Screening for Suicide Risk: Recommendation Statement: United States Preventive Services Task Force

United States Preventive Services Task Force

Citation

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Abstract

Figure 3

Agency for Healthcare Research and Quality

Figure 2

US Department of Health and Human Services

SUMMARY OF RECOMMENDATION

The U.S. Preventive Services Task Force (USPSTF) concludes that the evidence is insufficient to recommend for or against routine screening by primary care clinicians to detect suicide risk in the general population. I recommendation.

The USPSTF found no evidence that screening for suicide risk reduces suicide attempts or mortality. There is limited evidence on the accuracy of screening tools to identify suicide risk in the primary care setting, including tools to identify those at high risk (see Clinical Considerations). The USPSTF found insufficient evidence that treatment of those at high risk reduces suicide attempts or mortality. The USPSTF found no studies that directly address the harms of screening and treatment for suicide risk. As a result, the USPSTF could not determine the balance of benefits and harms of screening for suicide risk in the primary care setting.

CLINICAL CONSIDERATIONS

- The strongest risk factors for attempted suicide include mood disorders or other mental disorders, comorbid substance abuse disorders, history of deliberate self- harm (DSH), and a history of suicide attempts. DSH refers to intentionally initiated acts of self-harm with a non-fatal outcome (including self-poisoning and self-injury). Suicide risk is assessed along a continuum ranging from suicidal ideation alone (relatively less severe) to suicidal ideation with a plan (more severe). Suicidal ideation with a specific plan of action is associated with a significant risk for attempted suicide.
- Screening instruments are commonly used in specialty clinics and mental health settings. The test characteristics of most commonly-used screening instruments (Scale for Suicide Ideation

[SSI], Scale for Suicide Ideation–Worst [SSI-W], and the Suicidal Ideation Questionnaire [SIQ]) have not been validated to assess suicide risk in primary care settings. There has been limited testing of the Symptom-Driven Diagnostic System for Primary Care (SDDS-PC) screening instrument in a primary care setting.

DISCUSSION

Although the incidence of suicide is low in the general population (0.01%), it was the 11th leading cause of death in the United States in 2000, with an age-adjusted rate of 10.6 per 100,000 people.[4] Adolescents and the elderly are particularly at risk for suicide.[5,6] Risk factors for attempted suicide include mood disorders, comorbid substance abuse disorders, and a history of previous suicide attempts.[7] Additional risk factors for attempted suicide in youth are aggressive or disruptive behavior and history of physical and sexual abuse.[8] Two-thirds of suicidal deaths occur on the first attempt, with higher completion rates in men than in women.[9,10] Although men complete suicide more often than women, women attempt suicide more often than men.[10] Between 3% and 5% of those who have had an episode of DSH die by suicide within 5 to 10 years.[11] More than 90% of those who complete suicide have a psychiatric illness at the time of death, usually depression, alcohol abuse, or both.[12] Almost 75% of suicides are completed by white males who have a 2-fold higher risk for suicide than do black males (19.1/100,000 vs 10.4/100,000).[4] Native Americans are also at high risk for suicide.[13]

The USPSTF reviewed the evidence for the effectiveness of identification and treatment for suicide risk in the primary care setting. Because no direct evidence was found regarding the impact of screening on suicide attempts or completions, the USPSTF examined the accuracy of screening tests and the efficacy of treatment on intermediate outcomes, such as reduced suicidal ideation, reduced severity of depression, reduced hopelessness, and improved level of functioning. Their review did not include studies of populations with chronic psychiatric illnesses because people in this group would already have been identified as being at risk for suicide.

Little is known about screening instruments to assess suicide risk in primary care populations. Only 1 study of good quality evaluated a screening instrument, the 62-item SDDS-PC, for the identification of patients with psychiatric illnesses in the primary care setting.[14] One of its items for assessing suicide risk, "feeling suicidal," was predictive of plans to attempt suicide with reasonable test characteristics (83% sensitivity, 98% specificity, and a 30% positive predictive value). However, the study has not been replicated, nor has the specific item been tested independent of the longer instrument. Two studies of fair to poor quality evaluated the 21-item SSI and the SSI-W in adult psychiatric outpatients.[7,15] Patients who scored in the higher-risk category in the SSI and SSI-W were more likely to commit suicide than those who scored in the lower-risk category (approximately 7 and 14 times more likely, respectively). The shortened 4-item Suicidal Ideation Questionnaire (SIQ-JR), developed to identify adolescents at risk for suicide in emergency room settings, has 98% sensitivity, 37% specificity, and a 55% positive predictive value.[16] None of these 3 screening instruments has been evaluated in the primary care setting. No studies were found that assessed instruments for screening patients at high risk for suicide in primary care populations.

In the USPSTF review, 33 randomized controlled trials addressed the effect of treatment of those patients with a history of suicide attempts on health outcomes and mortality.[3] Thirty-one of these trials required recent DSH; the other 2 trials enrolled patients with borderline personality disorder (at least 75% of whom had a history of DSH in these 2 studies). With respect to the outcomes on suicide attempts and completion, no statistically significant effects of interventions were found for which more than 1 study of the intervention had been performed. However, some trends suggested incremental benefits from some interventions (in particular, problem-solving therapy for patients aged 15 or older). Of the interventions for which only 1 study was conducted, the most promising are dialectical behavior therapy (DBT) for adults with borderline personality disorder, interpersonal psychotherapy (IPT) for adults with DSH, and group therapy for younger adolescents with DSH. No studies were found that evaluated treatment for suicide risk in the geriatric population. The studies comprising the evidence base have 3 primary limitations: first, studies tend to be underpowered; second, standard care is poorly described and likely varies across multiple studies; and third, there is a lack of stratification based on age and age ranges are inconsistent across studies. This limits the ability of the USPSTF to draw meaningful conclusions about the effects of these interventions on future suicide attempts or suicides.

Several studies of fair quality evaluated the effect of

treatment on the intermediate outcomes of suicidal ideation, depressive severity, hopelessness, and level of functioning in high-risk patients. No studies recruited patients from primary care settings. Improvements were described in patients with a history of DSH who participated in problem-solving therapy, and in women with borderline personality disorder who were treated using DBT, antidepressant therapy, cognitive behavioral counseling, and interpersonal psychotherapy. Among children aged 18 and younger, who had a history of attempted suicide, brief emergency crisis intervention involving mother and daughter decreased depressive symptoms at the 18-month follow-up.[17]

No studies have directly addressed the harms of either screening or treatment of primary care patients at risk for suicide. Two studies found contradictory results regarding the harms of treatment interventions in a population of patients with a history of DSH compared with patients with no history of DSH.[3]

RECOMMENDATIONS OF OTHERS

The Canadian Task Force on the Periodic Health Examination (now the Canadian Task Force on Preventive Health Care) has found insufficient evidence to recommend for or against routine evaluation of suicide risk and recommends that physicians remain alert to the possibility of suicide in high-risk patients, particularly if there is evidence of psychiatric disorder, depression, or substance abuse or if the patient has recently attempted suicide or has a family member who committed suicide.[18] The American Academy of Pediatrics recommends asking about depression, substance abuse, suicidal thoughts, and other risk factors associated with suicide risk in routine history taking throughout adolescence.[19] The American Academy of Child and Adolescent Psychiatry recommends that clinicians be aware of patients at high risk for suicide (older male adolescents or adolescents of either sex, regardless of age, who have a current mental disorder or disordered mental state [such as depression, mania or hypomania, or mixed states], especially when complicated by comorbid substance abuse, irritability, agitation, or psychosis).[20] The American Medical Association Guidelines for Adolescent Preventive Services (GAPS) recommend that all adolescents be asked annually about behaviors or emotions that indicate risk for suicide.[21]

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*Members of the Task Force at the time this recommendation was finalized. For a list of current Task Force members, go to http://www.ahrq.gov/clinic/uspstfab.htm.

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APPENDIX A

U.S. PREVENTIVE SERVICES TASK FORCE RECOMMENDATIONS AND RATINGS

The Task Force grades its recommendations according to one of 5 classifications (A, B, C, D, I) reflecting the strength of evidence and magnitude of net benefit (benefits minus harms):

A. The USPSTF strongly recommends that clinicians provide [the service] to eligible patients. The USPSTF found good evidence that [the service] improves important health outcomes and concludes that benefits substantially outweigh harms.

B. The USPSTF recommends that clinicians provide [the service] to eligible patients. The USPSTF found at least fair evidence that [the service] improves important health outcomes and concludes that benefits outweigh harms.

C. The USPSTF makes no recommendation for or against routine provision of [the service]. The USPSTF found at least fair evidence that [the service] can improve health outcomes but concludes that the balance of benefits and harms is too close to justify a general recommendation.

D. The USPSTF recommends against routinely providing [the service] to asymptomatic patients. The USPSTF found at least fair evidence that [the service] is ineffective or that harms outweigh benefits.

I. The USPSTF concludes that the evidence is insufficient to recommend for or against routinely providing [the service]. Evidence that [the service] is effective is lacking, of poor quality, or conflicting and the balance of benefits and harms cannot be determined.

APPENDIX B

U.S. PREVENTIVE SERVICES TASK FORCE STRENGTH OF OVERALL EVIDENCE

The USPSTF grades the quality of the overall evidence for a service on a 3-point scale (good, fair, poor):

Good: Evidence includes consistent results from well-designed, well-conducted studies in representative populations that directly assess effects on health outcomes.

Fair: Evidence is sufficient to determine effects on health outcomes, but the strength of the evidence is limited by the number, quality, or consistency of the individual studies, generalizability to routine practice, or indirect nature of the evidence on health outcomes.

Poor: Evidence is insufficient to assess the effects on health outcomes because of limited number or power of studies, important flaws in their design or conduct, gaps in the chain of evidence, or lack of information on important health outcomes.

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