

**TWO BRIEF SCREENS FOR ADOLESCENT DEPRESSION IN THE  
PEDIATRIC EMERGENCY DEPARTMENT**

*Maia S Rutman, MD<sup>1</sup>,  
Edmond Shenassa, ScD<sup>2</sup>,  
Thomas Chun, MD<sup>1</sup>  
and Bruce Becker, MD, MPH<sup>1</sup>.*

<sup>1</sup>Emergency Medicine, Brown Medical School, Providence, RI, United States and <sup>2</sup>Centers for Behavioral and Preventive Medicine, Brown Medical School, Providence, RI.

## **BACKGROUND:**

Depression is a common psychiatric problem for adolescents. Nevertheless, adolescents are rarely formally screened for depression when being treated in the Pediatric Emergency Department (PED).

## **OBJECTIVE:**

We examined the sensitivity and specificity of one- and two-question instruments to screen for depression in adolescents in the PED.

## **DESIGN/METHODS:**

Cross-sectional study of a convenience sample of adolescents 12-17 years of age presenting to an urban PED with sub-critical illness or injury between 4/05 and 11/05. Participants completed a demographic questionnaire and three depression screens: the Yale-Brown one-question instrument, a two-question case finding instrument for depression that has been validated in adults (Figure 1), and the Center for Epidemiologic Studies 20-question screen (CESD). Data was analyzed using SPSS®.

### Figure 1: One and Two-Question Instruments

One-Question Instrument: Do you often feel sad or depressed?

Two-Question Instrument, Question 1: During the past month, have you often been bothered by feeling down, depressed, or hopeless?

Two-Question Instrument, Question 2: During the past month, have you often been bothered by little interest or pleasure in doing things?

## **RESULTS:**

One hundred and eighty one patients were approached, of whom 130 (72%) agreed to be screened. Forty-six (35%) of the 130 study participants screened positive on the CESD using a cutoff score of  $\geq 16$ . A “yes” response to the one-question instrument had a sensitivity of 65% and specificity of 94% as compared to the CESD, while a “yes” response to one or both questions of the two-question instrument had a sensitivity of 76% and specificity of 86% as compared to the CESD (Table 1).

Table 1: Performance of brief screens compared with CESD

Sensitivity, % (95%CI)  
Specificity, % (95%CI)  
Positive Predictive Value, % (95%CI)  
Negative Predictive Value, % (95%CI)

One-question screen  
54 (40-88)  
94 (89-99)

83 (70-96)  
79 (71-97)

Two-question screen

76 (64-88)  
86 (68-100)  
74 (54-94)  
86 (68-100)

### **CONCLUSIONS:**

The two-question instrument is sensitive and specific for detecting depression in adolescents being treated in the PED. This screen takes less than one minute to administer, and is a practical addition to patient evaluation in the PED setting.