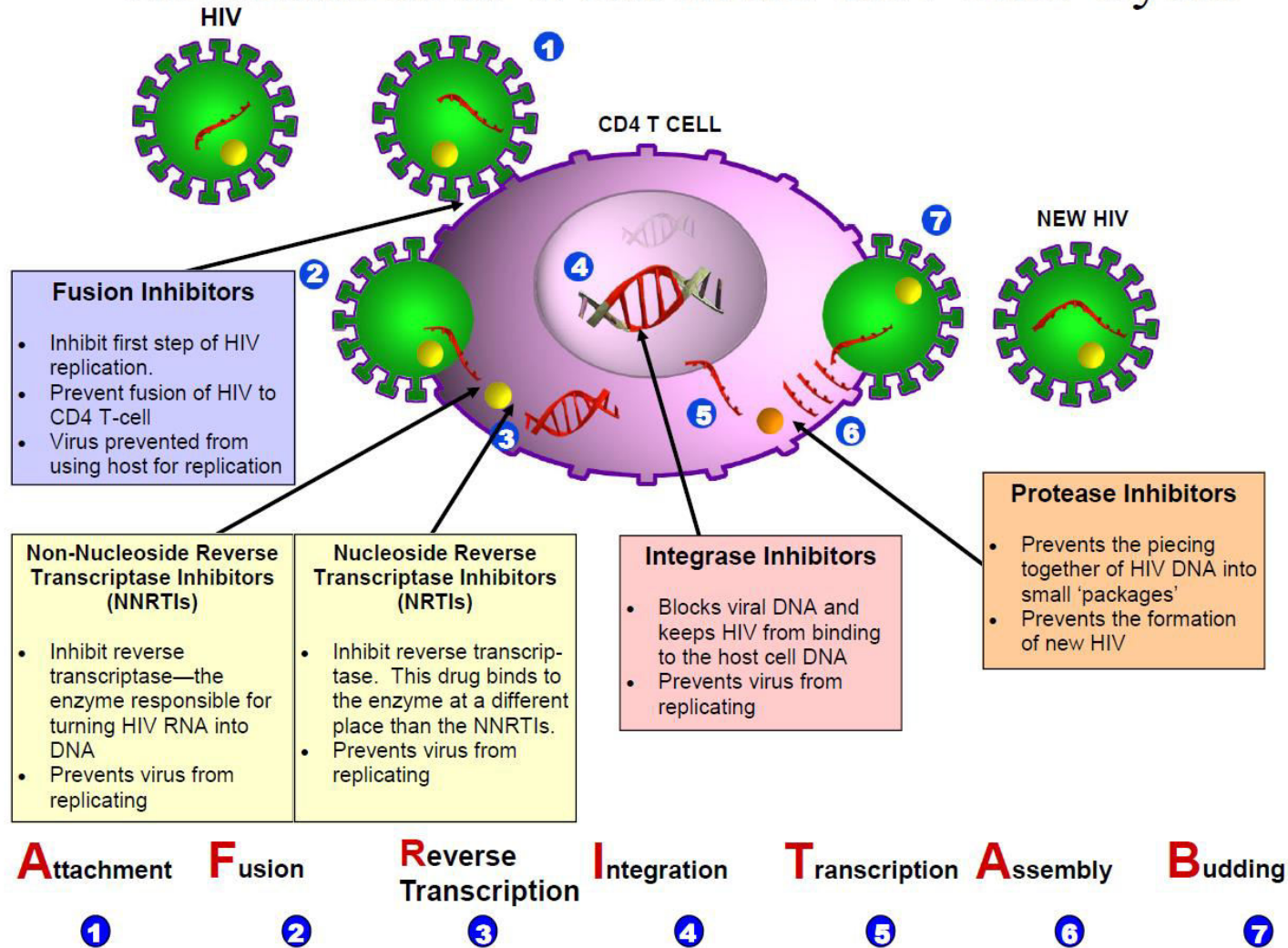
HIV Life Cycle - Worksheet



A _____ **F** _____ **R** _____ **I** _____ **T** _____ **A** _____ **B** _____

1. HIV binds to receptors on the CD4 T-cell.
 - A message is sent to the CD4 T-cell to let the virus in.
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.
3. The HIV RNA is turned into double-stranded DNA within the CD4 T-cell.
 - The enzyme reverse transcriptase aids in this process.
4. Once the DNA is formed, it hides itself in the human DNA housed in the CD4T-cell nucleus.
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.
6. The protease enzyme in the cell combines the DNA 'packages' to create active virus.
7. HIV is formed, it pushes itself out of the CD4 T-cell
 - The virus steals part of the CD4 T-cell protective coating.

Medications at Work in the HIV Life Cycle



Adherence, Labs, and Medication Resistance



OBJECTIVES

At the end of this unit, participants will be able to:

- Define what adherence means
- Identify common reasons for adherence challenges
- Brainstorm questions to ask to assess adherence
- List behaviors and/or activities that may indicate non-adherence
- Identify some of the barriers that providers, agencies, and the community at large have built that make it difficult to adhere
- Recognize the types of laboratory tests used to monitor a person's HIV care and treatment
- Understand why laboratory tests are important in monitoring health and how they can be used to manage care
- Understand the concept of drug resistance
- Understand what types of drug resistance testing are available and when they are used



INSTRUCTIONS

1. This section is divided into three topics to be taught in one session with an estimated time of 120 minutes. The facilitator should provide a break for participants.
2. Welcome participants.
3. Review the unit objectives.
4. Play the video "The ART Wall: Antiretroviral Therapy," which provides an overview of all of the topics to be covered in the session. <https://www.youtube.com/watch?v=1PEisyVjHsl&sns=em>
5. **Adherence:** Begin by facilitating a group conversation, as detailed in the slides. Review slides about the definition of adherence and factors affecting it. Review handouts and tools.
6. Take a 10-minute break.
7. **Resistance:** Play the video "Stop the Virus—HIV: Avoiding Resistance," https://www.youtube.com/watch?v=_H1zLcJZxeE
8. Review slides about drug resistance testing.
9. **Labs:** Ask participants about the importance of lab visits and review slides. Facilitate lab test activity (in pairs) and then case scenario activity (divide participants into three groups). Slides 33 through 38 are optional.
10. Wrap up. Thank participants for their work. As CHWs educating clients about their lab values is an important step to promoting adherence as part of the HIV care team.



Related C3 Roles

Care coordination, case management and system navigation, providing coaching and social support, providing direct service

Related C3 Skills

Communication skills, interpersonal and relationship-building skills, knowledge base



Method(s) of Instruction

Lecture, brainstorm, pairing, video, group discussion



Estimated time

120 minutes



Key Concepts

Adherence, viral load, resistance, CD4



Materials

All sections

- Computer with internet access and projector
- PowerPoint slides
- Flip chart for case scenario activity

Adherence

- Video: ART Wall <https://www.youtube.com/watch?v=1PEisyVjHsl&sns=em>
- Adherence tools (e.g., pill boxes, medication watch, pill bottles)
- Sample (unidentified client) lab reports

Handouts

- Ten Questions to Ask Yourself Before You Begin HIV Treatment
- Assessing Adherence: Ten Questions You Should Ask
- Adherence Fact Sheet #405 at <http://www.aidsinfonyet.org>

(continued)

Adherence, Labs, and Medication Resistance



Materials (continued)

Resistance

- Video: Stop the Virus—HIV: Avoiding Resistance at https://www.youtube.com/watch?v=_H1zLcJZxeE

Handouts

- HIV Resistance Testing Fact Sheet #126 at <http://www.aidsinfonet.org>
- Genosure Sample Test www.monogrambio.com/hiv-tests/genotypic-assays/genosure-prime (click on sample report to obtain copy)

Labs

Handouts

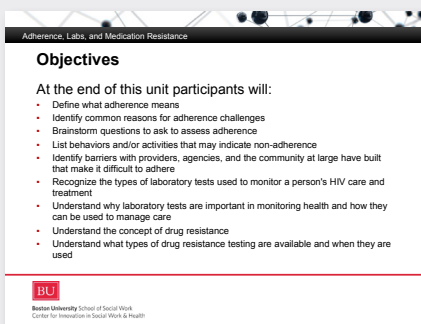
- Lab Worksheet
- Lab Worksheet—Answers
- Monitoring Tests for People with HIV at <https://www.thebody.com/article/monitoring-tests-people-hiv>
- Normal Laboratory Values, Fact Sheet 120 A/B page 1, at <http://www.aidsinfonet.org>
- Adherence Case Scenarios

Adherence, Labs, and Medication Resistance



SLIDE 1

This session will cover three topics—it's a longer session, so we will take a break.



SLIDE 2

Review objectives.



SLIDE 3

First we'll watch a video, called the ART Wall: Antiretroviral Therapy (ART). <https://www.youtube.com/watch?v=1PEisyVjHsl&sns=em>

It does a good job of explaining all three topics.



SLIDE 4

Ask, "How do you define adherence?"

Adherence, Labs, and Medication Resistance

Adherence, Labs, and Medication Resistance

What is Adherence?

- How closely you follow a prescribed treatment regimen
- Partnership between patient and provider
- It is a skill to be learned
- Clients must be able to do the following to be adherent to their therapy:
 - Understand the regimen
 - The Who, What, When, Where, Why? of treatment
 - Believe they can adhere
 - Remember to take medications
 - Integrate medications into current lifestyle
 - Problem-solve changes in schedule and routines

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SLIDE 5

Review the slide.

Engage participants in discussion. Ask, “Has anyone missed or stopped taking a prescribed antibiotic? If so, what were some of the barriers that kept you from finishing the antibiotic? People with HIV are told by providers, family, and friends that they have to take HIV medications every day; however, there are sometimes barriers to doing so. What are they?”

Taking medication daily is often a skill that is learned, especially if you are a person who does not have a history of taking meds. If you don’t take HIV medications every day, HIV might multiply out of control. For the best viral load results, it is recommended that people with HIV should take over 90% of their pills correctly.

Doctors start patients on a preferred regimen from the HHS Guideline Recommendations; provide participants with a current copy (<https://aidsinfo.nih.gov>).

Adherence, Labs, and Medication Resistance

Factors Affecting Adherence

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SLIDE 6

There are many factors that affect adherence. Review the slide. Some barriers to adherence are pictured here.

Ask, “What behaviors may signal non-adherence?”

Adherence, Labs, and Medication Resistance

Probes for Assessing Adherence

- What is the reason you are taking this drug?
- How do you take this medication?
- Are you taking this medication with food?
- Where did you receive information about this medication?
- What do you use to help you remember to take your medication?
- What do you do when you miss a dose?
- What problems have you encountered while taking this medication?

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SLIDE 7

Ask, how do you gauge if a patient is adherent?

Review the slide.

We often don’t ask clients about their readiness to start medications, which is extremely important. It’s important to know if the person you’re working with does not have a history of taking medication, avoids taking medication, has problems swallowing, or other tendencies that would prevent adherence. Once the doctor has prescribed medication and the person is not adherent, they may develop resistance quickly. It has been said that the first regimen is the best regimen, because doctors want patients to have longevity with their first line of prescribed medication.

Let’s take a look at the handout, 10 Questions to Ask Yourself Before You Begin HIV Treatment. Ask participants to take turns reading the questions on the handout.

Adherence, Labs, and Medication Resistance

Adherence, Labs, and Medication Resistance

Client Factors Affecting Adherence

- Knowledge of treatment regimen
- "Fits" with lifestyle
- Stage of disease, level of wellness
- Support system
- Belief in treatment effectiveness
- Fear
- Ability to control side effects
- Mental health
- Substance abuse
- Stigma
- Believing that the drugs are ineffective
- Denial of HIV status

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SLIDE 8

Review the slide and discuss with participants.

Adherence, Labs, and Medication Resistance

Environmental Factors That Impact Adherence

- Transportation
- Housing
- Food
- Drug treatment
- Mental health service
- Social network
- Child care
- Addressing cultural norms

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SLIDE 9

Review the slide.

Ask, "What are some of the walls or barriers that providers, agencies, and the community at large have built that make it difficult for clients to adhere?"

Some barriers created by organizations can include:

- Clinic hours—time flexibility
- Clinic personnel that do not return calls
- What about enrolling in insurance plans such as Ryan White HIV/AIDS Program (RWHAP), AIDS Drug Assistance Program (ADAP), or ACA (Affordable Care Act)?
- Fear of a clinic employee breaching confidentiality or meeting someone you know.
- Finances—paying for HIV medications
- Transportation—in the case of meds, could a CHW or specialty pharmacy provide help by pick up or mailing?
- Do providers know or refer clients to practical resources they need (e.g. support groups, hot meals, etc.)?
- Can you think of any thing else that providers or agencies can do to help clients be successful in improving adherence?

Adherence, Labs, and Medication Resistance

Non-adherence Can Take Many Forms

- Not having prescription filled
- Taking an incorrect dose
- Taking medication at wrong time
- Missing doses
- Stopping therapy too soon
- Taking OTC medications that interfere with prescribed medication

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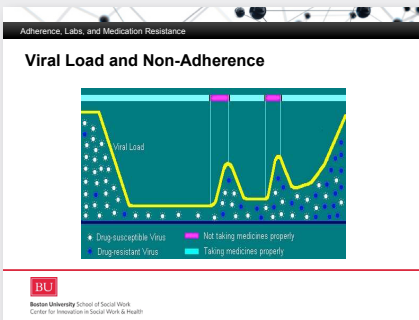
SLIDE 10

Non-adherence can take many forms. These are more personal causes of non-adherence.

Review the slide.

Optional resource: Adherence Fact Sheet #405 at www.aidsunited.org.

Adherence, Labs, and Medication Resistance



SLIDE 11

This chart shows a high viral load when a person is not taking medication.

Review the legend on the chart:

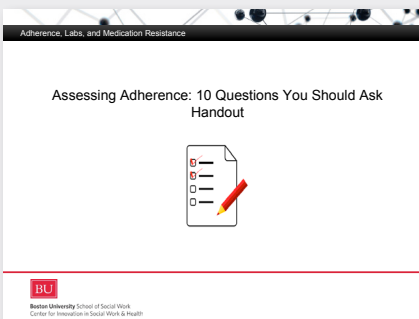
White—shows drug-susceptible virus

Blue—shows drug-resistant virus

Pink—shows that medication is not being taken properly

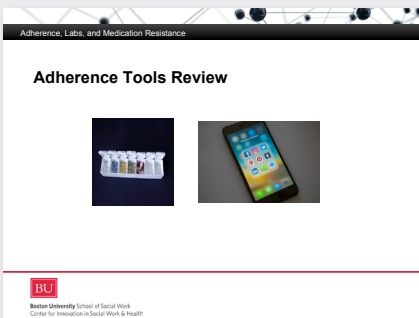
Light blue—shows that medications are being taken properly

As you look to the left, there are drug susceptible viruses that can be controlled by taking medication; there are fewer blue resistant virus strains. However, to the right there are a lot of blue drug-resistant viruses in the absence of not taking medication.



SLIDE 12

Ask, “What questions would you ask a client if you wanted to assess how adherent they are to their medication regimen?” Refer to handout, Assessing Adherence: Ten Questions You Should Ask.



SLIDE 13

Pass around adherence tools (medication watch, calendars, pill bottles, and trays etc.) for in person training. Also review the following:

Adherence and medication go hand in hand. In the past, a huge part of non-adherence was the pill burden for clients (i.e. some taking up to 16 pills a day)—but not anymore. STR or (single-tablet regimens) have made taking anti-retrovirals easier; today there are so many choices, some of which cause little to no side effects.

Another advance researchers have made is a change in the formulation of one of the most prescribed medications, Truvada. The tenofovir DF (TDF) formulation of Truvada has been decreased from 300mg, which was associated with long-term decreases in bone mineral density and kidney problems in some patients. The new formulation, tenofovir alafenamide, is 25mg and in some medications 10mg; doctors are seeing fewer kidney and bone issues with the TAF formulation compared to TDF in clinical trials.

Explain the concept of **U = U** which stands for Undetectable = Untransmittable.

Undetectable: By taking the right HIV medicine every day, one can lower the amount of HIV in the blood to become “undetectable.” This doesn’t mean the client no longer has HIV—it means that by continuing their plan of treatment, they can still have a healthy life with HIV.

Untransmittable: People with HIV who take HIV medication daily as prescribed and achieve and maintain an undetectable viral load for at least six months have effectively no risk of sexually transmitting the virus to an HIV-negative partner.

Additional U = U info: <https://hab.hrsa.gov/sites/default/files/hab/program-grants-management/ViralSuppressionProgramLetterFinal10-19-2018.pdf>; <https://www.preventionaccess.org/>; <https://www.niaid.nih.gov/diseases-conditions/treatment-prevention>; <https://www.cdc.gov/vitalsigns/end-hiv/>; and other websites.

Adherence, Labs, and Medication Resistance



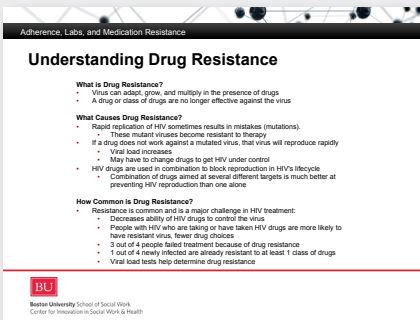
SLIDE 14

Take a 10 minute break.

After the break, ask:

- “What is drug resistance?”
- “What do you think causes drug resistance?”

Allow participants to respond, then review answers on the next slide.



SLIDE 15

Review the slide.

What is drug resistance?

- HIV is “resistant” to a drug if it keeps multiplying rapidly while a person is taking the drug.
- Physical changes (or mutations) in parts of the virus that prevent the medications from working cause resistance.
- HIV mutates almost every time a new copy is made. Not every mutation causes resistance. The “wild type” virus is the most common form of HIV. Anything different from the wild type is considered a mutation. An antiretroviral drug (ARV) won’t control a virus that is resistant to it. It can “escape” from the drug.

What causes resistance?

HIV usually becomes resistant when it is not totally controlled by drugs someone is taking. In short it is caused by:

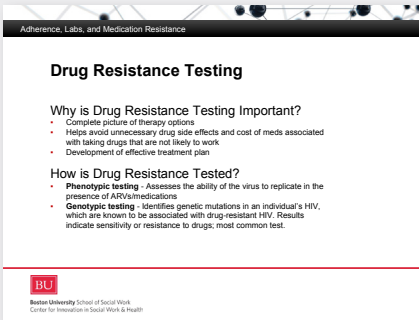
- Transmitted resistance: about 10% of people who contract HIV are already resistant to one or more ARVs. The person inherited resistance from the person they contracted the virus from
- Missed doses or non-adherence
- Re-infection—condomless sex with a person with HIV.

If a drug does not work against a mutated virus, that virus will reproduce rapidly and viral load increases. A person may then have to change drugs to get HIV under control. HIV drugs are used in combination to block reproduction in the HIV life cycle; however, drug resistance is very common.



SLIDE 16

Play a short video on resistance. https://www.youtube.com/watch?v=_H1zLcJZxeE



SLIDE 17

Review the slide.

Provide the handout of a GenoSure sample copy of a resistance test for a patient.

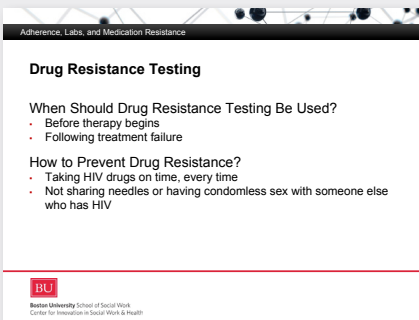
Explain that some resistance tests are called GenoSure or PhonoSense tests.

Both tests show if a person has become resistant to HIV medication. In this case, a physician will need to change the patient's medication regimen.

Tests usually show the word "resistant" or "sensitive" next to the name of the medication. **Sensitive** = patient not resistant to the drug; **Resistant** = patient is resistant to the drug; "resistant possible" means that if the patient continues on the path of not taking the drug properly they will soon develop resistance.

Genotypic tests are normally performed at the first lab visit to determine if the person that contracted HIV already has resistance from the person that transmitted the virus to them. Physicians may or may not tell the patient they are performing the test.

Phenotypic test is offered after patients have been non-adherent and gone through most HIV medications with multiple resistances to many medications. For the test, HIV medications are in a petri dish and the person's blood sample is put into each medication slot and allowed to cure overnight. The test is costly but does show the physician which medications a patient can still take that may provide benefit and slow the progress of the disease.



SLIDE 18

Review the slide.

When should drug resistance testing be used?

Genotype tests are generally performed before therapy begins. Phenotypic tests are performed when treatment has failed due to non-adherence.

Being adherent is the best way to prevent drug resistance.



SLIDE 19

Ask, "What are the benefits of keeping lab appointments?"


Allow for participants to answer, then review the slides.

Adherence, Labs, and Medication Resistance

Adherence, Labs, and Medication Resistance

Making Sense of Lab Values

Understanding labs and why they are important



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SLIDE 20

Explain that lab tests are some of the most important ways that clients and their healthcare provider can monitor their health. There are a variety of monitoring tests to help gauge HIV disease progression and the state of overall health for people with HIV.

Adherence, Labs, and Medication Resistance

Doctors Use Lab Tests to Monitor Your Health

Lab tests:

- Detect the presence of disease-causing organisms
 - (e.g. bacteria, viruses, parasites) that may be related to HIV
- Tell when to treat, how to treat, and if treatment is working
- Identify the development of side effects related to treatment
- Detect other infections and problems associated with HIV infection

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SLIDE 21

Review the slide.

Adherence, Labs, and Medication Resistance

Lab Basics

- Confirm your Personal Information:
 - Name
 - Age
 - Gender
 - Medical Record Number
- Ask about anything you do not understand

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SLIDE 22

Review the slide.

It's important to have clients confirm that all personal information is theirs. It's also important to encourage clients to be proactive and ask for a copy of their labs each and every time they meet with their doctor to review their labs.

Adherence, Labs, and Medication Resistance

What Do HIV Medications Do?

- Help to control HIV by reducing the growth of new virus
- Help keep your viral load down
 - Viral load = the amount of HIV in your blood
- HIV medicines do not cure HIV or AIDS

Reduce viral load



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SLIDE 23

HIV medication helps control HIV by reducing the growth of new virus. HIV medications can be very effective at lowering viral load, which is the amount of HIV in the blood. HIV medications do not cure HIV infection or AIDS.

Adherence, Labs, and Medication Resistance

Adherence, Labs, and Medication Resistance

Tracking Your Health

Lab tests

- HIV viral load
- CD4 cell count
- Complete blood count (CBC)
- Lipids
- Glucose (blood sugar)
- Liver function
- Kidney function
- HIV drug resistance

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SLIDE 24

A client's healthcare provider will order a number of lab tests to help monitor treatment and disease progression. These may include HIV viral load, CD4 cell count, complete blood count (CBC), lipids, glucose, liver and kidney function, and HIV drug resistance.

Adherence, Labs, and Medication Resistance

Why are Labs Important?

Lab tests can help clients and their healthcare provider:

- Decide when to start HIV treatment
- Decide which HIV medicines are best for them
- Know whether or not their medicines are working
- Know if any of their medicines are causing side effects
- Watch for other infections and problems

Understanding your labs helps you take charge of your health.

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SLIDE 25

Review the slide.

Adherence, Labs, and Medication Resistance

When Should Lab Tests Be Done?

- When a person is first diagnosed with HIV, usually every 3 to 6 months, or whenever the healthcare provider feels they are necessary
- When a person start taking medicines and before they switch to different medicines

Even when you are feeling OK, labs can tell you things about your body that you may not be able to see or feel.

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SLIDE 26

A healthcare provider will order a number of lab tests when a patient is first diagnosed with HIV to determine baseline values; every time they start or switch to new medicines; and to help monitor ongoing treatment.

Most of these tests should be performed regularly, usually every three to six months or whenever the healthcare provider feels it's appropriate.

ACTIVITY: LABS

SLIDE 27

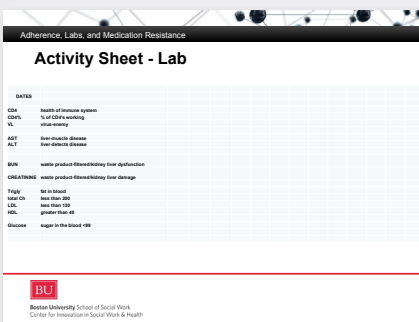
Ask participants to pair up for a lab practice activity.

Adherence, Labs, and Medication Resistance



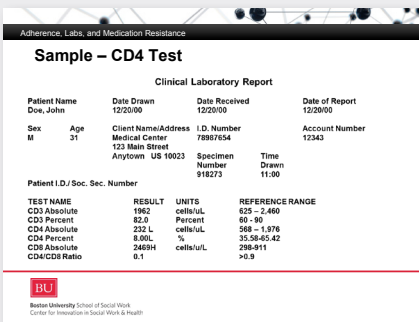
SLIDE 28

Using the Lab Worksheet handout, we will discuss specific monitoring lab tests for people with HIV and explain the significance of why each test is being monitored.



SLIDE 29

Let's take a look at this Lab Worksheet. You also have it as a handout.



SLIDE 30

Reviewing our labs on the CD4 Test, you see 4 columns:

1. Test Name—identifies the type of procedure performed
2. Result—the patient's actual result or percent
3. Units—how are the results measured in cells or percent
4. Reference Range—the normal or reference ranges for a person without HIV as compared to the actual result of a person with HIV. The result column will be identified as H for High or L for Low when compared to the patient's actual result.

Using the Lab Worksheet and the following sample tests:

- CD4
- Blood Chemistry
- Viral load Sample Tests

Identify and write in the lab results for each test on the Lab Worksheet (CD4, VL, Liver, Kidney, Cholesterol, and Glucose). Compare them to the actual result of a person living with HIV. The result column will be identified as H for High or L for Low when compared to the patient's actual result.

Guide participants as follows:

- Ask, "What is Mr. Doe's CD4 absolute or count?"
- Answer: 232. Please write 232 on your Lab Activity Sheet beside CD4 Count.
- Is this number considered high or low compared to the reference range?
- What is Mr. Doe's CD4 Percent?
- Answer: 8%. Please write 8% on your Lab Worksheet beside CD4 Percent.
- Is it low or high compared to the reference range?
- The CD4 Percent is the better indicator for HIV progression for Mr. Doe. The CD4 Percent is not variable; percentages are usually more stable over time than absolute counts.
- CD4 absolute or cell counts often fluctuate due to factors including time of day (levels are usually higher in the morning), fatigue, stress, vaccinations, infections such as flu, and monthly menstrual cycles in women.

Adherence, Labs, and Medication Resistance

Adherence, Labs, and Medication Resistance

Sample – Blood Chemistry Tests

Clinical Laboratory Report

Patient Name Doc, John	Date Drawn 12/20/00	Date Received 12/20/00	Date of Report 12/20/00
Sex M	Age 31	Client Name/Address Medical Center 123 Main Street Anytown US 10023	I.D. Number 78987654
			Account Number 12343
			Specimen Number 918273
			Time Drawn 11:00

Patient I.D./ Soc. Sec. Number

TEST NAME	RESULT	UNITS	REFERENCE RANGE
Sodium	135	mmol/L	136-144
Potassium	3.8	mmol/L	3.6-5.1
Chloride	103	mmol/L	101-111
CO2	24	mmol/L	22-33
Glucose	118H	mg/dL	70-98
BUN	12	mg/dL	8-20
Creatinine	0.7	mg/dL	0.6-1.3
GFR African-American	>90	mL/min/1.73m ²	>90
GFR Non-African Am.	>90	mL/min/1.73m ²	>90
Bilirubin Total	0.4	mg/dL	0.3-1.2
ALT	28	U/L	1-41
ALT	18	U/L	7-35

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SLIDE 31

Now let's review the blood chemistry tests. The blood chemistry, or chem panel, measures many important substances in the blood. Although the chem panel does not directly measure HIV disease progression, it can help indicate how well various organs are functioning and provide valuable information about drug side effects.

Find the Glucose, BUN, Creatinine, AST and ALT.

Please write the results of all the procedures beside the name on the Lab Worksheet.

Let's discuss one at a time:

- Glucose—sugar is carried in the blood in the form of glucose; it's broken down by cells to provide energy. What is a normal glucose range?
- BUN—(Blood Urea Nitrogen) is a metabolic waste product that is normally filtered out by the kidneys and excreted in the urine. Elevations may indicate kidney dysfunction or a body fluid imbalance (e.g. dehydration).
- Creatinine—waste product of protein metabolism is also normally excreted by the kidneys. Elevation may indicate kidney damage.
- AST—liver muscle disease
- ALT—early detection of liver damage

Adherence, Labs, and Medication Resistance

Sample – Viral Load Test

Clinical Laboratory Report

Patient Name Doc, John	Date Drawn 12/20/00	Date Received 12/20/00	Date of Report 12/20/00
Sex M	Age 31	Client Name/Address Medical Center 123 Main Street Anytown US 10023	I.D. Number 78987654
			Account Number 12343
			Specimen Number 918273
			Time Drawn 11:00

Patient I.D./ Soc. Sec. Number

TEST NAME	RESULT	UNITS	REFERENCE RANGE
HIV-1 RNA, PCR	32,030	copies/mL	

The reportable range for this assay is 20 to 10,000,000

Log ₁₀ HIV-1 RNA	4.506	log ₁₀ copies/mL	
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SLIDE 32

Viral load test:

- Finally, the viral load test is the most significant. Viral load tests measure the amount of HIV RNA or virus in the blood. The presence of RNA indicates that the virus is actively replicating (multiplying).
- Viral load is expressed as copies of RNA per milliliter of blood (copies/mL) or in terms of logs.
- If the level of HIV is too low to be measured, viral load is said to be undetectable, or below the limit of quantification.
- However, undetectable viral load does not mean that HIV has been eradicated; people with undetectable viral load maintain a very low level of virus. Even when HIV is not detectable in the blood, it may be detectable in the semen, reproductive organs, tissues, lymph nodes, and brain.

Guide participants as follows:

- Ask, "What is this person's viral load?"
- Answer: 32,030. Please write the results of the HIV-1 RNA, PCR or viral load on the Lab Worksheet.
- Ask, "What is the recommended viral load for patients?"
- Answer: Less than 20 or 40 depending on the lab.
- Ask, "What is meant by the term viral suppression?"
- Answer: People who are virally suppressed report a viral load of 200 copies or HIV-1 RNA, PCR or virus in the blood.
- Tell participants that they should work with the client to also identify other tests that may be concerning for the client (e.g. hemoglobin or A1c, cholesterol etc.)


U = U a new term is *Undetectable = HIV Untransmittable*

In September 2017, the **CDC** (Centers for Disease Control and Prevention) officially supported the medically proven claim that people who are **HIV+** and **Undetectable** and remain **consistently undetectable** or **Virally Suppressed** (20–200 copies) cannot transmit HIV to partners who do not have HIV. Nearly 20,000 cases were studied and all HIV negative persons remained HIV negative. (McCray & Mermin, 2017)

Adherence, Labs, and Medication Resistance

What is a "Normal" Lab Value?

- "Normal" or "reference range" values are found on a lab report
- Lab results can be low, high, or within normal range
- If labs are too high or too low, the client should talk to their healthcare provider



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SLIDE 33

Please note: The remainder of the lab slides are optional and do not need to be covered unless further clarification is needed. The lab activity alone reviews material on the remaining PowerPoint slides.

"Normal" values or reference ranges can vary from lab to lab, depending on the equipment and/or testing method used. It is important to compare your results to the range shown on the lab report. The lab results can be low, high, or within normal range.

Test results can be affected by many factors, such as age or gender, the time of day when the sample was taken, active infections, the stage of HIV and food. For example, some test samples need to be taken after a person has fasted for several hours.

If any labs values are too high or too low, encourage your client to discuss the results with their healthcare provider.

Adherence, Labs, and Medication Resistance

HIV Viral Load

- Measures the amount of HIV in the blood
- Very useful in deciding when to begin or change HIV medications

The goal: Keep your viral load as low as possible < 20 copies per ml blood

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SLIDE 34

HIV viral load is a test that measures the amount of HIV virus in the blood. When used in combination with CD4 cell count results, viral load is extremely useful in determining when to begin and change your HIV therapy.

The goal of HIV therapy is simple: to keep the amount of HIV in the blood as low as possible.

Adherence, Labs, and Medication Resistance

Understanding Viral Load Test Results

- A person with HIV can have a viral load from less than 20 copies to over 1,000,000 copies per milliliter of blood (copies/mL)
- Less than 20 copies/mL = "undetectable"
 - Undetectable does not mean the person is cured
- Less than 200 copies/mL = "virally suppressed"
 - Virally suppressed means the person's virus has been controlled, but is still present but at low levels, suppressing or reducing the function and replication of a virus

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SLIDE 35

A person's viral load can measure from less than 20 copies of HIV per milliliter of blood to more than one million copies. Although there is no cure for HIV, when your viral load is below 20 copies/mL, this is known as "undetectable" because the test is not sensitive enough to give a reliable number. Again, as we discussed previously—Undetectable does **not mean** that the person is cured. You may also see less than 400 copies/mL referred to as undetectable when less sensitive tests are used.


An important goal of HIV therapy is to encourage the client to get their viral load to undetectable.

Adherence, Labs, and Medication Resistance

CD4 Cell Count

Measures the number of CD4 cells (also called T-helper cells) in your body

- Indicates the health of the immune system
- The more CD4 cells, the stronger the immune system



Fewer CD4 cells may lead to increased infections

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SLIDE 36


CD4 cells are an important part of the immune system. Therefore, the CD4 cell count is a key measure of the health of the immune system. The more CD4 cells, the stronger the immune system is and the better able clients are to fight off infections.

Certain factors can cause the CD4 cell count to vary. These include time of day, fatigue, and stress. It's best to have blood drawn at the same time of day for each CD4 cell test and to use the same laboratory. When the body fights an illness, CD4 counts go up. Vaccinations can cause the same effect. Don't check CD4 cell count until two weeks after recovering from illness, or immediately after a vaccination.


Adherence, Labs, and Medication Resistance

Understanding CD4 Cell Count Results

Results can be reported as two values:
CD4 cell count (blips can be affected by stress)



CD4 cell percentage (no variance)



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SLIDE 37

CD4 cell tests are normally reported as the number of cells in a cubic millimeter of blood. Normal counts are between 500 and 1,500. Because CD4 cell counts can vary, some healthcare providers prefer to look at what's called the CD4 cell percentage. The CD4 cell percentage refers to the proportion of all lymphocytes that are CD4 cells. For example, if your CD4 percentage is 34%, it means that 34% of your lymphocytes were CD4 cells. The normal range is between 20% and 40%.

Anyone who has fewer than 200 CD4 cells or a CD4 percentage of less than 14% is considered to have AIDS.

In closing, understanding labs enables clients to:

- Play an active role in their health care
- Use new knowledge of lab tests and lab values to be a partner with their doctor
- Live a healthier life

CASE SCENARIO ACTIVITY: ADHERENCE AND RESISTANCE



SLIDE 38

(Approximately 20 minutes; 10 for group discussion and 10 for presenting feedback to the larger group).

Divide participants into three groups. There are three scenarios: A, B, and C. Give each group an adherence scenario to read, have them brainstorm as a group and answer the following questions in the assigned group. Write the four questions below on a flip chart. Each group will select a spokesperson who will report the groups' answers to the class.

1. What questions can the CHW ask the client?
2. Are there barriers or factors that would affect the client's adherence?
3. What strategies could the CHW suggest?
4. Are there any concerns regarding adherence or resistance?

To close the session, review the following points:

- 90% adherence is the goal and is key to living a long healthy life with HIV.
- Resistance can happen at any time when the virus is not totally controlled by HIV medications; it's important to keep medical appointments.
- Trends are important; however labs should be viewed over time, not just once to determine medical outcomes.
- Always make sure the lab report you are reading belongs to the correct client.
- Every lab is different, so what may be out of range for one lab may not be for another.
- Encourage clients to use portals or sources like MyChart, if available, so they can review their own labs and request copies prior to or at doctor visits so they can ask questions.

Ten Questions to Ask Yourself Before You Begin HIV Treatment

1. Why do I want to start treatment?
2. Am I ready?
3. Which regimen will still let me live my life?
4. Have I surrendered to the truth that I have HIV?
5. Who will I tell about my regimen?
6. Why this regimen?
7. What side effects am I willing to tolerate?
8. How can I expect to feel on this regimen?
9. What if it doesn't work?
10. Can I stop?

Assessing Adherence: Ten Questions You Should Ask

1. Which meds are you currently taking?
2. How frequently do you have to take each of your meds?
3. What are the food restrictions for each of your meds (i.e. with or without food)?
4. Why do you think some meds need to be taken with food and some on an empty stomach?
5. Why do you think some meds are taken once a day and others twice a day?
6. What helps you remember to take your meds?
7. What do you do when you miss a dose?
8. What problems have you encountered from taking meds?
9. How soon before you run out of meds do you order refills?
10. Do you believe that the meds are helping you and, if so, how?

Adherence Case Scenarios

Scenario A

Joe is a 32-year-old who started medication 3 weeks ago. The Community Health Worker (CHW) gives Joe a call to see how he has adjusted to his new medication regimen. Joe tells the CHW that he was prescribed Triumeq. He reports that he is taking his medications faithfully, however, Joe said he was worried because he has been experiencing side effects since starting the medication. Joe reports that he has mild stomach cramps, headaches, and diarrhea. He hasn't missed a dose but he switches from morning to night depending on how he feels and if friends are around since he has not disclosed.

1. What questions could the Community Health Workers ask Joe?
2. Are there barriers or factors that would affect the client's adherence?
3. What strategies could the CHW suggest?
4. Are there any concerns regarding adherence or resistance?

Scenario B

Carmen was diagnosed with HIV in July 1992. Before starting HIV treatment, her T cells were 868 and she was in great shape, but was angry at herself for trusting her partner and not asking him to wear a condom when they had sex. Soon after her diagnosis she told her partner, who blamed her for transmitting HIV; he broke up with her. She felt dirty, thought she was going to die, and insisted on starting her meds. She fell into a depression and began to drink, and soon could not remember when or how to take her meds. She didn't keep her medical appointments and began to feel really sick, coughing uncontrollably and losing weight. Her doctor recently introduced her to a CHW.

1. What questions could the CHW have asked Carmen before she started her meds?
2. Are there barriers or factors that would affect the client's adherence?
3. What strategies could the CHW suggest?
4. Are there any concerns regarding adherence or resistance?



Scenario C

Desiree, a 31-year-old transgender woman living in California, has been HIV positive for 10 years and has yet to take a single HIV medication. Though she has had several conversations with her doctors about the possibility of starting treatment, she has a history of mal-adherence and is afraid it will continue if she begins taking HIV meds.

Though Desiree has never been on HIV medications, she has been prescribed both antidepressants and hormones on a long-term basis. Desiree has always had trouble adhering to both of her pill regimens. "I always end up forgetting," she explained. More than merely forgetting, Desiree hates the taste of her pills and feels overwhelmed by the prospect of having to take her medications every day.

"I usually end up thinking how much I don't want to do it. I get concerned that, if I take this now, am I going to feel OK in a few hours to do whatever else I need to do?" she said. With a child to raise and a job to perform, Desiree is fearful every time she takes her meds.

1. What questions can the CHW ask Desiree before she start a new regimen?
2. Are there barriers or factors that would affect the client's adherence?
3. What strategies could the CHW suggest?
4. Are there any concerns regarding adherence or resistance?

Lab Worksheet - Answers

DATES							
CD4	health of immune system	232L					
CD4%	% of CD4's working	8.00L					
VL	virus-enemy	32,030					
AST	liver-muscle disease	28					
ALT	liver-detects disease	18					
BUN	waste product-filtered/kidney liver dysfunction	12					
CREATININE	waste product-filtered/kidney liver damage	.7					
Trigly	fat in blood						
total Ch	less than 200						
LDL	less than 130						
HDL	greater than 40						
Glucose	sugar in the blood <99	119H					
	*lipid test taken less often for clients						

Medication and Treatment Adherence



OBJECTIVES

At the end of this unit, participants will be able to:

- Educate clients about the benefits of antiretroviral therapy and address strategies to optimize adherence
- Discuss the goals of treatment
- Discuss new HIV drugs and the importance of single-tablet regimens
- Discuss the future of HIV medications
- Educate clients about HIV pre-exposure prophylaxis and Undetectable = Untransmittable (U = U)



INSTRUCTIONS

1. Welcome participants.
2. Review the unit objectives.
3. Ask participants to complete the worksheet, Medications and Treatment II—Understanding Medicine Options and Treatment individually or in groups. Review correct answers.
4. Review slides on treatment, drug regimens, new drugs, and PrEP (pre-exposure prophylaxis). Slides 3–15.
5. Facilitate group quiz activity slides 16–17.
6. Optional: Distribute the Case Scenario handout. Ask for volunteers to read the scenario and discuss case scenario as a group.
7. Wrap up. Tell the group we have numerous medications that help people with HIV live longer and HIV is now a chronic disease. As CHWs, helping to inform and educate our clients about the latest treatments is important and encourage them to ask their health care providers about new treatments that could be appropriate for them.



Related C3 Roles

Providing coaching and social support, providing culturally appropriate health education and information, advocating for individuals and communities

Related C3 Skills

Interpersonal and relationship-building skills, communication skills, advocacy skills, education and facilitation skills



Method(s) of Instruction

Lecture, group activity—worksheet and quiz, case scenario



Estimated time

1.25 hours



Key Concepts

Medication, treatment, antiretroviral therapy (ART), single-tablet regimen (STR), adherence, resistance, undetectable = untransmittable (U = U)



Materials

- Computer with internet access and projector
- PowerPoint slides

Handouts

- Worksheet: Medications and Treatment II—Understanding Medicine Options and Treatment
- Medication and Treatment Case Scenario
- Medications and Treatment II—Understanding Medicine Options and Treatment (Answer Key)

Medication and Treatment Adherence

Medication and Treatment Adherence

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Medication and Treatment Adherence

Objectives

At the end of this unit, participants will be able to:

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- Discuss new HIV drugs and the importance of single-tablet regimens
- Discuss the future of HIV medications
- Educate clients about HIV pre-exposure prophylaxis and U=U

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Medication and Treatment Adherence

Treatment

- Standard Practice – DHHS Treatment Guidelines (U.S. Department of Health and Human Services).
- Antiretroviral therapy (ART) is recommended for ALL individuals with HIV, regardless of CD4 count to reduce morbidity and mortality.
- ART is also recommended for individuals to prevent HIV transmission.
- It is important to educate clients on: benefits, strategies to increase adherence when starting ART.

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SLIDE 1

This session will build upon your knowledge of HIV medication and treatment.

SLIDE 2

Review objectives.

Ask participants to complete the worksheet “Medications and Treatment II— Understanding Medicine Options and Treatment.” The worksheet can be completed individually or in small groups. Ask participants for answers; facilitator can review the correct answers if necessary.

SLIDE 3

Review the slide.

There are now more than 25 antiretroviral (ARV) drugs that are FDA approved for the treatment of HIV. Without antiretroviral therapy (ART), most individuals with HIV will progress to AIDS-defining illnesses and premature death. The primary goal of ART is to prevent HIV-associated morbidity and mortality.

When starting ART, it is important to educate patients about the benefits and considerations of ART, and to address strategies to optimize adherence. On a case-by-case basis, therapy may be deferred because of clinical and/or psychosocial factors, but therapy should be initiated as soon as possible.

Doctors rely on Department of Health and Human Services (DHHS) guidelines that tell them what prescriptions will be most effective. There is an advisory group that determines what medications are most effective to use for first time HIV therapy.

When you look at the preferred regimen on some drug charts you may see A,B,C and roman numerals I, II, III. These symbols identify the rating of recommendations: for example

- Rating of Recommendations: A = Strong; B = Moderate; C = Optional
Rating of Evidence: I = Data from randomized controlled trials; II = Data from well-designed nonrandomized trials or observational cohort studies with long-term clinical outcomes; III = Expert opinion. Rated based on how the evidence was proven for the drug.

This is useful information because regimens should be individualized based on comorbid conditions, drug-to-drug interactions, pill burden, and dosing frequency (which can be challenging for people who are homeless or who have substance use disorder).

Medication and Treatment Adherence

Treatment

Goals of treatment include:

- Decreasing (viral load) viral replication
- Restoring and preserving immune function (increasing CD4 count)
- Reducing HIV complications
- Delaying onset of (AIDS) Acquired Immunodeficiency Syndrome
- Preventing development of opportunistic infections (OIs)
- Preventing transmission of HIV

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SLIDE 4

Ask participants: “What are the goals of treatment?” Ask participants to share their ideas.

Review the slide by asking for volunteers to read each point.

Medication and Treatment Adherence

Treatment

Recommendations are generally 3 drugs from at least 2 different classes.

1. Nucleoside reverse transcriptase inhibitors (NRTIs), “Nukes” 1987
2. Non-nucleoside reverse transcriptase inhibitors (NNRTIs), “Non-Nukes” 1996
3. Protease Inhibitors (PIs), 1995
4. Entry Inhibitors (EIs), 2003, Fusion Inhibitors, CCR5 Antagonists
5. Integrase Inhibitors, 2007
6. Pharmacokinetic or PK Enhancers (Booster)

Single-Tablet Regimens (multiple drug classes)

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SLIDE 5

Identify all HIV drug classes along with previous standard recommendations and new advancements in single-tablet regimens (STRs).

Provide some examples. For instance, Selzentry (maraviroc) is categorized as an Entry Inhibitor. It works by blocking the CCR5 receptor on the surface of the CD4-T cell, which HIV must attach to infect cells in the first place. It stops HIV infection before it enters the cell.

Depending on the drug chart and who publishes it, it may categorize a medication differently.

For example, Fuzeon (enfuvirtide) injection is rarely prescribed, but it may be listed under entry inhibitors or it may be in its own category. Norvir was first approved as a protease inhibitor, but is often used as a booster.

Antiretroviral drugs have a trade or brand name, generic name and an abbreviation; the drugs all start with a scientific name given during research. For example:

Trade name or brand name: Truvada
Generic name: emtricitabine/tenofovir
Abbreviation : FTC/TDF (3 character abbreviation)

Trade name or brand name: Tivicay
Generic name: dolutegravir
Abbreviation: 3 character abbreviation DTG

A Fixed dose IS 2 or more drugs in one tablet, such as Prezcoibix.

Single table regimens contain different drug classes—a complete regimen in one pill, such as Triumeq.

Recommendations are generally for 3 drugs from at least 2 different classes; however, a new STR, Juluca has changed the paradigm.

Medication and Treatment Adherence

Medication and Treatment Adherence

Three-Drug Regimens

Approval Dates	Medication
2006	Atripla
2011	Complera
2012	Stribild
2014	Triumeq
2015	Genvoya
2016	Odefsey
2017	Juluca
2018	Biktarvy

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SLIDE 6

This list shows all 3 drug regimens, known as single dose regimens, and their approval dates.

Several of these drugs have been re-formulated and we'll talk about what that means in more detail.

Atripla was the first single table regimen (STR) for awhile before Complera was approved, and now we have quite a few choices.

Preferred HIV medication lists can be found on websites such as AIDSInfo or thebody.com

Single-Tablet Regimens have been successful in extending many lives well beyond 50 years of age; the life span for people with HIV in many cases is the same as the general population; however, with this success other issues exist for those over 50 years of age who have been on these medications long-term.

Medication and Treatment Adherence

New Tenofovir Formulation

Tenofovir Disoproxil Fumarate (DF) is an NRTI.

- Main adverse effects: low bone density, kidney complications
- Approved November, 2011.

- Tenofovir Alafenamide (AF) is an NRTI.
- New formulation with fewer bone density and kidney complications
- Approved November, 2016.
- Game changer! Many formulations that contain tenofovir DF have been reformulated.
- Examples: Complera, Odefsey, Stribild, Genvoya, Truvada, Descovy

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SLIDE 7

Let's discuss the new tenofovir formulation—tenofovir alafenamide, also known as TAF.

TAF reaches higher levels in cells, meaning lower concentrations in the blood. This allows for less drug exposure to the kidneys, bones, and other organs and tissues. Studies have shown that it is just as effective as the old tenofovir formulation.

TDF—the old formulation has 300 mg of tenofovir as compared to TAF—the new formulation, with 25 mg of tenofovir

While many of the newer agents are tolerable, long-term side effects (e.g. metabolic and cardiovascular) and drug-drug interactions remain a concern. Young patients faced with the need to be on life-long therapy for upwards of fifty years require agents with safer long-term side effects. The approval of TAF will likely reduce the incidence of bone and renal toxicity; however, long-term data over a lifetime is needed to guide therapy. Many older combinations have been replaced with the new TAF.

Medication and Treatment Adherence

Drug	Dosing Considerations	Side Effects
Atripla	-Must be taken on empty stomach at bedtime -Must consider psychiatric history	Headache, dizziness, fatigue, depression, abnormal dreams, anxiety
Complera	-Must be taken with a 400 calorie meal	Lipid abnormalities, diarrhea, nausea, fatigue
Genvoya	-Must be taken with food -Avoid with poor kidney or liver function	Nausea, diarrhea
Odefsey	-Must be taken with a 400 calorie meal	Lipid abnormalities, diarrhea, nausea, fatigue
Stribild	-Must be taken with food -Avoid with poor kidney or liver function	Nausea, diarrhea, protein in urine, increase in serum creatinine
Triumeq	-Can be taken with or without food -Abacavir: HLA-B 5701 testing required -Avoid with poor kidney or liver function.	Headache, insomnia, fatigue

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SLIDE 8

Let's take a look at some of the single table regimens (STR) regimens.

- Atripla has been known to cause vivid dreams, which is caused by the efavirenz component. Most adverse effects from efavirenz are related to the central nervous system (CNS), such as hallucinations, dizziness, drowsiness, and unusual dreams. This is enhanced with food, so it should be taken on an empty stomach.
- Odefsey and Complera must be taken with high-calorie meals because of the rilpivirine component, which requires a basic environment for absorption.
- If one tests positive for the genetic variation HLA-B 5701, there's a risk of hypersensitivity to abacavir. This reaction affects 5-8% of patients and can be observed during the first 6 weeks of therapy. Symptoms of an abacavir hypersensitivity reaction include skin rash, fever, malaise, gastrointestinal symptoms, and respiratory symptoms. If a person with HIV has a reaction to abacavir, they should not take it again.

Medication and Treatment Adherence

New Three-drug Regimen

Biktarvy—approved 2018

- bictegravir 50mg (INSTI)
- emtricitabine 200mg (NRTI)
- tenofovir AF 25mg (NRTI)

Indication: HIV-1 adults who are virologically suppressed (<50 copies/mL) on a stable antiretroviral regimen for ≥3 months with no history of treatment failure or resistance to bictegravir, emtricitabine or tenofovir

Dosage: 1 tablet daily with or without food

Adverse Reactions:

- Diarrhea
- Nausea
- Headache

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SLIDE 9

Now we will discuss a couple of new drugs that were recently approved by the FDA.

Biktarvy, which was approved in 2018, is composed of two NRTIs as the backbone, with a new integrase inhibitor, bictegravir.

Review the slide.

Medication and Treatment Adherence

Biktarvy

Advantages of bictegravir

- Less nausea
- Small pill size
- Few drug-drug interactions
- Better resistance profile than dolutegravir

Prescribing Information:

- Cannot be used for patients with severe renal dysfunction (SCr <30 mL/min) or cirrhosis (Child-Pugh Class C)
- Do not take Biktarvy if you also take a medicine that contains dofetilide and rifampin

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SLIDE 10

Clinical data show that the regimen's antiviral efficacy, tolerability profile and limited drug interactions offer an effective new treatment option for a range of people with HIV.

In clinical trials through 48 weeks, no patients taking Biktarvy developed what is called treatment-emergent resistance.

Review STR dosing considerations and side effects of the older regimens and the newer agents.

Medication and Treatment Adherence

Juluca: First Two-drug Regimen

Juluca

- dolutegravir 50mg (INSTI)
- rilpivirine 25mg (NNRTI)

Indication: HIV-1 adults who are virologically suppressed (<50 copies/mL) on a stable antiretroviral regimen for ≥6 months with no history of treatment failure or resistance to dolutegravir or rilpivirine

Dosage: 1 tablet daily with meal

Adverse Reactions:

- Diarrhea
- Headache

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SLIDE 11

Juluca is the first two-drug regimen (integrase and non-nucleoside reverse transcriptase inhibitor) to be approved. Studies have proven that the two-drug regimen is just as effective as the previous standard of care with a three-drug regimen.

The most common side effects are headache and diarrhea, occurring in 2% of patients.

Juluca's safety and efficacy in adults were evaluated in two clinical trials of 1,024 participants whose virus was suppressed on their current anti-HIV drugs. Participants were randomly assigned to continue their current anti-HIV drugs or to switch to Juluca. Results showed Juluca was effective in keeping the virus suppressed and comparable to those who continued their current anti-HIV drugs.

Medication and Treatment Adherence

Juluca

Advantages of Juluca:

- Simplified regimen
- Well tolerated
- Smallest single tablet regimen

Prescribing Information:

- Monitor for hepatotoxicity and depressive disorders.
- Co-administration where significant decreases in rilpivirine plasma concentrations may occur.

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SLIDE 12

Review slide. A simplified regimen provides the option to reduce the number of anti-retrovirals a patient takes, while maintaining the efficacy of a traditional three-drug regimen.

Hepatotoxicity comes from the dolutegravir component and depressive disorder comes from the rilpivirine component.

As mentioned before, rilpivirine requires a basic environment for maximal absorption. It's important for patients to avoid acid-reducing drugs such as proton pump inhibitors and H2 blockers.

Medication and Treatment Adherence

The Future of HIV Therapy

- Do clinical trials play a role?
- Cabotegravir and rilpivirine as long-acting injectables
- Dapivirine within a vaginal ring
- Tenofovir alafenamide as a subdermal implant
- Studies for use as pre-exposure prophylaxis (PrEP)
- Cimduo* – contains lamivudine and tenofovir

*Being marketed as a similar medication to Truvada however, research has not been done on this medication for use as a PrEP drug. It is also important to know that it is not an exact formulation of Truvada. An over-the-counter HIV medication option may prove beneficial for some.

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SLIDE 13

It is difficult to determine with the high efficacy, safety, tolerability and the convenience of STRs where and to what extent improvements can be made. However, considering the vast advancements in treatment that have already occurred, it may be naïve to think that the current approach to HIV treatment is the best and only way.

HIV therapy has evolved considerably since the disease was first discovered. Initially, treatment consisted of multiple tablets per day then changed to three-drug single tablet regimens. Now, a recent two-drug regimen has been approved and injectable medications are being studied.

Cabotegravir, an integrase inhibitor, is currently in phase 3 trials. Clinical trials have shown two long-acting injectable antiretrovirals, cabotegravir and rilpivirine, administered once every 4 or 8 weeks, maintained viral suppression in about 90% of people who started therapy with an undetectable viral load. In the study, patients were given injectable ART as a maintenance therapy over 96 weeks once they had achieved viral suppression after 20 weeks of daily oral medication. The potential for a long-acting injectable ART could ease the burden faced by people with HIV of having to take daily oral medication lifelong to manage the disease. Phase 3 trials are ongoing and are needed to confirm the results, and further trials will be needed in wider groups of patients to generalize the findings.

Long-acting cabotegravir and rilpivirine are also being studied for HIV prevention. Cabotegravir injections given every 8 weeks produced high enough drug levels in both men and women to offer protection against HIV, although a larger dose every 12 weeks fell short of this threshold. Rilpivirine did not fare so well as a solo PrEP candidate, failing to consistently reach high levels enough to offer protection against HIV in a phase 1 study. Development of injectable rilpivirine was therefore stopped. Adherence to an HIV regimen gives HIV medicines the chance to do their job: to prevent HIV from multiplying and destroying the immune system.

Taking HIV medication every day prevents HIV from multiplying, which reduces the risk that HIV will mutate and produce drug-resistant HIV.

Tips to help maintain adherence:

- 7-day pill box
- Setting daily pill reminders on a smartphone
- Set up automatic refills at your pharmacy; your medicine will be ready when you need it, and you won't run out

Cimduo, is the first over-the-counter medication and is being marketed to be similar to Truvada, however, research has not been done on this medication for use as a PrEP drug. It is also important to know that it is not an exact formulation of Truvada. An over the counter option may prove beneficial for some.

Medication and Treatment Adherence

Medication and Treatment Adherence

HIV Pre-exposure Prophylaxis (PrEP)

Gold Standard Treatment:

- Truvada (emtricitabine/tenofovir DF) 1 tablet daily

PLUS

- Safe sexual practices and behavior
 - Condom use
 - Eliminate needle sharing
 - Community education and awareness efforts

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Medication and Treatment Adherence

Undetectable= Untransmittable

- Following the lead of hundreds of HIV experts and prevention organizations around the world, the Centers for Disease Control and Prevention (CDC) stated there is effectively no risk of an HIV-positive person with viral suppression sexually transmitting the virus to an HIV-negative partner.

- Released September 27, 2017
- It was the first time the agency acknowledged what several massive studies have found.
- Viral suppression is defined as less than 200 copies/ml or undetectable viral load.

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Medication and Treatment Part 2

1. Research among people with HIV has shown that Descovy is less toxic to the _____ and _____ than Truvada.
 - a) Liver, Bones
 - b) Heart, Liver
 - c) Kidney, Heart
 - d) Bones, Kidney
2. Which drug is the first two-drug regimen available to the market?
 - a) Biktarvy
 - b) Juluca
3. Which drug is FDA approved for HIV PrEP?
 - a) Truvada
 - b) Descovy
4. True or False. Having an undetectable viral load means the virus is cleared from your system.

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Medication and Treatment Part 2

5. Which drug class is considered the backbone of HIV therapy?
 - a) NNRTIs
 - b) NRTIs-NUKES
 - c) INSTIs
 - d) PIs
6. Which single-tablet regimen must be taken on an empty stomach?
 - a) Atripla
 - b) Complera
 - c) Odefsey
 - d) Stribid
7. Which single tablet regimen must you test for the HLA-B 5701 allele?
 - a) Complera
 - b) Odefsey
 - c) Stribid
 - d) Trumeq

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SLIDE 14

Review the slide.

Truvada is FDA approved for adults at high risk for infection. Descovy, which is an updated take on Truvada, is not approved for PrEP. Researchers estimate that many years of clinical trials are yet required before Descovy could be approved as PrEP. The estimated approval date is September of 2020.

To take PrEP, one must be HIV negative upon initiation and get tested every three months.

Take one pill once a day, and if you are exposed, it will prevent HIV. Often used in situations where one person in a couple is living with HIV and the other is not.

SLIDE 15

Undetectable = Untransmittable.

While studies show that HIV is not transmittable even without the use of condoms and PrEP, many doctors still encourage undetectable patients to practice safe sex.

Per Dr. Benjamin Young, MD, PHD Chief Medical officer of the international Association of Providers of AIDS Care, "The scientific evidence is compelling—not a single documented case of transmission by someone who is on effective ART. While it is hard to prove 'zero' risk, the risk of transmission is extraordinarily low."

Visit www.preventionaccess.org, or www.thebody.com to learn more.

SLIDE 16

End the unit with a quick "teach back" activity. Read the questions and take answers from participants. Review the correct answers.

Answers:

1. D
2. B
3. A
4. False

SLIDE 17

Answers:

5. B
6. A
7. D

Medication and Treatment Adherence



SLIDE 18

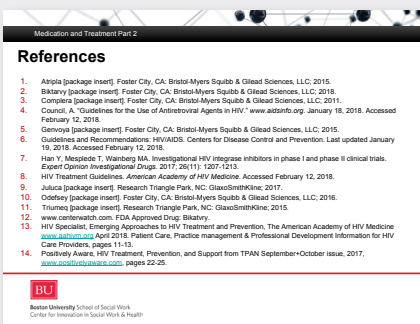
Optional case scenario activity. (Medication and Treatment Case Scenario handout).

If time allows, pass out the case scenario. It can be read by the facilitator or participants. Discuss the questions as a group.

Ask participants if they have any final questions.

To close, note that the consistent need for ARV medications may be the most challenging of all to change. Will broadly neutralizing antibodies, therapeutic vaccines, latency reversing agents, or CRISPR technology ever become routine methods for inhibiting, suppressing, or eliminating HIV? Evidence for these approaches and others continue to emerge and provide optimism that the future may hold a potential cure.

Medication and treatment will always be a subject to explore and discuss until we have a cure for HIV.



SLIDE 19

References

1. Atripla [package insert]. Foster City, CA: Bristol-Myers Squibb & Gilead Sciences, LLC; 2015.
2. Bikalvy [package insert]. Foster City, CA: Bristol-Myers Squibb & Gilead Sciences, LLC; 2018.
3. Complera [package insert]. Foster City, CA: Bristol-Myers Squibb & Gilead Sciences, LLC; 2011.
4. Council, A. "Guidelines for the Use of Antiretroviral Agents in HIV." www.aidsinfo.org. January 18, 2018. Accessed February 12, 2018.
5. Olenovir [package insert]. Foster City, CA: Bristol-Myers Squibb & Gilead Sciences, LLC; 2015.
6. Guidelines and Recommendations: HIV/AIDS. Centers for Disease Control and Prevention. Last updated January 12, 2018. Accessed February 12, 2018.
7. Han Y, Messplede T, Wanberg MA. Investigational HIV integrase inhibitors in phase I and phase II clinical trials. *Expert Opin Investigational Drugs*. 2017; 26(11): 1207-1213.
8. HIV Treatment Guidelines. American Academy of HIV Medicine. Accessed February 12, 2018.
9. Juluca [package insert]. Research Triangle Park, NC: GlaxoSmithKline; 2017.
10. Doluteivir [package insert]. Foster City, CA: Bristol-Myers Squibb & Gilead Sciences, LLC; 2016.
11. Triumeq [package insert]. Research Triangle Park, NC: GlaxoSmithKline; 2015.
12. www.centrwatch.com. FDA Approved Drug: Bikalvy.
13. HIV Specialist. Emerging Approaches to HIV Treatment and Prevention. *The American Academy of HIV Medicine*. www.aahivm.org. April 2018. Patient Care, Practice management & Professional Development Information for HIV Care Providers. pages 11-13.
14. Positively Aware. HIV Treatment, Prevention, and Support from TPAN September/October issue, 2017. www.positivelyaware.com. pages 22-25.



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Medications and Treatment II: Understanding Medicine Options and Treatment

Name: _____

Date: _____

Word Bank

- A. 2 drug regimen B. long-acting injectable C. undetectable D. highly active antiretroviral therapy
E. single-tablet regimen F. seven or eight G. HAART H. stigma I. undetectable
J. viral load K. disclose

Directions: Match terms to the correct letter using the Word Bank.

1. _____ What is HAART?*
2. HIV medications are grouped into _____ classes or categories according to how they fight HIV.
3. _____ STR's have made combination Antiretroviral Therapy (ART) a simple one pill, once-a-day reality.
4. The goal of therapy is to suppress the virus to _____ levels.
5. HAART regimens mainly consist of 3 to 4 drugs from different classes of medications; however, the FDA approved the first _____ November 2017.
6. One strategy for making ART simpler and more convenient would be to change the frequency anti-HIV medications need to be taken. Two investigational anti-HIV medications have been developed into _____ (into muscle) forms that maintain high enough levels in the blood to suppress HIV allowing for monthly or every two months dosing.

Medications and Treatment II: Understanding Medicine Options and Treatment - Answers

Name: _____

Date: _____

Word Bank

- A. 2 drug regimen B. long-acting injectable C. undetectable D. highly active antiretroviral therapy
E. single-tablet regimen F. seven or eight G. HAART H. stigma I. undetectable
J. viral load K. disclose

Directions: Match terms to the correct letter using the Word Bank.

1. D What is HAART?*
2. HIV medications are grouped into F classes or categories according to how they fight HIV.
3. E STR's have made combination Antiretroviral Therapy (ART) a simple one pill, once-a-day reality.
4. The goal of therapy is to suppress the virus to C or I levels.
5. HAART regimens mainly consist of 3 to 4 drugs from different classes of medications; however, the FDA approved the first A November 2017.
6. One strategy for making ART simpler and more convenient would be to change the frequency anti-HIV medications need to be taken. Two investigational anti-HIV medications have been developed into B (into muscle) forms that maintain high enough levels in the blood to suppress HIV allowing for monthly or every two months dosing.

Case Scenario

Carmen contracted HIV in March of 2016. Her first lab values indicated that her T- cell count was approximately 600. She still felt good physically; she was living with diabetics but it was also under control. She continued to work but was angry at herself for trusting a new partner and not asking him to wear a condom. Even with suspicions that he may have HIV from reading social media, she never asked him. Carmen was depressed and felt mentally broken.

To make things worse, Carmen's partner blamed her for transmitting the disease to him. Carmen tried ART, but when her 30-day prescription ran out she didn't get it refilled. She told her mother she was done with horse pills and side effects from HIV medicines. Carmen's health spiraled from good to poor: she was not getting out of bed as she was weak and it ached to stand and walk. Carmen stopped working and went on short-term disability. As Carmen's short-term disability was running out she had to seek out help from her doctor for medical care and recommendations. At Carmen's doctor visit he insisted that she meet with a CHW; he introduced her to the CHW after her exam.

1. What concerns would the CHW have about Carmen's physical and mental health?
2. What questions could the CHW ask Carmen or her doctor during the office visit?
3. What medications may not be good options for Carmen?
4. Are there barriers or factors that would affect the client's adherence?
5. What strategies could the CHW suggest?
6. Are there any concerns regarding adherence or resistance?

Promoting Medication Adherence



OBJECTIVES

At the end of this unit, participants will be able to:

- Define medication adherence
- Explain why medication adherence is important
- Discuss single-tablet regimens
- Review resistance, the causes, and how to prevent resistance
- Discuss the top six reasons people skip their medication
- Discuss tips for promoting adherence



INSTRUCTIONS

1. Before the session begins, set up the room to accommodate group work (three groups) with flip chart sheets and markers. Review videos on [helpstopthevirus.com](https://www.helpstopthevirus.com) and select a few as example to introduce/reinforce material.
2. Welcome participants.
3. Review the unit objectives.
4. Review slides 3–4 about the importance of medication adherence.
5. Facilitate group activity with Understanding Adherence worksheet, and review answers.
6. Review slides 6–10 about HIV medications and causes of resistance.
7. Facilitate group activity on promoting adherence through active listening.
8. Review slides 12–16 on preventing resistance and why people skip their HIV medications, tips for promoting adherence.
9. Distribute Promoting Medication Adherence Scenarios handout and facilitate case scenario activity.

(continued)



Related C3 Roles

Providing coaching and social support, providing culturally appropriate health education and information, advocating for individuals and communities, knowledge base

Related C3 Skills

Interpersonal and relationship-building skills, communication skills, advocacy skills, education and facilitation skills



Method(s) of Instruction

Group activity—quiz and case scenarios, lecture, video



Estimated time

1.25 hours



Key Concepts

Medication adherence, resistance



Materials

- Computer with internet access and projector
- PowerPoint slides
- Flip chart
- Markers
- Videos (optional)—<https://www.helpstopthevirus.com/hiv-education>

Handouts

- Promoting Medication Adherence Scenarios
- Understanding Adherence
- Active Listening Techniques
- Understanding Adherence (Answer Key)

(continued)

Promoting Medication Adherence



INSTRUCTIONS (continued)

10. Wrap up. To close this session, highlight the following points that CHWs can do and say to clients to promote medication adherence:
- Medication adherence, or the ability to stick to treatment, can be challenging for people with HIV.
 - Adherence is especially important for HIV treatment because of the high risk for drug resistance. If a person stops taking their medications and expects to simply resume them later, they may find that these medications are no longer effective.
 - The key to developing a treatment adherence plan is to understand that medication therapy does work.
 - There are many reasons why people skip HIV medications, however, the CHW can work with clients to support and promote adherence.
 - A 7-day pill box, setting phone alerts, and family support are helpful reminders.
 - Help clients keep all medical appointments.
 - Encourage clients to surround themselves with positive people.



Resources

Council, A. "Guidelines for the Use of Antiretroviral Agents in HIV." www.aidsinfo.org. January 18, 2018. Accessed February 12, 2018.

Guidelines and Recommendations: HIV/AIDS. Centers for Disease Control and Prevention. Last updated January 19, 2018. Accessed February 12, 2018.

HIV Treatment Guidelines. *American Academy of HIV Medicine*. Accessed February 12, 2018.

Positively Aware, HIV Treatment, Prevention, and Support from TPAN, 22nd Annual HIV Drug Guide, March + April 2018.

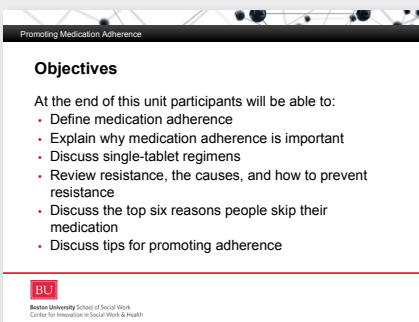
www.thewellproject.org

www.thebody.com

Promoting Medication Adherence



SLIDE 1

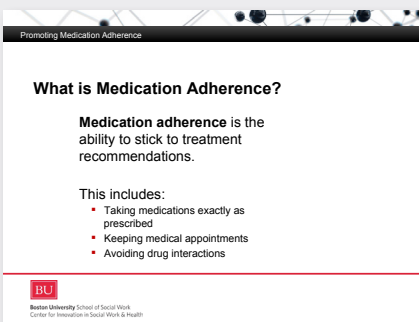


SLIDE 2

Review the objectives.

Engage participants to assess what they may already know about the topic.

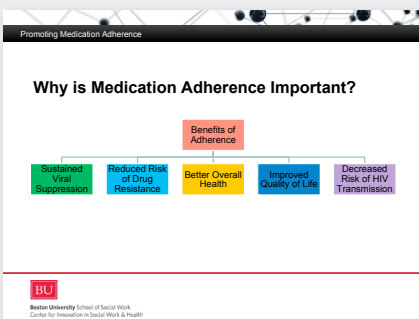
- Ask, "What is medication adherence?"
- Ask, "Why do you think medication adherence is important?"
- Ask, "How can you support/promote adherence with clients?"



SLIDE 3

Review the slide.

The HIV virus makes millions of copies of itself everyday. Antiretroviral drugs can't kill the virus but can keep it from multiplying rapidly.



SLIDE 4

Why is medication adherence important? Adherence to an HIV regimen gives HIV medicines the chance to do their job. It prevents HIV from multiplying and destroying the immune system. HIV medications help people with HIV live longer healthier lives. Medications also reduce the risk of HIV transmission, especially if the person is undetectable. If the person is undetectable for at least six months they cannot transmit the virus.

Other benefits are:

- Sustained viral suppression
- Reduced risk of drug resistance
- Better overall health
- Improved quality of life
- Decreased risk of HIV transmission

Promoting Medication Adherence



SLIDE 5

Group Activity: Understanding Adherence

Divide the class into 3 groups (depending on the number of class participants). Give each group a copy of the Understanding Adherence worksheet.

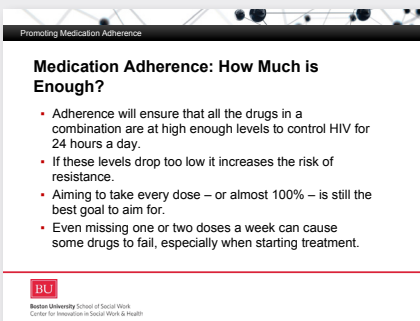
Ask each team to select a recorder to document answers and a reporter to share answers. As a group, answer all questions on the worksheet. Group members will also write in their answers or best guess to each question on the worksheet. Give about 8 minutes to complete the worksheet.

One point will be given to each group per question if the answer is correct; no half-points will be given.

If the group gives an incorrect answer, the next group (in alpha or numeric order) has the opportunity to answer the question.

If no group or individual gives a correct answer the facilitator will give the correct answer.

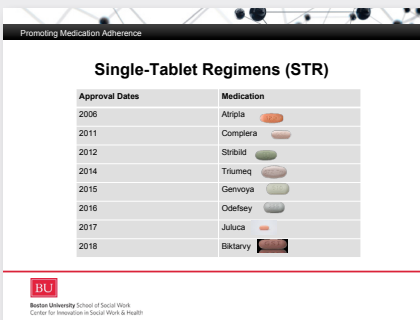
After reviewing the worksheet, point out that medication adherence and supporting clients in doing so is more than just encouraging them to take medication. It encompasses attending medical appointments such as the optometrist, well woman visits, dental appointments, and therapy sessions (if applicable) and attending support groups. These appointments and community meetings all aid in a person's health and well-being; it includes the whole person.



SLIDE 6

Review the slide.

When a patient is adherent, all the drugs are at high enough levels to control HIV for 24 hours a day.



SLIDE 7

Single-tablet regimens were a very important development in the treatment of HIV.

This chart is a listing of all 8 single-tablet drug regimens, and their approval dates. Most are 3 drug regimens; Juluca is the first and only 2 drug regimen.

Several of these drugs have been reformulated, for example Stribild and Genvoya are the same drug, however the difference is in the amount of tenofovir in the drug. The new formulation for Truvada is called TAF.


Atripla was the first single-dose drug before Complera was approved. Now there are many more choices available.

Preferred drug regimen options are always changing, so finding the right resources to educate yourself and clients is important. The most current information can be found on the websites aidsinfo.org, ias-usa.org, and thebody.com. Positively Aware Magazine publishes an HIV Drug Chart once or twice a year. Other reputable websites are also available.

Promoting Medication Adherence

What Is Resistance?

- HIV drugs are designed to **prevent the virus from reproducing**
- Sometimes HIV changes (**mutates**) as it makes copies of itself
 - Changes or mutations allow the virus to keep reproducing despite the drug
- When this happens, HIV has developed **resistance** to that drug
- Resistance is a major challenge in HIV treatment:
 - Decreases ability of HIV drugs to control the virus
 - Reduces treatment options

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SLIDE 8


Review the slide.


The best way to prevent resistance is to stick closely (adhere) to an HIV drug regimen. With good adherence, resistance is less likely to develop. This gives a patient's current drugs the best chance of working and will keep more treatment options open in the future.

Promoting Medication Adherence

What Is Resistance?

- After infecting a CD4 cell, HIV makes new copies of itself that infect other CD4 cells.
 - HIV can make billions of new viruses every day.
- When making new viruses, HIV copies its genetic code.
- Copying happens so fast that mistakes (**mutations**) can happen.
 - Some mutations are harmless
 - Others cause problems that allow the virus to reproduce even in the presence of HIV drugs



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SLIDE 9

Review the slide.

Promoting Medication Adherence

What Is Resistance?

- If a drug does not work against a mutated virus, that virus will reproduce rapidly.
 - Viral load increases
 - May have to change drugs to get HIV under control
- HIV drugs are used in combination to block reproduction in HIV's lifecycle.
 - Combination of drugs aimed at several different targets is much better at preventing HIV reproduction than one alone.
- With less reproduction of HIV:
 - Viral load is lower
 - Mutations and resistance are less likely to occur

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SLIDE 10

Review the slide.



SLIDE 11

Activity: Promoting adherence

Ask participants to return to the same groups for the next activity.

Tell the groups that clients have a number of reasons that they skip taking HIV medications. Ask the group to write as many reasons that they can think of on the flip chart sheet provided on the wall; they have 3 minutes to do so.

Take a quick look at the newsprint to identify any differences to be pointed out without mentioning the same answers.

Ask the participants if there are any other reasons that were not mentioned?

Promoting Adherence: Active Listening Practice

Divide class into pairs; groups of two.

Distribute the handout Active Listening Techniques. Review the 5 techniques and examples. Tell participants we are going to practice these techniques with our partner.

Give the instructions that each team will select one barrier from the flipchart that the group previously identified as reasons that a client is not taking their medication.

Each team will conduct a role play; one participant will play the role of client while the other will play the role of a Community Health Worker.

Distribute the handout Active Listening-Role Play. Using the active listening techniques handout the Community Health Worker will select a technique to role play and the participant who is the client will role play the barrier; acting out why it's difficult to be adherent to HIV medications. For example-Active Listening skill technique-Restating. Client role may explain the following :

Client's role play response

Adherence has been my priority since when I was diagnosed a year ago, but I wasn't working. Now that I am working, my new job at the hospital is shift work and honestly I don't have time to take my meds.

Community Health Worker role play response

"So, you would like to get back on track with taking your medication every day but working varied shifts at the hospital causes you to forget to take your HIV medication and need a strategy to help you remember; is that correct?"

Give participants 10 minutes to practice. Then debrief the activity by asking the following questions:


What there a technique that was easier to use? more difficult?

Promoting Medication Adherence

Preventing Resistance

The best way to avoid resistance is to **take medications daily as prescribed (i.e., good adherence)**.

- Important not to skip doses.
- Take medications at the same time every day.
- Remember, **good adherence** is the best way to prevent resistance:
 - Follow medication schedule and the virus will not reproduce as quickly
 - If it's not reproducing, HIV **cannot make changes that lead to resistance**
 - **Slow the progression of HIV**
 - **Restore the function of the immune system**
 - **Improve a person's quality of life**

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Promoting Medication Adherence

Top 6 Reasons Why People Skip Their HIV Medications

1. "Honestly, it just slipped my mind."
2. "I can't always afford my meds." Lack of health insurance to cover the cost of HIV medication
3. "My side effects are out of control."
4. "My housing isn't always stable."
5. "I have too much going on."
6. "I'm depressed."



Source: Tamell, K. (2018). 6 Reasons why people skip their HIV meds. The Body. The HIV/AIDS resource. <https://www.thebody.com/2018/06/06/reasons-why-people-skip-their-meds/>

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SLIDE 12

Review the slide.

SLIDE 13

Why clients may skip their HIV medications—and how to help them.

"Honestly, it just slipped my mind."

The key to remembering is tailoring your meds to your schedule. In order to remember to take your meds, you have to have a system that works with your routine, not against it.

What if you forget or miss a dose?

Almost everyone will forget or be late at some time, and this will be fine. But there is a difference between an occasional missed dose and regularly forgetting on a daily or weekly basis. Be strict with yourself to assess how adherent you are. Taking days off treatment is a risky way to use HIV drugs.

You need a regimen that you can follow every day.

This includes both during the weekend and in during different situations you may encounter in life.

Don't double dose

Many combinations are taken once daily. This usually means taking them every 24 hours. Twice-daily drugs need to be taken every 12 hours. If you realize you have missed a dose, take it as soon as you remember. If you only realize you missed a dose when you're going to take your next dose, do not take a double dose.

"I can't always afford my meds."

Not all interruptions in treatment are based on things that you can control, especially when it comes to money. Whether you have lost your job and with it your health insurance; you never had health insurance; you don't qualify for government assistance; you were placed on the AIDS Drug Assistance Program (ADAP) waiting list; or your insurance doesn't cover the entire cost of your meds, being able to pay out of pocket can cost thousands a month. Those who don't have that kind of money may find themselves going without. This issue may not be fixable, but talk to your provider about patient assistance programs to see what your next steps should be.

"My side effects are out of control."

Side effects can be bad. Not everyone will experience them, but some will. And whether it's vomiting, diarrhea, wild dreams, nerve damage, higher cholesterol levels, lipodystrophy, or depression, side effects can seriously impact your motivation to adhere to your medications. The key is to be knowledgeable and know what to expect *before* you start treatment. Also, ask your health care provider how to manage minor side effects if they arise. If you do experience some side effects and they are intolerable, don't just quit your treatment altogether. Speak to your health care provider about other alternatives and the possibility of switching your regimen to something else.

Promoting Medication Adherence

Top 6 Reasons Why People Skip Their HIV Medications

- "My housing isn't always stable." 
- "I have too much going on." 
- "I'm depressed."

Source: Tamel, K. (2014). 6 Reasons why people skip their HIV meds. The Body. The HIV/AIDS resource. <http://www.thebody.com/content/article/6-reasons-why-people-skip-their-hiv-meds/20140618>

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SLIDE 14

"My housing isn't always stable."

In the 2010 documentary *The Other City*, one of the most heartbreaking moments was when J'Mia Edwards, an mother of three with HIV who was struggling to maintain her Section 8 housing, looked into the camera and said, "I need an apartment. My housing is my prevention." For people with HIV who are homeless or who have unstable housing, basic needs (such as food, clothing, shelter and caring for children) often outrank taking their meds. No one can fault them for that. Also, having a stable roof over your head means you have a safe place to store your medication and refrigerate it if needed.

"I have too much going on."

Life doesn't stop because you have been diagnosed with a disease—nor do your responsibilities. Whether it's a chaotic work schedule, taking care of loved ones, or juggling a job and school, the act of getting your medications refilled regularly and taking them consistently is difficult to maintain when so much is expected of you. But balance is important, especially when it comes to your health. If you can't take care of yourself first, how are you going to be able to take care of your other responsibilities if you get really sick?


"I'm depressed."

Mental health issues are not uncommon for people with HIV. Stigma, isolation, and rejection can lead to depression—and if that depression goes untreated, it can deeply impact your ability to adhere to your medications. Even worse: Depression in the HIV community is massively underdiagnosed. HIV care providers need to step up and better screen for mental health issues. But that doesn't mean that you can't open up and talk to your provider about how you are feeling emotionally, especially if those feelings are a factor in why you are not taking your medicine.

Promoting Medication Adherence

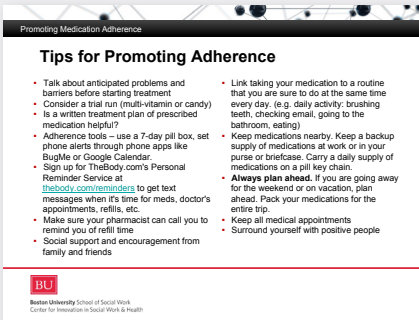
Other Reasons Why People Skip HIV Medications

- Trouble swallowing pills or other difficulty taking medications
- Being emotionally unprepared for treatment
- Confusion about why to take anti-HIV meds
- Difficulty taking medications
- Pill burden – mental/emotional fatigue of taking medications
- Skepticism about the effectiveness of the drugs
- Feeling a lack of choices about treatment
- "Feeling different" because of ongoing therapy
- Disruption of social routines; shame or fear of being seen taking medications
- Not having disclosed HIV status to work colleagues, friends, lovers or family
- Not having medications with you
- Alcohol or substance use

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SLIDE 15

Review the slide.



SLIDE 16

Review the slide.

Additional notes:

- Use a 7 day pill box. Once a week, fill the pill box with your medications for the entire week.
- Leave the tab up each day after taking the medication to see that you have taken it.
- Review anticipated problems and barriers to adherence, which then permits the patient to work out solutions on their own, or with assistance. For this purpose, some providers give their patients a week's worth of jelly beans or M&Ms to try to follow the prescribed schedule and see where they falter.

Which doses are problematic? What are the circumstances? What is the patient thinking when errors occur? What is the patient's attitude about mistakes? Do they consider a fifteen-minute delay a catastrophe signifying irremediable failure? Alternatively, are they sanguine about missing a weekend's worth of medications? Such rehearsal is often extremely helpful in anticipating and correcting potential pitfalls.

Make a Plan

Choose a treatment you think you can manage. Find out what is involved before you choose your treatment: How many tablets? How big are they? How often do you need to take them? How exact do you have to be with timing? Are there food restrictions? Are there easier options?

Plan your timetable. For the first few weeks, mark the time that you take each dose.

Some patients find it helpful to have a written treatment plan that shows the name of the medication, time of each dose, number of pills or capsules per dose and meal restrictions, if any, along with a telephone number to call with questions and for the next appointment date. Both doctor and patient should keep a copy of the plan for review at the next visit. Other techniques for promoting adherence include identifying daily activities that can be linked to pill-taking (e.g., a regular TV show), keeping a medication diary or log (preprinted forms can be prepared), preparing pills for the week at fixed times (e.g., Sunday evening), and otherwise relating pill-taking to the normal rhythms of daily life. Planning ahead for changes in routine or for weekends can forestall lapses at such times.

Reasons for treatment failure include, but are not limited to, the absence of effective treatment options for an individual patient, impaired drug metabolism or absorption, very late stage illness or inability to tolerate multiple, sometimes toxic, side effects.

If you travel, take additional drugs with you in case flights or other arrangements change.

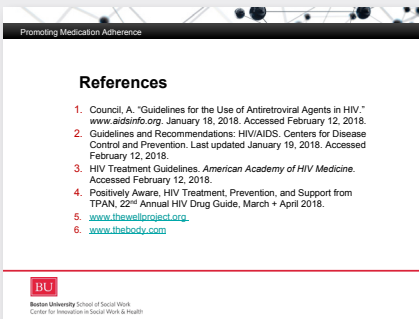
Keep an emergency supply where you might need them—at work or a friend's house etc.



SLIDE 18

Pass out case scenarios—ask the same groups to work together.

Assign a different case scenario to each group. Ask participants to determine as a group how to best support the client with medication adherence and share with the larger group.



SLIDE 19

Share these resources with participants to find out the most up to date information about HIV medications and recommendations to help clients with treatment adherence.

Promoting Medication Adherence Scenarios

Scenario A

Fred is a 62-year-old veteran who was diagnosed with HIV in 1988. Fred had a diagnosis of AIDS when he came to the Health Center. He has seen friends die during the early years of the AIDS epidemic. Fred delayed treatment and care due to being challenged with substance use. However, in 2010, when his health began to decline, Fred showed up at the clinic and was able to see a doctor and have labs done. His CD4 is at 250 and his viral load was at 300,000. Fred lost his housing and has been off meds and homeless for over 6 months. Fred reached out to the health center that connected him with a CHW. Fred told the CHW, "I want to take my meds again, but I've almost reached the point of not caring; I'm homeless, I feel like I'm starting from nothing at 62."

In a role play situation, use active listening skills to respond to the following questions:

1. What questions could the CHW ask Fred?
2. Are there resources the CHW can suggest for Fred?
3. What strategies would the CHW suggest to help promote good adherence for Fred?
4. Are there other concerns?

Scenario B

Julie, a 25-year-old single mother of an infant daughter was diagnosed with HIV two years ago. Julie's fiancé is HIV negative and has always been supportive of her care and treatment. Since Julie's diagnosis, she has always been great with taking her HIV medications as prescribed; her viral load was undetectable and her CD4 was close to 900. Julie has been back to work full time at night for a couple months. Julie watches the baby during the day, sleeping when the baby naps. Julie's fiancé has noticed that her 7-day pill box is still full from the previous week, her pill bottle is on the counter, and she seems extra tired. When Julie showed up for her checkup, the doctor told her that her CD4 had dropped and for the first time she had a viral load of over 100,000. The doctor told Julie that she would benefit from seeing a CHW and he wanted her to schedule an appointment; however, in the meantime he needed to run additional tests and would see her again in 2 weeks.

In a role play situation, use active listening skills to respond to the following questions:

1. What questions could the CHW ask Julie?
2. Are there resources the CHW can suggest for Julie?
3. What strategies would the CHW suggest to help promote good adherence for Julie?
4. Are there other concerns?



Scenario C

Keli, a 31-year-old transgender woman diagnosed in 2008, has been living with HIV for 10 years. Keli has been on the same regimen, Atripla, since that time. Keli's recent labs show that she has not had significant increases in her CD4 and her viral load from the last 2 lab visits. Keli's doctor told her that he strongly recommends a medication change due to newer medication on the market with fewer side effects. Keli is afraid of trying something new, but would welcome a decrease in the dreams she's been having that disrupt her sleep. A CHW is called into the clinic by the doctor to meet Keli and schedule an appointment for an educational session. Keli and the CHW have a great conversation and Keli secretly shared with the CHW that she smokes marijuana about once a week and that she has the habit under control –“it helps me chill out after I get home from work,” Keli says. “My fear is that a new regimen may not agree with my indulgence and the doctor doesn't know that I smoke.”

In a role play situation, use active listening skills to respond to the following questions:

1. What questions could the CHW ask Keli?
2. Are there resources the CHW can suggest for Keli?
3. What strategies would the CHW suggest to help promote good adherence for Keli?
4. Are there other concerns?

Understanding Adherence

True or False

1. _____ Being adherent is sticking to treatment, including taking medications and attending medical appointments.
2. _____ Being adherent to a medication regimen can reduce the amount of HIV in your body.
3. _____ Medication therapy does not always work, so do what feels best to you for your body.
4. _____ Being adherent can prevent resistance to HIV medication.
5. _____ It is okay to skip doses of medication regularly and still be adherent.

Multiple Choice- Circle the correct answer choice(s). Circle ALL that apply!

6. **Which of the following are reasons for adherence being difficult?**
 - a. Side effects to medication
 - b. A busy schedule or travel away from home
 - c. The medication does not work
 - d. Stress and depression
7. **Which of the following can make adherence easy?**
 - a. Taking medications at different times everyday
 - b. Using a pill 7-day box
 - c. Keeping a supply of medication with you at all times
 - d. Taking medications without food that should be taken with food



8. What are some reasons why you might forget to take your medications?

- a. Changing the times you take your medication everyday
- b. Being away from home or having a work schedule that changes a lot
- c. Having family and friends to remind you about your medication
- d. Not having medications with you.

9. Which of the following is NOT being adherent?

- a. Taking medications as prescribed
- b. Skipping doses of medications
- c. Skipping medical appointments
- d. Using a timer or phone alarm to keep up with taking medication

10. Which of the following are emotional/mental reasons for adherence being difficult?

- a. Living with an abusive person
- b. Shame or fear of being seen taking HIV medications
- c. Running out of medication
- d. Alcohol and substance use

Understanding Adherence- Answers

True or False

1. T Being adherent is sticking to treatment, including taking medications and attending medical appointments.
2. T Being adherent to a medication regimen can reduce the amount of HIV in your body.
3. F Medication therapy does not always work, so do what feels best to you for your body.
4. T Being adherent can prevent resistance to HIV medication.
5. F It is okay to skip doses of medication regularly and still be adherent.

Multiple Choice- Circle the correct answer choice(s). Circle ALL that apply!

6. Which of the following are reasons for adherence being difficult?
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- 8. What are some reasons why you might forget to take your medications?**
- a. Changing the times you take your medication everyday
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 - c. Having family and friends to remind you about your medication
 - d. Not having medications with you.
- 9. Which of the following is NOT being adherent?**
- a. Taking medications as prescribed
 - b. Skipping doses of medications
 - c. Skipping medical appointments
 - d. Using a timer or phone alarm to keep up with taking medication
- 10. Which of the following are emotional/mental reasons for adherence being difficult?**
- a. Living with an abusive person
 - b. Shame or fear of being seen taking HIV medications
 - c. Running out of medication
 - d. Alcohol and substance use

ACTIVE LISTENING TECHNIQUES

Technique	Barriers	Examples
Clarify	<p>Reasons clients miss medications</p> <p>Depressed. Being diagnosed HIV positive colors my whole world. I think about it every day, all day. I don't want to come out of my house; I feel deressed and so defeated.</p>	<p>So, are you saying that being diagnosed with HIV is so consuming that you think about it every waking moment and you are depressed? Have you talked about these feelings with your doctor?</p>
Restating	<p>Forget. Adherence has been my priority since when I was diagnosed a year ago, but I wasn't working. Now that I am working, my new job at the hospital is shift work and honestly the time I go in from 3:00pm to 11:00pm or 11:00pm to 7:00am every 3 months, I just honestly forget.</p>	<p>"So, you would like to get back on track with taking your medication every day but working varied shifts at the hospital causes you to forget to take your HIV medication and need a strategy to help you remember; is that correct?"</p>
Reflecting Back Feelings	<p>Side effects. I've been on my HIV meds. for a month now. I sit and I look at that bottle, when I do decide to take it after 30 minutes my stomach is in knots. I can't keep feeling like this; I know it's my health but I'm miserable and I just want to be normal again and not have these side effects.</p>	<p>You seem quite concerned about the side effects the medications may be causing. It has to be frustrating that you experience nausea after taking your medication.</p> <ul style="list-style-type: none"> • Have you talked to your doctor? • Have you tried taking medication with juice etc.? • Do you eat 30 minutes before you take your medication?
Summarizing	<p>Too busy. I'm a single Mom so it's not like I can duplicate myself; I wish. My son has football practice, my daughter is in drama twice a week and my baby girl is in track. I thought on-line classes would be easy to maneuver since I'm taking classes from home. I only work part-time Friday thru Sunday. I'm too busy, I know I need some structure; I've been missing my meds. 2-3 times a week.</p>	<p>These seem to be the key ideas you expressed:</p> <ol style="list-style-type: none"> a. 3 active kids that you taxi 2 days a week; b. Going to school on-line is time intensive; c. Your part-time job throws you off your daily medication schedule. All of which makes for a too busy schedule.

PEP, PrEP, and TasP



OBJECTIVES

At the end of this unit, participants will be able to:

- Understand what PrEP (pre-exposure prophylaxis) is, who it is for, and how it is paid for
- Understand what PEP (post-exposure prophylaxis) is, who it is for, and how it is paid for
- Understand what TasP (treatment as prevention) is and who it is for
- Understand the concept of U=U (Undetectable = Untransmittable)



INSTRUCTIONS

1. Before the session, review slides and talking points. If you don't have access to a projector and computer prepare flip charts with the Jeopardy questions and answers (1 per sheet). Make another flipchart with the title: SCORE SHEET for the game activity.
2. Welcome participants.
3. Break the participants into two teams and ask each team to name themselves to prepare for the Jeopardy game later in the session.
4. Review the unit objectives. Write team names on flipchart paper and post so all participants can see.
5. Engage participants and review the slides as follows:

PEP

6. Ask, "What is PEP?" Take responses from participants, then review slide 3.
7. Ask, "When should PEP be taken?" Take responses from participants, then review slide 4
8. Ask, "Is PEP free?" Take responses from participants, then review slide 5 and engage in a discussion about where their clients can receive this service at no cost.

PrEP

9. Ask, "What is PrEP?" Take responses from participants, then review slides 6–7, and open for discussion.
10. Ask, "Who is recommended to take PrEP?" Take responses from participants, then review slide 8.
11. Ask, "Is PrEP free?" Take responses from participants, then review slide 9.

(continued)



Related C3 Roles

Providing culturally appropriate health education and information

Related C3 Skills

Education and facilitation skills, knowledge base



Method(s) of Instruction

Lecture, question and answer game



Estimated time

60 minutes



Key Concepts

HIV prevention, pre-exposure prophylaxis, post exposure prophylaxis, treatment as prevention, Undetectable = Untransmittable



Materials

- Computer with internet access and projector
- PowerPoint slides
- Flip chart
- Markers
- 2 call bells
- Prizes such as candy, snacks, pens or other small items for game winners



Resources

- Project Inform PrEP Navigation Bootcamp <https://www.projectinform.org/wp-content/uploads/2018/08/Slides-SOA-PrEP-Summit.pdf>
- Centers for Disease Control (CDC) resources on HIV/AIDS and PrEP <https://www.cdc.gov/hiv/> <https://www.cdc.gov/hiv/basics/prep.html>
- The Well Project: <https://www.thewellproject.org/hiv-information/prep-women>
- Prevention Access Campaign www.preventionaccess.org/
- Medication Assistance Programs <https://www.nastad.org/prepcost-resources/prep-assistance-programs>

PEP, PrEP, and TasP



INSTRUCTIONS (continued)

Treatment as Prevention (TasP)

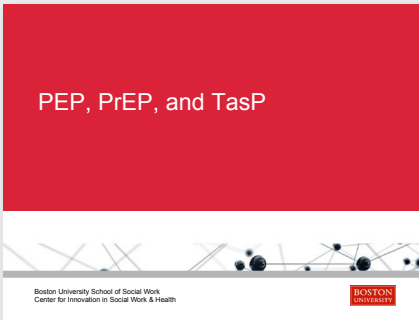
12. Ask, "Has anyone heard of Treatment as Prevention?"
Take responses from participants, then review slide 10.

U = U

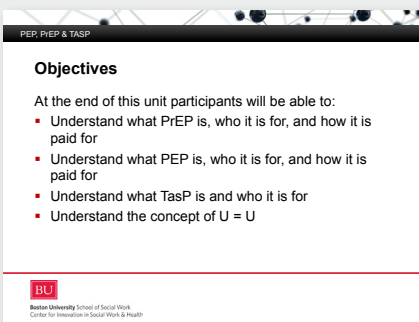
13. Ask, "What is U = U? Take responses from participants, then review slide 11.

Game Time (slides 12-30)

14. Have the participants get into their 2 teams. Make sure each team is recorded on a Flipchart marked SCORE SHEET.
15. Give each team a call bell to ring when they know the answer. If the team that rings the bell doesn't get the correct answer, allow the other team to answer. If neither team gets the correct answer, the facilitator will provide the answer. When a team gets a correct answer, record 1 point on the Score Sheet.
16. Review the Questions and answers provided on PowerPoint slides.
17. Record the correct answers and team points on a flip chart sheet.
18. Tally up the points and the team with the most points wins! Have participants applaud the group or give prizes to the winners.
19. Wrap up. To close, thank participants and review the additional resources that appear on the final slide.

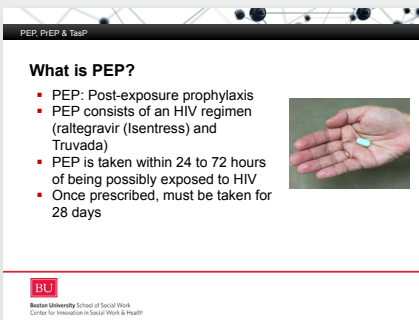


SLIDE 1



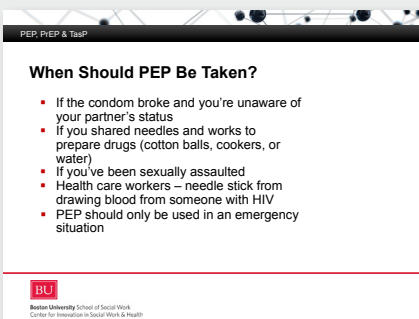
SLIDE 2

Review objectives.



SLIDE 3

Ask the question, take responses from participants, then review the slide.




SLIDE 4

Ask the question, take responses from participants, then review the slide.

PEP, PrEP & TasP

Is PEP Free?

- Every state is different; refer to your public health department and check with health care provider. Your health care provider may help you find a medication assistance program run by PEP manufacturers
- For example, in Los Angeles County PEP is covered under Medi-Cal (Medicaid) and some private insurance

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SLIDE 5


Ask the question, take responses from participants, and engage in a discussion about where their clients can receive this service at no cost.

PEP, PrEP & TasP

What is PrEP?

- Pre-exposure Prophylaxis
- A once-a-day pill called Truvada (tenofovir and emtricitabine)
- Can reduce a person's risk of acquiring HIV
- Can also stop from HIV from spreading throughout a person's body



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SLIDE 6


Ask the question, take responses from participants, and then review the slide.

PEP, PrEP & TasP

What is PrEP? (continued)

- A 96% chance of not acquiring HIV from sexual contact
- Among individuals who inject drugs there's a 70% of reducing acquisition of HIV
- Should be taken along with using condoms
- Provides maximum protection when taken daily for 7 days after engaging in anal sex; 20 days of maximum protection when taken daily vaginal sex or if a person is engaging in injection drug use



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SLIDE 7

Review the slide.

PEP, PrEP & TasP

Who is recommended to take PrEP?

- PrEP is geared towards individuals who are HIV negative
- If you're a heterosexual or gay/bisexual person in a relationship with someone who is HIV positive
- Have multiple partners (gay/bisexual or straight) whose HIV status aren't known
- Engaging in unprotected anal sex
- Newly diagnosed with an STD
- If a person inject drugs, share needles
- Recently entered into a drug program
- **Women who are pregnant or thinking about becoming pregnant should consult with their health care provider.**

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SLIDE 8

Ask participants when should people and providers consider PrEP? Take responses from participants, then review the slide.

PEP, PrEP & TasP

Is PrEP Free?

- Medicaid covers PrEP at no cost
- Private insurance companies cover PrEP with pre-authorization (client has to pay their co-pays)
- Programs such as Gilead Advancing Access (covers co-payments, deductibles, and co-insurance) Patient Access Network (covers co-payments, co-insurance and deductibles) and Patient Advocate Foundation (covers only co-payments)
- Resource: <https://www.nastad.org/prepcost-resources/prep-assistance-programs>

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SLIDE 9


Ask the question, take responses from participants, and then review the slide.

PEP, PrEP & TasP

Treatment as Prevention (TasP)

- Treatment as Prevention is another form of prevention for people who are HIV positive.
- According to a study called HPTN 052, when they're adherent to their meds with an undetectable viral load and high T-cell count, people who are HIV positive have a 96% chance of not transmitting the virus to their partner and/or partners, which in turn keeps the community viral load undetectable. When clients understand how HIV treatment works in their bodies it positions them to be accountable to themselves, their partners and the community as a whole.

Source: HPTN 052 Study. <http://www.researchprotocols.org/2012/1/e20022/>. Centers for Disease Control and Prevention (CDC). Prevention of HIV-1 Case Incidence. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3428766/>

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SLIDE 10

Ask participants if they have ever heard of Treatment as Prevention. Take responses from participants and then review the slide.

PEP, PrEP & TasP

What is U = U?

- U = U Means undetectable viral load equals untransmittable HIV.
- This allows people with HIV to not worry about transmitting the virus.
- It helps to reduce HIV stigma, fear, and shame.
- This is also a prevention strategy that is referred to as Treatment as Prevention (TasP).
- It opens up the possibilities of having children without going through alternative means of conceiving.
- It encourages people to start and stay on treatment.

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SLIDE 11

Ask the question, take responses from participants, and then review the slide.



ACTIVITY: GAME TIME!

SLIDE 12

Give the game instructions: Each team will have a call bell to ring when they know the answer. The first team to ring the bell-gets a chance to answer the question. If the team get the correct response, they get 1 point. If the team that rings the bell doesn't get the correct answer, allow for the other team to answer. If neither team gets the correct answer, the facilitator will provide the answer. Record the correct answers and team points on a flip chart sheet.

PEP, PrEP & TasP

Question

What does PEP stand for?

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SLIDE 13

Read the question and allow teams to ring in.

PEP, PrEP & TasP

Answer

Post-exposure prophylaxis

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SLIDE 14

Review the answer with participants and clarify any confusion.

PEP, PrEP & TasP

Question

True or False: Treatment as Prevention is a form of prevention for people who are HIV negative.

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SLIDE 15

Read the question and allow teams to ring in.

PEP, PrEP & TasP

Answer

FALSE: Treatment as Prevention is used to prevent transmission from a person with HIV.

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SLIDE 16

Review the answer with participants and clarify any confusion.

PEP, PrEP & TasP

Question

TRUE OR FALSE:
If a person take PrEP as prescribed, they have a 90% chance of not acquiring HIV.

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SLIDE 17

Read the question and allow teams to ring in.

PEP, PrEP & TasP

Answer

TRUE: When a person who is HIV negative takes PrEP as prescribed it lowers the risk of acquisition of HIV by 90%.

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SLIDE 18

Review the answer with participants and clarify any confusion.

PEP, PrEP & TasP

Question

For prevention, what can be taken along with using condoms?

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SLIDE 19

Read the question and allow teams to ring in.

PEP, PrEP & TasP

Answer

PrEP can be taken along with the use of condoms.

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SLIDE 20

Review the answer with participants and clarify any confusion.

PEP, PrEP & TasP

Question

When a person with HIV is adherent to their meds, and has an undetectable viral load and high T-cells, what happens?

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SLIDE 21

Read the question and allow teams to ring in.

PEP, PrEP & TasP

Answer

They have a 96% chance of not transmitting the virus to their partner(s).

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SLIDE 22

Review the answer with participants and clarify any confusion.

PEP, PrEP & TasP

Question

Is PrEP free?

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SLIDE 23

Read the question and allow teams to ring in.

PEP, PrEP & TasP

Answer

- Medicaid usually covers it for those who are covered under that insurance. Private insurance companies cover PrEP with pre-authorization (client has to pay their co-pays).
- Programs are available like Gilead Advancing Access (cover co-payments, deductibles, and co-insurance), the Patient Access Network (cover co-payments, co-insurance and deductibles) and the Patient Advocate Foundation (covers only co-payments).

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SLIDE 24

Review the answer with participants and clarify any confusion.

PEP, PrEP & TasP

Question

What regimen has to be taken within 24 to 72 hours of being possibly exposed to HIV in order to prevent infection?

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SLIDE 25

Read the question and allow teams to ring in.

PEP, PrEP & TasP

Answer

Post-exposure prophylaxis (PEP)

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SLIDE 26

Review the answer with participants and clarify any confusion.

PEP, PrEP & TasP

Question

Name three times when PEP should be taken?

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SLIDE 27

Read the question and allow teams to ring in.

PEP, PrEP & TasP

Answer

- If the condom broke and you're unaware of your partner's status
- If you've shared needles and "works" to prepare drugs (cotton balls, cookers, or water)
- If you've been sexually assaulted

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SLIDE 28

Review the answer with participants and clarify any confusion.

PEP, PrEP & TasP

Question

What does TasP stand for?

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SLIDE 29

Read the question and allow teams to ring in.

PEP, PrEP & TasP

Answer

Treatment as prevention

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SLIDE 30

Review the answer with participants and clarify any confusion.

Add up points for the game and award small prizes to the winning team!

PEP, PrEP & TasP

Resources

- Project Inform PrEP Navigation Bootcamp
<https://www.projectinform.org/wp-content/uploads/2018/08/Slides-SOA-PrEP-Summit.pdf>
- Centers for Disease Control (CDC) resources on HIV/AIDS and PEP, PrEP
<https://www.cdc.gov/hiv/>
<https://www.cdc.gov/hiv/basics/pep.html>
<https://www.cdc.gov/hiv/basics/pep.html>
- <https://www.thewellproject.org/hiv-information/prep-women>
- Prevention Access Campaign
www.preventionaccess.org/
- Medication Assistance Programs
<https://www.nastad.org/prepcost-resources/prep-assistance-programs>

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SLIDE 31

Thank participants and mention additional resources.

Medication and Drug Interactions



OBJECTIVES

At the end of this unit, participants will be able to:

- Understand drug-drug, drug-condition, drug-food, and drug-alcohol interactions
- Explain polypharmacy and related issues
- Discuss how the body processes drugs
- Discuss drugs that may interact with HIV drugs
- Discuss how to avoid drug interactions
- Use online resources to check for drug interactions



INSTRUCTIONS

1. Welcome participants.
2. Review the unit objectives.
3. Review slides 3–13 on types of drug interactions, polypharmacy, HIV-specific drug interactions, and facilitate discussion throughout as indicated in slide notes.
4. Facilitate conversation on what participants can do to avoid drug interactions. Ask participants to name a few ways CHW could help a client avoid interactions. Record responses on flipchart. Then review slide 14.
5. Review slide 16 and provide a demonstration of how to use a drug interaction checker.
6. Close with a quiz to review key concepts and review the answers with participants.
7. Wrap up. Review the final slide with list of resources and references with participants. Remind CHWs to advise clients to talk with their health care providers if they have any questions about their medications, any unanticipated reactions to food, and always share with their health care provider if they are taking any additional medications, vitamins or herbal remedies for their health.



Related C3 Roles

All

Related C3 Skills

All



Method(s) of Instruction

Lecture, quiz, online practice with HIV drug interaction checker



Estimated time

1.25 hours



Key Concepts

Drug interaction, polypharmacy



Materials

- Computer with internet access and projector
- PowerPoint slides
- Pens and paper for participants
- Online drug interaction checker: <https://reference.medscape.com/drug-interactionchecker>

Handout

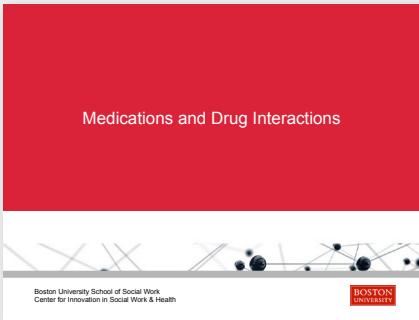
- What's PK (Pharmacokinetics) Got to Do with It? Understanding Medicine Options and Treatment (Answer Key)



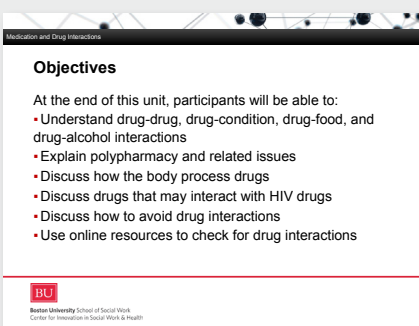
Resources

- Positively Aware. 2019 HIV Drug Guide. <https://www.positivelyaware.com/issues/march-april-2019-2019-hiv-drug-guide>
- Anderson, P.L. (2005). The ABC's of Pharmacokinetics: What's PK got to do with it? Positively Aware.
- Positively Aware—<http://www.thebody.com/content/80958/understanding-drug-interactions.html>
- The Well Project—<http://www.thebody.com/content/58994/drug-interactions-and-hiv-aids.html>
- AIDSinfo—<http://www.thebody.com/content/79250/what-is-a-drug-interaction.html>

Medication and Drug Interactions

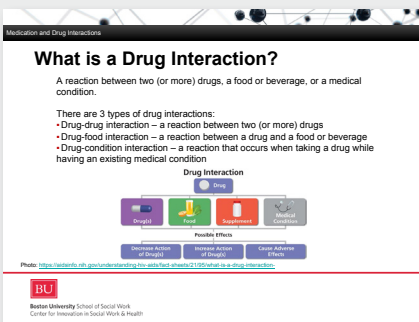


SLIDE 1



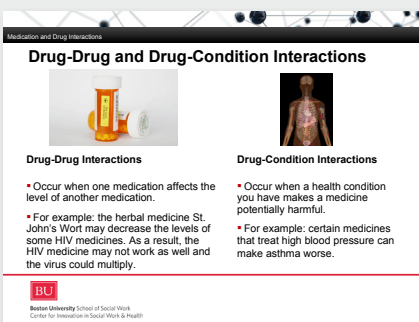
SLIDE 2

Review the slide.



SLIDE 3

Review the slide.



SLIDE 4

Review the slide.

Medication and Drug Interactions

Medication and Drug Interactions


Drug-Food and Drug-Alcohol Interactions

Drug-Food/Beverage Interactions

- Occur when a food or beverage affects how a medicine gets into the blood. A medicine can also change how the body uses a food/beverage.
- For example, certain drugs that treat osteoporosis (thinning of the bones) are not properly absorbed unless they are taken on an empty stomach.
- On the other hand, some drugs need to be taken with food so they break down more slowly or to reduce their side effects.
- It's important to follow food instructions carefully.

Drug-Alcohol Interactions

- Occur when alcohol affects the level of a medicine or increases its side effects.
- For example, people who take certain antidepressants should avoid alcohol because they can make side effects worse.



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SLIDE 5


Review the slide.

Medication and Drug Interactions

What is Polypharmacy?

Polypharmacy is when people take several medications.

- The practice of administering many different medicines, especially concurrently for the treatment of a single disease; also
- The concurrent use of multiple medications by people to treat usually coexisting conditions, which may result in adverse drug interactions.



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SLIDE 6

Review the slide.


A drug interaction is a reaction between two (or more) drugs, a reaction between a drug and a food or beverage, or a reaction between a drug and an existing medical condition.

Medications make us feel better and stay healthy, but sometimes drug interactions can cause problems. Drug interactions can reduce or increase the action of a medicine or cause adverse (unwanted) side effects. For example, taking a nasal decongestant if you have high blood pressure may cause an unwanted reaction.


Medication and Drug Interactions

Issues Related to Polypharmacy

Healthcare providers are concerned about Polypharmacy because more medications can mean:



More side effects



A higher likelihood of different medications interacting with each other (drug interactions)

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SLIDE 7

Polypharmacy is when people take several medications concurrently.

The practice of administering many different medications at the same time—the use of five or more medications, especially for the treatment of a single disease.

The concurrent use of multiple medications to treat coexisting conditions, which may result in adverse drug interactions.

For example, people with diabetes can have several health conditions such as heart problems, high blood pressure, and kidney damage. These conditions could cause a person to take additional medications.

This also includes herbs, supplements, and over-the-counter medicine, all of which we'll discuss in more detail.

The likelihood of polypharmacy increases with age.



People with hypertension, diabetes, and hyperlipidemia have increases risks of adverse drug events.

The number of drugs prescribed predicts the number of drug interactions.

Medication and Drug Interactions

Medication and Drug Interactions

HIV Medicines Can Cause Drug Interactions

- Treatment for HIV requires a combination of HIV medications to be taken to keep HIV under control; this combination can be a single-tablet-regimen (STR) or multiple pills.
- Drug-drug interactions between HIV medications, and between HIV medications and other medications are common; drug interaction can complicate HIV treatment.
- Prescription drug dosages need to be high enough to fight a specific disease but not so high that it causes a lot of side effects.
- Possible results of drug interactions include:
 -  Medication levels go down, so the medicine may not work as well.
 -  Medication levels go up, which may lead to worse or new side effects.
- *Individuals should discuss drug interactions with providers when choosing new HIV drug combinations, adding, or removing any drug from a regimen.*

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SLIDE 8

Ask, “Has anyone has experience caring for an adult with health concerns that involved polypharmacy?”

Take responses then review slide.

Healthcare providers are concerned about polypharmacy because more medications can mean:

- More side effects
- A higher likelihood of different medications interacting with each other (drug interactions)

Ask, “What do we know about people who have side effects from medication?”

Take responses.

Ask, “Are they more inclined to continue taking the medication?”

No, many will discontinue.

Medication and Drug Interactions

How Does the Body Process Drugs?

The main ways the human body handles drugs are:

- Step 1. Drug absorption
- Step 2. Drug distribution
- Step 3. Drug metabolism
- Step 4: Drug elimination

Anderson, P.L. (2005). The ABC's of Pharmacokinetics. What's PK got to do with it? *Pharmacy Today*.

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SLIDE 9

All people with HIV who are on treatment take more than one HIV drug, even if they only take one pill. Some pills contain more than one drug; for example, Truvada is a pill that contains the HIV drugs Emtriva (emtricitabine) and Viread (tenofovir). Many people with HIV take other types of medications as well.

Interactions between medicines can reduce or increase the concentration of a medicine in the blood. The change in concentration can make a medicine less effective, more effective, or so strong that it causes dangerous side effects.

For example: A person may take Triumeq, an HIV drug known to have very few side effects. However, if the person adds calcium or calcium and magnesium supplements to their daily regimen, those minerals could lower the level of Triumeq, making the HIV medicine less effective.

In order for a drug to work properly, a person must take the correct dose at the correct time so that the right amount of drug enters the bloodstream. Before an HIV drug is approved, researchers study different doses and choose one that is both safe and effective. The dose has to be high enough to stop HIV from making copies of itself, but not so high that it causes a lot of side effects.

Tell clients that it is important to discuss the possibility of drug interactions with their health care provider when choosing a new HIV drug combination, or when adding or removing any drug or supplement from their regimen.

Medication and Drug Interactions


How the Body Metabolizes Drugs

This process involves the liver and kidneys:

- Liver makes chemicals called **enzymes** to break drugs down
- Kidneys filter drugs out of bloodstream and into urine
- Drug is removed from the body in urine or feces

Sometimes, one drug affects the way another drug is metabolized

- Speeds up or slows down action of liver enzymes
- Can cause changes in blood levels of other drugs that are broken down by the same enzyme

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Medication and Drug Interactions


Drugs That May Interact with HIV Drugs


Prescription, over-the-counter and complementary therapies **may have major interactions** with HIV drugs:

- **Birth control pills** with ethinyl estradiol (form of estrogen) can interact with HIV meds, making birth control pills less effective, increasing chance of pregnancy

• **Complementary therapies**

- Most vitamins and herbs have not been studied with HIV drugs
- St. John's Wort (herbal anti-depressant) and garlic supplements should NOT be taken with any PIs or NNRTIs



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SLIDE 10

Distribute the handout "What's PK (Pharmacokinetics) Got to Do with It?"

Tell participants "When you swallow a pill, the drug goes from the stomach to the intestine and then into the liver before circulating to the rest of the body." There are several steps on how the body processes drugs. Ask for a volunteer to read each step.

Step 1. Drug absorption:

How the drug enters the blood, usually through tablets or capsules in the stomach and intestines. This where food requirements come in, and why some drugs have warnings not to take antacids.

Step 2. Drug distribution:

How the drug travels in the blood-stream and how it goes into and comes out of other areas of the body. Some areas of the body like the brain and reproductive organs are protected from chemicals; it's difficult to measure drug levels in those areas.

Step 3. Drug metabolism:

How the body chemically changes a drug, usually in the intestines and liver. Metabolism involves breaking a drug down or adding a chemical that makes it easier to pass it into urine.

Step 4: Drug elimination:

How the body gets the drug out, usually by passing the drug into the urine (via the kidneys) or stool via the liver. Some people have kidney or liver illness. In these cases, the blood level of some drugs may build to very high levels if the drug dose is not reduced.

SLIDE 11

The body metabolizes (breaks down) the drugs you take. This process involves the liver and kidneys. Review slides.

Drugs that slow down metabolism inhibit the metabolism of drugs. This causes other drugs to be metabolized and removed from the system more slowly, which:

- Increases the amount of other drugs in the body
- Increases how long other drugs stay in bloodstream

Individuals taking drugs that slow down liver enzymes should talk to their providers about adjusting doses of other medications.

Drugs that speed up metabolism get rid of drugs faster. This can be useful in HIV treatment, for example, Norvir (ritonavir), a PI, makes liver enzymes work more slowly. It boosts levels of other PIs like Reyataz (atazanavir); the amount of Reyataz in the blood becomes higher than it would be without Norvir. This reduces the chance of developing resistance. However, Norvir can cause other types of drugs to have higher levels in the blood. These increased blood levels of drugs can cause overdoses or increase side effects including:

Enducer = causes or induces breakdown/reduces concentration

Inhibitor = stops/slows down a drug from breaking down so drug concentration builds up

Medication and Drug Interactions

Other Drugs That May Interact with HIV Drugs

Classes of drugs that are more likely to interact with HIV drugs (not a complete list):

- Antifungal drugs
- Antibiotics
- Antacids
- Drugs that prevent seizures
- Drugs to treat high cholesterol
- Drugs to treat depression
- Antihistamines (allergy medications)
- Drugs to control heart rhythm
- Opium-based pain killers (narcotics)
- Drugs that increase bowel activity
- Sedatives (medications to calm your nerves)
- Blood thinners
- Drugs to treat erectile dysfunction
- Drugs to treat tuberculosis
- Drugs to treat hepatitis C

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SLIDE 12

There is a long list of prescription, over-the-counter, complementary, and recreational drugs that may have major interactions with HIV medications. Food and beverages can also change the way HIV drugs are broken down in the body. Here are a few examples:

Birth control pills containing ethinyl estradiol (a form of estrogen) can interact with HIV drugs. This can make the birth control pills less effective and increase the chances of pregnancy. Clients may need to talk with their provider about switching to or adding another form of birth control.

Many people with HIV use complementary therapies such as vitamins or herbs. While most of these have not been studied with HIV drugs, St. John's Wort (an herbal anti-depressant) and garlic supplements have been shown to affect the levels of some HIV drugs. St. John's Wort and garlic supplements should not be taken with any PIs or NNRTIs. Clients should discuss any vitamins, herbs, or supplements they take with their health care provider.

Medication and Drug Interactions

Substances That May Interact with HIV Drugs

- **Recreational drugs and alcohol**
 - Reports of overdoses caused by taking recreational drugs and HIV drugs
 - Interactions between ecstasy or amphetamines (crystal meth, speed) and PIs are particularly dangerous
 - Alcohol affects body processes, can cause drug interactions
 - Combining alcohol and some HIV drugs (e.g., Videx) can increase risk for developing pancreatitis
- **Methadone and buprenorphine**
 - Can interact with many HIV drugs

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SLIDE 13

Review the slide. There are certain classes of drugs used to treat some medical conditions that are more likely to interact with HIV drugs. Not all drugs in these classes will cause problems. Note: this is not a complete list; other classes of drugs may also cause interactions.

There is no way that the average person can keep up with all of these possible medication interactions.

Ask, "What should a client do?"

They should always talk to their doctor and pharmacist to discuss any potential interactions.

Medication and Drug Interactions

Medication and Drug Interactions

Things You Can Do to Avoid Drug Interactions:

Keeping a current list of all your medications and taking it to every healthcare visit. Include all prescription and over-the-counter medications, vitamins, herbs, and supplements. It's important for health care providers and patients to review medications together.

Use the same pharmacy for all your prescription medications.

- The pharmacist can have access to all medications you are taking and can check for possible drug interactions.

Asking questions when you receive a new medicine.

- Should I take the new medication in the morning/evening or at bedtime?
- Should I take the new medication with food or on an empty stomach?
- Does this medication have any interactions with alcohol, food, or other drugs that I should know about?
- Ask if you need all the medications you are taking?
- Ask if there are ways to simplify your treatment regimen?
- Providers may need to adjust doses or change drugs based on possible interactions.

Other tips:

- Show which medications you take and what they do.
- Take each of your medications as directed by your healthcare provider.
- Refill prescriptions on time so you never run out of medication.

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SLIDE 14

Review the slide.

There have been reports of overdoses, some fatal, caused by taking recreational drugs (street drugs) and HIV drugs. Interactions between ecstasy or amphetamines (crystal meth, speed) and PIs are particularly dangerous.

Alcohol affects body processes and is often responsible for drug interactions. Combining alcohol and certain HIV drugs like Videx can increase the risk of developing pancreatitis (inflammation of the pancreas).

Methadone and buprenorphine can interact with many HIV drugs. It is important that the opioid treatment program and the HIV health care provider know what medications a patient is taking. This way necessary adjustments can be made to ensure the person receives enough methadone or buprenorphine to prevent withdrawal symptoms, and enough HIV drugs to fight the virus effectively.

People are not always ready to get treatment for their substance use. Ask, "What can we tell them, or how can we encourage them?"

Use harm reduction principles

Encourage them to be honest with their doctor so they can be placed on the right regimen

Offer to assist them with resources (connecting them to in-patient services, support groups, etc.)

Ask, "What are some ways to avoid drug interactions?"

Take answers, then review the next slide.

Medication and Drug Interactions

Which kind of drug interaction concerns you the most?

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SLIDE 15

Review the slide.

Medication and Drug Interactions

Examples of Online Interaction Practice

The HIV Drug Interaction Checker by the University of Liverpool is an online resource that allows you to check drug-drug interactions between an HIV drug and any other prescription or over-the-counter medication.

There is also a mobile app, the HIV iChart (Note: for the app you'll need to use the generic, or scientific name, not the brand name).

<https://www.hiv-druginteractions.org/checker>

MedScape's Drug Interaction Checker is another resource.

<https://reference.medscape.com/drug-interactionchecker>

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SLIDE 16

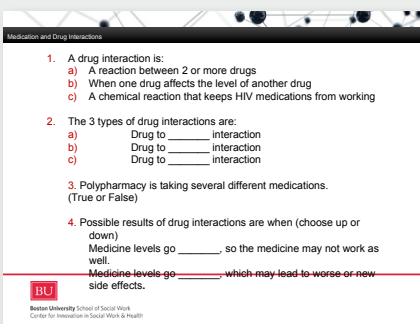
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Medication and Drug Interactions



SLIDE 17

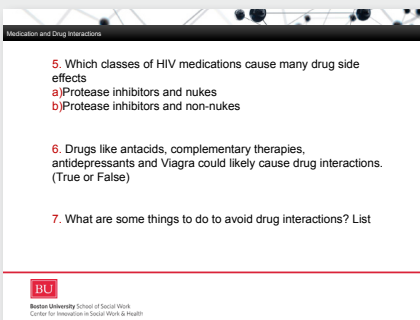
Review the slide.



SLIDE 18

Ask, "Which kind of drug interaction concerns you the most?"

Take responses and discuss. Address any questions participants have about drug interactions.

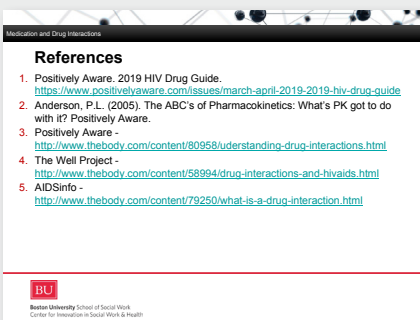


SLIDE 19

The HIV Drug Interaction Checker by the University of Liverpool is an online resource that allows you to check drug-drug interactions between an HIV drug and any other prescription or over the counter medication.

MedScape's Drug Interaction Checker is another resource. Use this website to demonstrate with a couple of examples using an HIV drug along with an over-the-counter drug:

Triumeq + St. John's Wort
Triumeq + Calcium Magnesium



SLIDE 20

What's PK (Pharmacokinetics) Got to Do with It?

The main ways the human body handles drugs are:

Step 1. Drug absorption	This is how the drug enters the blood, usually from tablets or capsules in the stomach and intestines. This is where “food requirements” come in or why some drugs have warnings not to take antacids along with the drugs.
Step 2. Drug distribution	This is how the drug travels in the blood-stream and how it goes into and comes out of other areas of the body. Did you know that some areas of the body, like the brain and reproductive organs, are specifically protected from chemicals? It is hard to measure drug levels in those areas.
Step 3. Drug metabolism	This is how the body chemically changes a drug, usually in the intestines and liver. Metabolism involves breaking a drug down or adding a chemical that makes it easier to pass it into urine or stool.
Step 4. Drug elimination	This is how the body gets the drug out, usually by passing the drug into the urine (via the kidneys) or stool (via the liver). Sometimes people have kidney or liver illness. In these people, the blood level of some drugs may build to very high levels if the drug dose is not reduced.

Anderson, P. L. (2005, Winter). What's PK got to do with it? The ABCs of Pharmacokinetics. Retrieved from <http://www.thebody.com/content/art875.html>

HIV and Substance Use



OBJECTIVES

At the end of this unit, participants will be able to:

- Have awareness of epidemiology data about people with HIV who are challenged with substance use
- Have an understanding of the intersection of HIV and substance use
- Understand strategies to support people with HIV and management of substance use



INSTRUCTIONS

1. Welcome participants.
2. Review the unit objectives.
3. Ask the questions presented on slides 4–9 to determine how much participants know about HIV and substance use. Review the correct answers.
4. Present slides 10–21 covering definitions, US data of people with HIV and substance use, stigma, effects of drugs and alcohol, and medication assisted treatment.
5. Present slides 22–27 covering strategies for working with clients. Emphasize the importance of the CHW/client relationship in addressing health disparities and opportunities to impact substance use disorder on a system level.
6. Poll participants again on the questions presented at the beginning of the session. Present correct answers.
7. Ask participants to briefly discuss their experiences with linking clients to care.
8. Wrap up. To close, encourage CHWs to continue their education in substance use disorder and to develop partnerships with treatment facilities in the community that support coordination of services for clients.



Related C3 Roles

Providing coaching and social support, implementing individual and community assessments, providing culturally appropriate health education and information, building individual and community capacity

Related C3 Skills

Capacity building skills, advocacy skills, knowledge base, individual and community assessment skills



Method(s) of Instruction

Large group discussion, polling questions



Estimated time

60 minutes



Key Concepts

Substance use, substance abuse, opioid addiction, substance use and HIV



Materials

- Computer with internet access and projector
- Power Point slides

Handout

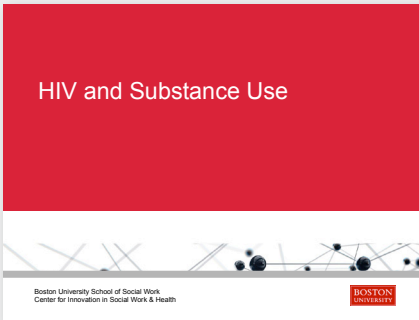
- Fact Sheet on Recreational Drugs and HIV: Drug Interactions



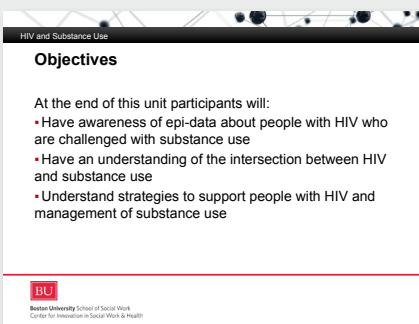
Resources

Toolkit for Screen, Brief Intervention, Referral to Treatment (SBIRT): <https://www.integration.samhsa.gov/clinical-practice/sbirt>

HIV and Substance Use

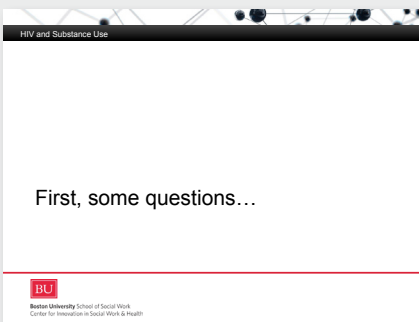


SLIDE 1



SLIDE 2

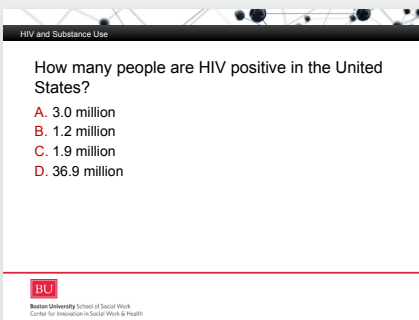
Review the objectives.



SLIDE 3

Guide participants through the series of questions on the following slides.

Say, "First let's take a poll to determine what you currently know about HIV and substance use."



SLIDE 4

Read the question and potential answers. Ask for a show of hands.


Provide the correct answer: **B. 1.2 million**

HIV and Substance Use

HIV and Substance Use

What percentage of people with HIV are struggling with substance use disorders (SUD) and in need of treatment?

- A. 24%
- B. 7%
- C. 44%
- D. 52%

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SLIDE 5


Read the question and potential answers. Ask for a show of hands.

Provide the correct answer: **A. 24%**

HIV and Substance Use

Which of the following are challenges people with HIV and diagnosed with a SUD experience?

- A. Poor medication adherence
- B. Missed appointments
- C. Resistance to HIV medications
- D. All of the above

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SLIDE 6


Read the question and potential answers. Ask for a show of hands.

Provide the correct answer: **D. All of the above**

HIV and Substance Use

Are opiates and opioids are the same?

- A. Yes
- B. No

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SLIDE 7


Read the question and potential answers. Ask for a show of hands.

Provide the correct answer: **B. No**

HIV and Substance Use

Do Assisted Drug Assistance Programs (ADAP) pay for Medication Assistance Treatment for Opioid Addiction

- A. Yes
- B. No
- C. Sometimes

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SLIDE 8

Read the question and potential answers. Ask for a show of hands.

Provide the correct answer: **C. Sometimes**

HIV and Substance Use

HIV and Substance Use

Which of the following is a strategy to help clients with HIV and SUDs?

- A. Reduce stigma
- B. Use of language
- C. Harm reduction plan
- D. Effective interventions to promote change
- E. All of the above

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SLIDE 9

Read the question and potential answers. Ask for a show of hands.

Provide the correct answer: **E. All of the above**

Thanks for answering these questions. As we go through the slides the answers will be explained.

HIV and Substance Use

Definitions

- **Substance Use:** Taking or consuming low doses of a substance, like alcohol or prescription drugs, so that negative effects are rare or minor.
- **Substance misuse/abuse:** The excessive use of a substance, such as drugs or alcohol, which results in clinical and functional impairments.
- **Substance Use Disorder (SUD):** A diagnostic term referring to recurrent use of alcohol or other drugs (AOD) that causes "clinically and functionally significant" impairment (e.g., work, school, home, health).

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SLIDE 10

Lets begin by first defining terms that may frequently be used interchangeably. Review the definitions.

HIV and Substance Use

Epi-Data
1.2 million people with HIV in the U.S.

AIDSvii
Rates of Persons Living with Diagnosed HIV, 2014

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SLIDE 11

One of our polling questions asked about the number of people with HIV in the US. There are 1.2 million as documented by the Centers for Disease Control. The darker colors indicate areas with the highest HIV incidence, which are in the East, South, and Western states of the United States.

HIV and Substance Use

**DRUG and ALCOHOL USE—
A SIGNIFICANT RISK FACTOR FOR HIV**

1.2 MILLION PEOPLE
IN THE U.S. ARE LIVING WITH HIV.

FROM 2005 TO 2009, 1 IN 3 PERSONS
WITH HIV ALSO USED DRUGS OR ALCOHOL,
OR BOTH.

HIV INCIDENCE BY
TRANSMISSION, 2010*

24%
OF ALL PERSONS WITH HIV ARE ON
TREATMENT

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SLIDE 12


While this data is from 2009, the National Institutes of Health state that 1 in 3 people with HIV are using drugs or alcohol.

24% of people with this dual diagnosis could benefit from substance use treatment and more current data suggests that 16% of HIV transmission was from injection drug use.

HIV and Substance Use

Substances

- Alcohol
- Smoking
- Illicit Drugs
- Opioids and Opiates

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SLIDE 13


For this purpose of this unit, we will focus on the following substances.

HIV and Substance Use

Alcohol and HIV

- Weakens the immune system
- Excessive drinking can impair judgement and lead to increased sexual risk behavior
- Diminishes how effective antiretroviral therapy can be
- Opportunity for viral replication to occur
- Poor adherence to medications
- Increased virus
- Missed medical appointments
- Liver damage
- Hepatitis C
- Determines whether to treat HIV or treat liver



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SLIDE 14

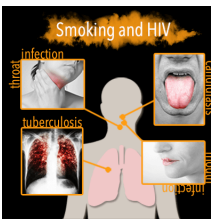
The combination of alcohol and HIV:

- Weakens the immune system.
- Excessive drinking can impair judgement and lead to increased sexual risk behavior.
- Diminishes how effective antiretroviral therapy can be in managing viral suppression.
- When our immune system is weakened, there is opportunity for viral replication to occur.
- Research indicates that excessing drinking can lead to poor adherence to medications, leading to increased virus and liver damage.
- We know that alcohol affects judgement and potential for missed medical appointments.
- A diagnosis of Hepatitis C is dependent on lab results of how functional a client's kidneys are. With alcohol, it complicates the picture—need to determine whether to treat HIV or treat the liver.


HIV and Substance Use

Smoking and HIV

- Rate of smoking is 2 to 3 times greater in a person with HIV
- Heart disease
- Osteoporosis
- Stroke
- Cancer
- Smoking cessation can save the life of a person with HIV



Source: americanaddictionscenter.org

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SLIDE 15

Research conducted by the American Addictions Center indicates that the rate of smoking is 2 to 3 times greater in a person with HIV. This combination can lead to heart disease, osteoporosis, stroke, and cancer, as well as throat, mouth and lung infections, pneumonia, and COPD. One major change that can improve a person's health is if they stop smoking.


HIV and Substance Use

Illicit Drugs and HIV

- Methamphetamines
- Cocaine
- Marijuana (in some states)

Negative impact

- Adherence to medications and medical appointments
- Poor viral outcomes
- Lack of social supports
- Risky behavioral choices
- Potential side effects to medications
 - Illicit drugs stay longer in the blood and are more toxic

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SLIDE 16

Next, we will look at illicit or illegal Drugs and HIV.

Methamphetamines or meth are a stimulant drug that is a white powder or pill.

Crystal meth is also known as chalk, crank, crystal, ice, meth, and speed. The drug looks like glass fragments or shiny, bluish-white rocks. It is chemically similar to amphetamine [a drug used to treat attention-deficit hyperactivity disorder (ADHD) and narcolepsy, a sleep disorder.


Cocaine, also known as coke, is a strong stimulant, mostly used as a recreational drug. It is commonly snorted, inhaled as smoke, or dissolved and injected into a vein. Mental effects may include loss of contact with reality, an intense feeling of happiness, or agitation. Crack cocaine, also known simply as crack, is a free base form of cocaine that can be smoked. Crack offers a short but intense high to smokers.

Cannabis, also known as marijuana, among other names, is a psychoactive drug from the cannabis plant used for medical or recreational purposes. From this map you can see there are many states that have legalized marijuana for medicinal purposes and recreational use.

HIV and Substance Use

What are Opioids?

- Opiate: derivative of opium poppy
 - Morphine
 - Codeine
- Opioid: any compound that binds to opioid receptors
 - Semisynthetic (i.e. hydrocodone, oxycodone, heroin, buprenorphine)
 - Synthetic (i.e. fentanyl (30-50x as potent as heroin), methadone)
 - Oral, transdermal and intravenous formulations
- Narcotic: legal designation

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SLIDE 17

Opiates are direct derivatives of the opium poppy plant. Examples of opiates are opium itself, morphine, and codeine.


Opioids are any compound that binds to opioid receptors in the brain and body. There are semi-synthetic compounds-hydrocodone, oxycodone, heroin, and buprenorphine. We know that many times people are prescribed these pain medications which become addictive. There also are synthetic opioids such as fentanyl and methadone which are prescribed for pain management and are addictive. Many deaths are caused by fentanyl overdose as well as fentanyl being mixed with other drugs that unfortunately can lead to death. The term "narcotic" is more of a legal designation for drugs that is used less and less in drug treatment settings because of its negative connotation.

Reference: Galanter, M., Kleber, H.D., & Brady, K.T. (2015). *Textbook of Substance Abuse Treatment, 5th Ed.* Arlington, VA: American Psychiatric Publishing.

HIV and Substance Use

Effects of Opioids

- Opioids are highly addictive.
- Brain cells can become dependent to the extent that users need it in order to function in their daily routine (without necessarily getting "high").
- Opioids initially cause a rush of pleasure.
- Opioids reduce cognitive processing, slow down reaction time, and impair memory, all of which affects behavior and impairs decision-making abilities.

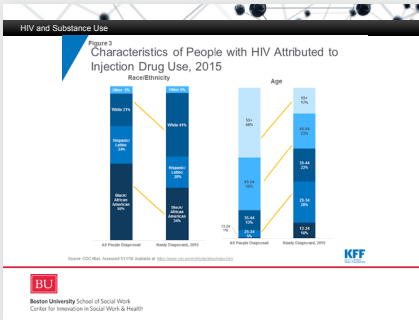
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SLIDE 18

Make the point that opioids are highly addictive and people can become physiologically dependent on them very quickly. It is important to understand that individuals who are physiologically dependent on opioids can need drugs just to be able to function normally, without even necessarily getting high.

There are Medically Assisted Treatment programs that we will discuss next that are given to people who are dependent on opioids, with the support of a treatment team.

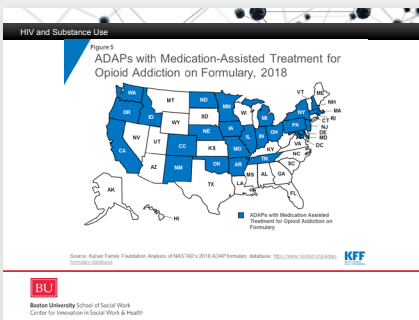
Reference: Galanter, M., Kleber, H.D., & Brady, K.T. (2015). *Textbook of Substance Abuse Treatment, 5th Ed.* Arlington, VA: American Psychiatric Publishing.



SLIDE 19

As the graph shows, in 2015, fewer of the new injection drug use (IDU) related HIV diagnoses were among African-Americans and more were among Whites. This likely reflects the movement of the opioid epidemic into largely white, poor, rural areas. Additionally, new diagnoses in 2015 tended to be much younger than the overall population of IDU-related HIV cases (60% were under the age of 45 vs. 80% 45 and older in the broader population). The increase was especially large among ages 13–24 and ages 25–34.

Reference: Kaiser Family Foundation (2018). *Characteristics of people with HIV attributed to injection drug use, 2015*. Retrieved from: <https://www.kff.org/hiv/aids/issue-brief/hiv-and-the-opioid-epidemic-5-key-points/>.



SLIDE 20

This is a map showing AIDS Drug Assistance Programs (ADAP) in states that include medication-assisted treatment (MAT) for opioid addiction in their formulary. HIV care recipients on ADAP who have an opioid addiction have access to MAT if they live in one of the highlighted states.

Reference: Kaiser Family Foundation (2018). *Analysis of NASTAD's 2018 ADAP formulary database*. Retrieved from: <https://www.kff.org/hiv/aids/issue-brief/hiv-and-the-opioid-epidemic-5-key-points/>.

Medication Assisted Treatment (MAT) for Opioid Treatment

- Methadone
- Buprenorphine Treatment (Buprenorphine [Subutex], Naloxone, Suboxone)
 - Transdermal patch
 - Sublingual tablet or film
 - Extended release monthly injection (Naltrexone/Vivitrol)
- Naloxone (Narcan)

Source: SAMSHA

SLIDE 21

A common misconception associated with MAT is that it substitutes one drug for another. Instead, MAT helps withdrawal symptoms and psychological cravings that cause chemical imbalances in the body. MAT programs provide a safe and controlled level of medication to overcome the use of an abused opioid.

- Methadone, buprenorphine, and naltrexone are used to treat opioid dependence and addiction to short-acting opioids such as heroin, morphine, and codeine, as well as semi-synthetic opioids like oxycodone and hydrocodone. People may safely take medications used in MAT for months, years, several years, or even a lifetime. Plans to stop a medication must always be discussed with a doctor.
- Like methadone, buprenorphine suppresses and reduces cravings for the abused drug. It can come in a pill form or sublingual tablet that is placed under the tongue (Suboxone) or as an injection (Sublocade).
- Naltrexone works differently than methadone and buprenorphine in the treatment of opioid dependency. If a person using naltrexone relapses and uses the abused drug, naltrexone blocks the euphoric and sedative effects of the abused drug and prevents feelings of euphoria.
- Opioid overdose prevention medication-FDA approved naloxone, or Narcan, an injectable drug used to prevent an opioid overdose. There is also a mist form which can be easier to administer. You can be trained to carry Narcan an use as needed.

SLIDE 22

Next we will review strategies to consider as a CHW.

HIV and Substance Use

Strategies for Consideration

- Reduce stigma
- Use of language
- Harm reduction plan
- Effective interventions to promote change
 - SBIRT (Screen, Brief Intervention, Referral to Treatment)
 - Cognitive behavioral therapy (CBT)
 - 12 Step Programs
- For people who may be suffering with addiction, find out about medication assisted therapy programs and encourage people to talk with providers.

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SLIDE 23

We know that stigma has many negative impacts, from discouraging people from getting tested for HIV and engaging in healthcare to making people feel judged. While it makes sense that providers should use person-centered language in talking with individuals, research has actually demonstrated the negative impact of not using person-centered language.

In a study, one individual was referred to as a “substance abuser” while the other was referred to as “having a substance use disorder.” In gathering feedback about the two individuals, participants demonstrated biases based on these descriptors alone. The “substance abuser” was viewed as being less likely to benefit from treatment, more likely to benefit from punishment, more likely to be threatening, more likely to be blamed for substance-related difficulties, and more able to control their substance use without help. If each of these biases were held (consciously or unconsciously by a provider), they could impact treatment and engagement in significant ways.


Source: Facing Addiction with the National Council on Alcoholism and Drug Dependence, 2018.

HIV and Substance Use


The Real Stigma of Substance Use Disorders

In a study by the Recovery Research Institute, participants were asked how they felt about two people “actively using drugs and alcohol.”

One person was referred to as a “substance abuser”



The other person as “having a substance use disorder”



No further information was given about these hypothetical individuals.

THE STUDY DISCOVERED THAT PARTICIPANTS FELT THE “SUBSTANCE ABUSER” WAS:

- less likely to benefit from treatment
- more likely to benefit from punishment
- more likely to be socially threatening
- more likely to be blamed for their substance-related difficulties and less likely that their problem was the result of an innate dysfunction over which they had no control
- they were more able to control their substance use without help

Facing Addiction with the National Council on Alcoholism and Drug Dependence

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SLIDE 24

Using people first language is less stigmatizing. Let’s look at some examples of how we can make an intentional shift to use less judgmental language when talking with and about our clients.

HIV and Substance Use

Correcting Language to be Less Stigmatizing

Shifting from stigmatized to corrected, less judgmental terms is beneficial for engagement.

STIGMATIZING	CORRECTED
Abuser, addict, alcoholic	A person with a substance use disorder
Clean	A person in recovery
Substance abuse	Substance use disorder
Relapse	A recurrence of symptoms
Dirty	A person not yet in recovery, positive urine screen

Source: [Center for Disease Control and Prevention \(CDC\) | Guide to Using Addictive-Related Terms: Improve our communication! | www.cdc.gov/od/oc/2014/04/04-10-14-together-alpha-taking-guide.pdf](#). © Centers for Disease Control and Prevention


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HIV and Substance Use

Examples of a Harm Reduction Plan

People who use drugs can take small steps to reduce harm to themselves and others:

- Knowing the source of their drugs may increase their knowledge of the drug's strength and toxicity
- Reduce the amount of drugs consumed
- Avoid using drugs alone
- Needle exchange programs
- Get support for physical and mental health concerns, housing, or necessities

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SLIDE 25

Let's look an example of a harm reduction strategies we could talk about with our clients.

HIV and Substance Use

Effective Interventions to Promote Change

- SBIRT (Screen, Brief Intervention, Referral to Treatment)
 - SBIRT focuses on the large numbers of people who may use alcohol or drugs in unhealthy ways but who do not have a substance use disorder (i.e., abuse, dependence). Research shows that they can and do successfully change their use with feedback and early intervention. SBIRT also gives positive feedback to those who make healthy decisions.
 - 10 questions
 - https://www.integration.samhsa.gov/clinical_practice/sbirt
- Cognitive Behavioral Therapy (CBT)
 - Talk Therapy
- 12 Step Group

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SLIDE 26

There are many effective interventions that have been proven to promote change in clients who have a SUD.


SBIRT is one such intervention. It stands for Screen, Brief Intervention, Referral, and Treatment. Based on the results of the assessment, a client would receive a brief intervention and be referred to treatment. If you click on the link, it would take you to a toolkit and places to receive training.

Cognitive behavioral therapy is talk therapy, provided by a therapist, substance abuse counselor, or clinical social worker.

12 Step groups or programs include Alcoholics Anonymous (AA) and Narcotics Anonymous (NA).

HIV and Substance Use

Client Healthcare Disparities	System Opportunities
<ul style="list-style-type: none">• Reduced entry into and retention in HIV care• Delayed initiation of ART• Inferior HIV treatment outcomes• Lower health literacy• Socioeconomic status• Lack of healthcare insurance• Unstable housing• Disjointed healthcare systems	<ul style="list-style-type: none">• Clinical, pharmacological, behavioral, and social services• Cost-effective and convenient services• Screening for and treatment of underlying SUDS• Treating underlying SUDS could have positive impact on HIV adherence• Offer secondary HIV prevention services to reduce transmission of HIV• Shift the economics of war on drugs to war on getting substance use services to people

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SLIDE 27


We have an opportunity to form relationships with our clients that can ultimately support the choices they make, which we hope can include accessing substance use treatment.

Let's take a moment to empathize with some of our clients, who may struggle with substance use.

Review disparities and opportunities on the slide.

HIV and Substance Use

Let's complete those questions again to see how much we have learned...

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SLIDE 28


Read the slide.

HIV and Substance Use

HIV and Substance Use

How many people are HIV positive in the United States?

- A. 3.0 million
- B. 1.2 million
- C. 1.9 million
- D. 36.9 million

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SLIDE 29


Read the question and potential answers. Ask for a show of hands.

Provide the correct answer: **B. 1.2 million**

HIV and Substance Use

What percentage of people with HIV are struggling with substance use disorders (SUD) and in need of treatment?

- A. 24%
- B. 7%
- C. 44%
- D. 52%

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SLIDE 30


Read the question and potential answers. Ask for a show of hands.

Provide the correct answer: **A. 24%**

HIV and Substance Use

Which of the following are challenges people with HIV and diagnosed with a SUD experience?

- A. Poor medication adherence
- B. Missed appointments
- C. Resistance to HIV medications
- D. All of the above

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SLIDE 31


Read the question and potential answers. Ask for a show of hands.

Provide the correct answer: **D. All of the above**

HIV and Substance Use

Are opiates and opioids are the same?

- A. Yes
- B. No

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SLIDE 32


Read the question and potential answers. Ask for a show of hands.

Provide the correct answer: **B. No**

HIV and Substance Use

Do Assisted Drug Assistance Programs (ADAP) pay for Medication Assistance Treatment for Opioid Addiction?

A. Yes
B. No
C. Sometimes

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SLIDE 33


Read the question and potential answers. Ask for a show of hands.

Provide the correct answer: **C. Sometimes**

HIV and Substance Use

Which of the following is a strategy to help clients with HIV and SUDs?

A. Reduce stigma
B. Use of language
C. Harm reduction plan
D. Effective interventions to promote change
E. All of the above

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SLIDE 34

Read the question and potential answers. Ask for a show of hands.

Provide the correct answer: **E. All of the above**

Thanks for answering these questions!

Next, ask participants to briefly discuss their experiences with linking clients to care.

HIV and Substance Use

Resources

- Recreational Drugs and HIV: http://www.aidsinfonet.org/fact_sheets/view/494#DRUG_INTERACTIONS
- Substance Abuse and HIV/AIDS: <https://americanaddictioncenters.org/health-complications-addiction/substance-abuse-hiv-aids>
- Jaimie P. Meyer, Amy L. Althoff, and Frederick L. Altice. Optimizing Care for HIV-Infected People Who Use Drugs: Evidence-Based Approaches to Overcoming Healthcare Disparities. *Clinical Infectious Diseases*, Volume 57, Issue 9, 1 November 2013, Pages 1309–1317, <https://doi.org/10.1093/cid/cit427>

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SLIDE 35

Here are some additional resources.

Fact Sheet on Recreational Drugs and HIV: Drug Interactions

HOW DOES RECREATIONAL DRUG USE AFFECT HIV?

Recreational drug use can increase the risk of HIV infection. Also, for people taking antiretroviral medications (ARVs) to fight HIV, there can be some serious interactions between drugs and ARVs. These interactions can lead to under- or overdoses of ARVs or recreational drugs. Some of these may be fatal.

DRUGS AND CONTRACTING HIV

Drug and alcohol use increases the likelihood of a sexual encounter, and using alcohol or drugs before or during sexual activity greatly increases the chances of not following safer sex guidelines (see fact sheet 151, (<http://www.aidsinfonet.org>) and thus HIV/STI infection. This risk is further increased for people who exchange drugs for sex.

If recreational drugs are injected using shared needles, there is increased risk of infection with blood-borne diseases, including HIV and viral hepatitis (fact sheet 506, <http://www.aidsinfonet.org>). See fact sheet 155 on ways to reduce this risk.

People who use drugs should be tested regularly for HIV. The long-term symptoms of persistent drug use may be similar to those of HIV or AIDS. Be sure to tell your medical provider about any recreational drugs you use.

DRUG USE AND HIV PROGRESSION

There is little research on drug use and HIV disease progression. We do know that heavy drug use may negatively impact a person's sleep schedule, appetite and overall health. Drug use can cause the immune system to weaken and exacerbate the side effects of ARVs. In turn, this can provide a pathway for opportunistic infections to develop (see fact sheet 500, <http://www.aidsinfonet.org>).

Another risk of drug use is missing ARV doses and poor adherence. This can lead to HIV resistance (see fact sheet 126, <http://www.aidsinfonet.org>) or treatment failure. For more information on adherence, see fact sheet 405 on <http://www.aidsinfonet.org>.



DRUG INTERACTIONS

Recreational drugs will likely interact or interfere with ARV therapy, increasing or decreasing ARV drug levels. This can lead to ARV treatment failure. Also, drug interactions can cause a serious, possibly fatal increase in the level of recreational drugs. The liver metabolizes most ARVs and all protease inhibitors. Recreational drugs metabolized in the liver can cause serious drug interactions.

There is little research on the effects of interactions between ARVs and recreational drugs on the human body. This is because the use of recreational drugs is illegal and they cannot be provided to people with HIV, even to study the effects.

Alcohol

Excessive alcohol use may weaken immune system function and threatens the long-term benefits of ARV therapy. Alcohol can increase blood levels of abacavir (Ziagen, fact sheet 416, <http://www.aidsinfonet.org>). Chronic alcohol use affects treatment adherence by interfering with a person's ability to stick to a regular ARV regimen. Alcohol use may increase the risk of pancreatitis when used with didanosine (Videx, factsheet 413, <http://www.aidsinfonet.org>)

Cocaine

Although interactions between cocaine and ARVs are unlikely to increase cocaine toxicity, the cocaine use may decrease ARV effectiveness by diminishing adherence.

Crystal meth, methamphetamine, crank, glass, Tina, others

A recent study found that gay men who use crystal meth have five times the risk of HIV infection as non-users. Serious and dangerous drug interactions are highly likely. When methamphetamine is used with ritonavir (Norvir, fact sheet 442, <http://www.aidsinfonet.org>), including when used for boosting other ARVs, amphetamine levels can double or triple.



Ecstasy/MDMA

Ecstasy uses the same liver pathway as protease inhibitors. This can cause very high levels of ecstasy in the body of people taking protease inhibitors. There is one documented case report of a death due to an interaction between ecstasy and ritonavir. Ecstasy can also increase the risk of kidney stones when used with indinavir (Crixivan, fact sheet 441, <http://www.aidsinfonet.org>) due to dehydration.

GHB (Xyrem, “date rape drug”)

This drug is primarily metabolized by the liver. There are no known interactions between GHB and ARVs. Protease inhibitors may increase GHB levels. Protease inhibitors may increase GHB levels.

Ketamine (K, Special K)

This drug is primarily metabolized by the liver. All protease inhibitors may cause high levels of ketamine. This could cause hepatitis. To date, there are no case reports or studies of interactions between ketamine and ARVs.

LSD

The metabolism of LSD is not understood. Interactions with ARVs are possible but unknown.

Marijuana

There are no known interactions between marijuana and ARVs. Interactions may be greater if marijuana is eaten rather than smoked. Use with protease inhibitors may increase effect of marijuana.

THE BOTTOM LINE

Some recreational drugs may interact with some ARVs. The information on these interactions is incomplete, but interactions can be dangerous or fatal. People who use drugs should be tested regularly for HIV. Be sure to tell your medical provider about any of the recreational drugs you use.

Sexual Health Part I



OBJECTIVES

At the end of this unit, participants will be able to:

- Understand that sexual health is more than sexual transmitted infections (STIs) and contraception, and requires a deeper understanding of sexuality
- Understand how social determinants of health (SDOH) influence sexuality and sexual health
- Effectively conduct conversations with clients about sexual health and sexuality
- Support clients by presenting options and support them in making changes
- Support clients in understanding and communicating with others about their sexuality and health goals



INSTRUCTIONS

1. Prepare index cards for Sexual Health Pictionary game and select the scenarios that you would like participants to role play from the Sexual Health Scenarios handout.
2. Welcome participants and have participants and presenters introduce themselves, including gender pronouns.
3. Review the unit objectives.
4. Review slides 3–5 on sexual health, sexuality education, and influences on sexual health.
5. Break participants up into groups of four and tell participants we are going to play a game called Sexual Health Pictionary to get practice talking about sexuality. If there are fewer than 8 participants, play the game with the entire group.
6. Give each group a sheet of flip chart paper and a marker.
7. One player will select a card from the facilitator, and draw the concept on the flip chart. The first group or person to guess the concept correctly wins that round.
8. Play four rounds so that each person in the group gets a turn to draw.
9. The team that wins the most rounds wins the game.

(continued)



Related C3 Roles

Providing culturally appropriate health education and information, providing counseling and social support, building individual and community capacity

Related C3 Skills

Interpersonal and relationship skills, communication skills, capacity building skills, education and facilitation skill, knowledge base



Method(s) of Instruction

Dyads, group discussion, games, role play



Estimated time

50 minutes



Key Concepts

Sexuality, sexual health, relationships, family, sexual orientation, gender



Materials

- Computer with internet access and projector
- PowerPoint slides
- Flip chart
- Markers
- Index cards with the words: “contraception,” “friendship,” “choice,” “transmission,” “love,” “and intimacy” for Pictionary game.

Handout

- Sexual Health Scenarios

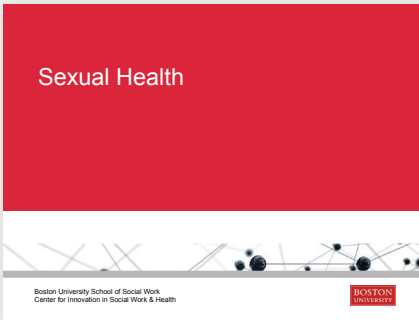
Sexual Health Part I



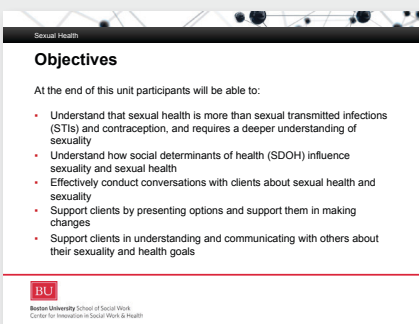
INSTRUCTIONS (continued)

10. Debrief the activity by asking:
 - a. What was challenging about describing these topics?
 - b. Not all people are comfortable about sexuality or sexual health. What would help you as CHW talk comfortably about this topic with your clients?
11. Review the scenarios presented on slide 7 about DJ and Andrew and facilitate discussion as described in slide notes.
12. Ask participants to get into pairs to role play a discussion with a client.
13. Distribute the Sexual Health Scenarios handout.
14. Each person has five minutes to practice a role play and then switch roles.
15. After the pairs have completed the role play, facilitate a 10-minute group discussion. Ask, "How did this exercise feel for you? What small action steps did you think of?"
16. Wrap up. Review slide 8 to summarize and close.

Sexual Health Part I



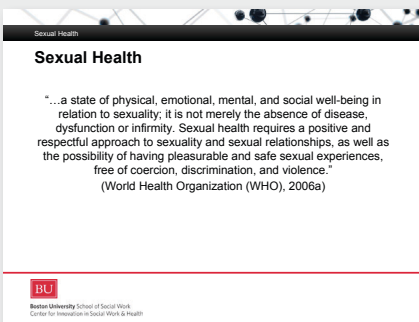
SLIDE 1



SLIDE 2

Review the objectives.

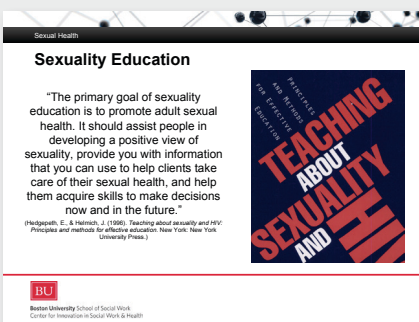
Ask participants if someone knows the definition of sexual health? Take definitions from participants and then advance to next slide.



SLIDE 3

Review the slide and compare how the WHO definition is the same and different from participants' definitions.

Source: WHO (2006a). Defining sexual health: Report of a technical consultation on sexual health, 28–31 January 2002. Geneva, World Health Organization.



SLIDE 4

Review the slide.

Sexual Health

Influences on Sexual Health

- Access to resources
- Discrimination
- Sexual orientation
- Neighborhood
- Social Norms
- Education
- Income
- Existing Prevalence

Attitudes

Beliefs

Values

Why doesn't it work much?

Why don't it work happen to me?

How do we control our own lives?

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SLIDE 5

Review the slide.

These are some of the attitudes, beliefs, and values that can prevent people from engaging in their sexual health.

ACTIVITY: SEXUAL HEALTH PICTONARY

SLIDE 6

Sexual Health

Darius Jenkins / DJ

Andrew

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SLIDE 7

DJ is a 24-year-old Black MSM (man who has sex with men) who is living with HIV from Compton, CA and has not come out to his family. DJ is in a relationship with Sheba who also lives with HIV who performs at a club where DJ sells marijuana. He tells you that they both missed several doses of medication. DJ also shares with you that he's the receptive party in his relationship and he's concerned about superinfection because they are not using condoms. Sheba has tried, but he often loses his erection while putting on the condom.

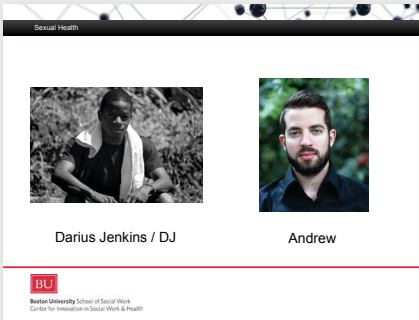
Andrew is a 24-year-old white MSM from Pasadena, CA who works as a legal assistant and has the support of his family. He is in a serodiscordant relationship (one partner has HIV and the other does not) and he is going with his partner to the LGBTQ testing drop-in space to get tested today; they are considering PrEP.

What are some ways that social determinants of health (SDOH) impacted DJ's life and not Andrew's life?

Considering SDOH, how might you counsel DJ and what are some options you can share with him? Andrew?

Now you will have the opportunity to practice using the information we've learned about sexual health and influences on human sexuality.

(continued)



SLIDE 7 (continued)

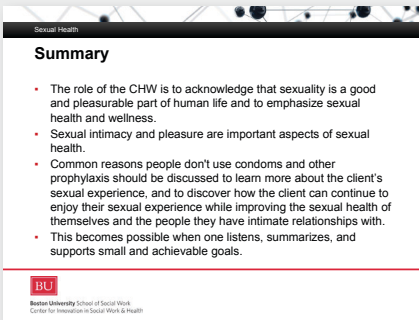
Give instructions for role play.

You will have a chance to role play discussing sexual health with a client in pairs. Hand out role play. Each person has five minutes to practice the roleplay and then switch roles. After the pairs have completed the role plays, come back to the larger group for discussion.

Allow 10 minutes to debrief the role plays.

Ask:

- How did this exercise feel for folks?
- What small action steps did you think of?



SLIDE 8

Review the slide to summarize and close.

Sexual Health Scenarios

Scenario 1

Damon is struggling with his sexuality. At the age of 14, he was raped by a neighborhood boy who was 3 years his senior. He didn't tell anybody because he was ashamed and intimidated by his perpetrator who threatened that if he told anyone his family would be harmed. As Damon became an adult he started to have desires to sleep with men, but he was attracted to women. Occasionally Damon would have sexual encounters with men when the urge became too strong.

Currently, Damon has been in a relationship with a woman for the past 6 years, and has been living and thriving with HIV for 10 years. Damon would like to be honest with his partner about his sexuality but is afraid she will leave him.

How would you counsel him to accept his sexuality and have the ability to tell his significant other?

Scenario 2

Jonathan is a heterosexual African man who has been living and thriving with HIV for 5 years and has been married to his wife for 3 years. Jonathan is frustrated with his wife because she still does not believe Jonathan can't transmit the virus to her. Jonathan's wife has been told several times by the doctor that because Jonathan is virally suppressed, HIV is untransmittable. Jonathan would like to have children but his wife is terrified of having unprotected sex with him.

What would you say to get to the root cause of why Jonathan's wife doesn't trust the science or her husband?

Scenario 3

Tania is a Caucasian woman who was diagnosed with Herpes Simplex 2 three years ago and has not dated since then. She is ashamed and blames herself for not using protection. Tania doesn't want to engage in sex anymore because she feels dirty and, she doesn't think anybody would want to date her. She isolates herself and doesn't socialize. The only person she hangs out with is her best friend of 20 years. Tania's best friend has invited her to parties and other places to meet people, but Tania always refuses.

What would you say to uplift her self-esteem, to motivate her to meet new people?



More Scenarios

#1 A transgender client, Angel, tells you they've been dating Dante who is a bus driver who drives the bus she uses frequently. They've been seeing each other about two or three times a week and talk daily. Angel hasn't disclosed that they are transgender and they are interested in a long-term sexual relationship with Dante.

Angel tells you they have not had sex since their transition and asks you what they should do.

#2 A female client, Maria, who is 27 years old has a history of sex work to support her substance use. She is moving into a new apartment and has financial needs, but has not been working the streets since getting clean 4 months ago. She has also been dating an elderly gentleman, Ramon, for 6 years. Maria tells you that when Ramon came over they had sex and afterward she asked him for money to pay deposits on her power bill. Ramon refused to give her the money, which led to an altercation where she hit him on the head with a bottle. After that, he gave her the money. Maria says to you, "Why can't he just give me the money? Why do I always have to check his ass?" How would you respond?

#3 Antonio is a 68-year-old man whose labs came back positive for syphilis; the provider has asked you to find him and bring him back into the clinic for treatment. When you talk to tell him that he needs to come back into the clinic for the treatment, he tells you that this can't be true because he hasn't had sex in years and is not convinced he should go into the clinic with you.

#4 Shaniqua is 19 years old and just found out she is HIV positive and pregnant. She's been dating Devontae, who is 22, for 8 months. They met when he was first released from prison, and Devonte is the only person she's slept with. In tears, she tells you that she doesn't want to have a child infected with AIDS and Devontae is the last person she'd want to be the father of her child because he's a liar and cheater.

Sexual Health Part 2



OBJECTIVES

At the end of this unit, participants will be able to:

- Have a deeper understanding of sexual health
- Understand the diversity of sex roles and orientations across genders
- Become more at ease in discussing sex-related topics with clients



INSTRUCTIONS

1. Prior to the session, prepare set up for group activity. On four separate flip sheet charts, write the following phrases: sexual body parts, sexual activities, labels that express sexual orientation/identity, and strategies that promote sexual health. Post the sheets around the room.
2. Welcome participants.
3. Review the unit objectives.
4. Review slides on the biological, psychological, social, and spiritual aspects of sexual health, and encourage brief discussion.
5. Facilitate activity on getting comfortable with sexual language, as described in the slides.
6. Wrap up. Thank participants for their participation. Share and distribute the hand out on Sexual Health Glossary for LGBTQ terms.



Related C3 Roles

Providing culturally appropriate health education and information, providing coaching and social support, building individual and community capacity

Related C3 Skills

Interpersonal and relationship-building skills, communication skills, capacity building skills, education and facilitation skills, knowledge base



Method(s) of Instruction

Group discussion, small group activity



Estimated time

60 minutes



Key Concepts

Sexual health, sex, sexual orientation



Materials

- Computer with internet access and projector
- PowerPoint slides
- Flip chart
- Markers

Handout

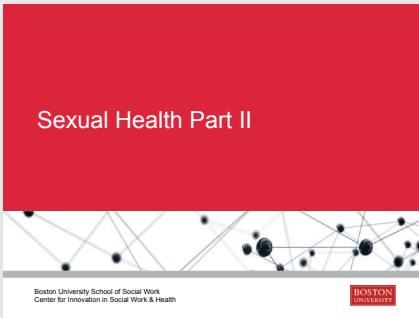
- Sexual Health Glossary of LGBTQ+ Terms



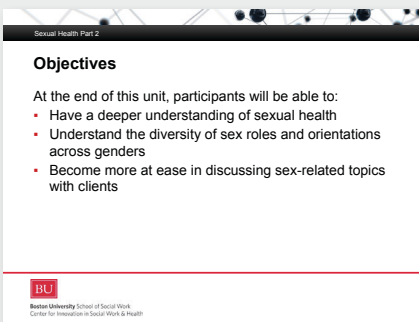
Resources

David Stanley, American Red Cross African American HIV/AIDS Program Curricula, 2002, American Sexual Health Association. <http://www.ashasexualhealth.org/sexual-health/>

SLIDE 1



SLIDE 2



Review the objectives.

Ask, "How do you define sexual health?"

SLIDE 3

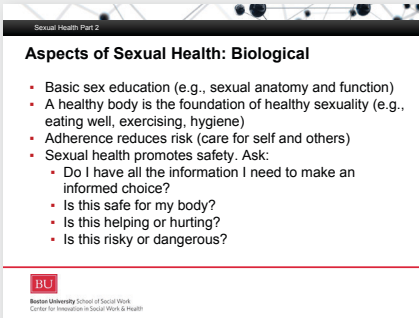


Share the WHO definition of sexual health on the slide.

Sexual health is the ability to embrace and enjoy our sexuality throughout our lives. It is an important part of our physical and emotional health. Being sexually healthy means:

- Understanding that sexuality is a natural part of life and involves more than sexual behavior.
- Recognizing and respecting the sexual rights we all share.
- Having access to sexual health information, education, and care.
- Making an effort to prevent unintended pregnancies and STIs and seek care and treatment when needed.
- Being able to experience sexual pleasure, satisfaction, and intimacy when desired.
- Being able to communicate about sexual health with others, including sexual partners and healthcare providers.
- Sexual health includes biological, psychological, social, and although it is not mentioned in the WHO definition, spiritual elements. We will explore aspects of sexual health as they relate to each of these areas.

Reference: WHO (2006a). Defining sexual health: Report of a technical consultation on sexual health, 28–31 January 2002. Geneva, World Health Organization.



Sexual Health Part 2

Aspects of Sexual Health: Biological

- Basic sex education (e.g., sexual anatomy and function)
- A healthy body is the foundation of healthy sexuality (e.g., eating well, exercising, hygiene)
- Adherence reduces risk (care for self and others)
- Sexual health promotes safety. Ask:
 - Do I have all the information I need to make an informed choice?
 - Is this safe for my body?
 - Is this helping or hurting?
 - Is this risky or dangerous?

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SLIDE 4

Sex education

Every sexually active adult should have at least a basic understanding of human sexual anatomy and the sexual response cycle. It is important not to assume that just because someone is sexually active that they have an understanding of these important topics.

For example, An HIV counselor who runs HIV education groups for men coming out of prison was amazed at how much the men didn't know about sexual anatomy. In one group of about 40 men, only one was able to identify a clitoris. Most men were not even able to identify the urethra. He quickly realized that not only did he need to do HIV education, but he also had to do some basic sex ed. Part of sexual health is knowledge about the biology of sex.

A healthy body is the foundation of healthy sexuality

Another part is caring for one's own body. Sex and sexuality are felt and expressed through the body. Therefore, taking care of ourselves, that is, remaining adherent to treatment, eating right, and exercising all support healthy sexuality. In some sense, it is the foundation of healthy sexuality.

Adherence reduces risk

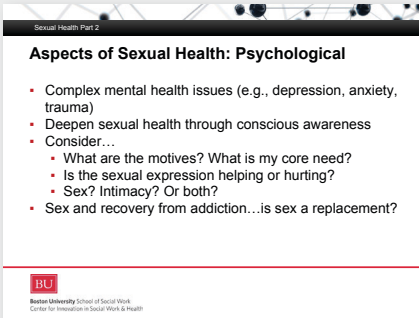
Remaining adherent to treatment and taking care of one's own body reduces the risk of transmitting HIV. Healthy sexuality means caring not just for one's own well-being, but also the well-being of your partners. Many people with HIV are motivated to begin treatment and to adhere to it for that very reason.

Sexual health promotes safety

When working with clients, one question we might ask about sexual behavior is, is it consensual? If it is not, then it is not healthy and should be avoided. If it is consensual then we might ask, "is it safe for my body?" If it is hurting the body, then it is unhealthy. We might also ask if it seems to be helping or hurting. That is, is it strengthening the relationship between partners and leading to an increased sense of well-being or is it causing more problems and leading to feelings of shame or animosity? Asking these questions may help you and the client better sort out the complexities of sexual health as they relate to the body.

Discussion

Ask participants to briefly share their reflections on the suggested questions mentioned on this slide (2–3 quick responses).



Sexual Health Part 2

Aspects of Sexual Health: Psychological

- Complex mental health issues (e.g., depression, anxiety, trauma)
- Deepen sexual health through conscious awareness
- Consider...
 - What are the motives? What is my core need?
 - Is the sexual expression helping or hurting?
 - Sex? Intimacy? Or both?
- Sex and recovery from addiction...is sex a replacement?

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SLIDE 5

Complex mental health issues: depression, anxiety, trauma

The psychological aspects of sexual health are complex. People are complex and we all build on top of our basic drives and instincts layers of meaning and interpretation. There is the basic drive for sex, but also the complexities of human psychology that go along with it. Mental health issues such as depression and anxiety can have a major impact on sexual health and behavior.

Deepen sexual health through conscious awareness

Past experiences in life, good and bad, can influence sexual behavior. Individuals who have experienced sexual exploitation or trauma may need additional support in examining their sexual behavior and achieving sexual balance and wholeness. Some individuals may act out their past trauma, putting themselves into harm's way repeatedly. While it is beyond the scope of this module to examine the how and why of this phenomenon, we can say that evaluating the safety of sexual behavior is key. If it is unsafe, then it may lead to additional trauma and exploitation. The first step in supporting victims of such experiences is to help them achieve safety. Asking whether the behavior is safe or not and whether it may lead to additional victimization is essential for trauma survivors.

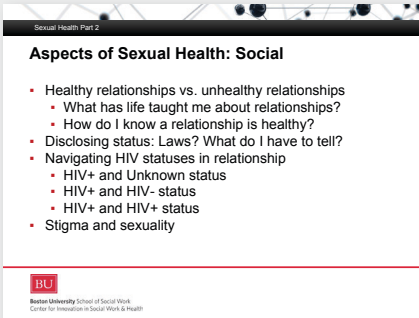
Question to consider...

- What are the motives? What is my core need?
- Is the sexual expression helping or hurting?
- Sex? Intimacy? Or both?

Often times people engage in sex not because they want sex, but because they want something else and sex is one way to achieve it. A person may be lonely and seek companionship. Others may be seeking intimacy with someone else to gain a deeper, more meaningful connection. Some may be trying to disconnect and retreat from others by having sex. It is important to explore the motives behind the behavior and evaluate whether the sexual behavior is truly meeting that core need or want and whether there might be a better, more direct way of attaining what they really want or need.

Discussion

- How can a discussion about the motives behind a person's sexual behavior be useful in working with people with HIV?
- What things should you consider before asking a client about their motives? (e.g. is the relationship strong enough to support this level of probing?)



SLIDE 6

Healthy relationships vs. unhealthy relationships

Now let's take a look at the social aspects of sexual health. The social aspects include engagement in healthy versus unhealthy relationships, how and when to disclose one's HIV status, navigating HIV status, and the stigma of sex along with the stigma of HIV.

Ask, "How do you know a relationship is healthy?"

Researchers have come up with something called a mutually growth fostering relationship. This type of relationship is based on three things: mutuality, empathy, and authenticity. One way to assess whether a relationship is mutually growth fostering is to look at the results of that relationship. A healthy relationship should result in increased zest, action, clarity, a sense of worth, and a desire for more connection with others.

Unhealthy relationships leave you with diminished energy, diminished action, confusion, diminished sense of self-worth, and isolation.

It may be helpful to explore these with your clients. When it comes to relationships, it is best to allow the one in the relationship to work through these questions rather than trying to tell them that they are in a bad relationship. It is best to simply ask some general questions rather than to make statements about the relationships they are engaged in. Asking these questions also helps the client begin to see for themselves what a healthy versus unhealthy relationship looks like and increases their self-efficacy in evaluating relationships in the future.

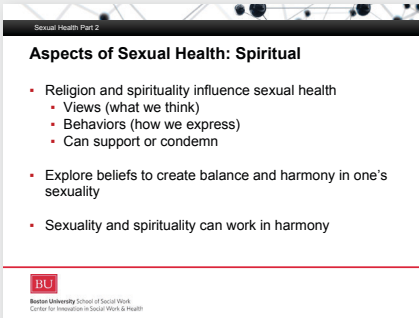
Disclosing status: Laws? What do I have to tell?

Navigating HIV statuses in relationship

It is beyond the scope of this session to examine in detail how and when to disclose one's HIV status. In some states people with HIV must disclose their status to all sexual partners regardless of the sexual activity. In others they must disclose only for vaginal or anal sex. It is important to know what the legal requirements are in your state. Disclosure of status is a key issue related to sexual behavior and health. Navigating HIV statuses in relationships can feel threatening to some as they consider potential responses. The more comfortable and confident a person is in disclosing their status the more likely they will be to do so. Disclosing an HIV status when safe and appropriate can increase the level of honesty and intimacy within that relationship. But, it can also lead to rejection and victimization.

Stigma and sexuality

When talking about sexual health we have to acknowledge the stigma of HIV and the stigma of sex. Sex is all around us. It's on TV, the radio, billboards, etc. We can't escape it, but so few of us are willing to have open honest conversations about it. Often times one's sexuality is treated like one's HIV status, kept secret. But there is a time and a place for discussing both and failure to do so can lead to increased feelings of shame and isolation.



Sexual Health Part 2

Aspects of Sexual Health: Spiritual

- Religion and spirituality influence sexual health
 - Views (what we think)
 - Behaviors (how we express)
 - Can support or condemn
- Explore beliefs to create balance and harmony in one's sexuality
- Sexuality and spirituality can work in harmony

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SLIDE 7

Although it is not often addressed within current models of sexual health, spirituality is one aspect of sexual health we should consider. There is no doubt that religion and spirituality influence how we think about, and often times how we express, our sexuality.

Religion and spirituality influence sexual health

The relationship between religion, spirituality, and sex has often been problematic for many people with HIV. On one hand religion has been a tool of oppression and on the other a source of liberation.

Explore beliefs to create balance and harmony in one's sexuality

It is important to find out what the client's beliefs are. How do they view themselves and their sexuality in the context of their faith? This exploration may be beyond the scope or skill set of the CHW; however there may be opportunity to encourage the client to access supports to bring clarity to this area.

Discussion

Ask, "Why is it important to NOT impose your religious beliefs on the client? How can doing so harm the relationship?"

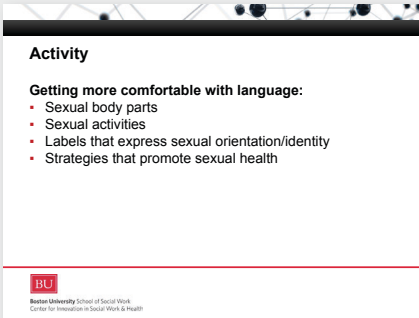
It is vital that during any discussion about this topic that you do not attempt to impose your views or beliefs on the client. Exactly what each client takes up as their faith is not our concern. Our concern is with whether their beliefs are in harmony with the client's sexuality.

Sexuality and spirituality can work in harmony

Sexuality and spirituality can work together to bring a sense of meaning and balance to the lives of people with HIV. When one's spiritual and religious beliefs clash with one's sexual orientation and or behavior, a myriad of problems may arise. It is important, therefore, to be sure one's religious and spiritual beliefs are in balance and harmony with one's sexuality.

Summarize and transition to group activity

- "Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence" (WHO, 2002).
- Sexual health is far more expansive than a oversimplification of risk-reduction strategies. Sexual health takes into consideration biological, psychological, social, and spiritual factors that influence a person's sexual wellbeing.



Activity

Getting more comfortable with language:

- Sexual body parts
- Sexual activities
- Labels that express sexual orientation/identity
- Strategies that promote sexual health

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SLIDE 8

Introduce the activity by pointing out that many people may feel some discomfort talking about sex in public or with people they don't know well. This exercise will introduce and help participants feel more comfortable with using language associated with sex, sexuality and the diversity of sexual orientations across genders. It will focus on language that participants may hear while working with clients and provide an opportunity to learn ways to respond in a sensitive, nonjudgmental way.

Keep the tone of this activity light; it should be fun as well as instructive.

Post the prepared flip chart sheet (each with one title listed below) around the room spacing them apart to allow for non-distracting discussion within the groups.

- **Sexual body parts** (can be combined with sexual activities to conserve time)
- **Sexual activities**
- **Labels that express sexual orientation/identity**
- **Strategies that promote sexual health**

Divide participants into four groups (ideally three to five people).

Distribute a marker to each group and have them choose a volunteer to write their responses.

Assign each group to each one of the posted sheets.

Each group will brainstorm and write their responses on the posted newsprint for three minutes.

Instruct participants to rotate to the next sheet and allow one minute for them to review previous response. Then allow three minutes for brainstorming and adding new content to the list.

Continue this process until each group has visited each sheet.

Bring the groups together for a large group discussion of the written responses.

Ask for volunteers to read responses from each list. Review one list at a time. Ask volunteers to review the meaning of the terms and responses.

Distribute Handout: "Glossary of LGBTQ+ Terms" as a reference resource.

Debrief questions

- Which aspects were most uncomfortable for you? Explain.
- Which aspects were most comfortable? Explain.
- Are there words or phrases that should never be used when working with a client? Explain.
- What will you do to become more informed and comfortable discussing issues related to sexual health?
- How do you think having done this exercise will help you become more effective in your role as a CHW? Explain.

Summarize and close.

Sexual Health Glossary of LGBTQ+ Terms

Terms are always changing in the LGBTQ+ community. For an updated list, please visit: <http://www.transstudent.org/definitions>

Summary

Cisgender/cis: Term for someone who exclusively identifies as their sex assigned at birth. The term cisgender is not indicative of gender expression, sexual orientation, hormonal makeup, physical anatomy, or how one is perceived in daily life.

Transgender/Trans: Encompassing term of many gender identities of those who do not identify or exclusively identify with their sex assigned at birth. The term transgender is not indicative of gender expression, sexual orientation, hormonal makeup, physical anatomy, or how one is perceived in daily life. Also see: The Gender Unicorn.

Queer: A term for people of marginalized gender identities and sexual orientations who are not cisgender and/or heterosexual. This term has a complicated history as a reclaimed slur.

Basic Terminology:

Cis(gender): Adjective that means “identifies as their sex assigned at birth” derived from the Latin word meaning “on the same side.” A cisgender/cis person is not transgender. “Cisgender” does not indicate biology, gender expression, or sexuality/sexual orientation. In discussions regarding trans issues, one would differentiate between women who are trans and women who aren’t by saying trans women and cis women. Cis is not a “fake” word and is not a slur. Note that cisgender does not have an “ed” at the end.

Gender Expression/Presentation: The physical manifestation of one’s gender identity through clothing, hairstyle, voice, body shape, etc. (typically referred to as masculine or feminine). Many transgender people seek to make their gender expression (how they look) match their gender identity (who they are), rather than their sex assigned at birth. Someone with a gender nonconforming gender expression may or may not be transgender.

Gender Identity: One’s internal sense of being male, female, neither of these, both, or other gender(s). *Everyone has a gender identity, including you.* For transgender people, their sex assigned at birth and their gender identity are not necessarily the same.

Sex Assigned At Birth: The assignment and classification of people as male, female, intersex, or another sex assigned at birth often based on physical anatomy at birth and/or karyotyping.



Sexual Orientation: A person’s physical, romantic, emotional, aesthetic, and/or other forms of attraction to others. In Western cultures, gender identity and sexual orientation are not the same. Trans people can be straight, bisexual, lesbian, gay, asexual, pansexual, queer, etc. just like anyone else. For example, a trans woman who is exclusively attracted to other women would often identify as lesbian.

Transgender/Trans: An umbrella term for people whose gender identity differs from the sex they were assigned at birth. The term transgender is not indicative of gender expression, sexual orientation, hormonal makeup, physical anatomy, or how one is perceived in daily life. Note that transgender does not have an “ed” at the end.

Transition: A person’s process of developing and assuming a gender expression to match their gender identity. Transition can include: coming out to one’s family, friends, and/or co-workers; changing one’s name and/or sex on legal documents; hormone therapy; and possibly (though not always) some form of surgery. It’s best not to assume how one transitions as it is different for everyone.

Transsexual: A term that is often considered pejorative similar to transgender in that it indicates a difference between one’s gender identity and sex assigned at birth. Transsexual often – though not always – implicates hormonal/surgical transition from one binary gender (male or female) to the other. Unlike *transgender/trans*, *transsexual* is not an umbrella term, as many transgender people do not identify as transsexual. When speaking/writing about trans people, please avoid the word transsexual unless asked to use it by a transsexual person.

More Terminology:

Agender: An umbrella term encompassing many different genders of people who commonly do not have a gender and/or have a gender that they describe as neutral. Many agender people are trans. As a new and quickly-evolving term, it is best you ask how someone defines agender for themselves.

AFAB and AMAB: Acronyms meaning “assigned female/male at birth” (also designated female/male at birth or female/male assigned at birth). No one, whether cis or trans, gets to choose what sex they’re assigned at birth. This term is preferred to “biological male/female,” “male/female-bodied,” “natal male/female,” and “born male/female,” which are defamatory and inaccurate.

Ally: Someone who advocates and supports a community other than their own. Allies are not part of the communities they help. A person should not self-identify as an ally but show that they are one through action.



Aromantic: The lack of romantic attraction, and one identifying with this orientation. This may be used as an umbrella term for other emotional attractions such as demiromantic.

Asexual: The lack of a sexual attraction, and one identifying with this orientation. This may be used as an umbrella term for other emotional attractions such as demisexual.

Bigender: Refers to those who identify as two genders. Can also identify as multigender (identifying as two or more genders). Do not confuse this term with Two-Spirit, which is specifically associated with Native American and First Nations cultures.

Binary: Used as an adjective to describe the genders female/male or woman/man. Since the binary genders are the only ones recognized by general society as being legitimate, they enjoy an (unfairly) privileged status.

Bisexuality: An umbrella term for people who experience sexual and/or emotional attraction to more than one gender (pansexual, fluid, omnisexual, queer, etc.).

Boi: A term used within queer communities of color to refer to sexual orientation, gender, and/or aesthetic among people assigned female at birth. Boi often designates queer women who present with masculinity (although, this depends on location and usage). This term originated in women of color communities.

Bottom Surgery: Genital surgeries such as vaginoplasty, phalloplasty, or metoidioplasty.

Butch: An identity or presentation that leans towards masculinity. Butch can be an adjective (she's a butch woman), a verb (he went home to "butch up"), or a noun (they identify as a butch). Although commonly associated with masculine queer/lesbian women, it's used by many to describe a distinct gender identity and/or expression and does not necessarily imply that one also identifies as a woman or not.

Cross-dressing (also crossdressing): The act of dressing and presenting as a different gender. One who considers this an integral part of their identity may identify as a cross-dresser. "Transvestite" is often considered a pejorative term with the same meaning. Drag performers are cross-dressing performers who take on stylized, exaggerated gender presentations (although not all drag performers identify as cross-dressers). Cross-dressing and drag are forms of gender expression and are not necessarily tied to erotic activity, nor are they indicative of one's sexual orientation or gender identity. Do NOT use these terms to describe someone who has transitioned or intends to do so in the future.

Cissexism: Systemic prejudice in the favor of cisgender people.

Cissimilation: The expectation for and act of trans people, especially trans women, assimilating to cisgender (and often heteronormative) standards of appearance and performance.



Drag: Exaggerated, theatrical, and/or performative gender presentation. Although most commonly used to refer to cross-dressing performers (drag queens and drag kings), anyone of any gender can do any form of drag. Doing drag does not necessarily have anything to do with one's sex assigned at birth, gender identity, or sexual orientation.

Dyadic: Not Intersex.

Equality: A state in which everyone is equal. This ignores difference in identity/community and history. [Read why we changed our name from "equality" to "educational."](#)

Equity/Liberation/Justice: A state in which all marginalized communities are free. This differs greatly from equality. [Read TSER director's Eli Erlick's article on why equality hurts the transgender movement.](#)

Femme: An identity or presentation that leans towards femininity. Femme can be an adjective (he's a femme boy), a verb (she feels better when she "femmes up"), or a noun (they're a femme). Although commonly associated with feminine lesbian/queer women, it's used by many to describe a distinct gender identity and/or expression and does not necessarily imply that one also identifies as a woman or not.

Gender Affirming Surgery; Genital Reassignment/Reconstruction Surgery; Vaginoplasty; Phalloplasty; Metoidioplasty: Refers to surgical alteration and is only one part of some trans people's transition (see "Transition" above). Only the minority of transgender people choose to and can afford to have genital surgery. The following terms are inaccurate, offensive, or outdated: sex change operation, gender reassignment/realignment surgery (gender is not changed due to surgery), gender confirmation/confirming surgery (genitalia do not confirm gender), and sex reassignment/realignment surgery (as it insinuates a single surgery is required to transition along with sex being an ambiguous term).

The Gender Binary: A system of viewing gender as consisting solely of two, opposite categories, termed "male and female," in which no other possibilities for gender or anatomy are believed to exist. This system is oppressive to anyone who defies their sex assigned at birth, but particularly those who are gender-variant or do not fit neatly into one of the two standard categories.

Gender Dysphoria: Anxiety and/or discomfort regarding one's sex assigned at birth.

Gender Fluid: A changing or "fluid" gender identity.



Gender Identity Disorder / GID: A controversial DSM-III and DSM-IV diagnosis given to transgender and other gender-nonconforming people. Because it labels people as “disordered,” Gender Identity Disorder is often considered offensive. The diagnosis is frequently given to children who don’t conform to expected gender norms in terms of dress, play or behavior. Such children are often subjected to intense psychotherapy, behavior modification and/or institutionalization. This term was replaced by the term “gender dysphoria” in the DSM-5.

Genderqueer: An identity commonly used by people who do not identify or express their gender within the gender binary. Those who identify as genderqueer may identify as neither male nor female, may see themselves as outside of or in between the binary gender boxes, or may simply feel restricted by gender labels. Many genderqueer people are cisgender and identify with it as an aesthetic. Not everyone who identifies as genderqueer identifies as trans or nonbinary.

Heteronormative / Heteronormativity: These terms refer to the assumption that heterosexuality is the norm, which plays out in interpersonal interactions and society and furthers the marginalization of queer people.

Intersex: Describing a person with a less common combination of hormones, chromosomes, and anatomy that are used to assign sex at birth. There are many examples such as Klinefelter Syndrome, Androgen Insensitivity Syndrome, and Congenital Adrenal Hyperplasia. Parents and medical professionals usually coercively assign intersex infants a sex and have, in the past, been medically permitted to perform surgical operations to conform the infant’s genitalia to that assignment. This practice has become increasingly controversial as intersex adults speak out against the practice. The term *intersex* is **not** interchangeable with or a synonym for *transgender* (although some intersex people do identify as transgender).

LGBTQQIAPP+: A collection of identities short for lesbian, gay, bisexual, trans, queer, questioning, intersex, asexual, aromantic, pansexual, polysexual (sometimes abbreviated to LGBT or LGBTQ+). Sometimes this acronym is replaced with “queer.” Note that “ally” is **not** included in this acronym.

Monosexual / Multisexual / Non-monosexual: Umbrella terms for orientations directed towards one gender (monosexual) or multiple genders (multisexual/non-monosexual).

Nonbinary (Also Non-Binary): A preferred umbrella term for all genders other than female/male or woman/man, used as an adjective (e.g. Jesse is a nonbinary person). Not all nonbinary people identify as trans and not all trans people identify as nonbinary. Sometimes (and increasingly), nonbinary can be used to describe the aesthetic/presentation/expression of a cisgender or transgender person.

Packing: Wearing a penile prosthesis.



Pansexual: Capable of being attracted to many/any gender(s). Sometimes the term omnisexual is used in the same manner. “Pansexual” is being used more and more frequently as more people acknowledge that gender is not binary. Sometimes, the identity fails to recognize that one cannot know individuals with every existing gender identity.

Passing/blending/assimilating: Being perceived by others as a particular identity/gender or cisgender regardless how the individual in question identifies, e.g. passing as straight, passing as a cis woman, passing as a youth. This term has become controversial as “passing” can imply that one is not genuinely what they are passing as.

Polysexual: Capable of being attracted to multiple gender(s).

Queer: General term for gender and sexual minorities who are not cisgender and/or heterosexual. There is a lot of overlap between queer and trans identities, but not all queer people are trans and not all trans people are queer. The word queer is still sometimes used as a hateful slur, so although it has mostly been reclaimed, be careful with its use.

Stealth: To not be openly transgender in all or almost all social situations.

T: Short for testosterone.

Top Surgery: Chest surgery such as double mastectomy, breast augmentation, or periareolar (keyhole) surgeries.

Trans: Prefix or adjective used as an abbreviation of transgender, derived from the Latin word meaning “across from” or “on the other side of.”

Trans*: An outdated term popularized in the early 2010s that was used to signify an array of identities under the trans umbrella. However, it became problematized online due to improper usage. See our page on the asterisk.

Transmisogyny: Originally coined by the author Julia Serano, this term designates the intersectionality of transphobia and misogyny and how they are often experienced as a form of oppression by trans women.

Transphobia: Systemic violence against trans people, associated with attitudes such as fear, discomfort, distrust, or disdain. This word is used similarly to homophobia, xenophobia, misogyny, etc.



Trans Woman / Trans Man: Trans woman generally describes someone assigned male at birth who identifies as a woman. This individual may or may not actively identify as trans. It is grammatically and definitionally correct to include a space between trans and woman. The same concept applies to trans men. Often it is good just to use woman or man. Sometimes trans women identify as male-to-female (also MTF, M2F, or trans feminine) and sometimes trans men identify as female-to-male (also FTM, F2M, or trans masculine). Please ask before identifying someone. Use the term and pronouns preferred by the individual.

Two-Spirit: An umbrella term indexing various indigenous gender identities in North America.

HIV and Comorbidities



OBJECTIVES

At the end of this unit, participants will be able to:

- Name common comorbidities most often associated with HIV
- Understand how best to manage comorbidities including but not limited to: diabetes, hepatitis C, hypertension, kidney disease, depression, and substance abuse disorder



INSTRUCTIONS

1. Welcome participants.
2. Review the unit objectives.
3. Review slides 3 and 4 introducing the concept of comorbidities.
4. Facilitate group research activity on the significance of common comorbidities.
5. After groups present, review the slide for each comorbidity to review any key points that were not covered in the group presentations.
6. Wrap up. Thank the group for their active participation. Summarize the session by noting the importance of understanding the common comorbidities associated with HIV, possible causes, side effects and how best to manage comorbidities while living with HIV. People don't die from HIV or AIDS; they die from complications of the disease which is most often a comorbidity.



Related C3 Roles

Providing culturally appropriate health education and information, providing coaching and social support, building individual and community capacity, providing direct service

Related C3 Skills

Communication skills, professional skills and conduct, knowledge base



Method(s) of Instruction

Small group activity, brainstorm, teach back



Estimated time

60 minutes



Key Concepts

Comorbidities, diabetes, hypertension, hepatitis C, kidney disease, depression, substance abuse



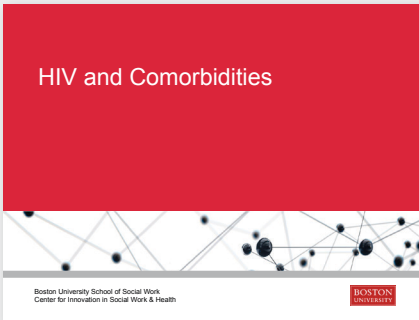
Materials

- Computer with internet access and projector
- PowerPoint slides
- Flip chart
- Markers

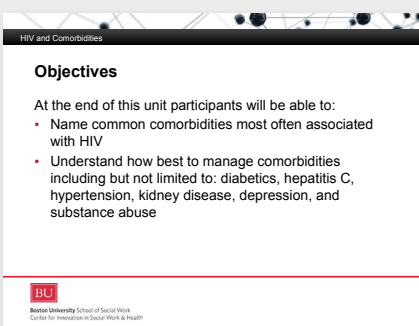
Handouts

- Diabetes and HIV , Fact Sheet #654 at <http://www.aidsinfony.org>
- Hepatitis C, Fact Sheet #507 at <http://www.aidsinfony.org>
- HIV and Cardiovascular Disease Fact Sheet #652 at <http://www.aidsinfony.org>
- HIV and Kidney Disease, Fact Sheet #651 at <http://www.aidsinfony.org>
- Depression and HIV, Fact Sheet #558 at <http://www.aidsinfony.org>
- Drug Use and HIV Fact Sheet #154 at <http://www.aidsinfony.org>

HIV and Comorbidities



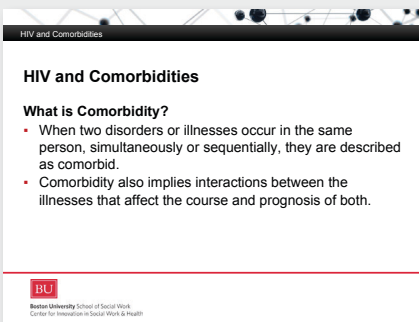
SLIDE 1



SLIDE 2

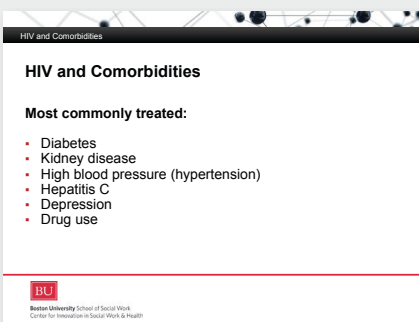
Review objectives.

Ask, “What do you think of when we say comorbidity?” Allow time for participants to answer.



SLIDE 3

Review the slide.



SLIDE 4

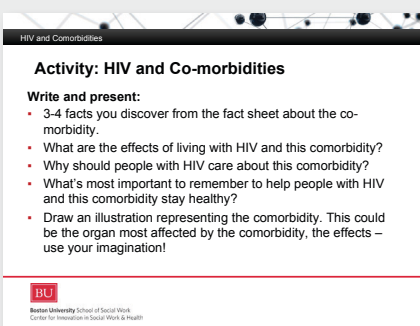
Review the slide, listing the most commonly treated comorbidities for people with HIV.



SLIDE 5

Group activity

- Divide participants into 6 groups (one for each comorbidity) and guide them through the next activity.
- Say, "Today we will be research assistants to our doctors, learning as much information as we can about each comorbidity. We will conduct our own brief research on the most common comorbidities that affect people with HIV."
- Give each group a different comorbidity fact sheet, flip chart sheets, and markers.

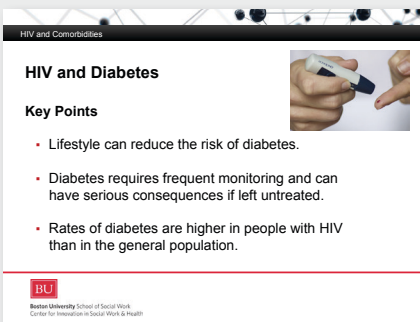


SLIDE 6

Ask each group to choose a recorder and a reporter. The recorder will write on the flip chart sheet key points about the comorbidity, and the reporter will present these points, including how it can potentially result in negative outcomes for a client with HIV.

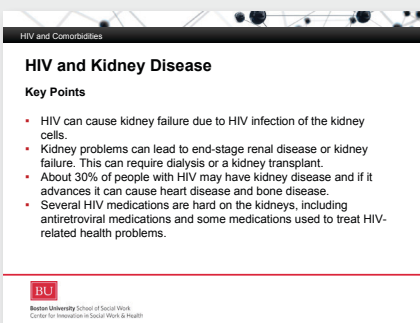
Each group must answer the questions listed on the slide, as well as create a piece of artwork. Each question is worth five points, for a total of 20 points, with extra credit for completing an illustration.

Each group will have 20 minutes to prepare and five minutes to share in a teach back to the larger group.



SLIDE 7

Cover any key points the group did not discuss during their presentation.



SLIDE 8


Cover any key points the group did not discuss during their presentation.

HIV and Comorbidities

HIV and High Blood Pressure

Key Points

- Blood pressure should be monitored regularly as part of HIV care.
- HIV drugs can interact with other medicines to affect blood pressure.
- Blood pressure can be affected by diet, smoking, and lack of exercise.



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SLIDE 9


Cover any key points the group did not discuss during their presentation.

HIV and Comorbidities

HIV and Hepatitis C

Key Points

- A blood test for antibodies will show exposure to hepatitis C.
- HIV treatment has particular benefits for people with HIV and hepatitis C co-infection.
- Hepatitis C treatment can cure most people of hepatitis C.



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SLIDE 10


Cover any key points the group did not discuss during their presentation.

HIV and Comorbidities

HIV and Depression

Key Points

- Depression can be a life-threatening disorder.
- Depression among people with HIV is common and is associated with increased high-risk behavior, nonadherence to ART, and progression of immunodeficiency.
- Depression can be diagnosed and treatment can be initiated in the primary care setting.



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SLIDE 11


Cover any key points the group did not discuss during their presentation.

HIV and Comorbidities

HIV and Drug Use

Key Points

- Substance use disorders (SUDs) are common among people with HIV: 40% of people with HIV in the United States are associated with injection drug use (IDU), either directly or by having an IDU sex partner.
- Among people who inject drugs in the United States, 40-45% have HIV.
- Substance use is a significant cause of morbidity and mortality in itself, and it is associated with HIV transmission and acquisition.
- Ask all patients about any current or recent use of illicit drugs or alcohol, or misuse of prescription drugs. Ask specifically about injection drugs, opioids, methamphetamines, cocaine, and "club drugs."



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SLIDE 12

Cover any key points the group did not discuss during their presentation.

In closing, it's important to understand common comorbidities associated with HIV, possible causes, side effects, and how best to manage comorbidities while living with HIV. People don't die from HIV or AIDS; they die from complications of the disease, which can include comorbidities.

HIV and Aging



OBJECTIVES

At the end of this unit, participants will be able to:

- Identify and discuss special challenges among those aged 50 and older living with HIV regarding:
 - Clinical and physical health
 - Mental and emotional health
 - Substance use
 - Sexual health
 - Addressing challenges with clients
 - PrEP
 - Living well with HIV



INSTRUCTIONS

- Before the session begins, prepare three flip chart sheets for the group activity. Write one phrase on each sheet: clinical and physical health, mental and emotional health, and sexual health. Review slides and talking points.
- Welcome participants.
- Review the unit objectives.
- Review slides 3–6 about numbers of people with HIV over age 50.
- Facilitate group activity on the challenges people over 50 face in regard to clinical and physical health, mental and emotional health, and sexual health (slide 7).
- Review slides 9–12 to cover any issues not discussed by the groups.
- Review slide 13 on PrEP.
- Distribute handout case scenario and facilitate discussion.
- To close, review slides about how older adults can live well with HIV.
- Wrap up. Share final slide with suggested resources and references for helping people with HIV who are over 50 years.



Related C3 Roles

All

Related C3 Skills

All



Method(s) of Instruction

Presentation, group activity, case scenario



Estimated time

1.25 hours



Key Concepts

Sexism, stigma, transphobia, racism, homophobia, ageism, co-morbidities, polypharmacy, PrEP



Materials

- Computer with internet access and projector
- PowerPoint slides
- Flip chart
- Markers

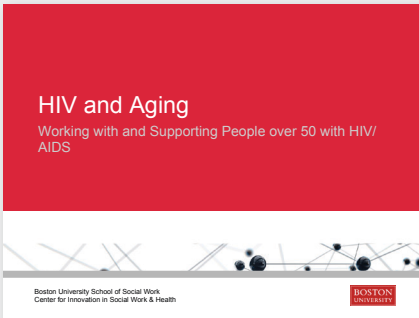
Handout

Case Scenario

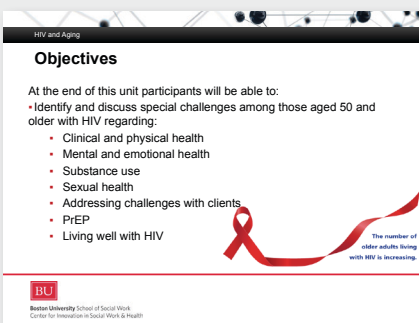


Resources

Website: <http://theconversation.com/living-and-aging-well-with-hiv-new-strategies-and-new-research-87485>



SLIDE 1

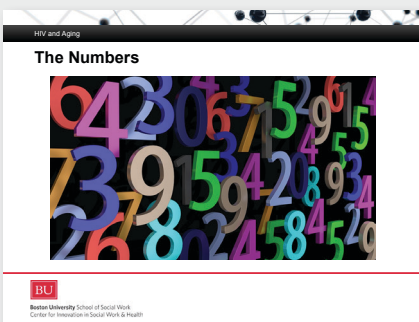


SLIDE 2

Review the objectives.

Introduce HIV and aging topic by acknowledging:

- Work remains to control the spread of HIV by identifying people with HIV who are undiagnosed.
- Development of HAART (i.e. cocktails using multiple drugs) has increased life expectancy of people with HIV.
- Annual numbers of HIV diagnosis declined by 5% between 2011 and 2015.



SLIDE 3

The next slides will focus on the numbers—the scope and impact of people over 50 with HIV.

Aging is a part of the natural course of life. However, HIV seems to accelerate the aging process. We're not sure if it is the virus itself or HIV treatment that influences the aging process, but we will discuss some of these special challenges.

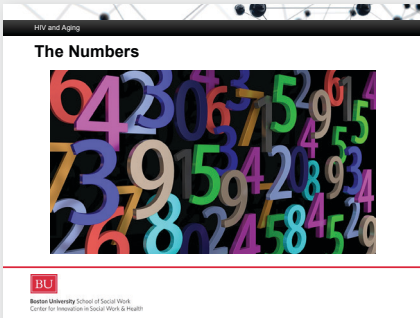
People aged 50 and older accounted for approximately:

- 17% (6,812) of the 39,782 new HIV diagnoses in 2016 in the United States. Though new HIV diagnoses are declining among people aged 50 and older, around 1 in 6 HIV diagnoses in 2016 were in this group.
- 35% of people aged 50 and older already had late stage infection (AIDS) when they received an HIV diagnosis 2016

The good news is that as a result of the development of highly active antiretroviral therapy starting in the 1990s and today, life expectancy for many people with HIV nears that of a person without HIV. The bad news is research increasingly shows that diseases that typically strike HIV negative people in their 60s and 70s are occurring in people with HIV in their 40s and 50s.

We have seen a decline of 5% in HIV diagnosis nationwide, but we still have special populations where we see increases in the number of infections.

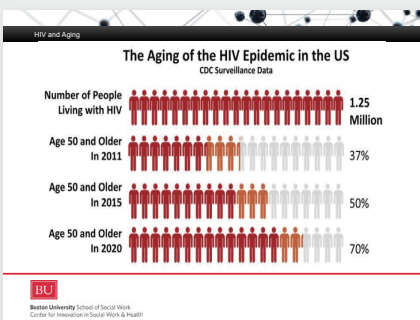
(continued)



SLIDE 3 (continued)

Growing older with HIV is uncharted territory. This is the first generation of people with HIV who are over 50.

The American Academy of HIV Medicine (AAHIVM), the American Geriatrics Society (AGS) and the AIDS Community Research Initiative of America (ACRIA) released the first clinical treatment strategies for managing older HIV patients: *The HIV and Aging Consensus Project: Recommended Treatment Strategies for Clinicians Managing Older Patients with HIV* in the fall of 2011.

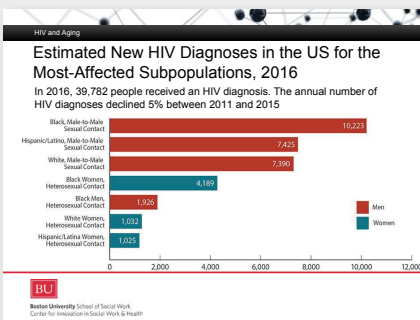


SLIDE 4

Review the chart.

People with HIV who are over 50 are a growing population. According to CDC surveillance data:

- Number of people with HIV is 1.25 million
- In 2011—37% were age 50 and older
- In 2015—50% were age 50 and older
- In 2020—70% are projected to be 50 and older



SLIDE 5

Point out the following on the chart:

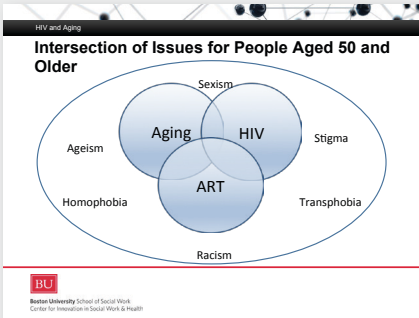
Disparities: The most impacted sub-populations are:

- Black men who have sex with men (MSM);
- White MSM; and
- Latino MSM; followed by
- Black, Latina, and white heterosexual cisgender women.
 - Among people aged 50 and over, Blacks/African Americans accounted for 43% of all new HIV diagnosis in 2015. Whites accounted for 36%, and Hispanics/Latinos accounted for 17%.
 - Among people aged 50 and older, 49% of new HIV diagnosis in 2015 were among gay and bisexual men, 15% were among heterosexual men, 23% were among heterosexual women, and 12% were among people who inject drugs.

It's important to note that this slide only shows subpopulations that represent more than 2% of all HIV diagnoses, so smaller, but still heavily impacted communities are not reflected.

Let's take a closer look at some of these disparities. In 2016:

- African Americans represented 12% of the population, but accounted for 44% (17,528) of HIV diagnoses. African Americans have the highest rate of HIV diagnoses compared to other races and ethnicities.
- Hispanics/Latinos represented 18% of the population, but accounted for 25% (9,766) of HIV diagnoses.



SLIDE 6

Older people with HIV have to grapple with aging, HIV, and the effects of anti-retroviral therapy (ART), all within the context of stigma and societal oppression which may include racism, homophobia, transphobia, sexism, and ageism.

HIV and Aging

Activity: Special Challenges

HIV among those aged 50 and older:

1. Clinical and physical health
2. Mental and emotional health
3. Sexual health

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SLIDE 7

Group activity: special challenges

Break participants into 3 groups and assign each group one of the 3 topics listed below. If there are fewer than 10 participants then conduct activity as a large group. Have the group(s) discuss what challenges people with HIV who are 50 or older may encounter with respect to the topic. Assign a recorder to write on the flip chart and a recorder to share with the larger group. Allow the groups 5 minutes to discuss before reporting back to the larger group.

1. Clinical and physical health
2. Mental and emotional health
3. Sexuality and sexual health

After the group discussion, the facilitator will close out the activity by reviewing any issues not covered by participants by reviewing the next slide.

HIV and Aging

Clinical and Physical Health

- HIV inflammation
- Long-term effects of antiretroviral medication
- Polypharmacy
- Co-morbidities

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SLIDE 8

Make sure to cover the following points, or emphasize them during the group discussion:

- HIV treatments have decreased the likelihood of AIDS-defining illnesses among people aging with HIV.
- HIV-associated non-AIDS conditions are more common in individuals with long-standing HIV infection. These conditions include cardiovascular disease, lung disease, certain cancers, HIV-Associated Neurocognitive Disorders (HAND), and liver disease (including hepatitis B and hepatitis C), among others.
- In addition, HIV appears to increase the risk for several age-associated diseases, as well as to cause chronic inflammation throughout the body. Chronic inflammation is associated with a number of health conditions, including cardiovascular disease, lymphoma, and type 2 diabetes.

HIV and Aging


Polypharmacy

Polypharmacy, the use of multiple medications, is common.

People with HIV are living longer with improved antiretroviral therapies. As patients age, other health conditions become more common such as:

- Heart Disease
- High Cholesterol
- High Blood Pressure
- Diabetes
- Osteoporosis
- Kidney Disease
- Non-AIDS Related Cancer


Drug-drug interactions effects may decrease the effectiveness of HIV medications or increase medication toxicity.

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HIV and Aging

Mental and Emotional Health


- Studies have found high rates of depression among older people with HIV
- Social isolation is an important issue:
 - Older people may face isolation due to illness or loss of family and friends.
 - Stigma from HIV infection and aging.
 - Negative stereotypes of aging, including viewing older people as:
 - Needy
 - Senile and less useful than younger people
 - Stigma can lead to increased symptoms and decreased quality of life
 - Social isolation has been linked to a decrease in health and quality of life

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HIV and Aging

Substance Use

- Rates for substance use are higher in older individuals with HIV than among same-age peers who are HIV negative.
- Increases in depression have been linked with increased use of substances, including alcohol, marijuana, cocaine, opioids, and benzodiazepines.
- Interactions can occur between prescription medications and illicit substances. These interactions may make it difficult for individuals to adhere to their prescribed medications and could greatly reduce quality of life.

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SLIDE 9

Polypharmacy—the use of multiple medications—is common. We talked about polypharmacy when we discussed drug to drug interactions and drug to condition interactions.

The number of medications prescribed for conditions such as heart disease, high cholesterol, and diabetes predicts the number of drug interactions.

- Drug-drug interaction—a reaction between two (or more) drugs.
- Drug-condition interaction—a reaction that occurs when taking a drug while having an existing medical condition.

People with HIV are living longer than ever before with improved antiretroviral therapies, so as patients age, other health conditions become more common.

SLIDE 10

Review the slide making sure to emphasize the following points:

- People need human connection in order to survive. As people grow older, a chipping away of connections and social life can lead to isolation from family and community.
- An increased burden of symptoms, such as fatigue, pain, and depression, are perhaps worse in women with HIV. This can negatively influence everything from daily functioning, to employment, to quality of life.
- HIV and dementia can be particularly challenging.

SLIDE 11


Review the slide.

Note that veterans are particularly at risk. Homelessness and substance use are huge challenges for the veteran population. This group of people may not be seen as at risk because of stereotypes associated with being older.

HIV and Aging

Sexuality and Sexual Health

- Older individuals are sexually active, but there are lower rates of HIV testing among adults 50 and older.
- Post-menopausal women are at risk of HIV and STI infection due to increased risk of vaginal tearing during intercourse.
- Older adults generally have lower rates of condom use. Women who are not concerned about pregnancy may not use condoms.
- Older adults who are divorced or who have lost a partner due to death may be unaware of HIV risks.

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SLIDE 12

Review the slide.

Older Americans are more likely than younger Americans to be diagnosed with HIV infection late in the course of their disease, meaning they start treatment late, and have more damage to their immune systems.

Older people are sexually active, including those with HIV, and may have the same HIV risk factors as younger people, including a lack of knowledge about HIV prevention, as well as having multiple sex partners.


Older people also face some unique issues:

- Many widowed and divorced people are dating again. They may be less aware of their risks for HIV than younger people, believing HIV is not an issue for older people. Thus, they may be less likely to protect themselves.
- Women who no longer worry about becoming pregnant may be less likely to use a condom and to practice safer sex. Age-related thinning and dryness of vaginal tissue may raise older women's risk for HIV infection.
- Although they visit their doctors more frequently, older people are less likely than younger people to discuss their sexual habits or drug use with their doctors. And doctors are less likely to ask their older patients about these issues.

HIV and Aging

PrEP for Older Adults

- Condom use declines with age; used by less than 10% of those over age 50.
- 15 to 20% of older adults with HIV engage in high-risk (unprotected) sex.
- In multiple studies, older adults with HIV report that their partners are often not capable of using a condom, due to the inability to sustain an erection.
- Many older women with HIV report that they and their male partners do not perceive the need to use a condom because they are post-menopausal.

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SLIDE 13

Review the slide.


Although older adults often have sexual relations more with age-matched peers, several studies have shown that there is a significant amount of high-risk behavior occurring between younger and older individuals. For the older adult with HIV who is having sex with a younger person, the opportunity to encourage the use of PrEP is evident.

Older adults with HIV, with the support of providers, can be effective advocates for the use of PrEP among their seronegative, at-risk sexual partners, be they casual, short-term, or long-term. Many of these at-risk partners are also among those least likely to be routinely tested for HIV. The use of PrEP together with "treatment as prevention" and other prevention interventions (condoms and behavioral interventions) is considered to be an important path toward ending the AIDS epidemic.

HIV and Aging

Case Scenario: Ms. Mavis Jones

Mavis is a 63-year-old African American female. She is pre-diabetic, postmenopausal, and has high blood pressure. She's a member of the Lively Steppers Dance group that meet at the Elks Club three days a week, and participates in dances on weekends. She's very social, smokes a pack of cigarettes a day, and has 3 to 5 cocktails a week. Mavis was diagnosed with AIDS when her long-term partner Stan died of lymphoma three years ago. Mavis began treatment and has been adherent to her ART. She has not disclosed to family or friends because of the stigmatizing language they have expressed about people with AIDS.


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HIV and Aging

Living Well: Older Adults with HIV

While these health challenges mentioned may seem discouraging, people with HIV are now living long-enough, healthy-enough lives to experience the same types of conditions as the general population.

- There is no magic bullet for aging well, no matter your health status.
- Evidence suggests some promising, nonpharmacological strategies that can help adults.
 - Physical activity – increasing the amount, intensity, and frequency
 - Improves cardiovascular health
 - Reduces symptoms of fatigue
 - Improves cognitive functioning
 - Improves chronic health conditions including hypertension, diabetes, and depression

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SLIDE 14

Activity: Case scenario

Ask a participant to read the scenario. Ask participants to reflect and then answer the following questions:

Ask, “What are the challenges that Mavis must face to improve her health?”

- Preventing diabetes
- High blood pressure
- Smoking
- Feels stigmatized

Ask, “What are some options, education, and screenings you could possibly discuss with her to address these challenges and improve her quality of life?”

- Diabetes class—diet and high blood pressure
- Exercise—weigh bearing
- Smoking cessation

Ask, “What are things Mavis is doing that are affirming that you could point out?”

- Dance group—aerobic exercise
- Social support outreach

Ask, “Do you have other concerns or questions you would want to discuss with Mavis?”

Ask: “How can you as a CHW help Mavis stay healthy?”

- Check in with her by phone or visits to see if she is seeing her doctors about managing not only HIV but diabetes and high blood pressure. She may be seeing more than one doctor so it is important for her to keep all her medical appointments. If you agency allows you to accompany her to appointments ask her if there is any thing you can do to help her with appointments and if she would like go to appointments with her.
- Discuss options about cutting back the number of cigarettes she smokes.
- Talk with her about who she might feel comfortable disclosing her status and if you can help her manage the process. Since she describes herself as social, ask her if she would like to connect with other people who are HIV positive.

SLIDE 15


Close by summarizing: Growing older with HIV is uncharted territory. This generation is the first to live longer and healthier lives. People with HIV are now living long-enough, healthy-enough lives to experience the same conditions related to aging as the general population. Living well with HIV is very similar to living with other chronic illnesses, or just “living well.”

There is no magic bullet for aging well, no matter your health status, however exercise can improve lean body mass, decrease fat, stress, fatigue, and depression, and improve strength, endurance, and cardiovascular fitness. It may also help the immune system work better. Accessible exercises can include walking, water aerobics, etc.

HIV and Aging

Live Well: Older Adults with HIV

- Eating a nutritious, balanced diet can improve chronic health conditions.
- Limiting alcohol consumption is important for aging well.
- Positive social interactions can improve HIV treatment adherence.
- Paid employment can be beneficial; research also finds that volunteerism, activism, and being involved in a spiritual community can be a source of helpful interactions.
- "You Are Only as Old as You Feel" – a positive attitude toward one's age can have a positive effect on one's health.

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SLIDE 16


Review the slide.

Other health strategies that can help are eating nutritious meals, having positive social interaction, a positive attitude, and employment or volunteer work. Being involved in one's community can be a source of good health. Artistic expression can be beneficial as well.

HIV and Aging

Resources and References

1. Living and aging well with HIV: New strategies and new research, The Conversation - <https://theconversation.com/living-and-aging-well-with-hiv-new-strategies-and-new-research-37485>
2. Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention: <https://www.cdc.gov/nchhstp/default.htm>
3. AIDS Info <https://aidsinfo.nih.gov/understanding-hiv-aids/fact-sheets/2580/hiv-and-older-adults>
4. The Well Project <https://www.thewellproject.org/hiv-information/aging-and-hivWellness>
5. Diverse Elders Coalition, Eight Policy Recommendations for Improving the Health and of Older Adults with HIV, 2014, <https://www.diverseelders.org/resource/eight-policy-recommendations-for-improving-the-health-wellness-of-older-adults-with-hiv/>

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SLIDE 17

Share resources and references for helping people with HIV who are over 50.

Case Scenario

Ms. Mavis Jones

Mavis is a 63-year-old African American female. She is pre-diabetic, postmenopausal, and has high blood pressure. She's a member of the Lively Steppers Dance group that meet at the Elks Club three days a week, and participates in dances on weekends. She's very social, smokes a pack of cigarettes a day, and has 3 to 5 cocktails a week. Mavis was diagnosed with AIDS when her long-term partner Stan died of lymphoma three years ago. Mavis began treatment and has been adherent to her ART. She has not disclosed to family or friends because of the stigmatizing language they have expressed about people with AIDS.

HIV and Stigma



OBJECTIVES

At the end of this unit, participants will be able to:

- Understand how language shapes our world
- Understand the history of language in relation to HIV and other chronic illnesses
- Define stigma and its impact on HIV prevention, treatment, and care
- Explain the differences between stigmatizing and empowering language
- Identify “People First Language” and its importance
- Explore the use of empowering language when talking or writing about oneself and others



INSTRUCTIONS

1. In preparation for the session, review slides and the notes.
2. Welcome participants.
3. Review the unit objectives.
4. Review slides 3–27 on HIV-related stigma, types of stigma, levels of stigma, impact, microaggressions, self-talk, history of HIV-related language, media, and People First Language, and engage participants in discussion throughout as prompted in slide notes.
5. Facilitate activity on stigmatizing self-talk vs. empowering self-talk (slide 28).
6. Facilitate optional activity on internal and external stigma.
7. Wrap up. Close by summarizing. Encourage participants to engage in self-care if the session has been triggering in any way.



Related C3 Roles

Providing coaching and social support; providing culturally appropriate health education and information; cultural mediation among individuals, communities, and health and social service systems

Related C3 Skills

Interpersonal and relationship-building skills, communication skills, education and facilitation skills



Method(s) of Instruction

Lecture, group discussion, group activity



Estimated time

60 minutes



Key Concepts

Stigma, internal stigma, external stigma, HIV language, stigmatizing macroaggressions, People First Language



Materials

- Computer with internet access and projector
- PowerPoint slides
- Paper and pens

Handouts

- Using Language that Empowers Worksheet
- Stigmatizing Language

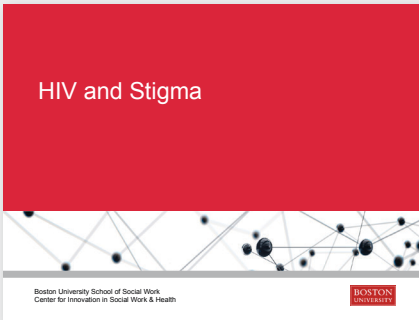
Answer Key

- Using Language that Empowers—Answers

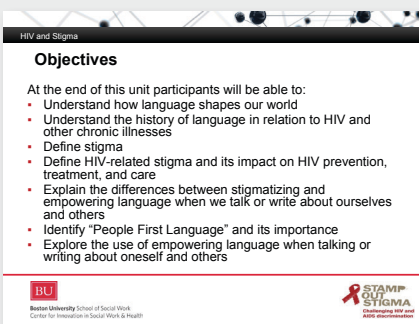


Resources

Department of Health and Human Resources Health Resources & Services Administration’s Ryan White Program available at: <https://hab.hrsa.gov/about-ryan-white-hiv-aids-program/about-ryan-white-hiv-aids-program>

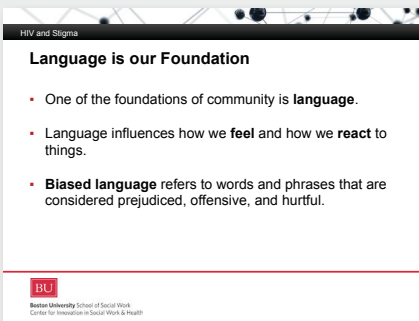


SLIDE 1



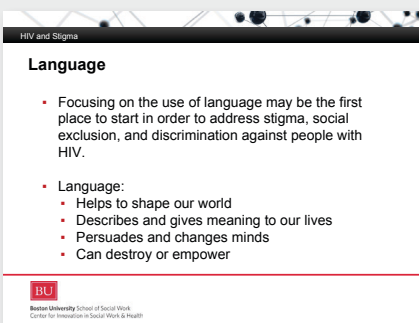
SLIDE 2

Review the objectives.



SLIDE 3

Review the slide.



SLIDE 4

Review the slide.

Defining Stigma



SLIDE 5

Ask, “What is stigma? Can someone define stigma, not related to HIV? Who has experienced stigma? How?”

SLIDE 6

Review the slide and make the following points.

Stigma is borne out of fear and it represents one of the most complex and pervasive barriers to health care for people with HIV/AIDS.

HIV/AIDS-related stigma often builds upon and reinforces other existing prejudices, such as those related to gender, sexuality, and race. For example, stigma associated with HIV is often based upon the association of HIV and AIDS with already marginalized and stigmatized behaviors, such as drug use and same-sex and transgender sexual practices.

Share the two major causes of stigma: Fear and ignorance.

People often do not know how HIV is or is not transmitted, so, fearing they might get infected through contact with a person with HIV, they isolate them.

Moral judgments: People know that HIV is transmitted mainly through sex or injecting drugs, so they assume that people with HIV get HIV through these activities. Therefore, they condemn people with HIV for “immoral” behavior. They don’t consider people born with HIV.

From the beginning, the Ryan White HIV/AIDS Program has fought against discrimination and the isolation that stigma creates. Ask participants how many people have heard of the Ryan White program? Explain that the Ryan White program is a federally funded program to help people with HIV to get care and treatment. The Ryan White Program made a commitment to help more people engage and remain in care.

SLIDE 7

Review the slide.

Stigma is a process where we (society) create a “spoiled identity” of an individual or a group of individuals. We identify a difference in a person or group, such as a physical difference (e.g., physical disfiguration), or a behavioral difference (e.g., people having lots of sex) and then mark that difference as a sign of disgrace. This allows us to stigmatize the person or group (i.e., they have already made up their mind about you).

HIV and Stigma

HIV and AIDS-related Stigma

- HIV/AIDS-related stigma refers to **prejudice, discounting, discrediting, and discrimination** directed at people perceived to have AIDS or HIV, as well as their **partners, friends, families, and communities**.

“Negative feelings, beliefs and behaviors directed toward an individual or group due to a particular label or characteristic.”

“Disqualification from full social acceptance”

“By definition, or course, we believe the person with a stigma is not quite human. On this assumption, we exercise varieties of discrimination, through which we effectively, if often unthinkingly, reduce his life chances”.

Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Englewood Cliffs, N.J.: Prentice-Hall.

HIV and Stigma

Social stigma refers to extreme disapproval of (or discontent with) a person or group on socially characteristic grounds that are perceived, and serve to distinguish them, from other members of a society.

HIV Related Stigma refers to:

- Prejudice.
- Discounting, discrediting and discrimination
- Directed at people perceived to be living with AIDS or HIV, as well as their partners, friends, families and communities.

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SLIDE 8

There are different types of stigma—social stigma is the exclusion of a person or group because of who and what they are perceived to be.

HIV/AIDS-related stigma refers to prejudice, discounting, discrediting, and discrimination directed at people perceived to have AIDS or HIV, as well as their partners, friends, families and communities. (Source: Herek, G. M. (1999). AIDS and stigma. *American behavioral scientist*, 42(7), 1106–1116.) So now it gets more expansive...it's not only people with HIV, but people that do the work to help them.

Ask if participants have any questions. HIV can be the elephant in the room in so many households, relationships, and organizations. It can be contentious, especially after a person shares their diagnosis with family or friends because of fear and lack of knowledge about HIV.

HIV and Stigma

Stigmatizing language is defined as language that:

- Perpetuates myths and stereotypes
- Uses nouns (labels) to describe people (e.g. HIV-infected woman)
- Uses demeaning or outdated words or phrases

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SLIDE 9

Review the slide.

Source: Patterson, J. B., and Witten, B. J. (1987). Disabling language and attitudes toward persons with disabilities. *Rehabilitation Psychology*, 32(4), 245.

HIV and Stigma

Why Language Matters

People experience multiple forms of oppression, stigma, and discrimination based on:

- Gender
- Race
- Sexual identity
- Socioeconomic status
- Adding an HIV diagnosis can magnify this, affecting self-worth, confidence, and self identity

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SLIDE 10

Review the slide.

SLIDE 11

Review the slide.

There are two types of stigma, internal and external.

Internal comes from self-judgement while external comes from what we hear from others. The results from both types can include ignorance, discrimination, violence just to name a few.

Internal stigma can be difficult to change because it can be rooted in our life experiences. Some people who receive an HIV diagnosis have already experienced multiple forms of oppression and discrimination based on gender, race, or sexual identity.

External stigma can cause us to internalize the messages we get from others. For example, are you “clean” or “dirty” or “damaged”?

SLIDE 12

HIV and AIDS do not discriminate; people do. Let’s briefly examine 3 different levels of stigma.

Individual level

A person may experience: Ostracism, rejection, avoidance, and prejudice.

Mandatory HIV testing of individuals without prior informed consent or confidentiality protections may occur.

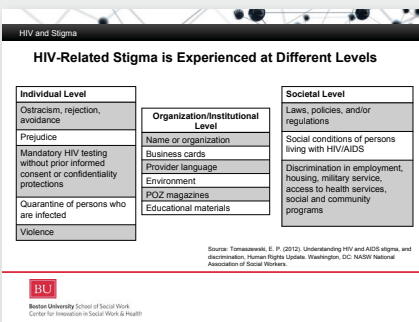
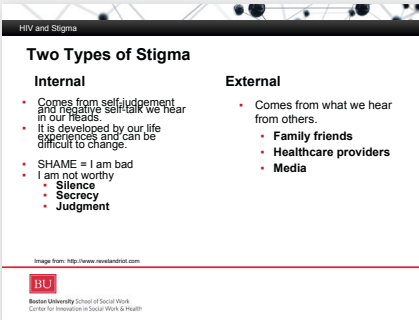
Violence can be a reality especially for the transgender community and other “high risk groups.”

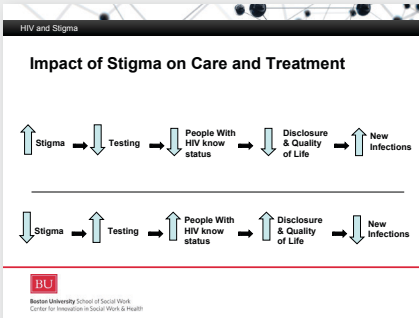
Organization/institutional level

Organizations also bear responsibility. If a clinic has the name “AIDS” or “HIV Clinic Services,” people may choose to not visit it. If a CHW’s business card says HIV/AIDS case manager, or the clinic’s educational materials display sad photos, this may turn people away. Try to provide comfort in clinic rooms, making them warm and inviting.

Societal level

Stigma on a societal level seeks punishment by enacting laws and policies against people with HIV and AIDS, while other diseases are rarely mentioned. People with HIV face discrimination in employment, military service, housing, access to health services, and basic civil and human rights. For example, the criminalization of HIV transmission and forcible segregation of HIV positive prisoners. Organizations such as the Association of Nurse in AIDS Care (ANAC), the American Medical Association, the U.S. Conference of Mayors and many more support the modernization of state HIV-specific laws and prosecutions.





SLIDE 13

Review the slide.

Source: Herek, G. M. (1999). AIDS and stigma. *American behavioral scientist*, 42(7), 1106–1116.

When stigma is high, testing is low, fewer people know their status, fewer people disclose, and new infections rise. When stigma is low, testing increases, more people learn their status, more people disclose, and new infections drop. Unfortunately, people are sometimes stigmatized even in places they go for medical care and other services.

While access to appropriate treatment and care for individuals with HIV is generally recognized as a fundamental human right, discrimination can prevent people from getting tested and seeking or adhering to treatment and care due to the stigma associated with being HIV positive. For example in the United States, it is estimated that one in five persons with HIV is unaware of their HIV status. HIV stigma intensifies feelings of fear and isolation for people with HIV, which can compromise engagement in care.

Think about:

Counseling and Testing

A person is less likely to seek HIV testing in environments where they perceive workers to be judgmental about sexual activity and drug use. The use of less stigmatizing language is important in reducing stigma and empowering people with HIV and reflect the current science and the ways that people with HIV feel about themselves. Reducing stigma can help reduce HIV transmission by increasing disclosure and encouraging HIV testing.

Access to Care

People who exhibit concerns about stigma are more likely to delay care and/or not adhere to care.

Disclosure of Status

The decision to reveal one's HIV status is associated with a person's level of comfort. The more accepting, caring, and nonjudgmental a social network is toward HIV, the more likely the individual is to disclose.

Health Disparities

Consider stigma as it relates to racial/ethnic health disparities among communities of color when accessing HIV/AIDS services.

Isolates Families

Stigma can discourage households from registering affected children in national support programs and further limits access to information, prevention, care, and treatment.

HIV and Stigma

Self Talk

Infected



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SLIDE 14

HIV infection is medically correct; however we don't have to refer to people with HIV as "infected".

When you think about someone being infected, what do you envision?

Instead, say "people with HIV."

HIV and Stigma

Microaggressions

The everyday verbal, nonverbal, and environmental slights, snubs, or insults, whether intentional or unintentional, that communicate hostile, derogatory, or negative messages to target persons based solely upon their marginalized group membership.

Diversity in the Classroom, UCLA Diversity & Faculty Development, 2014.

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SLIDE 15

Review the slide.

Ask, "What microaggressions have you heard?"

Ask, "What is the connection between stigma and microaggressions?"

Encourage participants to discuss in dyads or small groups. Then elicit responses.

HIV and Stigma

Microaggressions

Examples

- Where are you from?
- You speak English very well.
- You are a credit to your race.
- When I look at you I don't see color

Message (intended or not)

- You are not a true American
- You are a foreigner in your own country
- People of color are generally not as intelligent as whites
- Denying the significance of a person of color's racial/ethnic experience and history

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SLIDE 16

Review the slide for additional examples of microaggressions.

HIV and Stigma

Examples of Microaggressions

- "You really look great! I could barely tell you were transgender."
- "You don't look like you have HIV at all!"
- "I forgot you were gay. You act so straight."

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SLIDE 17

Review the slide for additional examples of microaggressions, and allow participants to respond.

Both stigma and microaggressions share similarities because they both stem from people's fears, ignorance, and judgments.

Microaggressions may be conscious or unconscious, and evoke shame in people. People are not aware of how stigma and microaggressions affect people with HIV. HIV stigma is wrong and unacceptable—it hurts people with HIV and affects their willingness to disclose and engage in care and other health enhancing practices.

History of HIV-Related Language



SLIDE 18

HIV and Stigma

Terminology

- GRID (Gay Related Immune Deficiency)
- AIDS (Acquired Immunodeficiency Syndrome)
- ARC (AIDS-Related Complex)
- Full-Blown AIDS
- HIV (Human Immunodeficiency Virus)
- Late Stage HIV, End Stage HIV, or Stage 3 (US) or Stage 4 (World Health Organization (WHO))



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SLIDE 19

HIV terminology and stigma

To understand the present, we must look at the past.

- GRID—Gay Related Immune Deficiency—was the original name for AIDS in 1982.
- AIDS—Acquired Immunodeficiency Deficiency Syndrome—changed from GRID to AIDS. GRID did not fully encompass the changing demographics of the disease. The first recognized cases were restricted to gay men.
- ARC—AIDS-related complex
- Full-blown AIDS
- HIV—Human Immunodeficiency Virus
- Late-stage HIV or end-stage HIV

All of these terms shaped how communities thought about this disease.

HIV and Stigma

Media



- Something is not correct on this magazine cover.
- What is it?



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SLIDE 20

The media can have a big effect on changing the tide on stigmatizing language. However, the media has a lot of responsibility. Mainstream media reporting on HIV often sensationalize stories about people with HIV. Media coverage often includes disclosure of the person's identity, disclosing the person's HIV status not only to the individual's community but also, with the internet, to the world.

Media messaging can either support HIV prevention, care, and treatment efforts or hinder them.

Ultimately, the outcome of HIV messaging depends upon three things: The clarity of the message; the precision of the message; and the sensitivity of the message

Ask, "How did Time Magazine get this wrong?"

Take responses from participants.

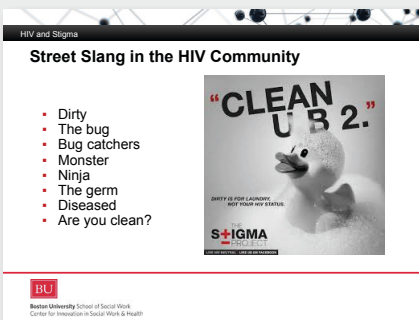
Answer: AIDS is not a virus, AIDS is a syndrome. AIDS, which stands for acquired immunodeficiency syndrome, is a condition characterized by progressive failure of the immune system.



SLIDE 21

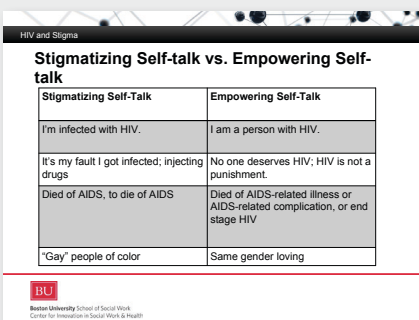
This poster is one of a series produced by Clement Communications, a public relations company that researches, creates, publishes, and distributes programs and materials to help organizations communicate with their intended audience. Designed to appeal to specific racial groups, each poster in the series features a different child. Although the child in the photograph appears to be happy and healthy, we learn from the message that her mother has given her AIDS. We see an emotional appeal to women—African-American women in this case—which along with the text suggests they have a responsibility beyond themselves to be tested for AIDS.

This ad shows a healthy baby but what is the message in the caption? Does the mother have a greater responsibility to be tested? What is the coded language from the media? Maybe the message is mothers with HIV should not have children?



SLIDE 22

These are examples of how language has been used in the HIV community in a negative way. How many of these have you heard?



SLIDE 23

Stigmatizing self-talk is "I'm infected with HIV." Empowering self-talk is "I am a person with HIV."

No one deserves HIV; HIV is not a punishment. HIV is a human disease that can affect anyone.

Incarcerated does not equal criminal. Being incarcerated does not define you as a person nor brand you as a criminal.

"Gay" people of color. Many people of color identify as same-gender loving rather than gay.

Transgender or gender-diverse people may use a pronoun that is different from what you might assume, so asking everyone what pronouns they use to show trans people they are welcome in your organization. Respecting people's core identify and the words they use to describe themselves is at the heart of putting people first.



SLIDE 24

Ask, “Who has heard the term “People First Language?”

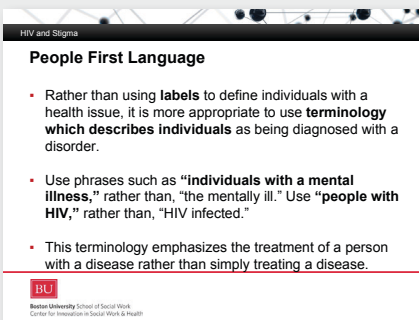
People First Language is an alternative way to talk about people with disabilities. It’s putting people before the disability. To use People First Language, simply say the person’s name or use a pronoun first, follow it with a verb, than state the name of the disability.

Using People First Language is not an attack nor does it call the disease to attention front and center. It puts the person first. We’ll look at a few examples later.



SLIDE 25

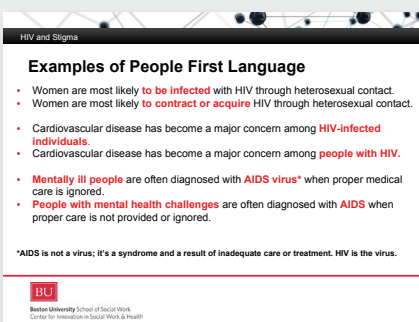
Review the slide.



SLIDE 26

Review the slide.

People First Language puts the person before the disability, illness or medical condition. A person is more than their medical diagnosis. People First Language helps to eliminate prejudice and it removes value judgements about the person. When we describe people by labels or medical diagnoses, we devalue and disrespect them as individuals.



SLIDE 27

We will look at a few examples that will help us distinguish between stigmatizing, incorrect, and insensitive language vs. what is preferred by communities.

Compare the first examples for each sentence (stigmatizing language) to the second example (People First Language).



SLIDE 28

Activity: Discuss stigmatizing language and its impact on people with HIV

- Distribute Using Language that Empowers worksheet.
- Divide participants into small groups.
- Participants will brainstorm empowering statements that will convert or reframe stigmatizing language and microaggressions.
- Review responses as a large group.
- Ask, “What can you do to help reduce stigmatizing language?”

Discuss and make distinctions between external and internal stigma.

- External stigma (enacted stigma, discrimination) refers to the experience of unfair treatment by others.
- Internal stigma (felt stigma or self-stigmatization) refers to the shame and expectation of discrimination that prevents people from talking about their experiences and stops them from seeking help.

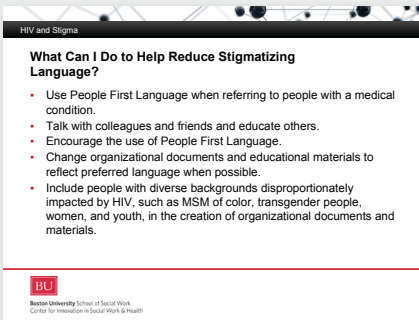
If any participants have disclosed that they are living with HIV, ask if they would be willing to briefly share their experiences by answering the following questions (3 minutes or less).

- What was a stigmatizing situation you have experienced since your diagnosis?
- How did it make you feel and what did you do?
- If the person has been living with HIV for several years (5 or more) would they feel any different if the situation were to occur today?



SLIDE 29

Review the slide.



SLIDE 30

What can we all do to reduce stigma?

- Use People First language when referring to people with a medical condition.
- Talk with colleagues and friends and educate others. Encourage use of People First Language.
- Change organizational documents and educational materials to reflect preferred language when possible.
- Include people with diverse backgrounds disproportionately impacted by HIV, such as MSM of color, transgender people, women, and youth in the creation of organizational documents and materials. This will help ensure that language is culturally appropriate beyond the issue of HIV.

Optional activity

- In small groups, have participants develop situations that are examples of external stigma and internal stigma.
 - Example external stigma: A client has been expelled from their home due to their HIV status and sexuality.
 - Example internal Stigma: A client believes they deserved HIV because of their behaviors.
- Ask probing questions to help participants understand the impact stigma plays in providing services as a CHW.
- Example questions:
 - What impact can internalized stigma have on a person's motivation or willingness to work with a CHW?
 - In what ways can stigma impact a CHW's role effectiveness if they experience externalized or internalized stigma?

Emphasize that stigma separates and is counterproductive to building supportive, honest, and authentic working relationships with clients.

Summarize: Stigma can be a difficult topic because it often brings up hurt feelings, past aggressions, and negative experiences for people in general, not just people with HIV. Take some time for self-care if this lesson has triggered feelings for you.

Using Language That Empowers

Stigmatizing Statements and Microaggressions	Possible Interpretations/Implications	Empowering Statements
1. I'm infected with HIV.	I am a disease. I am nasty. I should be feared.	I am living with HIV. I have HIV. I have been diagnosed with HIV.
2. "That's so gay."		
3. I caught HIV by being "out there" bad.		
4. I got HIV from having risky sex.		
5. "You don't look like you have HIV at all!"		
6. We should target prostitutes for HIV testing day.		
7. He got HIV from "shooting up."		
8. "Anyone can be successful if they try hard enough."		

Using Language That Empowers—Answers

Stigmatizing Statements and Microaggressions	Possible Interpretations/Implications	Empowering Statements
1. I'm infected with HIV.	I am a disease. I am nasty. I should be feared.	I am living with HIV. I have HIV. I have been diagnosed with HIV.
2. "That's so gay."	Your culture is your most defining feature. Something is over the top, flamboyant, and exaggerated.	I am proud to be gay. That is so exaggerated or over the top.
3. I caught HIV by being "out there" bad.	HIV is easily spread through casual contact. I am bad or what I have done is bad; therefore, I deserve HIV.	I contracted HIV by [describe a behavior]. I am learning to live with HIV.
4. I got HIV from having risky sex.	What is risky sex?	I got HIV by having condomless sex, sex while using drugs, sex with more than one partner
5. "You don't look like you have HIV at all!"	People with HIV look sick.	People with HIV can look and feel healthy.
6. We should target prostitutes for HIV testing day.	Prostitutes do not use protection and are a greater risk than others. Labels objectify the person.	We could reach out to sex workers to offer testing.
7. He got HIV from "shooting up."	Injection drug use.	He contracted HIV by injecting drugs.
8. "Anyone can be successful if they try hard enough."	Implies laziness or inadequacies	Do your best. Give your best effort toward accomplishing your goals.

Stigmatizing Language

Stigmatizing	Preferred
AIDS virus	HIV
HIV/AIDS	HIV AIDS (only when referring to AIDS) HIV and AIDS
HIV virus	This is a redundant; use HIV
Promiscuous	This is a value judgment and should be avoided
Risk group	Risk
Risky sex – Unprotected sex	Sex without a condom
PLHA or PLWHA	People with HIV or Person with HIV
HIV patient, AIDS patient	Person with HIV
Positives or HIVers	People with HIV
AIDS/ HIV carrier	Person with HIV
AIDS victim or AIDS sufferer	Person with HIV
Died of AIDS, to die of AIDS	Died of AIDS-related illness or AIDS-related complications or end stage HIV
Victim	Person with HIV
Sufferer	Person with HIV
Contaminated	Do not use
Innocent (victim)	Do not use
AIDS orphans	Children orphaned by loss of parents or guardians who died of AIDS related complications
Full-blown AIDS	There is no medical definition for this phrase, simply use the term AIDS, or Stage 3 HIV
Zero new infections	Zero new transmissions/new cases
Mentally ill people	Person with a mental health challenges
HIV infected	Person with HIV
HIV infections	HIV transmissions, diagnosed with HIV
Number of infections	Number diagnosed with HIV/number of acquisitions
Compliant	Adherent
AIDS test	HIV test
To catch AIDS To contract AIDS To catch HIV	An AIDS diagnosis, developed AIDS, to contract HIV
Became infected	Contracted/acquired/diagnosed
HIV infected mother	Mother with HIV
Mother to child transmission	Vertical transmission, perinatal transmission
HIV infected baby	Baby with HIV
HIV exposed infant	Infant exposed to HIV
AIDS/HIV carrier	Person with HIV

Supporting Clients with Disclosure



OBJECTIVES

At the end of this unit, participants will be able to:

- Define disclosure
- Identify risks and benefits of disclosure
- Develop strategies to assist clients in weighing the risks and benefits of disclosure
- Develop strategies to support clients through the disclosure process
- Use resources to support clients with disclosure to family, intimate partners, and providers



INSTRUCTIONS

1. Before the session begins, place two sheets of clip chart paper around the room, one labeled “benefits,” the second labeled “risks.” Distribute post-it notes and markers. Review resources to update and share information with participants.
2. Welcome participants.
3. Review the unit objectives.
4. Review slides 3–4 providing an overview of disclosure.
5. Facilitate activity about benefits and risks of disclosure.
6. Distribute Stages of Change Model handout. Review slides 6–7 on benefits and risks, and the stages of change model.
7. Tell participants, as CHWs we have a unique role in helping our clients with disclosure. Ask participants:
 - ◇ CHW, what do you need to consider when working with a client around disclosure?
 - ◇ CHW what can you do to take care of yourself when you are working with a client about disclosure?
 - ◇ What are some guidelines you would suggest to a client when they are getting ready to disclose their HIV status?
 - ◇ Record responses on a flipchart.
8. Review slides 9–11 and compare to responses on flipchart. Distribute the Disclosure Activity handout.

(continued)



Related C3 Roles

Providing coaching and social support, providing culturally appropriate health education and information, advocating for individuals and communities

Related C3 Skills

Interpersonal and relationship-building skills, communication skills, advocacy skills, education and facilitation skills



Method(s) of Instruction

Lecture; group discussion; group activity-case scenarios



Estimated time

1.25 hours



Key Concepts

Disclosure, U = U, PrEP, countertransference



Materials

- Computer with internet access and projector
- PowerPoint slides
- Flip chart
- Post-it notes
- Markers
- Video: Disclosure: Family Table Talk (optional) <https://www.youtube.com/watch?v=NfwvUgOuiTE>

Handouts

- Stages of Change Model
- Discussion and Role-Play Guideline—Telling Others You Are HIV Positive
- Disclosure Activity
- Tips for CHWs: Helping Clients Disclose
- Case Scenarios: HIV Disclosure
- 13 Steps to Better Active listening
- The 7 Stages of Grief

Supporting Clients with Disclosure



INSTRUCTIONS (continued)

9. Facilitate activities on tips for disclosure and self-care slide 12.
10. Review slides 12–14 to emphasize key points on how CHWs can help with self-care and tips for disclosure. Distribute Tips for CHWs: Helping Clients Disclose handout.
11. Review slide 15, distribute 13 Steps to Better Active Listening handout. Ask participants to read each technique.
12. Review slides 16–19 about a client trying to disclose to a child, the stages of grief, and countertransference.
13. Facilitate case scenario activity, slide 19.
14. Facilitate discussion about how comfortable participants feel about their ability to support clients with disclosure slide 20.
15. Wrap up. Close with the video “Disclosure: Family Table Talk” (optional). Thank participants for their contributions and active engagement. Review the summary slide and share the final slide with additional resources. Highlight that as a CHW you are in a unique role as a member of the HIV care team to spend time and support people with HIV managing their life including who they choose to disclose their status.



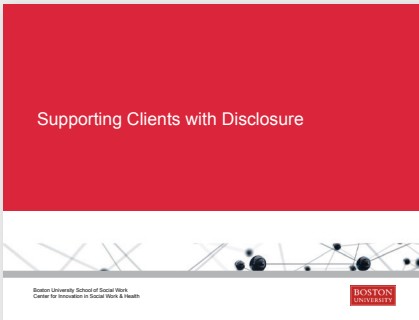
Resources

Stages of Change: <http://www.cpe.vt.edu/gttc/presentations/8eStagesofChange.pdf>

Become a Better Listener: Active Listening available at: <https://psychcentral.com/lib/become-a-better-listener-active-listening/>
By John M. Grohol, Psy.D.

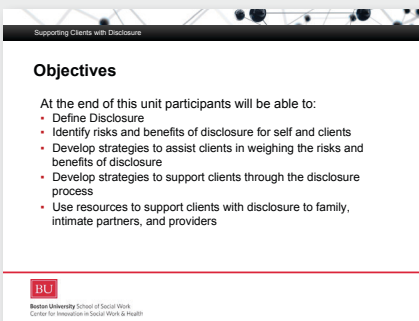
The 7 Stages of Grief: Through the Process and Back to Life available at: www.recover-from-grief.com/7-stages-of-grief.html

SLIDE 1



SLIDE 2

Review the objectives.



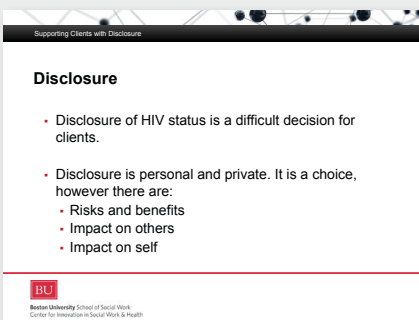
SLIDE 3

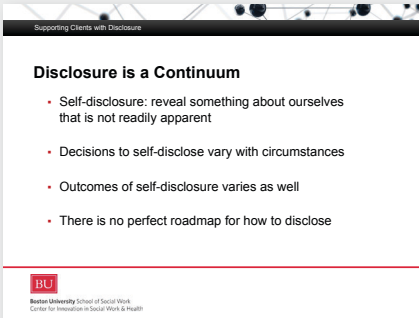
Review the slide.

What is disclosure? The dictionary defines it as “to reveal, to admit.” The term is used in finance, law, and real estate. Most often we think of disclosure as self-disclosure. That is, we are revealing something about ourselves that is not otherwise evident and that perhaps we don’t reveal to everyone.

Deciding who to disclose to, what to disclose, why to disclose, when, and where is an on-going process for clients—one that is stressful, creates fear and anxiety, and can change relationships.

The decision to disclose is personal. There are risks and benefits to weigh and there are fears to conquer. The focus of this unit is to provide you with information and resources to help you help your clients with their decision to disclose.





Supporting Clients with Disclosure

Disclosure is a Continuum

- Self-disclosure: reveal something about ourselves that is not readily apparent
- Decisions to self-disclose vary with circumstances
- Outcomes of self-disclosure varies as well
- There is no perfect roadmap for how to disclose

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SLIDE 4

Review the slide.

Self disclosure is a fact of life for all of us, and we each make decisions many times a day to disclose or not to disclose information about ourselves. Sometimes those decisions are easy and sometimes they are hard. Sometimes we disclose to a few (and hope they keep it quiet) and sometimes we tell everyone.

Disclosure of HIV status is difficult, and the difficulty sometimes arises from what we think the other person's reaction might be. There is still so much stigma and fear associated with HIV that disclosure can be risky. We may know someone who has been rejected by family or loved ones, fired from their job, or shunned by their friends after disclosing their HIV status. We may also know someone who benefitted from disclosure; they gained strength, confidence, and found support and love for who they are with their secret revealed.

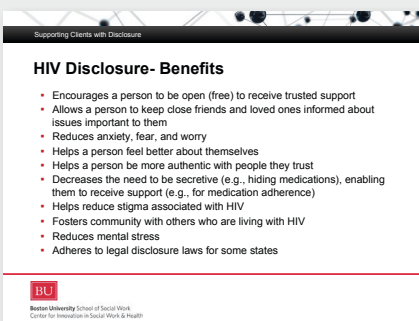


ACTIVITY:
RISKS AND BENEFITS OF DISCLOSURE

SLIDE 5

Activity: Brainstorm risks and benefits

- Preparation: Before the session begins, place two pieces of flip chart paper around the room—one labeled benefits, the second labeled risks.
- Give the following instructions: There are benefits and risks to people with HIV disclosing their status. Using the post-it notes in front of you, write down as many benefits and risks that you can think of related to someone disclosing their HIV status and then post it on the sheet it applies to. Allow five minutes for the activity, then review as a group.
- Review the following slides to cover any risks and benefits that participants did not post.



Supporting Clients with Disclosure

HIV Disclosure- Benefits

- Encourages a person to be open (free) to receive trusted support
- Allows a person to keep close friends and loved ones informed about issues important to them
- Reduces anxiety, fear, and worry
- Helps a person feel better about themselves
- Helps a person be more authentic with people they trust
- Decreases the need to be secretive (e.g., hiding medications), enabling them to receive support (e.g., for medication adherence)
- Helps reduce stigma associated with HIV
- Fosters community with others who are living with HIV
- Reduces mental stress
- Adheres to legal disclosure laws for some states

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SLIDE 6

Disclosure does have its benefits. However, benefits of disclosure can be different for everyone. By disclosing, it encourages a person to be open in sharing their HIV status and getting support from people with whom they trust.

Disclosure helps to reduce anxiety, fear and worry of the unknown. People with HIV can feel better about sharing an important aspect of themselves. They don't have to hide anymore, and it helps indirectly to boost the immune system, which is impacted by stress.


Disclosure helps them feel genuine with others who they care about and trust; they no longer need to be secretive, hide when taking medications, or make up reasons for medical appointments. It reduces the stigma associated with living with HIV, especially as they connect with others who are also living with HIV—they begin to build a network of support.

Supporting Clients with Disclosure

Supporting Clients with Disclosure

HIV Disclosure- Risks

- Stigma
- Risk of discrimination (i.e. impact on career and/or personal life)
- Risk of criminalization
- Emotional or physical harm
- People will not respect privacy – fear of others
- Rejection
- Lack of strong social network
- Feeling ashamed, guilty, dirty, judged as irresponsible (e.g., can't protect him/herself)
- Homophobia
- Burdening others

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SLIDE 7


People with HIV are still stigmatized and unfortunately that is not going away anytime soon. Of course there are many things we can do to combat stigma; mainly, normalize it by talking about it in our communities at schools, universities, churches, etc.


- Disclosure can impact a career at any job level (e.g. server at a restaurant, dentist, nurse, etc.) and it can impact your personal life (e.g. friends and family who don't understand how the disease is transmitted can act out of ignorance.
- People have experienced emotional and physical harm, even death after disclosing or if someone finds out about their status.
- Fear of others respecting privacy—we'll talk about tips and considerations to share with clients when they are thinking about disclosing.
- Rejection, feeling ashamed, guilty, dirty, judged as irresponsible, and lack of a strong social network can cause isolation and withdrawal.
- Homophobia is real; people can be shunned and put in harm's way due to fear and ignorance.
- Burdening others—children may feel that they have to care for a parent living with living with HIV, family members may receive news of a diagnosis they may have no knowledge of—or even fear.

Research suggests that in most situations, the significant benefits outweigh the risks and that most people feel little or no regret after disclosing.

Supporting Clients with Disclosure

Stages of Change and Disclosure



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SLIDE 8


Briefly review the Stages of Change Model handout.

Working with clients to help them think about where they are on the spectrum of disclosure is helpful in determining what their next course of action will be. Are they at the beginning, at pre-contemplation, not thinking about disclosing—or are they at the action stage, ready to disclose on a small scale to one or more people? Or are they ready to disclose to an audience on World AIDS Day?

Supporting Clients with Disclosure

General Guidelines for Telling Others You Are HIV Positive



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SLIDE 9

Review the Discussion and Role-Play Guideline—Telling Others You Are HIV Positive handout. CHWs can have a discussion or role play with clients in helping guide their decision to disclose or not.

Supporting Clients with Disclosure

Disclosure Tips: Preparation, Action, and Behavior

- Prepare – get informed about HIV
- Leave resources (e.g., articles or a hotline phone number) for the person you tell
- Get support
- Talk it over with someone you trust, and come up with a plan
- Accept the reaction
- You can't control how others will deal with your news
- If telling a significant other or partner, other resources or fact sheets on U=U or PrEP may be helpful

Source: <http://www.thebody.com>

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Supporting Clients with Disclosure

Disclosure Tips Continued

- Be selective
- Consider the 6 W's
 1. Who do you tell?
 2. What do you want to tell them about your HIV status?
 3. What are you expecting from the people you are disclosing your HIV status to?
 4. When should you tell them?
 5. Where is the best place to have this conversation?
 6. Why are you telling them?

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Supporting Clients with Disclosure

Self-Care Tips and Considerations

As a CHW

- What can you do to take care of yourself when you are working with a client on disclosure?
- What do you need to consider when working with a client on disclosure?
- What are some guidelines you would suggest to a client when they are getting ready to disclose their HIV status?

Source: <http://www.thebody.com/>

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SLIDE 10

- CHWs can coach the client in the following ways with regard to their preparation, actions, and behaviors prior to disclosing—review the slide.
- Encourage the client to gain knowledge about HIV, that way they can have answers to questions from the person they are disclosing. The client's knowledge may reassure the person that things will be okay.
- Have resources available. There are up to date, factual websites where one can get informative brochures and other resources.
- Depending on how the disclosure process goes, the CHW can provide support or they may need to refer the client to seek out professional therapy to help manage their feelings.
- Encourage the client to think about what they know about the person they are disclosing to, and to try to anticipate their reaction—but also accept how the person may react to the news. Ultimately, we can only control ourselves and not how others respond to information.

SLIDE 11

Ask a participant to read the slide.

SLIDE 12

Group activity: CHWs and self-care, and tips and considerations that CHWs can share with clients

- Split participants into two groups. Label two flip chart sheets: CHWs and self-care, and tips for disclosure.
- Instruct participants: Disclosure can be stressful for both CHWs and clients. Have one group identify tips CHWs can share with clients for disclosure, and the other identify self-care practices. Each group will have a recorder to write responses, and a reporter to report back. Allow 10 minutes for the groups to discuss.
- Ask the reporters for each group to share the groups responses. Review slides for any tips the groups did not cover.
- Distribute the handout Tips and Considerations for CHWs as They Work with Clients around Disclosure.

Ask, "What is your confidence level in supporting clients' disclosure decisions?" Tell participants to keep this question in mind while working on the case scenarios.


Distribute the 13 Steps to Better Active Listening handout. This can be useful in guiding CHWs in conversations with clients, and will be used during the case scenarios.

Supporting Clients with Disclosure

Supporting Clients with Disclosure

CHWs and Self-Care


- Supporting and coaching clients on disclosure can be stressful.
- CHWs may feel pressure (from themselves or the client) to give advice, and in turn, feel frustrated when clients don't follow through.
- Go at the client's pace and know your limits.
- Remember that disclosure is a decision for your client to make; not you.
- Other ways of handling stressful situations are to:
 - Try physical activity
 - Be sure to get rest and eat well
 - Talk about it

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Supporting Clients with Disclosure

Tips and Considerations for CHWs in Working with Clients around Disclosure

- CHWs can help clients consider why they want to disclose.
- Encourage clients to arrange a comfortable, appropriate time and place for the discussion.
- Tone — has a lot to do with how people might hear what you're telling them. Being calm and matter of fact may help inform their reaction and minimize their fears.
- Clients should make sure they are emotionally and physically safe.
- Clients may anticipate how the person might react to the disclosure.
- Encourage clients to ask what they want and do not want from the person they are disclosing to.

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Supporting Clients with Disclosure



The graphic shows the words "Active" and "Listening" written on colorful sticky notes. "Active" is on a row of five notes (red, blue, purple, pink, yellow) and "Listening" is on a row of seven notes (red, blue, yellow, pink, blue, yellow, blue). The notes are pinned to a white background.

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SLIDE 13

CHWs can support clients while still maintaining their own self-care. However, CHWs may experience feelings of transference and countertransference especially if the CHW is a person living with HIV, if they have a family member living with HIV, or if they have experience with disclosure from another traumatizing life event. CHWs can sometimes feel pressure to give advice and in turn feel frustrated when clients don't follow through.

You never know how disclosure is going to go. CHWs can advise clients to gain more knowledge, work with a support system such as a support group, or stick with a CHW to talk things through; however, the decision to disclose is ultimately up to the client.

SLIDE 14

It can be difficult to decide whether or not to disclose, but CHWs can help clients consider why and when they want to self-disclose. In other words, there should be a purpose for self-disclosing.

A few points the CHW can discuss with the client is to make sure there is a quiet place free of distractions, and make sure the client has adequate time so that there is time to react to the news.

The client should also be clear about what they want or do not want to receive from the person with whom they are disclosing. For example, if you are disclosing to a significant other because you want to be open and honest, then you may not expect them to respond to the news immediately, and instead allow them time to process what they have heard, just as you may have done when you were given your diagnosis—it took time to accept and fully understand what an HIV diagnosis meant. With close family, friends, and your significant other, you may want to ask them not to disclose your status to others.

SLIDE 15

Review the 13 Steps to Better Active Listening handout.

Keep these techniques in mind when having conversations with clients, and when we work on the new two activities.

Supporting Clients with Disclosure

How Can a CHW Help This Client?

A client is struggling with disclosure to children.

- A. Convince the client to only tell older children.
- B. Role-play different scenarios with the client.
- C. Tell the client to consult a therapist first.
- D. Advise the client to be open and honest, only answering questions asked.

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SLIDE 16

Ask participants which answer would they choose? After some responses, point out that there is no right or wrong answer. It really depends on the person disclosing knowing their own family members. Discuss the options:

- A. Convince the client to only tell older children
Depending on the age of the child, the child may be too young to understand what HIV and AIDS means and therefore does not understand how it affects them, whereas an older child may have already encountered the subject in school and definitely understands that the news not only impacts the person disclosing, but also the family.
- B. Role playing different scenarios with the client can give the client the confidence to be able to disclose to family or friends.
- C. Tell the client to consult a therapist first.
Seeing a therapist can help the client prepare themselves for disclosure and the reaction that may occur. In one example, a client was divorced and admitted that she contracted HIV from her ex-husband. She was distraught with how she was going to tell their children, various ages but all old enough to understand. She said that the therapist helped her understand how each child would probably receive the information. The client reported that the therapist was right on target and it helped her gain the confidence to disclose.
- D. Advise the client to be open and honest, only answering questions asked
How many times have we all given information that was not asked? Be honest, be clear, but be brief and allow children to process what they have been told. This gives them time to think about it and ask questions later.

Supporting Clients with Disclosure

HIV Grief and Disclosure

- Review the 7 Stages of Grief handout.
- Disclosure can be more difficult if a client has not gone through the grieving process.
- Stages of grief can help identify where clients are in the process.
- CHWs can review the stages with clients.

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SLIDE 17

Distribute the 7 Stages of Grief handout and very briefly review the stages of grief. This handout can be useful in guiding CHWs in conversations with clients. Many HIV long-term survivors said the most painful part was realizing that their friends were gone but they were still here. Disclosure can be more difficult if a client has not gone through the grieving process.

Supporting Clients with Disclosure

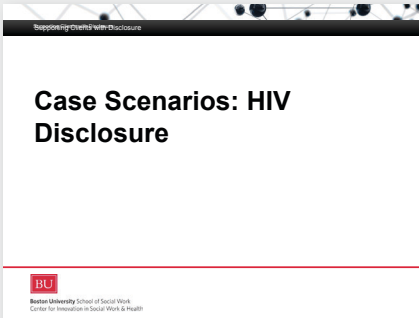
Countertransference and Disclosure

- CHWs cannot do this work and *not* be affected.
- CHWs may experience intense feelings towards clients with disclosure-related issues.
- CHWs may have a bias towards disclosing.
- Identifying feelings and beliefs in supervision can help CHWs "meet clients where they are at."

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SLIDE 18

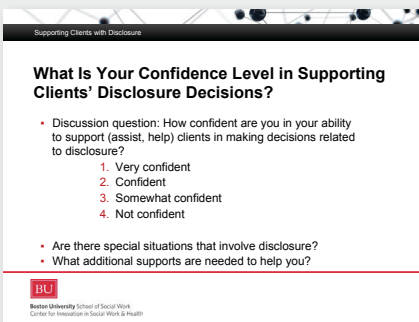
Review the slide.



SLIDE 19

Case scenario activity

- Divide participants into 2 groups and distribute the Case Scenarios: HIV Disclosure handout. Each group should select a recorder who will document the group's responses, and a reporter who will share them with the larger group.
- One group will discuss Tonya, the other James. Have the groups discuss for a few minutes, referring also to the Disclosure Activity handout, then report back on how they could help these clients.

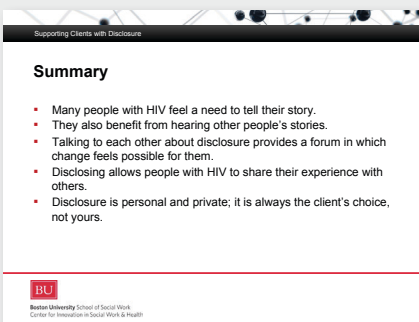


SLIDE 20

Closing discussion questions

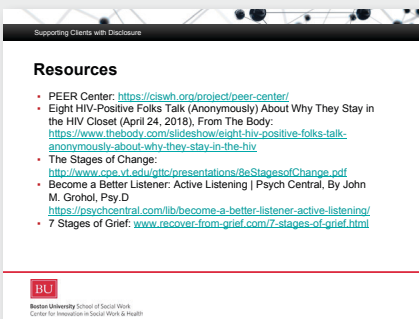
- Ask participants to share, by show of hands, how comfortable they feel in their ability to support clients with disclosure.
- Depending on time, ask, "What additional supports are needed to help you?"
- Explain that there may be special situations that involve disclosure (e.g. a CHW working with minors may need to disclose their status to school staff or in a court setting)
- When information is requested or needs to be released about a client, the CHW would need the client's consent, and in addition, a signed release of information from the client or guardian.

Show optional video, Disclosure: Family Table Talk <https://www.youtube.com/watch?v=NfwvUgQuiTE>



SLIDE 21

Review the slide.



SLIDE 22

Share resources with participants.

Stages of Change Model

According to the Stages of Change Model, behavior change is a process that involves moving through a series of 5 major stages: precontemplation, contemplation, preparation, action, and maintenance.

Stage 1. **Precontemplation** (*Not Ready*)

In this stage, people do not intend to take action in the near future, and can be unaware that their behavior is problematic.

Working with someone in precontemplation stage: Encourage them to think about the pros of changing their behavior, and to feel emotions about the effects of their negative behavior on others. Help them become more mindful of their decision-making and more conscious of the multiple benefits of changing an unhealthy behavior.

Stage 2. **Contemplation** (*Getting Ready*)

In this stage, people are beginning to recognize that their behavior is problematic, and start to look at the pros and cons of their continued actions. People in this stage intend to start the healthy behavior within the next 6 months.

Working with someone in contemplation stage: While they are usually aware of the pros of changing, their cons are about equal to their pros. This ambivalence about changing can cause them to keep putting off taking action. Encourage them to work to reduce the cons of changing their behavior.

Stage 3. **Preparation** (*Ready*)

People at this stage are ready to start taking action within the next 30 days. They take small steps that they believe can help them make the healthy behavior a part of their lives. For example, they tell their friends and family that they want to change their behavior.

Working with someone in preparation stage: Encourage them to seek support from friends they trust, tell people about their plan to change, and think about how they would feel if they behaved in a healthier way. Their number one concern is: when they act, will they fail? They learn that the better prepared they are, the more likely they are to keep progressing.



Stage 4. **Action**

In this stage, people make specific adjustments in changing their problem behavior or in acquiring new healthy behaviors.

Working with someone in action stage: You can teach people techniques for keeping up their commitments, such as substituting activities related to the unhealthy behavior with positive ones, rewarding themselves for taking steps toward changing, and avoiding people and situations that tempt them to behave in unhealthy ways.

Stage 5. **Maintenance**

People at this stage changed their behavior more than 6 months ago. People sustain action and work to prevent returning to their problematic behavior. It is important for people in this stage to be aware of situations that may tempt them to slip back into doing the unhealthy behavior—particularly stressful situations.

Working with someone in maintenance stage: It is recommended that people in this stage seek support from and talk with people whom they trust, spend time with people who behave in healthy ways, and remember to engage in healthy activities to cope with stress instead of relying on unhealthy behavior.

Adapted from: Prochaska, JO; Velicer, WF. The transtheoretical model of health behavior change. *Am J Health Promotion*, 1997. Sep–Oct; 12(1):38–48.

Discussion & Role-Play Guideline- Telling others you are HIV Positive

Here are a few questions CHW's can review to role-play and/or discuss with clients:

- Why do you want to tell them?
- Why do you feel they need to know?
- What do you expect from the person you are telling?
- What are the benefits and risks to telling?
- What if they don't handle it well?
- How will I feel if they tell someone else?
- What do you want from them?
- Anticipate the person's reaction (best/worst scenario)

Disclosure Activity

Goals of the Activity:

1. Understand to whom clients should disclose their status
2. Understand why people disclose their status
3. Identification of strategies to help clients with disclosure

WHO SHOULD THEY DISCLOSE THEIR STATUS:

Clients should be selective with whom they disclose their status. It's their personal decision. Some states have laws requiring clients to disclose their status before sexual encounters, sharing needles or before receiving medical care.

WHY DO PEOPLE DISCLOSE THEIR STATUS?

1. They want people to have a choice
2. They don't want to keep it a secret
3. It's a stress reliever because it's a heaviness that can be burdensome
4. It's a moral decision

WHAT ARE SOME TIPS ON DISCLOSURE?

1. Be selective
2. Consider the 6 W's
 - a. Who do you need to tell?
 - b. What do you want to tell them about your HIV infection?
 - c. What are you expecting from the people you are disclosing your HIV status to?
 - d. When should you tell them?
 - e. Where is the best place to have this conversation?
 - f. Why are you telling them?

Tips for CHW's: Helping Clients Disclose

CHW's can help clients consider the following:

- Be there to support the client at time of disclosure
- Encourage clients to arrange a comfortable, appropriate time and place for the discussion.
- Tone – has a lot to do with how people might hear what you're telling them. Being calm and matter of fact may help inform their reaction and minimize their fears.
- Clients should make sure they are emotionally and physically safe.
- Clients may anticipate how the person might react to their self-disclosure.
- Encourage clients to ask for what they want and do not want from the person they are self-disclosing to.
- Give a sense of hope – share your story or give facts
- Answer questions and dispel myths.
- Provide facts about HIV/AIDS – educate.
- Offer to connect with resources.
- Offer to follow up by phone in a couple weeks.
- Know the laws in your state and document the disclosure visit with the client.
- Remember that clients may go back and forth in their decision making, and that is no reflection on you.
- Use your supervisor as a sounding board.
- To relieve stress, talk with your supervisor and other supportive co-workers about your feelings.
- Keep in mind: Burnout, over-commitment and extending yourself beyond what is expected does not provide balance.

Case Scenarios: HIV Disclosure

HIV Disclosure

Tonya (HIV disclosure)

Tonya is a 19-year-old Latina who loves fashion. She spends hours daily curating her appearance, making sure that everything about her appearance is red carpet ready. Tonya is popular among her friends and is their “go to” person for high fashion looks and flawless make-up and hair consultation. She has big dreams of completing a degree in fashion design. At a recent office visit, Tonya learned two things that threaten her plans for the future. She learned that she was pregnant and tested positive for HIV.

For the last several months she has been receiving perinatal care and is on HIV medications. She is adjusting to the HIV diagnosis, but she’s intensely afraid to tell her partner. Right now, things are going well with him. He is 22-years-old and has a decent job selling car insurance. He is supportive and wants to be together to raise their unborn child, but knowledge of her HIV diagnosis could change everything!

As Tonya grapples with her circumstance, she sees her dreams flying further away from her. She writes in her journal, “Why should I bother? This is a hopeless situation.” Aside from her medical provider, Tonya’s journal is the only witness to her inner struggle. Every moment of her day seems to be filled with debates on whether to tell her partner about her HIV status. The weight leaves her feeling completely ashamed and worthless. Her medical provider noticed the changes in her mood and encouraged her to talk with you about disclosing to her partner.

What strategies can you use to help Tonya make a plan for disclosing to her partner?



James (HIV disclosure)

James is a 46-year-old heterosexual man who has been living with HIV for 5 years. He has worked hard to build a stable and happy life. He loves his job working for the City of Pasadena for the past 10 years and sees himself retiring from this position. On the weekends, James is active and enjoys landscaping, skating and playing tennis. His life is good, but he desires a life partner.

While playing tennis, he met a woman who he has been dating for the past 3 months. The relationship is progressing, and James must decide to disclose his HIV status. To date, they have not discussed their individual sexual health. Although James is motivated to share his status, he isn't sure how to go about it. His mind replays numerous stories he has heard from his peers who have had negative experiences when they disclosed to others. James believes telling the truth is very important, but sinking and paralyzing feelings of rejection oppose his desire to reveal his HIV status.

What strategies can you use to help James make a plan for disclosing to his partner?

13 Steps to Better Active Listening Skills

1. Restating

To show you are listening, repeat every so often what you think the person said — not by parroting, but by paraphrasing what you heard in your own words. For example, “Let’s see if I’m clear about this. . .”

2. Summarizing

Bring together the facts and pieces of the problem to check understanding — for example, “So it sounds to me as if . . .” Or, “Is that it?”

3. Minimal encouragers

Use brief, positive prompts to keep the conversation going and show you are listening — for example, “umm-hmmm,” “Oh?” “I understand,” “Then?” “And?”

4. Reflecting

Instead of just repeating, reflect the speaker’s words in terms of feelings — for example, “This seems really important to you. . .”

5. Giving feedback

Let the person know what your initial thoughts are on the situation. Share pertinent information, observations, insights, and experiences. Then listen carefully to confirm.

6. Emotion labeling

Putting feelings into words will often help a person to see things more objectively. To help the person begin, use “door openers” — for example, “I’m sensing that you’re feeling frustrated. . . worried. . . anxious. . .”

7. Probing

Ask questions to draw the person out and get deeper and more meaningful information — for example, “What do you think would happen if you. . .?”



8. Validation

Acknowledge the individual's problems, issues, and feelings. Listen openly and with empathy, and respond in an interested way — for example, "I appreciate your willingness to talk about such a difficult issue. . ."

9. Effective pause

Deliberately pause at key points for emphasis. This will tell the person you are saying something that is very important to them.

10. Silence

Allow for comfortable silences to slow down the exchange. Give a person time to think as well as talk. Silence can also be very helpful in diffusing an unproductive interaction.

11. "I" messages

By using "I" in your statements, you focus on the problem not the person. An I-message lets the person know what you feel and why — for example, "I know you have a lot to say, but I need to. . ."

12. Redirecting

If someone is showing signs of being overly aggressive, agitated, or angry, this is the time to shift the discussion to another topic.

13. Consequences

Part of the feedback may involve talking about the possible consequences of inaction. Take your cues from what the person is saying — for example, "What happened the last time you stopped taking the medicine your doctor prescribed?"

The 7 Stages of Grief

1. SHOCK & DENIAL

You will probably react to learning of the loss with numbed disbelief. You may deny the reality of the loss at some level, in order to avoid the pain. Shock provides emotional protection from being overwhelmed all at once. This may last for weeks.

2. PAIN & GUILT

As the shock wears off, it is replaced with the suffering of unbelievable pain. Although excruciating and almost unbearable, it is important that you experience the pain fully, and not hide it, avoid it or escape from it with alcohol or drugs.

You may have guilty feelings or remorse over things you did or didn't do with your loved one. Life feels chaotic and scary during this phase.

3. ANGER & BARGAINING

Frustration gives way to anger, and you may lash out and lay unwarranted blame for the death on someone else. Please try to control this, as permanent damage to your relationships may result. This is a time for the release of bottled up emotion.

You may rail against fate, questioning "Why me?" You may also try to bargain in vain with the powers that be for a way out of your despair ("I will never drink again if you just bring him back")

4. "DEPRESSION", REFLECTION, LONELINESS

Just when your friends may think you should be getting on with your life, a long period of sad reflection will likely overtake you. This is a normal stage of grief, so do not be "talked out of it" by well-meaning outsiders. Encouragement from others is not helpful to you during this stage of grieving.

During this time, you finally realize the true magnitude of your loss, and it depresses you. You may isolate yourself on purpose, reflect on things you did with your lost one, and focus on memories of the past. You may sense feelings of emptiness or despair.

5. THE UPWARD TURN

As you start to adjust to life without your dear one, your life becomes a little calmer and more organized. Your physical symptoms lessen, and your "depression" begins to lift slightly.

6. RECONSTRUCTION & WORKING THROUGH

As you become more functional, your mind starts working again, and you will find yourself seeking realistic solutions to problems posed by life without your loved one. You will start to work on



practical and financial problems and reconstructing yourself and your life without him or her.

7. ACCEPTANCE & HOPE

During this, the last of the seven stages in this grief model, you learn to accept and deal with the reality of your situation. Acceptance does not necessarily mean instant happiness. Given the pain and turmoil you have experienced, you can never return to the carefree, untroubled YOU that existed before this tragedy. But you will find a way forward.

You will start to look forward and actually plan things for the future. Eventually, you will be able to think about your lost loved one without pain; sadness, yes, but the wrenching pain will be gone. You will once again anticipate some good times to come, and yes, even find joy again in the experience of living.

Using Motivational Interviewing Techniques in HIV



OBJECTIVES

At the end of this unit, participants will be able to:

- Apply Motivational Interviewing (MI) techniques to coach engagement in care
- Apply MI skills to support clients with HIV disclosure
- Apply MI skills to support clients with treatment adherence
- Solicit input and support from other health care team members to move clients toward viral suppression



INSTRUCTIONS

1. Before the session, review the slides and talking points on MI practice.
2. Welcome participants.
3. Review the unit objectives.
4. Review slides on Motivational Interviewing definition, principles, and techniques.
5. Ask participants to pair up for Motivational Interview practice as described in the slides. Reconvene the group for a debrief conversation.
6. Wrap up. Share the final slide with additional resources on MI practices. Remind participants that MI practice is continuous as CHWs our goal is to work with our clients at whatever stage at with their medical care and treatment and support them in living healthy lives.



Related C3 Roles

Building individual and community capacity

Related C3 Skills

Communication skills, education and facilitation skills



Method(s) of Instruction

Role play



Estimated time

45 minutes



Key Concepts

HIV disclosure skills, HIV disclosure practice, Motivational Interviewing skills practice, HIV treatment adherence coaching, medication adherence coaching



Materials

- Computer with internet access and projector
- PowerPoint slides

Handout

- Case Scenarios For Using Motivational Interviewing Techniques in HIV

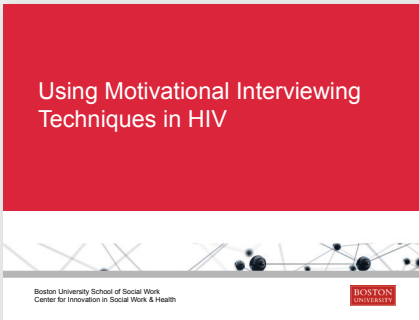


Resources

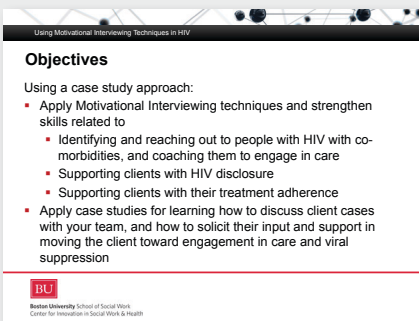
Motivational Interviewing Definition, Principles and Approach https://www.umass.edu/studentlife/sites/default/files/documents/pdf/Motivational_Interviewing_Definition_Principles_Approach.pdf

Alexander Waitt-Motivational Interviewing, Fox and Bee Associates, LLC. www.poz.com/basics/hiv-basics/disclosure

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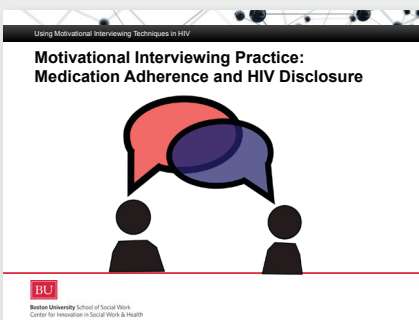


SLIDE 1



SLIDE 2

Review the objectives.



SLIDE 3


In this session, you will have the opportunity to practice coaching scenarios involving HIV disclosure, client engagement in care, and medication adherence.

Using Motivational Interviewing Techniques in HIV

Using Motivational Interviewing Techniques in HIV

Introduction to Motivational Interviewing (MI)

- Motivational Interviewing is a **client-centered**, directive method for enhancing **intrinsic motivation** to change by exploring and resolving **ambivalence**
- Ambivalence is a conflicted state of favoring change and supporting status quo
- Helps client get “unstuck” from ambivalent feelings
- Explores the client’s personal reasons for making a change
- **Brings the client closer to who they want to be from who they are right now**



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SLIDE 4

Motivational Interviewing is a **client-centered**, directive method for enhancing **intrinsic motivation** to change by exploring and resolving **ambivalence**.

Define the following terms:

Client-centered approach: A client-centered approach places emphasis on a client’s autonomy and right to choose goals and/or interventions based on their identified needs for services.

Intrinsic motivation: Intrinsic motivation can be described as doing something that is motivated from our own passions without the incentive of reward or fear of a negative consequence. Doing the behavior is often its own reward.

Ambivalence: Ambivalence is often described as a state of being “wishy-washy.” It is the gap between who I am and who I want to be. In many cases, people hold expectations for themselves that favor change while simultaneously supporting the status quo. That inner struggle (ambivalence) often drives indecision and a sense of feeling stuck that is common in all people. Motivational Interviewing is a client-centered, skillful practice that aids people in moving beyond ambivalence to get closer to who they want to be.

Using Motivational Interviewing Techniques in HIV

Motivational Interviewing (MI) Definition

A collaborative, person-centered approach for drawing out and strengthening a person’s motivation to change his or her behavior. MI involves a set of principles and strategies, but more importantly, it is an approach that embodies the spirit of collaboration, empathy, and meeting people where they are at.

Miller, W.R. and Rollnick, S. (2009). Ten things that Motivational Interviewing is not. Behavioural and Cognitive Psychotherapy, 37, 129-140.

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SLIDE 5

Ask a participant to read the slide.

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Theory, Principles, Challenges

Self Perception Theory:

- How a person views him or herself impacts their behavior

Self Determination Theory:

- How a person talks about him or herself impacts their behavior

Three Principles

- People want to be their best self
- People *already have* what they need to be that best self
- Your job is to simply evoke that best self

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SLIDE 6

We understand that Motivational Interviewing is a way of working collaboratively with people to support their motivation for and commitment to change. The following two theories and three principles serve as important anchors to ground the CHW's perspective when working in partnership with clients.

Two major theories:

- **Self-Perception Theory:** A key idea in Self-Perception Theory is how people view themselves impacts their behavior. If a person feels negatively about themselves, they are less likely to take positive action. Consider the influence of your own self-perception and the impact when making changes in your life.
- **Self-Determination Theory**—Self-Determination Theory can be generally described as the way a person talks impacts their behavior. For example, If they speak negatively, they perform negatively.
- These two theories underscore the work of the CHW who uses Motivational Interviewing techniques because they help us to see why it is important to support people in talking and feeling more positively about themselves and their challenges when they want to make and sustain changes in their lives.

Three principles:

- People want to be their best self.
- People already have what they need to be that best self.
- Your job is to simply evoke that best self.

CHWs work with people whose lives and experiences can be very complicated. It can be easy to propose solutions or prioritize the client's circumstances according to our own values. These three principles help to ground the CHW in a client-centered approach by honoring the virtue in each statement and being willing to prioritize viewing the client's concerns through the eyes of the client and not our own. Strong alignment with these principles can have transformative effects in the CHW/client relationship.

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MI Spirit

Evocation

Compassion

Acceptance

Collaboration

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SLIDE 7

When using Motivational Interviewing skills, the following four qualities should underlie your approach with people. Define each characteristic and briefly explore with participants.

- **Acceptance:** Embody a disposition of acceptance by recognizing that people have the right to make their own choices free of judgment from others.
- **Compassion:** Employ compassion by extending empathic care without judgment.
- **Evocation:** Be intentional about asking the right questions to help people resolve ambivalence.
- **Collaboration:** Work in partnership with people to examine their situations and ways to respond.


Ask participants to give an example of how a CHW might employ each when of these qualities when working with clients or with other care team members.

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Core Strategies to Highlight/Support Someone through Ambivalence

- Express empathy (your effort to “put yourself in their shoes” and feel what they are going through)
- Develop discrepancy (pointing out conflicts between stated goals and behaviors)
- Respond to potential discord (don’t argue or fight)
- Support self-efficacy (reinforcing people’s ability to accomplish their goals)

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SLIDE 8

- **Express empathy:** (your effort to “put yourself in their shoes” and feel what they are going through) Empathy helps to build trusting and supportive relationships that aid in the CHW/client collaboration.
- **Develop discrepancy:** (pointing out conflicts between stated goals and behaviors) Example: You want to be healthier, but you do not show up for your medical appointments.
- **Respond to potential discord:** (don’t argue or fight) Developing discrepancy or responding to potential discord isn’t synonymous with confronting or wrestling with a client about their behavior. The goal is to empathetically shine light on a situation in such a way that the client can view their own behavior.
- **Support self-efficacy:** (reinforcing people’s ability to accomplish their goals) We understand from self-perception theory that how we view ourselves can impact our behavior; thus, reinforcing a client’s belief in their ability can have a positive impact and aid change.

Using Motivational Interviewing Techniques in HIV

Coaching Skills to Promote Behavior Change

- O** Open-ended questions
- A** Affirmations
- R** Reflective listening
- S** Summarizing

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SLIDE 9

O.A.R.S. is a set of skills that helps to create an open, affirming, accepting environment where the client can explore their feelings, behaviors, and beliefs. O.A.R.S. skills help to move MI conversations forward and allow clients to freely express content that can position them to hear and make progress toward change. Review O.A.R.S. skills and provide examples. After each skill, invite participants to reflect and share the value of using O.A.R.S. skills.

Open-ended questions

Use open-ended questions that invite elaboration or descriptive information. Open questions usually require more than a yes or no response and encourages the client to talk more. Examples: What helps you stay on track with your medications? Tell me more about...

Affirmations

Using affirmations helps to reinforce the client’s strengths. Affirmations can be used to validate the client’s experience or feelings.

Examples: You’ve accomplished a lot in a short time. I appreciate your honesty.

Reflective listening

Reflective listening is a way to clarify statements and demonstrate that you heard and understood your client.

Examples: It sounds like you... You’re wondering if...

Summarizing

Summarizing statements link material that has been discussed to reinforce what has been said and demonstrates that you have been listening carefully.

Examples: Here’s what I’ve heard... Let me see if I got this right...

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Reflective Statements Practice

The diagram consists of three chevron-shaped boxes pointing to the right. The first is dark red and labeled 'Simple'. The second is a lighter red and labeled 'Complex'. The third is a light pink and labeled 'Double Sided'.

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SLIDE 10

Define the difference between simple, complex, and double-sided reflections.

- **Simple:** Literally using the client's words and giving it back to them.
- **Complex:** Adds meaning, value, or emotion to the client's words.
- **Double-Sided:** Highlights discrepancy between client's words/values and actions.

Using Motivational Interviewing Techniques in HIV

Reflective Statements Practice

- **Client Statement:** "Getting to my appointments isn't an option unless you can give me bus tickets."

The diagram consists of three chevron-shaped boxes pointing to the right, each containing an example of a reflective statement. The first is dark red and labeled 'Simple'. The second is a lighter red and labeled 'Complex'. The third is a light pink and labeled 'Double Sided'.

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SLIDE 11

- **Simple:** A simple reflection is a basic restatement of the client's own words, being careful to use the client's language.
- **Complex:** Complex reflections add meaning, value or emotion to the client's words. In essence, you are reflecting a deeper layer of the simple reflection that helps to open new perspective.
- **Double-sided:** The aim of double-sided reflections is to highlight the discrepancy between the client's words/values and their actions.

Examples:

- **Simple:** "Getting to your appointments isn't an option."
- **Complex:** "Transportation is a problem." "Finding transportation is overwhelming."
- **Double-sided:** "Even though transportation is tough, you realize your health is at risk if you don't make your appointments."



SLIDE 12

CHWs work in a variety of capacities. This role-play activity provides an opportunity to practice MI skills during a client interaction involving HIV disclosure, client engagement, or HIV treatment adherence.

Distribute the handout Case Scenarios: HIV Disclosure, Client Engagement, and Medication Adherence.

Using the scenarios provided, ask participants to form dyads and conduct a role-play of their choosing.

- One person will role play the CHW and the other will role-play the community member.
- Allow 10–15 minutes for each role-play.
- Remind CHWs to use MI skills in their role-play.
- At the end of the allotted time, participants should switch roles and select a different scenario.

When complete, reconvene the group and debrief.

- Ask, “What MI skills did you recognize when you were in the role of the client?”
- Ask, “In your role as the CHW, which skills were easiest and which skills were more difficult?”
- Ask, “What can you do to continue to practice and develop your MI skills?”

Remind participants that MI is nuanced and requires patience and practice. Using MI skills helps keep their client interactions client-centered and provides opportunity to address ambivalence, ultimately helping the client change their behavior.

Summarize and close.

Case Scenarios for Using Motivational Interviewing Techniques in HIV

Scenario A

Fred is a 62-year-old veteran who was diagnosed with HIV in 1988. Fred had a diagnosis of AIDS when he came to the Health Center. He has seen friends die during the early years of the AIDS epidemic. Fred delayed treatment and care due to being challenged with substance use. However, in 2010, when his health began to decline, Fred showed up at the clinic and was able to see a doctor and have labs done. His CD4 is at 250 and his viral load was at 300,000. Fred lost his housing and has been off meds and homeless for over 6 months. Fred reached out to the health center that connected him with a CHW. Fred told the CHW, "I want to take my meds again, but I've almost reached the point of not caring; I'm homeless, I feel like I'm starting from nothing at 62.

In a role play situation, use motivational interviewing techniques to respond to the following questions:

1. What questions could the CHW ask Fred?
2. Are there resources the CHW can suggest for Fred?
3. What strategies could the CHW suggest to help promote good adherence for Fred?
4. Are there other concerns?

Scenario B

Julie, a 25-year-old single mother of an infant daughter was diagnosed with HIV two years ago. Julie's fiancé is HIV negative and has always been supportive of her care and treatment. Since Julie's diagnosis, she has always been great with taking her HIV medications as prescribed; her viral load was undetectable and her CD4 was close to 900. Julie has been back to work full time at night for a couple months. Julie watches the baby during the day, sleeping when the baby naps. Julie's fiancé has noticed that her 7-day pill box is still full from the previous week, her pill bottle is on the counter, and she seems extra tired. When Julie showed up for her checkup, the doctor told her that her CD4 had dropped and for the first time she had a viral load of over 100,000. The doctor told Julie that she would benefit from seeing a CHW and he wanted her to schedule an appointment; however, in the meantime he needed to run additional tests and would see her again in 2 weeks.

In a role play situation, use motivational interviewing techniques to respond to the following questions:

1. What questions could the CHW ask Julie?
2. Are there resources the CHW can suggest for Julie?
3. What strategies could the CHW suggest to help promote good adherence for Julie?
4. Are there other concerns?



Scenario C

Keli, a 31-year-old transgender woman diagnosed in 2008, has been living with HIV for 10 years. Keli has been on the same regimen, Atripla, since that time. Keli's recent labs show that she has not had significant increases in her CD4 and her viral load from the last 2 lab visits. Keli's doctor told her that he strongly recommends a medication change due to newer medication on the market with fewer side effects. Keli is afraid of trying something new, but would welcome a decrease in the dreams she's been having that disrupt her sleep. A CHW is called into the clinic by the doctor to meet Keli and schedule an appointment for an educational session. Keli and the CHW have a great conversation and Keli secretly shared with the CHW that she smokes marijuana about once a week and that she has the habit under control –“it helps me chill out after I get home from work,” Keli says. “My fear is that a new regimen may not agree with my indulgence and the doctor doesn't know that I smoke.”

In a role play situation, use motivational interviewing techniques to respond to the following questions:

1. What questions could the CHW ask Keli?
2. Are there resources the CHW can suggest for Keli?
3. What strategies could the CHW suggest to help promote good adherence for Keli?
4. Are there other concerns?

Scenario D

Jimmy is a 62-year-old, man who has been living with HIV for 28 years. Jimmy has been an HIV activist, peer educator, outreach worker and served as president for several LGBTQIA organizations over the past 30 years. Jimmy recently buried his long-time friend and roommate about 6 months ago. Since his friend's passing, Jimmy has stopped taking his medications, missed several doctor appointments and has been 'missing in action' in all his community engagement activities. Jimmy's chart has been referred to the CHW by his provider for re-engagement.

In a role play situation, use motivational interviewing techniques to respond to the following questions:

1. What questions could the CHW ask Jimmy?
2. Are there resources the CHW can suggest for Jimmy?
3. What strategies could the CHW suggest to help promote good adherence for Jimmy?
4. Are there other concerns?



Scenario E

James is a 46-year-old heterosexual man who has been living with HIV for 5 years. He has worked hard to build a stable and happy life. He loves his job working for the City of Pasadena for the past 10 years and sees himself retiring from this position. On the weekends, James is active and enjoys landscaping, skating and playing tennis. His life is good, but he desires a life partner.

While playing tennis, he met a woman who he has been dating for the past 3 months. The relationship is progressing, and James must decide to disclose his HIV status. To date, they have not discussed their individual sexual health. Although James is motivated to share his status, he isn't sure how to go about it. His mind replays numerous stories he has heard from his peers who have had negative experiences when they disclosed to others. James believes telling the truth is very important, but sinking and paralyzing feelings of rejection oppose his desire to reveal his HIV status.

James is in the contemplation stage of change regarding his disclosure. He has shared with you (CHW) his anxiety around telling his significant other his HIV status.

In a role play situation, use motivational interviewing techniques to respond to the following questions:

1. What questions could the CHW ask James?
2. Are there resources the CHW can suggest for James?
3. What strategies could the CHW suggest to help promote good adherence for James?
4. Are there other concerns?

Scenario F

Jenni is a 28 year old Latina woman working as a Medical Assistant at a Long-term Nursing Facility. She is passionate about helping others and she loves her job. Jenni is HIV positive but she has never shared this information with her supervisor or with any of her co-workers. She is in the United States legally but has many family members living with her that are not.

Jenni has always been adherent to her medical appointments; her viral load is undetectable and her last CD4 was around 800. Recently a ward for patients with Dementia was opened and workers have complained about the challenges they are having with patients being confused, fighting and one nurse had an accidental needle stick while tending to a patient.

Jenni wants to tell her supervisor but she has not always been supportive of staff and with high turnover she's afraid of losing her job.

Jenni has come to you (CHW) with this concern.

In a role play situation, use motivational interviewing techniques to respond to the following questions:

1. What questions could the CHW ask Jenni?
 2. Are there resources the CHW can suggest for Jenni?
 3. What strategies could the CHW suggest to help promote good adherence for Jenni?
- Are there other concerns?

Acknowledgments

This curricula draws from and is adapted from other training curricula for peer educators and community health workers, such as the Building Blocks to Peer Success (<https://ciswh.org/resources/HIV-peer-training-toolkit>) and the Community Capacitation Center, Multnomah County Health Department (<https://multco.us/health/community-health/community-capacitation-center>)

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