

HIV AND ORAL HEALTH*

▶ ABOUT THIS ACTIVITY

- 🕒 **Time:** 3 hours, 15 minutes
- ➔ **Objectives:** By the end of this session, participants will be able to:
 - Describe the life cycle of HIV and how HIV medications work.
 - Describe good and poor oral hygiene habits.
 - Describe the basic structures of oral health
 - Identify oral manifestations of HIV Training
- ★ **Training Methods:** Lecture, Small Group Activity, Game Trivia
- ✓ **In This Activity You Will...**
 - Review information on the HIV Life Cycle
 - Review information on the Action of HIV Medication
 - Review information on oral health hygiene practices, and oral manifestations of HIV disease
 - Provide trainees with a scenario to work on communication and situational skills
 - Have trainees play Jeopardy game to review all materials covered
- ✂ **Materials**
 - Handouts on HIV Life Cycle & HIV Medications
 - Case Scenario
 - Cards with Emotions
 - Computer for PowerPoint
 - Projector Screen
 - Speakers to connect to computer

(continued next page)

Instructions

1. Start with an icebreaker –everyone will say their name and share one good and one bad oral health practice they may have.
2. Give handouts, slides and the case scenario to the participants. Start off by reading aloud (or have participant volunteer to read).
3. Inform the group that we will get back to discussing this scenario.
4. Review the information on the PowerPoint slides with the group.
 - If standalone training, review all three PowerPoints (in this order: 1. Interesting facts, 2. HIV 101, 3. HIV Oral Health)
 - If part of a larger HIV peer training curriculum, review PowerPoints on “Interesting Facts” and “HIV Oral Health” only.
5. Take a 15 minute break.
6. Reinroduce the case scenario to the group. Break the group into smaller groups and have each group answer one of the questions.
7. Ask the groups to report back to the larger group on their responses to the questions.
8. Allow groups to comment on each other’s questions.
9. Non-verbal communication activity: each person picks up a card with an emotion on it and then tries to express the emotion non-verbally in front of the group.
10. Introduce Jeopardy game to participants and provide them with the instructions to play.
11. Play Jeopardy game to review materials covered.

Summary

Wrap up the session by reminding participants that while all this information is important, the general take-home messages are:

- 1) Knowing and practicing good oral hygiene is important
- 2) Getting dental care regularly is crucial
- 3) Good oral health is important for everyone regardless of HIV status, but people living with HIV need to be especially aware of the importance of oral health as part of their overall health.

While people face many challenges to getting dental care and practicing good oral health hygiene, peers can draw from their own personal experiences and use that to help them. Encourage participants to share what they learned today with others and, if they have any other questions, ask a dental provider.

* This oral health module was developed by the Health & Disability Working Group, Boston University School of Public Health, 2009. For more information, visit <http://www.hdwg.org/echo>. The HIV 101 portions of the module come from the Missouri People to People Training Manual, 2008.

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ABOUT THIS ACTIVITY (CONT.)

Materials (cont.)

- Timer or watch with a second hand and calculator for jeopardy game
- Flipchart paper and markers
- Oral hygiene “products”: regular and sugar-free gum with xylitol, hard-bristle and soft-bristle toothbrushes, floss, mouthwash, cigarette pack, bottle of rubbing alcohol, bag of candy, soda bottle
- PowerPoint Slides including:
[Interesting Oral Facts](#)
[HIV 101](#)
[HIV and Oral Health Review](#)
[HIV and Oral Health Jeopardy Game](#)

Preparation

- Have handouts printed in advance
- Prepare 10 cards with different emotions (angry, sad, unconcerned, suspicious, happy, shy, uncomfortable, tired, scared, surprised)
- Have oral hygiene products placed on a table where participants will be able to access them.
- It may be helpful to have two people facilitating the Jeopardy game –the game/slideshow operator and a scorekeeper who can also be the host.

► TRAINING TIPS

- Be sure to review the PowerPoint slides and reference the slide notes when applicable
- It is important to do a test run of the slides and the Jeopardy game to become comfortable with operating the slide show view with all the multimedia and audio effects

HIV Oral Health Jeopardy Game Instructions

Important Note: Facilitator/Instructor should become familiar with how to run the PowerPoint game before trying with an actual group

1. Open the PowerPoint game and make sure to enable your macros; otherwise the game will not play correctly
2. If you wish to change a question, you can do so by editing the text in the slides. *Do not remove or replace text boxes or delete any shapes unless you are familiar with custom animation in PowerPoint.*
3. Depending on what version you have, you may need to keep score via pen and paper if the score box does not work in slideshow view
4. The facilitator will need to use the answer key to know the correct and incorrect responses.
5. You will need three teams to play the game.
6. Select a method (i.e. a coin toss) to determine which team will go first
7. Explain the rules of the game to the teams who will be playing (a-e, m):
 - a. Team will select a question by the point system on the board
 - b. Facilitator will click on the number/points team selected (IMPORTANT to click on the actual number and not just anywhere in the box)
 - c. Facilitator will read the question out loud
 - d. A team will have 20 seconds to answer the question
 - e. If the team cannot answer the question in 20 seconds, another team will get a chance to answer the question to get the point. Whichever team says their team name first gets the next chance to answer the question.
 - f. If the first team to answer a question does not get the right answer, another team can try to answer the question to get the points
 - g. Once the right answer is given, facilitator will click on the “Score” icon at the bottom of the slide and this will bring you to the Score slide in which the facilitator will enter the points earned under the respective teams score board (Slide #2)
 - h. Then the facilitator will click on the Category matrix icon on Slide #2 and that will bring you back to the Category matrix.

* This module is part of the online toolkit *Building Blocks to Peer Success*. For more information, visit http://www.hdwg.org/peer_center/training_toolkit. This module was developed as part of the SPNS Oral Health Initiative, 2009. For more information, visit <http://www.hdwg.org/echo>. The HIV 101 portions of the module come from the Missouri People to People Training Manual, 2008.

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HIV Oral Health Jeopardy Game Instructions (cont.)

- i. The points will disappear from the question board once they have been asked so you can keep track of which questions are still unanswered.
- j. Repeat A-G until there are no questions remaining.
- k. For the double Jeopardy questions, in order to get to the question, click on the arrow icon at the bottom right of the slide.
- l. When there are no questions with points remaining, click on the Final Jeopardy icon on the question board slide and that will bring you to the final jeopardy question
- m. The final Jeopardy question is open-ended. This allows teams to provide their own responses to a fair open-ended question and all the teams get the opportunity to get the question correct.
- n. Final Jeopardy question rules include:
 - The teams have to have the answer(s) ready by the end of the final Jeopardy song that will play or a set amount of time you determine
 - The team must determine how many points they want the final Jeopardy question to be worth, with a maximum bet of their total score (i.e. 900 points).
 - If a team does not get the right answer, the points they assigned or bet for the final Jeopardy question should be deducted from their total points.
8. When a team chooses a question, click on the number/points for which category box they chose. It is important to click on the number/points and not just anywhere in the box.
9. Read the question out loud.
10. Using a timer, give the team 20-30 seconds to respond.
11. If the team gets the right answer, click on the slide (anywhere except for the “Score” box) so it highlights the correct answer and depending on what version of the game you are using, a music clip will play.
12. Then click on the “Score” box, which will bring you to the slide where you can record the score in the team boxes.
13. Once you have recorded the score, click on the Jeopardy category matrix on that slide, which will bring you back to the categories.
14. If they get the wrong answer or do not respond after 20 seconds, open the question to the other 2 teams and whichever team says their team name first, gets a chance to answer the question.
15. If the team gets the right answer, repeat steps 11-13. If they get the wrong answer repeat step 14.
16. Continue steps 8-15 until there are no more points in the category matrix left.
17. At this point, indicate to the teams the final jeopardy question instructions in Step 7n and click on the Final Jeopardy box in the matrix. After reading aloud the question, click on the slide so the music will start playing.
18. If a team gets the right answer, they get to select the next question.
19. If all teams get the wrong answer or do not know the response to a question, the team who has most recently given the correct response on a question gets to go first.

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HIV Oral Health Jeopardy Game Answer Key

HIV 101

100.

Which of the following products always contain fluoride?

- A. Toothpaste
- B. Floss
- C. Water

▶ **D. None of the above**

200.

Why is fluoride important for oral health?

Fluoride helps bring minerals back into the tooth structure

300.

Which of the following is True?

- A. Oral HPV will always result in oral warts.
- B. HIV medications work by actively destroying the HIV virus

▶ **C. Anal sex has a higher risk of HIV transmission than oral sex**

400.

Describe the HIV Life Cycle using AFRITAB.

Attachment, Fusion, Reverse Transcriptase, Integration, Transcription, Assembly, Budding

500.

Name the following three structures.

A. Enamel. B. Dentin. C. Pulp

HIV & the Mouth

100.

_____ can cause “dry mouth” which contributes to _____ in HIV infected persons....

- A. Dental cavities; oral herpes
- B. Mouth rinse; healthy gums

▶ **C. HIV medications; dental cavities**

200.

Which statement about saliva is TRUE?

- A. It mostly contains bacteria that’s bad for your mouth.

▶ **B. It can act as a great lubricant for sex.**

- C. It helps with swallowing food, not the digestion of food.

300.

A common fungal infection of the mouth seen in connection with HIV infection and it often includes white patches

Thrush (oral candidiasis)

400.

What are three ways to help manage dry mouth?

Appropriate answers include –**drink water; chew on sugarless gum; suck on sugarless gum; artificial saliva; avoid caffeine; avoid sodas and high sugar products**

500.

Why is it so important to treat oral health problems?

- A. If you don’t treat them, bad oral health can cause AIDS.

▶ **B. It can lead to trouble with eating, which can affect your overall health.**

- C. When there is a problem, dental care is more important than HIV care.

- D. All of the above.

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HIV Oral Health Jeopardy Game Answer Key (cont.)

What's in the Mouth?

100.

Oral infections often occur when CD4 count is _____ and HIV viral load is _____.

A. CD4 Count is greater than 500 and Viral Load is less than 200

B. When Viral load is between 200 and 500

- ▶ **C. When CD4 count is less than 200 and Viral load is greater than 20,000**

200.

Pick a product and explain how it can reduce the build up of plaque?

- **Flossing helps remove plaque by scraping plaque off in between the teeth**
- **Brushing the teeth helps remove plaque by brushing it off of the inner, outer and chewing surfaces of the teeth as well as the tongue**
- **Antiseptic mouth rinse helps reduce plaque by killing the bacteria that cause plaque**
- **Chewing on sugar free gum or candy helps to reduce plaque by stimulating saliva flow**

300.

What is plaque and why is it a problem?

Plaque is a film on the teeth that attracts bacteria and can cause infections in your teeth and/or gums.

400.

Name two ways a dental rubber dam is used:
Appropriate responses include **by the dentists for fillings, helps isolate the teeth being worked on, oral sex for females, oral-anal sex, any other terms used to define these acts.**

500.

What is the most common malignancy associated with HIV that may present like this?

Kaposi's Sarcoma

Let's Talk Hygiene and Habits

100.

Brush me the right way. Which statement is True?

A. Hard bristles are better than soft bristles because they clean better.

- ▶ **B. Brush the tongue from back to front.**

C. Electric toothbrushes are not as good as regular toothbrushes.

D. Using someone else's toothbrush is okay if you boil in hot water first.

200.

Which is true about flossing?

A. Flossing is proven to be more important than brushing your teeth.

- ▶ **B. When first starting to floss, bleeding gums can be normal.**

C. The "C" effect is achieved by wedging the floss deep into your gums.

300.

Pick out all the products that are better for good oral hygiene.

soft bristle toothbrush, floss, sugar-free gum with xylitol, mouth rinse, diet soda, sugar-free candy

400.

Name 3 oral health habits that can lead to poor oral health

Smoking cigarettes; chewing tobacco; drug use; not brushing and/or flossing daily; eating and drinking sugary products; not going to the dentist for regular cleanings

500.

Demonstrate how you would examine your neck for swollen glands...What is a cause of swollen glands?

Infections, cancers, diseases of the immune system such as HIV/AIDS

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HIV Oral Health Jeopardy Game Answer Key (cont.)

Peer Talk

100.

You are talking with a client about the importance of coming back for his next appointment and the client shrugs and says, “Well, the pain is gone, so why would I come back?” Provide two reasons why regular dental care is important for this individual?.

- **There may be other problems/cavities that if not treated now will result in pain in the future.**
- **If he gets the dental care before there is pain, the procedures will be less invasive.**
- **By going to the dentist regularly, he can prevent further oral health problems in the future.**
- **His dental provider is part of his health care team and can help detect signs of HIV in or near the mouth.**

200.

You want to ask a client about his current oral hygiene practices. Provide an example of an open-ended question you would ask the client.

Any question in which an open-ended response is possible and one-worded responses are avoided

300.

A client informs you that she does not want to inform her dentist of her HIV status because she is worried she will be treated differently. Why should her dentist know her HIV status?

A. As a courtesy, so the dental provider can know he /she is at risk of contracting HIV.

- ▶ **B. So the dental provider can monitor her lab values and look for any signs of infection in her mouth that may relate to her HIV status.**

C. Because it is required by law that patients need to tell their health care providers their HIV status.

400.

Your doctor asks you about any drug use in the past 30 days. You feel very uncomfortable answering the question. Demonstrate two forms of non-verbal communication that might express how uncomfortable you feel.

Looking away, folding the arms, raising the eyebrow, crossing the legs, moving away, and any other suggestive gestures using body language

500.

Your client makes the following comment: “I have dentures, so I don’t have to worry about brushing my teeth and all that stuff.” Provide three points of oral hygiene if someone has dentures.

- 1. brush the gums;**
- 2. brush the tongue;**
- 3. brush the dentures;**
- 4. soak dentures overnight;**
- 5. use special denture brush when brushing dentures**

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HIV Oral Health Jeopardy Game Answer Key (cont.)

Random Facts

100.

How many Americans experience some anxiety and fear of the dentist?

- 1 million
- 15 million

▶ **30 million**

200.

Why are people with HIV more likely to have oral health problems?

Weakened immune system

300.

Oral Cancer. Which is true?

A. Only chewing tobacco puts you at high risk of getting oral cancer.

▶ **B. HIV does not cause oral cancer but can contribute to its progression.**

C. Smoking marijuana and smoking tobacco pose the same risk for getting oral cancer.

400.

What is stigma? Provide an example of HIV/AIDS stigma in oral health care.

Any example where a person is prevented from receiving good oral health care because of their HIV status –i.e. dentist won't treat a person with HIV

500.

Which of the following facts is FALSE?

A. Prince Charles has someone squeeze toothpaste on his toothbrush every day

B. In 1994, a prison inmate used tooth floss to escape from prison

C. In an average lifetime, a person produces 10,000 gallons of saliva.

▶ **D. The only cheese that is good for your teeth is feta cheese.**

Final Jeopardy

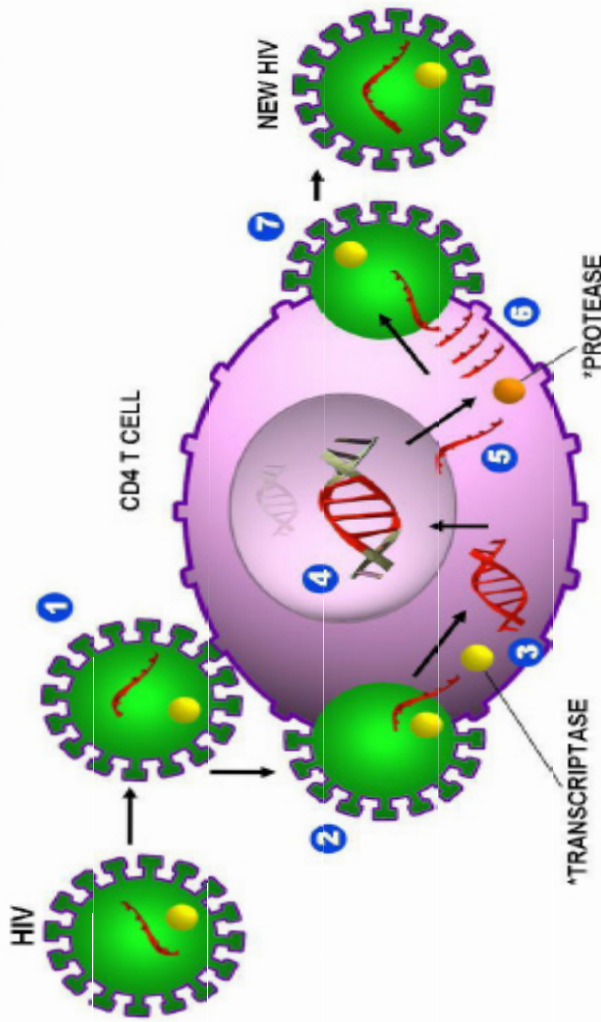
Identify four examples of how you as a peer could help someone with their oral health care needs?

Transportation, connecting with other social services, accompanying to dental visits, talking to them about their oral health care, explaining the importance of oral health care, describing your own experience with oral health care, appointment reminders, periodically calling them to stay in touch...

SESSION HANDOUT # 1 of 3

HIV AND ORAL HEALTH

HIV Life Cycle - The Big Picture

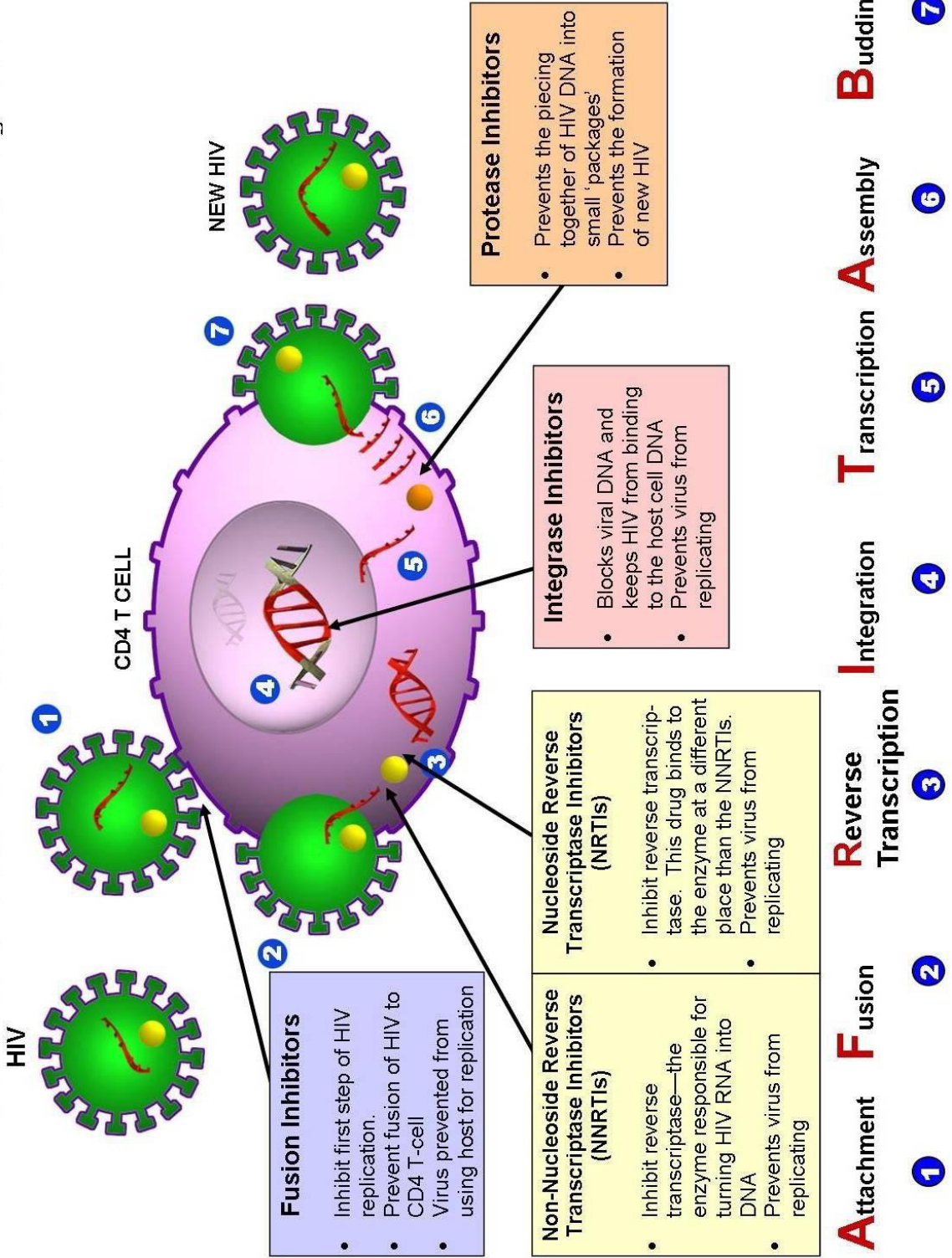


- A**ttachment **F**usion **R**everse **T**ranscription **I**ntegration **T**ranscription **A**ssembly **B**udding
1. HIV binds to receptors on the CD4 T-cell.
 - A message is sent to the CD4 T-cell to let the virus in.
 - Included in its contents are HIV RNA and reverse transcriptase.
 2. Once bound, the virus is allowed to dump its contents into the CD4 T-cell.
 - The enzyme 'reverse transcriptase' aids in this process.
 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 CD4 T-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. 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.

SESSION HANDOUT # 2 of 3

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Medications at Work in the HIV Life Cycle



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SESSION HANDOUT # 3 of 3

CASE SCENARIO: SANDRA

The dental team introduces a new client and her situation to you. They want you to help with getting her into dental care more regularly since she misses a lot of appointments and seems reluctant to complete her treatments. Sandra is 35 years old and in need of a lot of dental work, including some surgery to remove some teeth. She is a single mom who just got her life back together after being homeless and abusing alcohol and drugs for many years. It was during this time that she contracted HIV through what she believes was unprotected sex. During this period in her life, she rarely sought dental care, and if she did, it was only for when she had pain. And as soon as the pain was gone, she saw no need to go back to the dentist. She is juggling two jobs and dealing with a legal issue to regain full custody of her daughter. Sandra seems very self-conscious when she speaks to anyone, and she always covers her mouth, as she has some decayed and discolored teeth. She has expressed before an interest to go back to school to get her Associate's Degree and a better paying job, but in her opinion she doesn't have the "smarts" or the time to think about school. She smokes about a pack a day to help calm her nerves even though she wants to quit. As you go to approach her outside, in front of the waiting room to the dental clinic, she is smoking a cigarette sitting on the steps with her legs crossed and she does not make eye contact with you.

1. What are some of the biggest challenges Sandra faces to getting regular dental care?
2. Before you start talking with Sandra, what do you notice about her nonverbal communication (body language)? What does her body language suggest? How might this affect the way you approach her?
3. What are some ways you can start a conversation with Sandra?
4. Using open-ended style questions, list three questions that you would like to ask Sandra to learn more about her situation?
5. Sandra informs you that she doesn't want the surgery because she doesn't want them pulling out her teeth and making her look ugly. She doesn't want to go to work with missing teeth. How can you respond?
6. Identify three ways you specifically can help Sandra with getting the dental treatment she needs?