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## **Bullying and Suicide**

### **Detection and Intervention**

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Bullying is recognized as a major public health problem in the Western world, and it appears to have devastating consequences. Cyberbullying has become an increasing public concern in light of recent cases associated with youth suicides that have been reported in the mass media.

Most of the studies that have examined the association between bullying and suicidality have been cross-sectional. Those studies show that bullying behavior in youth is associated with depression, suicidal ideation, and suicide attempts. These associations have been found in elementary school, middle school, and high school students. Moreover, victims of bullying consistently exhibit more depressive symptoms than nonvictims; they have high levels of suicidal ideation and are more likely to attempt suicide than nonvictims.

The results pertaining to bullies are less consistent. Some studies show an association with depression, while others do not. The prevalence of suicidal ideation is higher in bullies than in persons not involved in bullying behavior. Studies among middle school and high school students show an increased risk of suicidal behavior among bullies and victims. Both perpetrators and victims are at the highest risk for suicidal ideation and behavior.

#### Suicide risk by sex

Cross-sectional studies of the differential impact of school bullying by sex on the risk of depression and suicidal ideation have shown significant associations, but the results are not consistent. Some researchers have found stronger associations among girls.

Kim and colleagues<sup>1</sup> reported that girls who were involved with school bullying (as either victim or perpetrator) were at significantly greater risk for suicidal ideation. Roland<sup>2</sup> found that girls who were bullies had more suicidal thoughts. Van der Wal and colleagues<sup>3</sup> found a strong association between being bullied and depression and suicidal ideation in girls, and Luukkonen and colleagues<sup>4</sup> found that being bullied and bullying others are both potential risk factors for suicidal behavior in girls.

On the other hand, Rigby and Slee<sup>5</sup> found that the association between being a bully and suicidal ideation applied only to boys. McMahon and colleagues6 recently reported that boys who had been bullied at school were more depressed and had a higher risk of thoughts about harming themselves and self-harming behavior than boys who had not been bullied. Kaltiala-Heino and colleagues<sup>7</sup> reported that among girls, severe suicidal ideation was associated with frequently being bullied or being a bully and for boys it was associated with being a bully. No association was found between boys and girls for depressive symptoms.<sup>8</sup>

Our earlier work tried to explain the differences in the risks of depression and suicidality between girls and boys; we suggested that there is a difference in the threshold for depression and suicide between the sexes. Girls who bullied others were at risk for depression, suicidal ideation, and suicide attempts even when the bullying was infrequent. However, only frequent bullying was associated with depression, suicidal ideation, and suicide attempts among boys.

There may be a different sex threshold in victimization as well. Among girls, victimization at any frequency increased the risk of depression, suicidal ideation, and suicide attempts. On the other hand, only frequent victimization increased the risk of depression and suicidal ideation in boys, although infrequent victimization was associated with an increased risk of suicide attempts.

#### What is already known about this topic?

Childhood and adolescent bullying is recognized as a major public health problem in the Western world, and it appears to be associated with suicidality. Recently, cyberbullying has become an increasing public concern in light of recent cases associated with youth suicides that have been reported in the mass media.

#### What new information does this article add?

This article summarizes the cross-sectional and longitudinal studies examining the association between bullying behavior and suicidality among adolescents.

#### What are the clinical implications?

Mental health practitioners should understand the relationship between bullying/cyberbullying behavior and suicide. Children who are frequently involved in bullying/cyberbullying behavior should be screened for psychiatric problems. In any prevention effort, it is important that students understand that there is always hope to stop the situation and they should be taught the skills to end the bullying/cyberbullying.

Only a few longitudinal studies of bullying behavior and later depression or suicidal ideation and behavior have been published. These studies provide evidence that bullying behaviors constitute more than mere correlates of depression and suicidality. A study of Norwegian youth reported that children who were being seriously bullied at age 11 years suffered from bouts of depression as young adults. <sup>10</sup> In a study of young adolescents in Australia, victimization in the 8th grade was associated with onset of

symptoms of depression the following year.<sup>11</sup> However, follow-up work done in Finland on children involved in bullying in the 8th grade showed that when psychiatric symptoms were taken into account, involvement in bullying did not independently increase the likelihood of depressive symptoms at age 15.

Similar results were seen in a 2-year follow-up of peer victimization among Australian students in their first 2 years of high school. Victimization at study baseline was not predictive of psychiatric health as measured by the General Health Questionnaire (GHQ) after baseline health status was taken into account. <sup>13</sup>

Additional longitudinal studies have predicted psychiatric problems from bullying behavior; however, these do not provide information on the suicidal outcome of bullying behavior. <sup>14,15</sup> Kim and colleagues 16 studied the impact of bullying on later suicidal/self-injurious behaviors and ideation among a sample of 1655 Korean students from grades 7 and 8. Girls who were perpetrators and boys with later-onset bullying behaviors were at increased risk for suicidal/self-injurious behaviors and ideation 10 months later, even after controlling for other suicide risk factors, such as anxiety and depression.

Contradictory results were seen in studies that examined the association between childhood bullying behavior and later depression, suicidal ideation, suicide attempts, and completed suicide. <sup>17,18</sup> Among a large cohort of Finnish boys born in 1981, bullying behavior at age 8 years was associated with severe depression 10 years later, even when controlling for childhood depression. However, bullying behavior at age 8 years was not associated with suicidal ideation 10 years later when controlling for childhood depression. <sup>17</sup>

Victims of bullying consistently exhibit more depressive symptoms than nonvictims; they have high levels of suicidal ideation and are more likely to attempt suicide than nonvictims.

The association between bullying behavior at age 8 years and later suicide attempts and completed suicides varied by sex. <sup>18</sup> Among boys, bullying behavior at age 8 years was not associated with later suicide attempts and completed suicides, after controlling for both childhood conduct and depression symptoms. Frequent victimization among girls at age 8 years, however, was associated with later suicide attempts and completed suicides, even after controlling for childhood conduct and depression symptoms. These findings indicate that suicidal behavior among boys who frequently bully others may be a function of psychopathology rather than of the bullying behavior per se.

Similarly, recent preliminary results from a US study showed the extent to which students who experience frequent bullying behaviors in high school—as either victims, perpetrators, or both—without concurrent depression or suicidal problems are at risk for later depression and suicidality. To our knowledge, this is the only study that has systematically examined the clinical importance of bullying behavior among high school students for later depression and suicidal ideation and behavior. Findings indicate that high school students who reported only frequent bullying behaviors during high school were not as mentally healthy as those who did not report bullying behaviors, but they did not subsequently become depressed or suicidal. Students who experienced bullying behaviors and depression or suicidality were more impaired 4 years later than those who had reported only depression or suicidality.

It seems as if bullying behavior in high school in the absence of other risks does not predict later suicidal ideation, suicide attempts, or depression. However, bullying behaviors in conjunction with depression or suicidality in high school portend a worse outcome than either depression or suicidality alone.

#### Cyberbullying

Recent empirical studies and cases reported in the media have demonstrated an association between cyberbullying/cyber victimization with psychopathology and suicide. <sup>19,20</sup> Findings from a cross-sectional study indicate that experience with cyber victimization is associated with an increase in depression, suicidal ideation, and suicide attempts. <sup>9</sup> Among girls, being bullied via the Internet or e-mail—infrequently or frequently—was significantly associated with depression and suicidal ideation. However, only frequent victimization was associated with suicide attempts. Among boys, frequent cyber victimization was associated with depression and both frequent and infrequent levels of victimization were associated with suicidal ideation.

Hinduja and Patchin<sup>21</sup> found that youths who experienced cyberbullying, as either perpetrators or victims, had more suicidal thoughts and were more likely to attempt suicide than those who had not experienced such forms of peer aggression. They note that traditional bullying and cyberbullying seem to be related to suicidal ideation in similar ways. Further longitudinal studies are necessary to examine the association between cyberbullying and suicidality.

#### **Detection and intervention**

Childhood bullying behavior can be assessed through self-reports as well as through reports from peers, parents, and/or teachers. Although one study found poor agreement between cross-informant reports (from parents, teachers, and children), these reports still carry the most weight in predicting late adolescent psychiatric outcomes. <sup>22</sup> Teachers reported higher levels of frequent bullying than others, whereas children reported the highest percentage of victimization. However, "frequent bullying" reports from all 3 informant groups predicted later psychiatric disorders. The investigators concluded that the education system and school health care service in mid-childhood are of great importance for the early detection of bullying and prevention of later adverse outcomes.

The main target of effective prevention of youth suicides is the reduction of suicide risk factors.<sup>23</sup> Bullying and peer victimization are serious risk factors for later suicidality, especially when there is comorbid psychopathology. Clinicians who deal with children and adolescents as well as those who are designing educational and public health prevention programs for schools should understand the relationship between bullying/cyberbullying behavior and suicide.

Children who are frequently involved in bullying behavior should be actively screened for psychiatric problems. School-based screening can be implemented by means of parent and teacher symptom checklists. Children and adolescents need information and psychoeducation about "healthy" online behavior. In addition, parents should aim to supervise their children's online behavior. However, since this may be difficult or unrealistic for some parents, there is a need for new strategies for cyberbullying prevention and intervention.

Increasing awareness about bullying and cyberbullying and efforts to prevent them are important, but it is crucial that accurate messages be distributed in these efforts. Awareness messaging should refrain from overemphasizing the link between cyberbullying and suicide (eg, showing videos of youths who have killed themselves after being bullied). While well-intentioned, these efforts may inadvertently

present rewards for the suicide act. In any prevention effort, it is important that students understand that there is always hope to stop the situation and they should be taught the skills to end the bullying/cyberbullying. When adaptive coping skills and hope for change are not presented, students may feel powerless and hopeless, which increases their risk of suicide.

The prevention literature currently focuses on bullying or suicide. We are not aware of programs that focus on the prevention of both bullying and suicidality. However, some programs may be able to tackle both bullying and suicidality. For example, the Sources of Strength suicide prevention program involves peer leaders to enhance protective factors associated with suicide risk in school populations. Although the program does not focus on bullying or cyberbullying, its goal is to enhance connectedness between youths and trusted adults and to change school norms. The program trains youth opinion leaders from diverse social cliques, including at-risk adolescents, to change the norms and behaviors of their peers by conducting well-defined messaging activities with adult mentoring. Wyman and colleagues recently reported that training of peer leaders with the Sources of Strength curriculum led to changes in norms across the full population of high school students after 3 months of school-wide messaging.

#### **Conclusion**

Whether by traditional means or via cyberspace, bullying and peer victimization puts adolescents at increased risk for suicide, especially when comorbid psychopathology is present. Longitudinal studies have just started to be published, and this research field needs to be further developed. In the meantime, findings from cross-sectional studies suggest differential risk profiles by sex as well as by the frequency and severity of the bullying. Female bullies are at increased risk for suicide, even when their bullying is infrequent. Males appear to be at increased risk for suicidal ideation, but only when they are bullied frequently.

Bullying and peer victimization lead to suicidal ideation and suicide attempts, but this association varies by sex and may be mediated by depression or conduct problems. Future research should continue to identify specific causal paths between bullying and suicide. Population-based longitudinal studies that include severe suicide attempts and suicide deaths are needed to support these findings.

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