Putting Prevention into Practice
An Evidence-Based Approach

Screening and Treatment for Major Depressive Disorder in Children and Adolescents

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▶ **See related U.S. Preventive Services Task Force Recommendation Statement on page 178.**

EB CME

This clinical content conforms to AAFP criteria for evidence-based continuing medical education (EB CME). See CME Quiz on page 127.

The case study and answers to the following questions on screening and treatment for major depressive disorder in children and adolescents 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 in the USPSTF Recommendation Statement and the evidence synthesis on the USPSTF Web site (http://www.ahrq.gov/clinic/uspstfix.htm). The practice recommendations in this activity are available at http://www.ahrq.gov/clinic/uspstf/uspschdepr.htm.

Case Study

A woman brings her two children, a 14-year-old boy and a nine-year-old girl, to your office for a routine checkup. She tells you that her husband has major depression, and she wants to know whether her children should be checked for early signs of depression.

Case Study Questions

1. Based on recommendations from the U.S. Preventive Services Task Force (USPSTF), which one of the following is the appropriate next step for these patients?

- ❑ A. Both children should be screened for major depressive disorder (MDD).
- ❑ B. Both children should be screened for MDD only if they have demonstrated symptoms of depression, including social isolation, anger, and sleep disturbance.
- ❑ C. The son should be screened for MDD if systems are in place to assure accurate diagnosis, treatment, and follow-up.
- ❑ D. Neither child should be screened for MDD, because treatment for depression has not been found to be effective in children or adolescents.
- ❑ E. The daughter should be screened for MDD, because the prevalence of MDD is higher in girls than boys.

2. Which one of the following statements about screening for MDD is correct?

- ❑ A. Screening instruments developed for primary care, such as the Patient Health Questionnaire for Adolescents (PHQ-A) and the Beck Depression Inventory for Primary Care (BDI-PC), have been used successfully in adolescents.
- ❑ B. Screening instruments have a 25 percent sensitivity in detecting MDD in children.
- ❑ C. The USPSTF found evidence that screening for MDD in children and adolescents causes significant harms.
- ❑ D. No screening instruments have been used successfully to diagnose MDD in children and adolescents in primary care settings.

3. Which of the following statements about treating MDD is/are correct?

- ❑ A. The USPSTF found adequate evidence that treating adolescents with selective serotonin reuptake inhibitors (SSRIs) decreases MDD symptoms.
- ❑ B. Although SSRIs have demonstrated harms in adults, such as increased risk of suicidality, there is no evidence to support these harms in children or adolescents.
- ❑ C. Psychotherapy has been found to be effective in the treatment of MDD in adolescents only when combined with SSRIs.
- ❑ D. Fluoxetine is the only drug approved by the U.S. Food and Drug Administration (FDA) for treating MDD in children and adolescents.

Answers appear on the following page.

Answers

1. The correct answer is C. The USPSTF recommends screening adolescents 12 to 18 years of age for MDD when systems are in place to assure accurate diagnosis, treatment, and follow-up. There is adequate evidence that screening tests accurately identify MDD in adolescents and that treatment with SSRIs, psychotherapy, or combined therapy (SSRIs and psychotherapy) decreases MDD symptoms.

The USPSTF concluded that the evidence is insufficient to assess the balance of benefits and harms of screening children seven to 11 years of age for MDD. Although SSRIs have been found to be effective in treating MDD in children, there is inadequate evidence that screening tests accurately identify MDD in children.

2. The correct answer is A. Instruments developed for primary care, such as the PHQ-A and the BDI-PC, have been used successfully to detect MDD in adolescents. The sensitivity and specificity in primary care settings is 73 and 94 percent, respectively, for the PHQ-A, and 91 and 91 percent, respectively, for the BDI-PC. However, data about the accuracy of MDD screening instruments in children are limited.

The USPSTF found no evidence of harms of screening for MDD in youth. Most studies on screening instruments in primary care settings focused on adolescents 12 years or older, and the studies that involved younger children demonstrated poorer performance of the screening instruments.

3. The correct answers are A and D. The USPSTF found adequate evidence that treating adolescents 12 to 18 years of age with SSRIs, psychotherapy, or combined therapy (SSRIs and psychotherapy) decreases MDD symptoms. Fluoxetine and citalopram yielded statistically significant higher response rates than did other SSRIs. Currently, fluoxetine is the only drug approved by the FDA for treating MDD in children and adolescents.

The USPSTF found inadequate evidence to support the benefits of treatment in children seven to 11 years of age. SSRIs (fluoxetine) reduce symptoms of MDD in children; however, data are limited on the benefits of psychotherapy (or psychotherapy plus SSRIs) in this age group.

There is convincing evidence that SSRIs are associated with harms, such as an increase in the risk of suicidality (i.e., suicide ideation, preparatory acts, or suicide attempts) in adolescents. Evidence is limited on the harms of psychotherapy or combined therapy (SSRIs and psychotherapy) in adolescents and children.

The USPSTF concluded that, in adolescents, there is moderate certainty that the net benefit of psychotherapy is moderate. In children, the evidence is lacking, and the balance of benefits and harms of psychotherapy could not be determined.

SOURCES

U.S. Preventive Services Task Force. Screening and treatment for major depressive disorder in children and adolescents: U.S. Preventive Services Task Force Recommendation Statement [published correction appears in *Pediatrics.* 2009;123(6):1611]. *Pediatrics.* 2009:123(4):1223-1228.

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