A Review and Application of Suicide Prevention Programs in High School Settings

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Teen suicide is a terrible tragedy and is the third leading cause of death among high school children aged 14 to 19. School based intervention programs have been regarded as an effective and essential means of addressing this problem. A comprehensive review of the extant literature provides examination of the risk and protective factors of suicide in this age group, the development of these programs, the current state of the science and recommendations for enhanced assessment and intervention.

When a teen takes his life it devastates a family, a school, and a community leaving survivors to wonder how and why it happened. Current statistics report that suicide among high school students was the third leading cause of death in 2007 for those of this age, with only accidents and homicides occurring with greater frequency (American Association of Suicidology [AAS], 2007). According to Pirrucello (2010), the causes of this tragic phenomenon have not been well understood; consequently, there have been many suicide prevention programs that have been developed, but very few that show statistically significant effectiveness.

The school is a nexus for teen life and, therefore, uniquely poised as a context in which to address teen suicide (Stephan, Weist, Kataoka, Adelsheim, & Mills, 2007). This review of literature examines how programs based in high schools have approached the problem of suicide in students. It begins by examining the current problem of suicide in this population and looks at both contributory and protective factors with the understanding that this information is crucial to developing an effective intervention (Cash & Bridge, 2009). The review further examines what types of programs and initiatives have been developed over the years, looking at factors such as effectiveness and criticisms. Finally, directions and recommendations for the future are provided.

SCOPE OF THE PROBLEM

Suicide is the third leading cause of death among youth ages 14–19 (i.e., “teens”); however, this statistic does not truly provide an accurate representation of the prevalence of the problem. Notably, in 2007, according to the Centers for Disease Control and Prevention (CDC; 2007), a survey reported that in the prior 12 months, 18.7% of teen girls and 10.3% of teen boys had considered suicide; 13.4% and 9.2%, respectively, had planned suicide; and 9.3% and 4.6% had attempted suicide. Additionally, it is estimated that for every teen suicide there are 100 to 200 attempts (AAS, 2007). The AAS also noted that although males think about, plan, and attempt suicide much less than females, they are 3.6 times more likely to be suicide completers. This has been attributed to the presence of and access to firearms, which are the most often used means of suicide in teens and account for 45.9% of all deaths in this population. Further, Greydanus, Bacopoulou, and Tsalamanios (2009) note that firearms are the method of choice for males. Studies have shown that if a gun is in the home of a suicidal teen it is likely to be used to attempt suicide; as such, limiting male teen access to guns is an essential means of reducing teen suicide rates (Cash & Bridge, 2009). Of note, in spite of these facts, discussion of this issue is currently not within the scope of most school-based suicide prevention programs.

There are many factors that contribute to teen suicidal behavior. In their comprehensive review of the epidemiology of youth suicide, Cash and Bridge (2009) note that the single greatest risk factor, by far, is underlying mental illness; a diagnosable Axis I psychiatric disorder is present in 80–90% of those who attempt and complete suicide. They highlight the most common diagnoses as being “mood, anxiety, conduct and substance abuse [disorders]” (p. 614). In their comprehensive review, Gould, Greenberg, Velting, and Shaffer (2003) also state that greater than 90% of youth suicides have “at least one major psychiatric disorder” (p. 389). However, the greatest single mental illness risk factor is depression; up to 60% of suicide completers, as well as 40–80% of suicide attempters, have been shown to have a depressive disorder (Cash & Bridge, 2009). The presence of a
prior suicide attempt is also a major predictor of future attempts (AAS, 2007). Gould et al. (2003) state that a prior attempt is “one of the strongest predictors for a completed suicide” (p. 390), especially for male adolescents. These authors also note that poor problem solving skills and interpersonal capacity increase the risk of teen suicide. Given the importance of these factors, an effective prevention program must somehow take these into account.

Other important factors that contribute to teen suicide include issues such as race, language spoken at home, sexual orientation, and perception of weight (Cash & Bridge, 2009; Jiang, Perry, & Hesser, 2010). According to Cash and Bridge (2009), currently, Caucasian teens have the highest suicide rate, but the rate of suicide in African-American male adolescents is increasing, which is causing the margin to close. Hispanic origin was noted by West, Swahn, and McCarty (2010) as a risk factor and Cash and Bridge (2009) stated that Hispanics had a higher rate of ideation and suicide attempts but not suicide completions. English not being the primary language spoken at home was another factor that Jiang et al. (2010) noted as having a strong correlation to suicide attempts. They also noted that adolescents who self-report being gay or lesbian or who are questioning their sexual orientation are two to three times more likely to attempt suicide as opposed to those who self-report a heterosexual orientation (Jiang et al. 2010). These authors also reported that being overweight was strongly associated to both suicide ideation and suicide attempts and stated a reason for this may be the depression that results from the social isolation of being overweight in high school. Further, based on mass media and anecdotal reports, being the victim of bullying may potentially disrupt the development of age appropriate self-perception and ego integrity; this may lead to increased depression and the potential for self-destructive tendencies.

Additional factors such as poor family dynamics, child abuse, child sexual abuse, and bullying, also significantly increase the risk of suicide among adolescents (Cash & Bridge, 2009; Kaminski & Fang, 2009). Gould et al. (2003) noted that poor relationships with parents was a significant risk factor, but it is difficult to make an independent analysis distinguished from underlying psychopathology in the adolescent. Regardless, identifying a poor family relationship is still very useful in the context of a school-based suicide prevention plan. Additionally, Gould et al. (2003) stated that child abuse, particularly sexual abuse, is strongly associated with increased teen suicidal behavior. Lastly the authors note that the familial tendency of suicide has been well-documented and is thought to be both a contextual relational issue as well as a genetic one. Gould et al. (2003) highlighted studies that definitively show that there is an increased risk of familial suicidal behavior based solely on genetics. Their review also discusses the genetic components of increased risk in teens with serotonin dysregulation being the obvious clinical focus. This is very important for clinical practice and treatment but it is not within the scope of a high school-based suicide prevention plan.

The issue of bullying has come to the fore in recent years and has captured mainstream media’s attention. The coverage of the deaths of several adolescent females as a result of bullying and cyberbullying highlight just how much of a problem this has become. The Centers for Disease Control and Prevention (2010b) demonstrate in a 2009 nationally representative sample that over 19% of high school students had experienced some type of bullying. Kaminski and Fang (2009) reflect that victimization in school by peers has an association to suicide that exceeds the risks of age, race, gender, and even depressive symptoms. The authors further note a school-based program geared toward addressing this one issue can significantly reduce the incidence of teen suicide.

Drug and alcohol use increases the chance that a teen who is feeling sad or depressed, or who has contemplated suicide, will attempt suicide (Cash & Bridge, 2009; West, Swahn, & McCarty, 2010). Additionally, adolescents who drink, use drugs, or smoke have strong associations to poor mental health including depression, suicidal ideation, and suicidal attempts (Jiang et al., 2010). These behaviors are clearly risk factors and should be included in screening tools within school-based prevention plans.

Prominent protective factors are access to effective care for physical, mental, and substance abuse problems, connectedness to one’s family and community, cultural and religious beliefs that view suicide as wrong or immoral, and adaptive coping mechanisms and problem solving skills (CDC, 2010a). The CDC has further noted that there has not been as much research on protective factors as risk factors but the development of protective factors is still regarded as critical in addressing adolescent suicidal behavior. Pirrucello (2010) adds self-confidence and willingness to seek help to this list. Gould et al. (2003) highlight family connectedness and, potentially, religion as protective factors. Hooven et al. (2010) add a concept they call self-efficacy, which they define as, “the confidence that one can effectively meet life challenges and access learned skills” (p. 723). A comprehensive adolescent suicide prevention plan can address substance abuse and promote coping skills, self-efficacy, problem solving abilities, and family cohesion.

HIGH SCHOOL SUICIDE PREVENTION PROGRAMS

In their seminal manuscript, Metha, Weber, and Webb (1998) conducted a meta-analysis of adolescent suicide prevention policy and programs in the 50 states from 1980 to 1994. It shows the development of initiatives and priorities of that time and provides an opportunity to compare the level of progress that has been made. The manuscript indicates that the first evidence of federal attention to the issue of adolescent suicide was the Youth Suicide and Prevention Act of 1985 which provided funds for school-based prevention programs. This manuscript reflects a significant amount of attention to the issue of adolescent suicide in the 1980s; however this did not result in comprehensive assessment and planning. Specifically, there were no standards
driving school-based programs; there was no standard school curriculum; and there were no standards for continuing education for those required to intervene. Financial considerations and issues with disjointed state initiatives additionally contributed to the failure of standardized prevention programs.

Stephan, Weist, Kataoka, Adelsheim, and Mills (2007) assert that the recommendations of President George W. Bush’s New Freedom Commission on Mental Health in 2002 were a catalyst to develop a more cohesive school-based mental health system for adolescents, including a suicide prevention program. It was again recognized that adolescent mental health was not a priority and, as a result, resources were fragmented (Stephan et al., 2007). However, as the authors point out, schools are a nexus and have a unique ability to increase adolescent accessibility to mental health care while also connecting with family and community. They also note the Commission recognizes the need to implement a national suicide prevention strategy within schools. A brief historical look at the development of policies concerning teen suicide prevention programs reveals that, as of 2002, little occurred regarding the development of a reliable suicide prevention program. The same ambiguity regarding adolescent suicide prevention programs persists today (Hallfors et al., 2006). What is clear is that there is a significant need for an effective program and that school is the place for implementation. Kalafat (2006) describes screening, curriculum based programs, gatekeeper training, and programs that enhance protective factors as current school-based initiatives. Gatekeepers are the adults, such as teachers and school counselors, who are in a position to observe and intervene with at-risk adolescents. Gatekeeper training focuses on increasing the identification and response skills of these professionals; subsequent self-reports from those who have received training indicate using the new skills and an increase in referrals (Stein et al., 2010). According to Kalafat (2006), there are several gatekeeper training programs available such as Question Persuade Refer (QPR), Living Works, and Suicide Options and Relief (SOAR). However, the actual training program is not as important as its administration. Keller et al. (2009) implemented and evaluated the QPR program with 14,000 child welfare employees, including teachers, in Tennessee. The authors concluded that the program was effective in equipping these individuals with the necessary skills when refresher courses were utilized and when there were legislative mandates, proper infrastructure, and administrative capacity to sustain the program. Stein et al. (2010) evaluated the Los Angeles Unified School District’s Youth Suicide Prevention Program (LAUSD) and concluded similarly that excellent administration and communication from the district down to the school, support of leadership (especially the principal), and established resources and channels for referrals were essential to successful training in this gatekeeper program servicing over 740,000 students.

Common criticisms of gatekeeper programs include their cumbersome administration and questionable effectiveness. Stein et al. (2010) found that the LAUSD program required specific protocols, adequate training, accessible support materials and personnel, excellent communication, vigilant oversight, and flexibility to maintain the program. These authors also noted there was no evidence this program actually reduced the incidence of adolescent suicide in this school district. It is essential to have trained personnel within suicide prevention curricula; however gatekeeper programs are not sufficient as stand-alone programs.

There is a paucity of research on the effectiveness of programs that enhance protective factors to reduce adolescent suicide. One program that has demonstrated success in enhancing the protective factors of problem solving, coping skills, and personal control among identified suicidal high school students at risk for dropping out is the Coping and Support Training Program (CAST; Thompson, Eggert, Randell, & Pike, 2001). Interestingly Eggert, Thompson, Brooke, and Pike (2002) demonstrate that this program also is effective in decreasing suicidal “thoughts, threats and attempts” (p. 60), as well as depression and drug and alcohol use. The program is expert-led and consists of 12 one-hour sessions over a six-week period with groups containing 6–7 students. It emphasizes mood management, substance abuse control, and school performance, and the facilitator focuses on helping adolescents acquire new skills and develop increased support from family and other adults.

Another program that focuses on enhancing protective factors, called Promoting CARE has demonstrated a decrease in suicidal behaviors, depression, and hopelessness and an increase in protective factors such as coping skills, self-efficacy, and family connectedness in identified at-risk adolescents in the short-term and up to eight years post intervention (Hooven et al., 2010). The most effective facet of the study involved two expert-led meetings with students 2.5 months apart coupled with two two-hour home visits with parents. The student meetings involved assessment, counseling, and a focus on connecting the adolescent with family and appropriately prepared school personnel. The parent meetings involved education on suicide and developing partnership with specific strategies for the adolescent. The Promoting CARE strategy is to decrease negative behaviors by improving coping skills, emotional management, and interconnectedness. Although more research needs to be conducted on these programs, it is intuitive and in keeping with the mission of schools to utilize programs that enhance protective factors (Kalafat, 2006).

The two major emphases in contemporary school-based suicide prevention plans are screening tools and curriculum programs but there is debate about the feasibility and effectiveness of each. Screening programs are designed to identify at-risk adolescents that are then referred for help (Kalafat, 2006). Three prominent screening tools in use today are the Suicidal Ideation Questionnaire (SIQ), the Suicide Risk Screen (SRS), and the Columbia Suicide Screen (CSS). The SIQ was developed in the late 1980s and has 83–100% sensitivity in identifying at-risk adolescents and 40–70% specificity (Thompson & Eggert, 1999). The SRS has been in use since the late 1990s and has 87–100% sensitivity and 54–60% specificity (Thompson &
The CSS is the most recent of the three and has 75% sensitivity and 83% specificity (Shaffer et al., 2004). Scott et al. (2009) demonstrated the Columbia Suicide Screen’s ability to identify adolescents at-risk for suicide that were not identified by school professionals. Each of these screening tools are very effective in identifying adolescents at-risk and are useful within a school-based suicide prevention plan. A common criticism of screening tools is that they produce numerous false positives and therefore are potentially costly and may overwhelm staff who are responsible for follow up (Hallfors et al., 2006; Scott et al., 2010). Other problems noted by Hallfors et al. (2006) in their evaluation of the SRS include scheduling, legal issues from potentially not identifying a student with suicidal ideation or thoughts of other forms of self-harm, as well as negative attitudes from administrators and parents. They concluded that the SRS was not a viable “real world” product in its current form and would need to be revised and re-tested. Kalafat (2006) also noted that the screening programs are hard to sustain and have an inherent weakness in that they only capture a certain moment in time; this is potentially problematic when applied to the waxing and waning nature of suicidal ideation in adolescents.

Scott et al. (2010) has done some promising work on the Columbia Suicide Screen by modifying the scoring algorithms and substantially diminishing the false positives with little effect on identifying high risk adolescents. Their methodology will require more study, but demonstrates the potential of maintaining high sensitivity and high specificity. Thompson and Eggert (1999), in their evaluation of the SRS, conceded that a high tolerance for false positives was needed to achieve an appropriate sensitivity because adolescent lives were at stake. As the science moves forward, this tolerance continues to be important because screening tools have been, and will continue to be, integral to school-based suicide prevention plans.

Conceivably the most utilized method of adolescent suicide prevention programs in high schools is the curriculum-based approach because, by nature, it is educational and facilitates a better cultural fit (Kalafat, 2006). Traditional curriculum-based approaches generally do not selectively screen for being “at risk;” rather they apply the curriculum to the entire student population. The methodology is to educate all adolescents and substantially diminishing the false positives with little effect on identifying high risk adolescents. Their potential of maintaining high sensitivity and high specificity. Thompson and Eggert (1999), in their evaluation of the SRS, conceded that a high tolerance for false positives was needed to achieve an appropriate sensitivity because adolescent lives were at stake. As the science moves forward, this tolerance continues to be important because screening tools have been, and will continue to be, integral to school-based suicide prevention plans.

One criticism of curriculum-based programs is that very few have demonstrated empirical effectiveness in reducing adolescent suicide (Hallfors et al., 2006). Gould et al. (2003) also noted that although curriculum-based programs create changes in knowledge, this change has not been explicitly correlated with behavioral change. Their review concluded there is not enough to support or deny the use of curriculum-based programs. Another historical criticism identified in the literature is that these programs actually increase suicidal behavior in adolescent males and former suicide attempters (Overholser, Hemstreet, Spirito, & Vyse, 1989; Shaffer et al., 1990). Numerous contemporary manuscripts note that this antiquated idea seems to plague school-based suicide prevention programs. The Shaffer et al. (1990) study highlighted one questionnaire response given by former suicide attempters that stated they were significantly more likely to believe that “talking about suicide in the classroom makes kids more likely to try to kill themselves” (p. 3155). Although such a response is noteworthy, it does not definitively allude to the idea that curriculum-based programs increase suicidality. Historically the seminal work of Overholser et al. (1989) reported a small yet significant increase in hopelessness in males. Conversely, Gould et al. (2003) concluded that hopelessness is not an independent predictor of suicidality in adolescents once a diagnosis of depression is accounted for. Additionally, Gould et al. (2005) in their study of iatrogenic effects of suicide screening programs for adolescents, concluded there are no negative effects of inquiring about suicidal ideation.

Curriculum-based programs have developed significantly over the last 20 years and are currently being used with promising results. Of note, the Signs of Suicide (SOS) program is the most effective in reducing self-reported suicide attempts among racially diverse adolescents in a randomized study (Aseltine et al., 2007). SOS is a unique curriculum-based program, which incorporates a brief screening tool. Students are trained to be gatekeepers by responding to needs of other students using the acronym ACT (Acknowledge, Care, and Tell) (Aseltine & DeMartino, 2004). The didactic portion of the program uses a video and discussion guide to increase student awareness of the signs of suicide and depression. A critical component of this program is the idea that suicidal thoughts are not normal, are the result of mental illness or other psychosocial crises, and should be regarded as an emergency that needs to be addressed. This critical component is a development in the science addressing an old methodology that taught suicide was a normal response to stress, thereby normalizing it (Stein et al., 2010). Students are taught to acknowledge the signs in themselves and others, let others know they care, and tell a responsible adult. This program utilizes a brief screening tool and students are encouraged to self-report if they achieve a predetermined score. Aseltine and DeMartino (2004) note that the student driven nature of this program is developmentally appropriate and has high impact because of peer group importance in adolescence. Although this program demonstrates short-term effectiveness and could be a model to move the science forward, Aseltine et al. (2007) also recognize that long-term follow-up is needed to determine long-term effectiveness. Curriculum programs that incorporate...
screening and trained gatekeepers appear to be an effective way for future assessment and intervention in the high school setting.

DISCUSSION

A comprehensive review of the extant literature reveals that high school-based prevention programs have been and continue to be how social scientists and educators have chosen to address this problem. However, there is a paucity of studies demonstrating empirical effectiveness. Currently high school-based suicide prevention programs can be separated into four general categories; enhancing protective factors, curriculum-based programs, gatekeepers, and screening programs (Kalafat, 2006) (see Table 1). Programs that enhance protective factors surrounding adolescent suicidality identify realistic methods of adaptive coping, problem solving skills, and the promotion of developmentally appropriate mental health. Curriculum-based programs utilize training materials to teach about suicide and mental illness and what to do if a student or peer is experiencing a problem. These programs have elements that are essential to an effective suicide prevention plan; however as stand-alone programs they have shown little evidence based effectiveness (Kalafat, 2006). Gatekeeper programs traditionally utilize adult staff members within the school that are trained to recognize signs of suicide and refer teens to appropriate help; some programs also utilize trained students. Screening programs utilize specialized questionnaires to identify at-risk youth so they can be referred to help both in and out of school. To expand awareness of this significant and pervasive public health challenge, there is a need to conduct more examination not only on the scope of the problem, but also on identifying stakeholders; current recommendations for reform are needed.

Some of the earliest evidence relative to the issue of adolescent suicide was the enactment of the Youth Suicide and Prevention Act of 1985, which provided funds for school-based prevention programs. The U.S. Department of Health and Human Services, National Strategy for Suicide Prevention, in 2001 provided the first national program for suicide prevention and its specific call for evidence based practice to guide school-based suicide prevention plans. The New Freedom Commission on Mental Health established in 2002 by President Bush, again highlighted suicide prevention in schools as a priority (Stephan et al., 2007). As a result of this recognition, there are suicide prevention programs in over 77% of all public schools in the United States (Stein et al., 2010). Given the Federal and State emphasis on suicide prevention programs in schools since the mid 1980s it is reasonable to expect the incidence of adolescent suicide to be closer to zero than it currently is. There is no Federal evidence based initiative, policy, or legislation that prescribes or directs the implementation of suicide prevention plans in high schools beyond recommending that they be evidence based (Stephan et al., 2007). School districts, administrators, and state policy makers are therefore responsible for choosing, implementing, and evaluating their own plan. There is limited research on the effectiveness of programs that use some combination of the traditional elements (i.e., gatekeepers, screening, etc.). There is no evidence in the literature of an effort to combine the highest value elements of known prevention strategies into a cohesive whole that will have a greater effect than its individual parts. Identifying stakeholders of all types and developing a partnership with them are crucial steps in implementing an effective plan (Stephan et al., 2007). If the stakeholders can be conceptualized as concentric circles where adolescents and their families are at the center, the next level is the individual school’s staff, including teachers, professional staff, and administrators. These are the people on the front lines of the programs in schools and responsible for implementing and maintaining programs (Stein et al., 2010). The next level is the school district and the board. These are the individuals responsible for determining what program to implement, the priority it will assume within overall curricula, and the level of funding that will be allocated. The next level further out on the concentric circles, but no less important, are community leaders and local and state government officials. Buy-in and collaboration from these vital stakeholders can provide a foundation for action and subsequent implementation of the program and may help with access to additional funding sources (Stephan et al., 2007). Finally, federal policy makers who are responsible for establishing policy and precedent to guide state lawmakers are the last level. These legislators have already identified schools as the best context to intervene using evidence based initiatives.

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<th>Name</th>
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<tr>
<td>Question Persuade Refer (QPR)</td>
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<td>Living Works</td>
<td>Gatekeeper program</td>
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<td>Suicide Options and Relief (SOAR)</td>
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<td>Los Angeles Unified School District Youth Suicide Prevention Plan (LAUSD)</td>
<td>Gatekeeper program</td>
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<td>Coping and Support Training (CAST)</td>
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<td>Signs of Suicide (SOS)</td>
<td>Curriculum based program</td>
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<tr>
<td>South Elgin High School Suicide Prevention Plan (SEHS)</td>
<td>Curriculum based program</td>
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In general, a culture shift is needed within school boards, districts, and individual high schools to make mental health and adolescent suicide a prominent issue that is proactively and skillfully addressed. In his review of the South Elgin High School (SEHS) suicide prevention program, Ciffone (2007) attributes the amazing success of the program not just to the curriculum, but also to ethos that was created in school by having the program there. The program not only provides necessary equipping of staff and students it also creates a different milieu; a healthier one with respect to the problem of suicide and mental health. The SEHS program combines several elements of the traditional programs; Ciffone (2007) makes the astounding claim that in over 19 years and 11,000 participants, there have been no suicides among the students while they attended school.

In addition to the importance of creating a culture of change, the efforts must be evidence based and empirically driven. Preliminary research reflects that the most effective programs are hybrid programs that combine gatekeeping, screening, and curricular facets that address suicide and enhance protective factors. An effective high school suicide prevention program requires adequately trained adult gatekeepers who are able to effectively respond to at-risk adolescents. All teachers, administrators, and professional staff within the school need to be trained because typically these individuals lack the skills to identify and intervene with at-risk adolescents (Kalafat, 2006). Screening for at-risk adolescents is vital to a comprehensive program. Once these teens have been identified, they can be funneled to gatekeepers and referred to help (Kalafat, 2006). Therefore screening and gatekeeper initiatives work synergistically, which is needed for effectiveness in school suicide prevention programs. Additionally, curricula that educate adolescents to the emergent nature of suicide and empower them to take preventative action appear to be very effective in decreasing suicidal behavior. More research is needed on the effectiveness of these programs; however, the CDC (2010a) recognizes that enhancing protective factors such as coping skills, communication, problem solving, and connectedness are important elements of positive mental health in adolescents. Kalafat (2006) also notes that some older studies have shown that programs that enhance protective factors may be more effective than those that address risk factors; specifically, there is longitudinal evidence that programs that enhance protective factors may be more effective. Including a protective component within the overall curricula is intuitive for educators and provides a balance to the message of “what not to do” or “what to watch out for.”

Finally, the prevalence of bullying within schools and its relation to adolescent suicide necessitates its inclusion in comprehensive suicide prevention curricula. Recent studies using secondary, cross sectional, and longitudinal analyses have demonstrated that bullying has a correlation to adolescent suicidality (Kaminski & Fang, 2009; Klomek, Sourander, & Gould, 2010). Bullying not only affects victims, but offenders are also at increased risk (Klomek et al., 2010). Cyberbullying is a unique form of victimization because smart phones and the Internet allow increased ubiquity and permanence of the injurious message, including anonymity for the offender (Klomek et al., 2010). Kaminski and Fang (2009) maintain that an effective proactive way to address bullying in schools is through enhancing protective factors, such as connectedness and social skills, and monitoring behavior utilizing both teacher and student gatekeepers. Additionally, there must be policies to address bullying when it does occur and a culture of zero tolerance for this damaging behavior. The students and their families must clearly understand how the school defines bullying and how those who engage in it will be held accountable. Eliot, Cornell, Gregory, and Fan (2010) demonstrate that students are more likely to report when they are bullied if they perceive that the school staff is supportive. Taking a strong stance on bullying is essential to an effective program and will help facilitate a positive, safe, and healthy culture within the school.

CONCLUSION

There has been a federal call to apply evidence-based suicide prevention programs in schools. Hybrid programs that combine elements of screening, protective factor enhancement, gatekeeping, and prevention curricula provide a foundation for ongoing evaluation and additional research. The overall goal of any program is to reduce the incidence of high school age suicides to as close to zero as possible. Benchmark comparisons can be made across schools, districts, and national averages. The obvious drawback to any method is that it will take time to determine when a program is truly effective.

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