



Screen teens for depression—it's quicker than you think

A 2-question tool can achieve reasonably accurate results, and takes minimal time or training.

PRACTICE CHANGER

Use this 2-question tool to screen adolescent patients for major depression during routine visits.¹

STRENGTH OF RECOMMENDATION

B: Based on a single cohort study against gold standard; consistent with studies in other populations.

Richardson LP, Rockhill C, Russo JE, et al. Evaluation of the PHQ-2 as a brief screen for detecting major depression among adolescents. *Pediatrics*. 2010;125:e1097-e1103.

ILLUSTRATIVE CASE

A mother brings in her 14-year-old daughter for a routine check-up. The girl has no chronic medical problems and an unremarkable physical exam. When you're alone with your patient, you inquire about substance abuse and sexual activity. She denies both. What questions would you ask to screen for depression?

Estimates of the prevalence of adolescent depression range from 3% to 9%,²⁻⁴ and nearly 20% of teens will experience a depressive disorder before the age of 20.² But less than half of depressed adolescents are diagnosed or treated.²

Depressed teens face multiple risks

Teens with depressive disorders are at elevated risk, not only for poor family and social relationships and difficulties at school, but also for early pregnancy, substance abuse, hospitalization, recurrent episodes of depression, and suicide.^{2,4} Thirteen percent of adolescents have seriously contemplated suicide, and 6.3% have made a

suicide attempt in the previous 12 months.⁵

The US Preventive Services Task Force (USPSTF) recommends screening all adolescents for depression—provided that effective treatments and counseling are available for those who need it.⁶ Nearly all primary care clinicians agree that it is important to screen for adolescent depression, yet many feel hindered by both a lack of training and time constraints.² The study by Richardson et al¹ shows that targeted screening can be effective, even when time is tight.

STUDY SUMMARY

2-question screen is fairly accurate

The Patient Health Questionnaire (PHQ)-9 is a simple and reasonably accurate test for depression in adults.⁷ A much shorter version, using only the first 2 of the PHQ-9's questions, is an effective screening tool for adults.⁸ Richardson et al evaluated this brief screen—the PHQ-2—for adolescent depression.¹

The researchers invited 4000 teens (ages 13-17) who had seen a clinician within the previous 12 months to participate in a mailed survey, with parental or guardian approval. The survey included questions about age, gender, height, weight, sedentary and functional behaviors, and overall health, as well as depressive symptoms identified with the PHQ-2. This simple screen asks patients to rate how often in the past 2 weeks they have had:

- 1) a depressed mood, and/or
- 2) a lack of pleasure in usual activities.

Each question is scored from 0 to 3, with 0=not at all, and 3=nearly every day.

Susan L. Pereira, MD;
Mari Egan, MD, MHPE;
James J. Stevermer, MD,
MSPH

Department of Family and Community Medicine, University of Missouri, Columbia (Drs. Pereira and Stevermer); Department of Family Medicine, University of Chicago Pritzker School of Medicine, Chicago, Ill (Dr. Egan)

PURLs EDITOR

John Hickner, MD, MSc
Cleveland Clinic

CONTINUED

Next, the authors randomly selected 271 respondents with scores of ≥ 3 and 228 respondents with scores < 3 , matched for age and gender. Of those, 89% (n=444) participated in a longer telephone interview, which included the PHQ-9 and the Diagnostic Interview Schedule for Children (DISC-IV). Participants were predominantly female (60%), Caucasian (71%), and from urban areas (83%), with a mean household income of \$57,442.

Compared with the DISC-IV—which the researchers considered the gold standard—the PHQ-2 had a sensitivity of 74% and a specificity of 75% at a cut point score ≥ 3 ; the sensitivity and specificity were 96% and 82%, respectively, for detecting young people who met the criteria for major depression on the PHQ-9. The area under the receiver operating curve was 0.84 (95% confidence interval, 0.75-0.92), meaning that the PHQ-2 correctly classified 84% of the participants as depressed or not depressed.

PHQ-2 helps identify related symptoms

Most of those with false-positive screens had other mental health problems. These included depressive symptoms that did not meet the criteria for major depression, an episode of major depression within the past year (but not in the last month), significant psychosocial impairment, and clinically significant anxiety symptoms.

WHAT'S NEW

Screening can be quick

Prior to this study, most validated tools for depression screening of adolescents were relatively time-consuming, and not likely to be performed during routine visits. The PHQ-2 is a reasonably accurate screen that requires minimal time (and minimal training).

References

- Richardson LP, Rockhill C, Russo JE, et al. Evaluation of the PHQ-2 as a brief screen for detecting major depression among adolescents. *Pediatrics*. 2010;125:e1097-e1103.
- Zuckerbrot RA, Maxon L, Pagar D, et al. Adolescent depression screening in primary care: feasibility and acceptability. *Pediatrics*. 2007;119:101-108.
- Williams SB, O'Connor EA, Eder M, et al. Screening for child and adolescent depression in primary care settings: a systematic evidence review for the US Preventive Services Task Force. *Pediatrics*. 2009;123:e716-e735.
- Bhatia SK, Bhatia SC. Childhood and adolescent depression. *Am Fam Physician*. 2007;75:73-80.
- Eaton DK, Kann L, Kinchen S, et al. Youth risk behavior surveillance—United States, 2009. *MMWR Surveill Summ*. 2010; 59:1-142.
- U.S. Preventive Services Task Force. Screening and treatment for major depressive disorder in children and adolescents: US Preventive Services Task Force Recommendation Statement. *Pediatrics* 2009; 123:1223-1228.
- Williams JW Jr, Noel PH, Cordes JA, et al. Is this patient clinically depressed? *JAMA*. 2002;287:1160-1170.
- Kroenke K, Spitzer RL, Williams JB. The Patient Health Questionnaire-2: validity of a two-item depression screener. *Med Care*. 2003;41:1284-1292.
- US Food and Drug Administration. Antidepressant use in children, adolescents, and adults. Available at: <http://www.fda.gov/Drugs/DrugSafety/InformationbyDrugClass/ucm096273.htm>. Accessed October 19, 2010.

CAVEATS

Study assessed a homogenous group

This study included mostly white girls from urban areas, relatively few of whom had public insurance. Whether the results are applicable to teens from different backgrounds is unclear. While the accuracy of the PHQ-2 was not perfect, almost 95% of those with a positive screen had some psychological problems.

CHALLENGES TO IMPLEMENTATION

Physicians may lack psych resources

Routinely using a 2-question screen for adolescent depression is unlikely to interfere with workflow in most practices. However, the USPSTF recommends screening teens only when there are systems in place to ensure accurate diagnosis, psychotherapy, and follow-up. Unfortunately, not all clinicians are adequately trained to diagnose or treat depressed teens, and some may lack access to appropriate psychotherapy referrals or consultation.

Despite the benefit of medications such as selective serotonin reuptake inhibitors (SSRIs) for teens with major depression, the antidepressants carry some risk. The black box warning for suicidality among adolescents treated with SSRIs⁹ necessitates accurate diagnosis, informed consent, and appropriate follow-up with clinicians who are comfortable treating adolescents.

JFP

ACKNOWLEDGEMENT

The PURLs Surveillance System is supported in part by Grant Number UL1RR024999 from the National Center for Research Resources, a Clinical Translational Science Award to the University of Chicago. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Center for Research Resources or the National Institutes of Health.



Do you screen adolescents for depression during routine visits?

- Yes, I regularly screen teens for depression
- Often
- Rarely or never
- Other _____

Go to jfponline.com and take our instant poll