

Putting Prevention into Practice

An Evidence-Based Approach

Behavioral Counseling Interventions to Promote a Healthful Diet and Physical Activity for Cardiovascular Disease Prevention in Adults

AILEEN BUCKLER, MD, MPH, CDR, USPHS, *Medical Officer, U.S. Preventive Services Task Force Program, Agency for Healthcare Research and Quality*

TAMMY SERVIES, MD, *General Preventive Medicine Residency, Uniformed Services University of the Health Sciences*

► See related U.S. Preventive Services Task Force Recommendation Statement at <http://www.aafp.org/afp/2013/0615/od1.html>.

CME This clinical content conforms to AAFP criteria for continuing medical education (CME). See CME Quiz on page 833.

The case study and answers to the following questions are based on the recommendations of the U.S. Preventive Services Task Force (USPSTF), an independent panel of experts in primary care and prevention that systematically reviews the evidence of effectiveness and develops recommendations for clinical preventive services. More detailed information on this subject is available on the USPSTF website (<http://www.uspreventiveservicestaskforce.org>). The practice recommendations in this activity are available at <http://www.uspreventiveservicestaskforce.org/uspstf/uspsphys.htm>.

A collection of Putting Prevention into Practice quizzes published in *AFP* is available at <http://www.aafp.org/afp/ppip>.

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Case Study

G.H., a 35-year-old woman, presents for a routine preventive visit. She has no chronic illnesses or significant family history of disease. She does not smoke, but admits she does not exercise regularly or eat a very healthy diet. She drinks a moderate amount of alcohol.

Case Study Questions

1. After a physical examination, you document that G.H.'s blood pressure is 110/65 mm Hg, her body mass index is 24.9 kg per m², her total cholesterol level is 170 mg per dL, her low-density lipoprotein cholesterol level is 110 mg per dL, her high-density lipoprotein cholesterol level is 52 mg per dL, and her fasting blood glucose level is 74 mg per dL. According to the U.S. Preventive Services Task Force (USPSTF), which of the following are appropriate next steps?
 - A. Use this visit to provide preventive services that have a greater health effect than behavioral counseling on healthy diet and exercise.
 - B. Provide a referral for intensive dietary and physical activity counseling.
 - C. Tell G.H. that her risk of cardiovascular disease is low, and ask if she would like to further discuss her diet and exercise habits.
 - D. Recommend against intense physical activity, because it is commonly associated with adverse cardiovascular events.
2. G.H. is an educated health care consumer. She is curious why you did not counsel her about diet and exercise. Which one of the following is an appropriate response?
 - A. Tell her that the USPSTF has found no benefit of a healthy diet and exercise in reducing the risk of cardiovascular disease.
 - B. Tell her that although the correlation among healthy diet, physical activity, and a lower incidence of cardiovascular disease is strong, evidence indicates that the health benefit of behavioral counseling is small.
 - C. Offer to set up monthly appointments for high-intensity behavioral counseling.
 - D. Provide her with a pamphlet on weight loss and exercise programs.
3. After discussing the risks and benefits, G.H. opts to participate in medium-intensity behavioral counseling. Which one of the following fulfills her desired level of participation?
 - A. Two 10-minute sessions for dietary counseling and creating a physical activity plan.
 - B. Writing a detailed diet and exercise plan during today's appointment.
 - C. Meeting a dietitian and personal trainer for 30 minutes twice per week for the next three months.
 - D. Six 20- to 30-minute sessions for dietary counseling and creating a physical activity plan.

Answers appear on the following page.

Answers

1. The correct answers are A and C. Although it is unlikely that counseling is harmful in an otherwise low-risk population, time may be better spent focusing on other preventive services that the USPSTF found to have a greater health effect. Given that the benefit of high-intensity behavioral counseling will be small for this individual who has no other risk factors for cardiovascular disease, there is no need for immediate intervention at this visit. However, a discussion of the patient's readiness for change, her social support, and the community resources available for improved diet and exercise may be useful if the patient is interested. The USPSTF found adequate evidence that intense physical activity is only rarely associated with adverse cardiovascular events.

2. The correct answer is B. Although adhering to national guidelines for a healthy diet and physical activity correlates with lower cardiovascular morbidity and mortality, the USPSTF determined that the net benefit of providing medium- or high-intensity behavioral counseling interventions in the primary care setting to promote a healthy diet and physical activity is small. Twelve 30-minute sessions would qualify as high-intensity counseling, but would likely yield only a small benefit for this patient. Before committing to this intervention, the patient's preferences should be discussed with respect to the significant time commitment involved and the small potential benefit. Low-intensity interventions, such

as mailed materials or one or two brief sessions with a primary care clinician, have not shown any beneficial effects on behavioral or intermediate health outcomes.

3. The correct answer is D. Low-intensity interventions have not shown any benefit and consist of little contact time (one to 30 minutes) and only one or two sessions with a clinician or other trained professional. Medium- and high-intensity interventions have shown benefits for behavioral and intermediate outcomes. Examples of medium-intensity interventions include three to 24 phone sessions or one to eight in-person sessions, totaling 31 to 360 minutes of contact with a clinician or other trained professional. Six in-person sessions of 20 to 30 minutes each to provide dietary counseling and create a physical activity plan would be considered a medium-intensity intervention. High-intensity interventions are the only interventions that showed sustained benefits beyond 12 months. Examples of high-intensity interventions are four to 20 in-person group sessions with more than 360 minutes of contact time.

SOURCES

U.S. Preventive Services Task Force. Behavioral counseling interventions to promote a healthful diet and physical activity for cardiovascular disease prevention in adults: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med.* 2012;157(5):367-371.

Lin JS, O'Connor E, Whitlock EP, Beil TL. Behavioral counseling to promote physical activity and a healthful diet to prevent cardiovascular disease in adults: a systematic review for the U.S. Preventive Services Task Force. *Ann Intern Med.* 2010;153(11):736-750. ■