



Educating non-mental healthcare providers about suicide-risk assessment in adolescents



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“Given the recent indications of resident interest and residency director perceptions of suicide training inadequacy in their own programs, the development of a residency-based training model ... is the optimal future direction.”

Suicide is the third leading cause of adolescent death in the USA [101]. For every adolescent suicide there are 100–200 suicide attempts [102]. In 2009, 6.3% of American high school students reported having attempted suicide within the previous year, and over twice that many (13.8%) reported experiencing suicidal ideation within the previous year [1].

Fortunately, adolescent suicide and suicide attempts are outcomes with modifiable risk factors that respond to personalized care. There are many opportunities for the provision of such care, particularly in nonspecialist environments. Adolescents routinely bring emotional distress and suicidal ideation to their primary providers' offices [2] and feel comfortable discussing these complaints [3,4]. The pediatric emergency department is the only source of healthcare provision for many underserved adolescents [5] and, as with the primary-care setting, adolescents similarly feel comfortable receiving suicide screening in

the pediatric emergency department [6]. Owing to the timing of their consultations, these may be the last source of professional intervention for these adolescents prior to a suicidal act [7].

However, if uninvited, these complaints commonly go unannounced and unaddressed. Suicidal ideation is frequently withheld if not directly assessed [8]. Direct questioning revealed a suicidal ideation point prevalence of 6% in one pediatric emergency department [6] and 22% preceding a 2-week incidence in an Australian outpatient clinic [9] among adolescents who presented without any psychiatric complaints. These adolescents will benefit from a simple but effective approach to suicide-risk assessment and management among nonspecialists.

Current nonspecialist attitudes & practices

Pediatric residents in the USA currently receive training in suicide prevention within

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the 1-month rotation in developmental-behavioral pediatrics as required by the Accreditation Council for Graduate Medical Education requirements [103]. Data do not support the adequacy of this level of training. Several studies have shown that both American and British pediatric house staff endorse low confidence in evaluating suicidal patients, as has been recently reviewed [10]. Over half (64%) of American pediatric residency directors report a feeling that resident training regarding suicide and depression in their own programs was inadequate [11].

As a potential result, a low percentage of nonspecialists (23–53%) report routinely performing suicide screening [12–14]. The actual performance of routine-suicide screening may be even lower: 53% of the provider cohort reported routinely performing screening, and only 7% of their patients reported receiving such screening at their last visit [14].

Evidence supporting efforts to increase nonspecialist training

Recently graduated pediatric residents endorse high levels of interest in child and adolescent psychiatry despite their low level of confidence in screening for, and assessing, suicide risk [15]. A study of postresidency pediatric outpatient clinic providers found over two-thirds (72%) of providers expressed interest in receiving more training, 69% of which explicitly mentioned training in screening and assessment [3]. A similar number of pediatric emergency room physicians (53%) reported perceiving receipt of inadequate training in the evaluation and screening of mental illness, yet more than half (55%) believed in the importance of screening [16].

These data suggest that training would be well received. In addition, there is evidence that among outpatient care providers, those who agree or strongly agree that they felt sufficiently trained and knew how to screen were significantly more likely to perform routine screening in practice (odds ratio: 3.2; 95% CI: 1.7–6.3) [3].

Evidence-supported models of training interventions for the nonspecialist

The first systematic review of workshop training interventions for the mental health specialist was recently published [17]. The findings of this review supplement what we may conclude from the recent additions to the nonspecialist training literature.

Wintersteen provided a 90-min didactic lesson in epidemiology, risk and protective factors, assessment and management to outpatient postresidency providers followed by the use of a standardized patient [18]. He found significantly increased rates of detection and referral rates that were maintained over time [18]. Similarly, Fallucco and colleagues provided a 50-min didactic lesson and role-playing exercises with standardized patients to pediatric residents [15]. Here, residents were assigned in groups to receive either the didactic (n = 12), standardized patient (n = 6), both interventions (n = 6) or no intervention (n = 10). These small sample sizes prevented sufficient statistical power to identify significant postintervention improvement in self-rated knowledge of suicide risk factors and confidence in screening for suicide risk factors, but the group of residents who received both interventions did perform significantly better in these measures than their comparison groups [15].

Alternate methods for nonspecialist providers in the literature include the use of electronic media and workshops. Video demonstration training was shown to increase provider confidence in discussing mental health concerns within pediatric populations by Kemper and colleagues [19], and a six-module self-administered web-based educational program designed for emergency department resident nonspecialists was shown to significantly improve post-program knowledge of suicidal assessment by Horwitz and colleagues [20]. The day seminar model significantly enhanced general practitioner recognition rates in Australia that was held 6 weeks after an intervention in an article by Pfaff and colleagues [21]; however, details of the training modalities used within the workshop were not published.

Commentary

These combined data support our opinion that suicide-risk identification, assessment and management training for nonspecialists is both feasible and beneficial in the outpatient and emergency department settings. Improved training is needed to address the current deficiencies of nonspecialist provider attitudes and performance in addressing adolescent suicide.

However, suicide assessment formulation and management measures will not work until identification rates through screening are improved. Nonspecialist providers must be taught that it is important to pay attention to

the evaluation of suicidal ideation and behavior. There remains a sizeable proportion (45%) of nonspecialist emergency-room providers who do not agree that screening is important; in fact, 70% support screening only when the chief complaint is psychiatric [16]. We recommend training that emphasizes the importance of screening and identification.

As noted, suicidal ideation is frequently withheld if not directly assessed [8]. Nonspecialists may best appreciate this through discussion of the large percentages of adolescents with suicidal ideation who presented to nonspecialists without psychiatric complaints [6,9]. Didactics should emphasize the importance of attention to indirect signs of suicidality.

These must include psychiatric disorders and symptoms in excess of the depressive disorders, such as substance use and impulsivity. More than twice as many outpatient providers reported frequently or always screening for depression than for suicide risk factors (52 vs 23%) among adolescents in one study [3]. This may reflect beliefs that depression screening is adequate for suicide prevention; in this same study, depression was more frequently identified as the most important suicide risk factor among any other risk factor, including prior suicide attempts [3]. Although approximately 60% of individuals who commit suicide suffer from depression, approximately 30% of individuals who commit suicide suffer from other psychiatric disorders [22]. Screening guidelines that directly address suicidal ideation, such as the American Medical Association's Guidelines for Adolescent Preventative Services, but not the United States Preventive Services Task Force's Guide to Clinical Preventive Services, should be emphasized. Didactics should also emphasize that, as in adults, there is no evidence of iatrogenic effects of suicide screening in adolescents [23], and that the access to lethal means, such as guns, should be evaluated without recourse. Follow-up sessions or online refreshers may address the indications that didactic material are poorly retained, even among nonspecialists with high interest in child and adolescent psychiatry [15].

However, didactics alone provides suboptimal training. Empiric studies have shown that direct questioning, simple empathic support and attentiveness yield the greatest rates of emotional and behavioral disclosure from adolescents and their parents [24,25]. The use of standardized patients may best promote supportive and empathic non-verbal communication, supportive interventions and emotional responsiveness. Such experiential activities are likely to increase overall provider comfort, which has been suggested as a primary mean to encourage greater engagement with pediatric populations [26]. This emphasis agrees with the empirically supported models of relationship-centered care [27] and the common-factor approach [28], and it utilizes the recent, if limited, data that didactics and role playing are associated with greater training outcomes than the use of either alone [15].

A study that assesses pre- and post-intervention training rates of screening, preferably with a follow-up group, would provide strong outcome evidence for a developed intervention model. Optimal outcome studies should be restricted to either the emergency department or outpatient clinic setting, as well as to providers in residency or postresidency years. Given the recent indications of resident interest [15] and residency director perceptions of suicide training inadequacy in their own programs, the development of a residency-based training model in line with the characteristics described above, its assessment through a sufficiently statistically powered, randomized, controlled, outcome-based study, and the dissemination of its methods via a detailed clinical description, is the optimal future direction.

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