Primary Care Behavioral Interventions to Reduce Illicit Drug and Nonmedical Pharmaceutical Use in Children

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Case Study

J.P. is a 16-year-old white female nonsmoker who presents for a sports clearance physical. She is in good overall health, excels academically, and plays water polo at school. During the patient history, she mentions that she and three friends were suspended from school for drinking cough syrup after a water polo tournament.

Case Study Questions

1. Based on the recommendations of the U.S. Preventive Services Task Force (USPSTF), which one of the following statements is correct?
   - A. The evidence is insufficient to assess the balance of benefits and harms of primary care–based interventions to reduce drug use in adolescents.
   - B. There is at least moderate certainty that the harms of interventions to reduce drug use in adolescents outweigh any potential benefits.
   - C. The opportunity cost (time that could be spent on more effective interventions) of interventions to reduce drug use in adolescents substantially outweighs any potential benefit.
   - D. The USPSTF recommendation does not apply to nonmedical use of over-the-counter (nonprescription) medications, such as cough syrup.

2. Based on the findings of the USPSTF, which one of the following statements about drug use in adolescents is correct?
   - A. Nonmedical prescription medication use rarely results in medical complications.
   - B. Marijuana use initiated before 18 years of age is equally likely to progress to a substance use disorder in adulthood as marijuana use initiated as an adult.
   - C. It is associated with increased risk-taking behaviors, such as driving under the influence, unsafe sexual activity, and violence.
   - D. It is not associated with lower levels of educational achievement.

3. Which of the following statements about the epidemiology of drug use behavior in children and adolescents in the United States are correct?
   - A. Less than 4% of youths 12 to 17 years of age reported drug use in the past month.
   - B. Almost 10% of youths 12 to 17 years of age reported drug use in the past month.
   - C. More than 4% of eighth-, 10th-, and 12th-grade students reported using over-the-counter cough or cold medicine for nonmedical reasons in the past year.
   - D. Less than 1% of eighth-, 10th-, and 12th-grade students reported using over-the-counter cough or cold medicine for nonmedical reasons in the past year.

Answers appear on the following page.
Answers

1. The correct answer is A. The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of primary care interventions to reduce drug use in children and adolescents (I statement). Interventions reviewed by the USPSTF include face-to-face counseling, videos, print materials, and interactive computer-based tools; however, the USPSTF did not find sufficient evidence that any of these interventions lead to improvement in health outcomes. Also, no studies regarding the magnitude of harms of these interventions were found. Opportunity cost is a potential harm of interventions to reduce drug use, but the evidence is insufficient to determine whether it outweighs the potential benefits. Other potential harms of interventions include anxiety, interference with the clinician-patient relationship, unintended increase in other risky behaviors, paradoxical increase in drug use initiation, and false sense of security. The USPSTF recommendation applies to illicit drug use and the nonmedical use of pharmaceuticals (including prescription and over-the-counter medications), such as cough syrup.

2. The correct answer is C. Drug use is associated with increased risk-taking behaviors, including driving under the influence, unsafe sexual activity, and violence. It is also associated with the three major causes of adolescent death, which are motor vehicle accidents, homicide, and suicide. In 2011, more than 150,000 adolescents were treated in emergency departments for complications of illicit drug and nonmedical pharmaceutical use. Approximately one-half of these visits were attributed to the nonmedical use of prescription drugs. Adolescents who start using marijuana before 18 years of age are at increased risk of developing a substance use disorder compared with those who initiate use as adults. Lower levels of educational achievement and attainment have been associated with substance use disorders in adolescence.

3. The correct answers are B and C. Approximately one in 10 adolescents (9.5%) 12 to 17 years of age reported having used drugs at some point in the past month. Substance use among adolescents is not restricted to illegal drugs and prescription medications. In a 2012 study, more than 4% of eighth-, 10th-, and 12th-grade students reported using over-the-counter cough or cold medicine for nonmedical reasons in the past year.

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SOURCES
