



MLCPC 109:

Unintended Consequences: HIV and Sexually Transmitted Diseases

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Abstract

This session will teach crisis pregnancy coaches of the unintended consequences of sexual activity, including sexually transmitted infections (STI), pregnancy, and emotional pain. Dr. Bush will address the impact of sex on the body and brain. Coaches will gain more knowledge about risky sexual behavior and will be more equipped to talk about these issues with their clients.

Learning Objectives

1. Participants will be able to apply current statistics about STIs to their clients.
2. Participants will explore the impact of sex on the brain.
3. Participants will acquire knowledge on how to teach abstinence to clients.

I. Sex

- A. Sexual activity is defined as any bodily contact meant to derive or give sexual gratification.
- B. This includes self-stimulation if only one person is involved.
- C. It also includes anal sex, oral sex, and mutual masturbation.
- D. Sexual activity is meant for procreation, recreation, and intimacy.

II. The Impact of Sex on the Body

A. STIs (Sexually Transmitted Infections)

1. The most common **bacterial** sexually transmitted infections are:
 - Gonorrhea
 - Chlamydia: one of the primary causes of infertility
 - Syphilis
2. The most common **viral** sexually transmitted infections are:
 - Human Papillomavirus (HPV)
 - Herpes Simplex Virus (HSV)
 - Human Immunodeficiency Virus (HIV)

3. Both the Center for Disease Control and the National Institute of Health call the rise in sexually transmitted infections of American youth an **epidemic**.^{1,2}

4. Most of these infections have **no symptoms**. Therefore, even though there are requirements for reporting having an infection, because people are not aware that they have them, they do not go in for testing. Clients should be encouraged to be tested on a regular basis, especially if they change partners.

5. Asymptomatic Carriers:
 - Chlamydia: 75% of girls and 50% of boys are unaware of their infection³
 - Gonorrhea: 50% of girls are unaware of their infection⁴
 - HSV-2: 90% of people are unaware of their infection⁵
 - HPV: >90% of people are unaware of their infection⁶
 - HIV: 25% of people are unaware of their infection⁷

6. Teens are at a higher risk for STIs due to differences in immunity and anatomy, because they tend to have multiple partners and practice more risky sexual behaviors.⁸
 - A 15 year old has a 1/8 risk of developing PID⁹
 - A 24 year old has a 1/80 risk with the same sexual behavior¹⁰

7. Syphilis
 - A bacterial infection
 - Lesions usually occur wherever syphilis enters the body
 - The sore will last about two weeks and will resolve on its own

- Syphilis goes deep inside the body and can cause problems that a woman may be unaware of for years
- Secondary syphilis may show as a rash on a woman's palms or feet
- The best time to treat syphilis is when it is in its primary stage, before the secondary or tertiary infections

8. Human Papilloma Virus (HPV)

- The most common viral STD
- There is **no cure** for viral infections—only the symptoms can be treated
- There are about 6 million new HPV infections each year¹¹
- More than 50% of sexually active adults are infected with HPV in their lifetime¹²
- HPV causes 99.7% of all cervical cancer cases¹³
- HPV is transmitted by skin to skin contact
- Many people will experience recurrences and will require multiple treatments, which are sometimes very painful
- Vaccines are available to reduce the risk of acquiring the infection

9. Genital Herpes

- Genital herpes is a virus
- There are two principle herpes viruses: HSV-1 and HSV-2
- HSV-1 has typically been associated with herpes above the waist (i.e. cold sores) and HSV-2 has typically been associated with herpes below the waist (i.e. genital lesions). Recently, though, due to the practice of oral sex, men and women can contract HSV-1 on the genitals and HSV-2 on the mouth/face.
- HSV-1 is the most common cause of genital herpes on college campuses

10. Human Immunodeficiency Virus (HIV)

- This virus is associated with reduced T-cells within the body
- HIV progresses to AIDS
- Most HIV cases are caused by sex and not blood transfusions
- Multiple partnering is considered the driver of the AIDS epidemic
- The most common way women contract HIV is through heterosexual sex, and the most common way men contract HIV is through homosexual sexual activity
- According to the CDC, if people did not have multiple partners, the number of cases of AIDS would drop significantly¹⁴
- According to the CDC, a person becomes infected with HIV every 9 ½ minutes in the United States.^{15, 16}
- In the U.S., the fastest age group for acquiring HIV is 15-24 year olds, especially young homosexual men¹⁷

B. Prevention of STIs

1. **Consistent and correct** use of male latex condoms with each act of intercourse can be used to reduce, **though not eliminate**, the risk of STD transmission.
2. Inconsistent use of condoms actually increases the risk of acquiring an STI.
3. The most reliable way to reduce the risk of STD transmission is to **abstain** from sexual activity or be in a long-term, mutually monogamous relationship with an uninfected partner.

III. Teen Pregnancy

- A. According to a study released by the CDC in 2008, teen pregnancy was at an historic low, as more teens were remaining virgins.^{18,19}

- B. 25% of those who were sexually active have become abstinent.²⁰

- C. The change we are seeing here may be because teens are paying more attention to the reality of teen pregnancy.
 - 1. 8 out of 10 teen fathers do not marry the mother of the child.²¹
 - 2. 50% of teen mothers do not have a high school diploma.²²

- D. Coaches should discuss goals with clients and help them to achieve those through encouraging them to find other behaviors to engage in other than sexual activity.

- E. Contraception and Teen Pregnancy:
 - 1. 20% of girls ages 12-18 using birth control will get pregnant within six months.²³
 - 2. 20% of teens younger than 18 using condoms will get pregnant within one year.²⁴

IV. Emotional Consequences of Sexual Activity

- A. Pain and suffering result from broken relationships. A woman may feel fear and confusion about her romantic feelings towards her partner.

- B. Women may have altered self-esteem as a result of being sexually active. They may also feel abandoned and betrayed by their partner.

- C. Guilt and depression are common among those who are sexually active.

- D. Those who are sexually active are often unable to form healthy long-term relationships.

- E. Sexual activity involves the total person.

- F. When a person's body is in intimate contact with another person, the entire person is "connected" with the other.
 - 1. A person's inborn need for and ability to connect with another person is a human characteristic that must be nurtured and protected for a person to prosper.

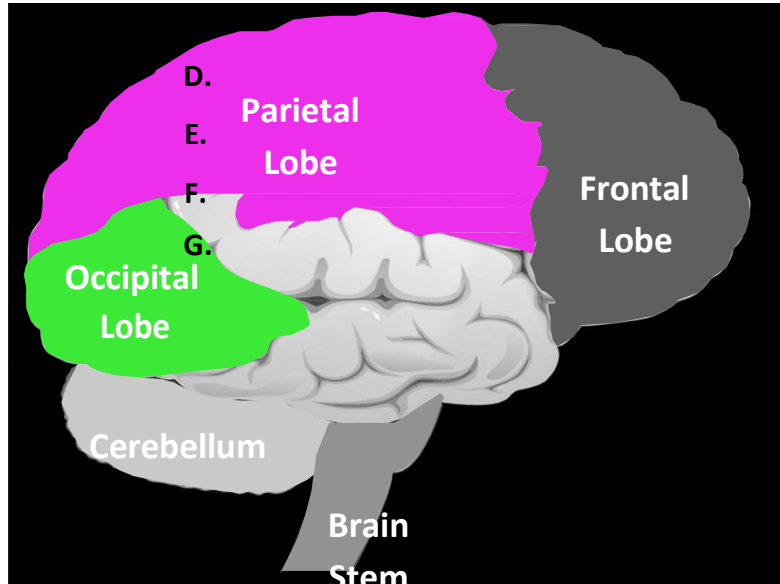
 - 2. Sex can greatly benefit this connection or it can greatly damage it.

V. The Impact of Sex on the Brain

- A. Two powerful brain events seem to always occur during sex:
 - 1. Attachment (bonding) to the sexual partner

 - 2. Desire for the repetition of sex acts

B. Brain Development



1. The brain has been called the largest sex organ in the body because sexual excitement is centered in the brain and begins in the brain even before the body is physically aroused.
2. Brain studies show that the prefrontal cortex is not fully mature until a person is in his or her **mid-twenties**. Therefore, it is important to understand that young people may be making decisions that do not suggest full maturation because the brain is still “under construction.”
3. The prefrontal cortex is where forward, abstract thinking, judgment, rational behavior, impulse control, and understanding the rules of social conduct occurs.

C. Neurochemicals in the Brain

1. More than 100 neurochemicals have been identified.
2. Receptors must be present in the brain for these substances to be active.

3. **Dopamine** is often called the **reward signal** because it rewards you for anything that is exciting (this includes relationships, drugs, sex, etc.). Dopamine does not tell you whether you are involved in a good or a bad activity.
4. Sexual intercourse causes the release of large amounts of **oxytocin** into the female brain and **vasopressin** into the male brain. Both of these hormones promote bonding with a sexual partner. Both hormones also bond mothers and fathers to the children that are produced as a result of sex. This allows for an **involuntary chemical commitment**.
5. **Pheromones** are chemicals secreted through the skin and sweat glands of many animals and from human males and females. These chemicals are unconsciously detected by the female nose (but not the male). They influence a woman's attraction to a man and her sexual satisfaction with him.
6. **Estrogen** drives a female's cravings for sexual intimacy, fluctuates with her cycle, and is highest just before ovulation. This increase is associated with lust and the desire for sex. Estrogen stimulates to activity of oxytocin and helps produce an intense desire for bonding. It also makes women appear attractive to many men.

D. Lust, Infatuation and Mature Love

1. One individual cannot tell if another person's interest is a result of lust or love—only time and other behaviors can reveal the difference.
2. Lust is a powerful emotional state and can cause people to do things they would not ordinarily do, often for self-gratification.

E. The Brain and Pain

1. The brain lights up in the same area if a person is experiencing physical pain like a broken bone or emotional pain like a broken relationship.
2. To the brain, physical and emotional pain feels the same—it hurts when a bond is broken.

F. Brain Molding

1. When we initiate an action or thought and repeat that action or thought, the experience physically molds our brains to habitually repeat the action or thought.
2. Therefore, bonding is an emotional and physical act, represented by the changes made in the brain.

VI. Bonding and the Sexually Active Adolescent

- A. As far as science can tell, bonding always occurs with any sexual involvement.
- B. When bonding occurs through sexual involvement, and is then severed because of a break-up, a brain pattern is established. If this pattern is repeated over and over again, permanent bonding is more difficult.
 1. Teens who are sexually active, are 3 times more likely to be depressed than those who were abstinent.²⁵⁻²⁸
 2. Suicide is attempted more often by sexually active teens than those who have not had sex (3 times more often by girls and 8 times more often by boys).^{29, 30}

3. Broken bonding may explain the adolescent emotional response.
4. Two thirds of teens who have had sex wish that they had waited.³¹

VII. Abstinence

- A. Abstinence is the calculated decision and deliberate action to refrain from sexual activity.
- B. The only truly effective and practical method to prevent sexually transmitted infections and non-marital pregnancies is abstinence.
- C. Abstinence increases the opportunity for developing healthy, long-term relationships.
- D. The delay of intercourse reduces the number of partners one will engage in sexual activity with, thus reducing the risk of contracting an STI.
- E. Sexual Risk Avoidance Education is the most effective at teaching healthy relationships.
 1. It gives medically accurate, age appropriate information on STIs, condoms, and contraception and the associated risks.
 2. It encourages self-control and discipline as a means of success for all areas of life.
- F. Sexual health comes from a positive self-image based on:
 1. Self-control
 2. Personal responsibility

3. Honesty
4. Kindness
5. Respect for oneself and other

VIII. Real Life Experiences

A. Notes: _____

Reactions: _____

B. Notes: _____

Reactions: _____

C. Notes: _____

Reactions: _____

D. Notes: _____

Reactions: _____

IX. Human Characteristics

- A. Human cognition and behavior is very complex.

- B. Humans are more than the sum total of their anatomy—including more than brain structure and chemicals.

- C. Humans have the capacity to make decisions and experience healing.

Endnotes

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