

Putting Prevention into Practice

An Evidence-Based Approach

Behavioral Counseling Interventions to Prevent Sexually Transmitted Infections

Tina Fan, MD, MPH, Medical Officer, U.S. Preventive Services Task Force
Program, Agency for Healthcare Research and Quality

Melissa Palma, MD, MPH, Public Health and Preventive Medicine Residency,
Cook County Health & Northwestern Feinberg School of Medicine

Case Study

A 24-year-old cisgender woman presents to your primary care clinic for a routine physical examination. Her only medication is an etonogestrel (Implanon) 68-mg implant for birth control. She reports occasional vaping of electronic cigarettes and states that she does not drink alcohol or inject drugs. Her sexual history includes three male partners in the past year and inconsistent condom use. She had *Chlamydia trachomatis* infection at 17 years of age but has not had any other sexually transmitted infections (STIs), including HIV. She was screened for cervical cancer at 21 years of age without cytologic abnormalities.

Case Study Questions

1. According to the U.S. Preventive Services Task Force (USPSTF) recommendation on preventing STIs, which one of the following factors indicates that this patient is at increased risk of STIs?

- A. She is younger than 25 years of age.
- B. She uses long-acting, reversible contraception.
- C. She was screened for cervical cancer at 21 years of age.
- D. She has multiple sex partners.
- E. She has a history of electronic cigarette use.

See related U.S. Preventive Services Task Force Recommendation Statement at <https://aafp.org/afp/2020/1115/od1.html>.

This PPIP quiz is based on the recommendations of the USPSTF. More information is available in the USPSTF Recommendation Statement and supporting documents on the USPSTF website (<https://www.uspreventiveservicestaskforce.org>). The practice recommendations in this activity are available at <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/sexually-transmitted-infections-behavioral-counseling>.

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CME This clinical content conforms to AAFP criteria for CME. See CME Quiz on page 585.

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2. Based on the USPSTF recommendation, which one of the following intervention approaches would be a reasonable option to provide to this patient?

- A. No interventions are indicated at this time because the USPSTF recommends against providing STI counseling.
- B. Provide in-person counseling about STIs, delivered in repeated sessions totaling more than 120 minutes.
- C. Provide STI counseling in a single session shorter than 30 minutes once the patient is older than 25 years.
- D. Decline to refer the patient to outside STI counseling services or group counseling services because they have been proven to be ineffective.
- E. Decline to refer the patient to outside media-based interventions because they have been proven to be ineffective.

3. Which of the following statements about the USPSTF recommendation on behavioral counseling interventions to prevent STIs are correct?

- A. Counseling should not include information on common STIs and STI transmission because this has not been found to be helpful.
- B. Counseling should increase patient motivation or commitment to safer sex practices.
- C. Counseling should provide training on condom use and communication about safer sex.
- D. Counseling should introduce patient understanding of individual risk, negotiation, and problem solving, but only if the patient specifically asks.

Answers

1. The correct answer is D. The USPSTF has identified several risk factors that place adults at increased risk of STIs, to whom counseling should also be provided. Risk factors include the following: having multiple sex partners, seeking STI testing or attending an STI clinic, belonging to a sexual or gender minority group, living with HIV, injection drug use, exchanging sex for money or drugs, or having recently been in a correctional facility. Some racial/ethnic minority groups are also at increased risk for STIs, but differences in STI rates among racial/ethnic groups may reflect differences in social determinants of health.¹ The USPSTF does not cite use of contraception, history of high-risk HPV, vaping, or smoking as risk factors that should routinely elicit STI prevention counseling. This patient has a history of an STI; however, only STIs contracted in the past year were found to be a significant risk factor. All sexually active adolescents are at increased risk of STIs and should be provided counseling to prevent them.

2. The correct answer is B. The USPSTF recommends behavioral counseling for STI prevention in sexually active adolescents and in adults at increased risk for STIs. Several intervention approaches have been found to be effective in decreasing STI acquisition, including in-person counseling, videos, websites, written materials, telephone support, and text messages. Group or individual counseling sessions lasting more than 120 minutes (often delivered over multiple sessions) were associated with larger reductions in STI incidence and associated with self-reported behavior change such as increased condom use.² In its 2020 update, the USPSTF found that interventions of shorter duration (less than 30

minutes) were also effective at preventing STIs in adolescents and adults.² The USPSTF recommendation includes referral to outside STI counseling services, group counseling services, or media-based interventions as effective STI counseling interventions.

3. The correct answers are B and C. The USPSTF concludes with moderate certainty that behavioral counseling interventions reduce the likelihood of acquiring STIs in sexually active adolescents and in adults at increased risk (B grade). The USPSTF found that behavioral counseling interventions for individuals seeking primary health care are associated with reduced incidence of STIs, including HIV, herpes simplex virus, human papillomavirus infection, hepatitis B virus, *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, *Treponema pallidum* (syphilis), and *Trichomonas vaginalis*. Intervention content often provides information on common STIs and STI transmission; aims to increase motivation or commitment to safer sex practices; and provides training on condom use and negotiation, communication about safer sex, problem solving, and other pertinent skills.

The views expressed in this work are those of the authors and do not reflect the official policy or position of Cook County Health, Northwestern University, or the U.S. government.

References

1. Krist AH, Davidson KW, Mangione CM, et al. Behavioral counseling interventions to prevent sexually transmitted infections: US Preventive Services Task Force recommendation statement. *JAMA*. 2020;324(7):674-681.
2. Henderson JT, Senger CA, Henninger M, et al. Behavioral counseling interventions to prevent sexually transmitted infections: updated evidence report and systematic review for the US Preventive Services Task Force. *JAMA*. 2020;324(7):682-699. ■