Predicting 3-Month Risk for Adolescent Suicide Attempts among Pediatric Emergency Department Patients

Purpose
In this multisite prospective study, researchers aimed to identify short-term predictors of suicide attempts [within 3 months of an emergency department (ED) visit] among adolescents.

Background
The rate of adolescent suicide continues to rise in the US. According to a 2018 study, 5.1% of male and 9.3% of female high school students reported a past-year suicide attempt (SA). A significant body of research has focused on single risk factors for adolescent SA, despite the growing recognition of the multidimensional nature of suicide risk. Understanding the multiple risk factors associated with adolescent SA will help identify potential prevention and intervention targets.

Methods
Adolescents (age 12-17) were recruited from 13 pediatric EDs and one Indian Health Service hospital to complete a suicide risk survey. Of 6,448 patients who completed the suicide risk survey, 2,897 participants (43.6%) were randomized to complete a 3-month telephone follow-up. This subset of participants was oversampled for suicide risk. Using multivariate models, the researchers identified predictors for suicide risk in the total sample and in important subgroups.

Findings
Within the 3-months post ED visit, 104 adolescents (4.9%) attempted suicide. Key baseline predictors of SA using multivariate models differed for subgroups defined by sex and the presence or absence of past-week suicidal thoughts. Recent suicide ideation (SI), lifetime severity of SI, lifetime history of suicide behavior, and school connectedness most strongly predicted SA for the group as a whole. Lifetime SI severity and social connectedness most strongly predicted 3 month SA for adolescents without recent SI at baseline. For adolescents with past week SI at baseline, public assistance, suicidal rumination, and social connectedness predicted 3 month SA. For male adolescents, past week SI at baseline and lifetime SI severity predicted SA; while for females, past week baseline SI, number of nonsuicidal self-harm incidents during the past 12 months, and social connectedness predicted 3-month SA.

Discussion
Study findings highlight the importance of adolescents’ social and school connectedness and provide new information regarding predictors for the specific subgroups of males, females, and adolescents who do not report recent suicidal thoughts. Results regarding predictors of suicide attempts, particularly those that are potentially modifiable such as school connectedness, indicate targets for preventive efforts. They also can inform adolescent risk recognition during an ER visit.

Citation