Receipt of Psychological or Emotional Counseling by Suicidal Adolescents

Jane E. Pirkis, PhD‡; Charles E. Irwin Jr, MD‡; Claire D. Brindis, DrPH‡; Michael G. Sawyer, PhD§; Christine Friestad, PhD‡; Michael Biehl, MA‡; and George C. Patton, PhD||

ABSTRACT. Objective. This study examined utilization of psychological or emotional counseling by suicidal adolescents to answer questions about the extent to which health services can contribute to the prevention of adolescent suicide.

Method. The study used data from Wave 1 of the National Longitudinal Study of Adolescent Health, which involved a household-based interview with a nationally representative sample of 15,483 adolescents from grades 7 to 12. Of these, 2,482 adolescents were classified as suicidal, as indicated by an affirmative response to the question “During the past 12 months, did you ever seriously think about committing suicide?” For this group, the study asked the following questions: 1) What proportion receives psychological or emotional counseling? 2) What are the sources of this counseling? 3) What factors are associated with receipt of such counseling?

Results. Less than one third (28%) of suicidal adolescents received psychological or emotional counseling. The most common sources of care were private doctors’ offices (37%) and schools (34%). Factors associated with receipt of counseling in the past 12 months included age, race, degree of suicidality, depression status, and having had a physical examination during the same period.

Conclusions. Only one third of those who report suicidal ideation and behavior receive psychological or emotional counseling. Although not all of these young people may identify a need for counseling, this finding still suggests that many of those at risk of harming themselves do not receive professional help. However, on the positive side, those who do use counseling services tend to do so on the basis of their being in the greatest need, rather than their parents’ capacity to pay for services. Counseling services have an important role to play in suicide prevention, and a variety of sources of care need to be available. Although counseling services are available, a range of other strategies is necessary to reduce the youth suicide rate. Pediatrics 2003;111:e388–e393. URL: http://www.pediatrics.org/cgi/content/full/111/4/e388; adolescent, suicide, counseling, utilization.

ABBREVIATIONS. Add Health, National Longitudinal Study of Adolescent Health; OR, odds ratio; CI, confidence interval.

Suicide is a major cause of death among adolescents, not only affecting the adolescents themselves, but also having significant emotional sequelae for parents, other relatives, and friends, and substantial financial costs for society. In 1999, suicide was the third leading cause of death for young people living in the United States, occurring at a rate of 8.2 per 100,000 for those 15 years old to 19 years old (13.3 per 100,000 for males and 2.8 per 100,000 for females) and 12.7 per 100,000 for those 20 years old to 24 years old (21.6 per 100,000 for males and 3.5 per 100,000 for females).1 In addition, in 1999, 19.3% of high school students reported seriously considering suicide over the previous 12 months (24.9% of females and 13.7% of males), and 8.3% reported making at least 1 suicide attempt (10.9% of females and 5.7% of males).2

Recent policy documents, such as the Surgeon General’s Mental Health Report,3 have suggested that services that provide psychological or emotional counseling have a key role to play in preventing adolescent suicide. This presupposes that suicidal adolescents come into contact with counseling services, because previous suicidal ideation and suicide attempts have consistently been shown to constitute risk factors for completed suicide.4 Yet there is a dearth of studies that examine the validity of this assumption. There is little work that specifically examines utilization of counseling services for this population. A few recently published studies have considered rates of generic mental health service utilization for groups of adolescents with mental health problems, although none that specifically consider utilization for suicidal adolescents. These studies have tended to define their denominator as adolescents who meet particular diagnostic criteria (usually for depression) or who identify themselves as having mental health or related problems (such as being victimized), and have examined the proportion who have sought and/or obtained mental health care in the previous year. Typically, the sources of mental health care and the reasons for presentation are not well-defined. Utilization rates have ranged from <25% to ~65%, depending on the characteristics of the sample, whether the information has come from adolescents or their parents, the geographical setting of the study, and the definition of mental health care.5–10

Most studies that have considered mental health service utilization rates for groups of adolescents with mental health problems have examined factors...
that are associated with service use. Again, the factors identified as being associated with adolescent mental health service use have varied, depending on definitional and other study design issues. These factors can be classified into 3 categories, using a taxonomy developed by Ford et al\(^1\) in the adolescent general health literature. The first category includes factors related to the individual’s predisposition to use services, such as age and gender\(^5,6,12\) and race/ethnicity.\(^5,8,12\) The second category includes variables that quantify the individual’s need, such as level of depressive symptoms,\(^6,12\) degree of suicidality,\(^6,8,12\) and mental health status as perceived by the adolescent\(^12\) or his/her parents.\(^7\) The third category includes factors related to the individual’s ability to secure services, such as socioeconomic status,\(^8\) health insurance coverage,\(^1,2\) and use of physical health services that might act as a referral source to mental health care.\(^8\)

Our study offered a unique opportunity to examine the utilization of psychological or emotional counseling by a much more specific group than other studies have considered—suicidal adolescents, as opposed to adolescents with broader ranging mental health problems. By focusing on this group in a way in which previous studies have not done, we aimed to inform questions about the extent to which health services can screen for and prevent adolescent suicide.

Our specific objective was to answer 3 questions regarding the mental health service use of suicidal adolescents: 1) what proportion receives psychological or emotional counseling? 2) what are the sources of this counseling? 3) what factors are associated with receipt of such counseling? It was beyond the scope of our study to consider differences between suicidal and nonsuicidal adolescents in terms of their utilization of counseling services, because it has consistently been demonstrated that the former group make greater use of mental health care\(^6,8,12\) and this analysis would have been less relevant to the question of adolescent suicide prevention.

### METHODS

#### Study Design and Sampling

This study used Wave 1 data from the National Longitudinal Study of Adolescent Health (Add Health), which employed a school-based sampling design to recruit US adolescents in grades 7 to 12 in 1994–1995 and involved in-home interviews supplemented by parental questionnaires and information from school administrators.\(^13\) Weights were applied to ensure that the sample was nationally representative. Complete data (including weights and parental and school administrator responses) were available for 15,483 adolescents. A total of 2,482 of these were classified as suicidal by virtue of their responding “yes” to the question, “During the past 12 months, did you ever seriously think about committing suicide?” The current study was restricted to these suicidal adolescents.

#### Measures

The analysis variables are outlined below, with additional detail provided where necessary. All variables were derived from the adolescent in-home interview except urbanicity (school administrator questionnaire) and health insurance status and income (parent in-home questionnaire).

### Dependent Variable

Receipt of counseling was defined by an affirmative response to the question, “In the past year, have you received psychological or emotional counseling?”, supplemented by responses to questions about whether it was provided in a private doctor’s office, community health clinic, school, hospital, or some other place. No information was available on the reason for this counseling, nor on when it occurred in relation to the adolescent’s suicidal thoughts or attempt.

### Independent Variables

Variables relating to a predisposition to use services included age, gender, and race/ethnicity.

Two variables related to level of need: degree of suicidality and depression status. Degree of suicidality was determined from the question, “During the past 12 months, how many times did you actually attempt suicide?”, with respondents classified as having made no attempts, 1 attempt, or multiple attempts. Depression status was determined from a modified, 18-item version of the Center for Epidemiologic Studies Depression Scale, scaled from 0–60 for comparability with the original Center for Epidemiologic Studies Depression Scale using a similar method to those employed by Goodman\(^14\) and Rushton et al.\(^15\) Following Roberts et al.,\(^16\) scores of 24 or higher for females and 22 or higher for males were regarded as indicative of depression.

Four variables related to the ability to secure services: urbanicity, physical examination, health insurance status, and income. The health insurance status variable categorized individuals as insured for all of, part of, or none of the 12-month period before interview. No information was available on whether coverage was specifically provided for mental health care. Following Goodman,\(^14\) income was classified in relation to 1994 poverty thresholds adjusted for household size: <1.5 times the poverty threshold (Class 1); 1.5 to <2.5 times the poverty threshold (Class 2); 2.5 to <4.0 times the poverty threshold (Class 3); 4.0 times the poverty threshold to less than the 95th household income percentile (Class 4); and ≥95th household income percentile (Class 5).

### Data Analyses

Analyses were conducted using SUDAAN,\(^17\) which adjusted for the clustering and stratification employed in the sampling strategy of Add Health and incorporated the appropriate weights. Descriptive analyses calculated the weighted proportion of suicidal adolescents who received psychological or emotional counseling overall and from particular sources. A logistic regression analysis examined the factors associated with receipt of counseling by suicidal adolescents.

## RESULTS

### A Description of the Suicidal Adolescents

Table 1 shows the key demographic characteristics of the 2,482 suicidal adolescents. Females accounted for 60% of the group. The adolescents were relatively evenly split across ages, with 13-year-olds constituting the smallest group at 14% and 15-year-olds making up the largest group at 19%. In terms of ethnic/racial mix, whites accounted for two thirds of all suicidal adolescents, and the majority of the remainder were blacks and Hispanics.

Table 1 also describes the suicidal adolescents in terms of their degree of suicidality in the 12 months before the survey. Approximately two thirds of these adolescents had only considered suicide, and had not made a suicide attempt. However, the remainder had made at least 1 attempt, with over one-tenth of the sample making >1 attempt.

### Proportion of Suicidal Adolescents Receiving Psychological or Emotional Counseling

In total, 682 of the 2482 suicidal adolescents received psychological or emotional counseling in the...
TABLE 1. Characteristics of Suicidal Adolescents (n = 2482)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Weighted %</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>939</td>
<td>40.27</td>
<td>37.25–43.29</td>
</tr>
<tr>
<td>Female</td>
<td>1543</td>
<td>59.73</td>
<td>56.71–62.75</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 or younger</td>
<td>253</td>
<td>13.81</td>
<td>9.99–17.63</td>
</tr>
<tr>
<td>14</td>
<td>329</td>
<td>15.71</td>
<td>12.11–19.31</td>
</tr>
<tr>
<td>15</td>
<td>480</td>
<td>19.20</td>
<td>16.80–21.60</td>
</tr>
<tr>
<td>16</td>
<td>486</td>
<td>17.26</td>
<td>14.72–19.80</td>
</tr>
<tr>
<td>17</td>
<td>528</td>
<td>18.57</td>
<td>15.81–21.33</td>
</tr>
<tr>
<td>18 or older</td>
<td>406</td>
<td>15.45</td>
<td>12.77–18.13</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Hispanic</td>
<td>437</td>
<td>11.81</td>
<td>8.47–15.15</td>
</tr>
<tr>
<td>Black</td>
<td>430</td>
<td>13.35</td>
<td>9.67–17.03</td>
</tr>
<tr>
<td>Asian</td>
<td>212</td>
<td>3.92</td>
<td>1.94–5.90</td>
</tr>
<tr>
<td>Native American</td>
<td>64</td>
<td>2.63</td>
<td>1.65–3.61</td>
</tr>
<tr>
<td>Other</td>
<td>28</td>
<td>0.94</td>
<td>0.40–1.48</td>
</tr>
<tr>
<td>White</td>
<td>1309</td>
<td>67.34</td>
<td>61.76–72.92</td>
</tr>
<tr>
<td>Degree of suicidality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No attempt</td>
<td>1756</td>
<td>69.97</td>
<td>67.05–72.89</td>
</tr>
<tr>
<td>1 attempt</td>
<td>439</td>
<td>18.69</td>
<td>16.35–20.83</td>
</tr>
<tr>
<td>&gt;1 attempt</td>
<td>282</td>
<td>11.34</td>
<td>9.48–13.20</td>
</tr>
</tbody>
</table>

12 months preceding the survey. This equated to a weighted population percentage of 28%.

Sources of Care for Suicidal Adolescents in Receipt of Psychological or Emotional Counseling

Table 2 shows the reported sources of care for the 682 suicidal adolescents who received psychological or emotional counseling. An individual could receive counseling from >1 source. Most commonly, these adolescents reported receiving counseling from a private doctor’s office or from their school. Thirty-seven percent of suicidal adolescents endorsed the former source, and 34% of suicidal adolescents endorsed the latter. Eighteen percent of suicidal adolescents reported receiving counseling from a community health clinic. The least common source of counseling was a hospital, endorsed by 13% of suicidal adolescents. Nineteen percent of suicidal adolescents reported receiving counseling from some other source.

Factors Associated with Receipt of Psychological or Emotional Counseling by Suicidal Adolescents

Table 3 presents the results of the logistic regression analysis. Specifically, it shows adjusted odds ratios for variables posited to have a relationship with receipt of psychological or emotional counseling by suicidal adolescents.

Two factors related to adolescents’ predisposition to use services were associated with receipt of counseling: age and race/ethnicity. Compared with those 18 years old or older, adolescents in the youngest age group (13 or younger) were more likely to receive counseling (odds ratio [OR] = 2.14; 95% confidence interval [CI] = 1.21–3.77), as were those 17 years old (OR = 1.68; 95% CI = 1.04–2.72). Asian adolescents were significantly less likely to receive counseling than white adolescents (OR = 0.44; 95% CI = 0.21–0.92).

The 2 levels of need variables—degree of suicidality and depression status—were also strongly and positively associated with the likelihood of receiving counseling, with the former showing a dose-response effect. Compared with adolescents who had considered suicide in the past year but made no suicide attempt, those who had made 1 attempt were 1.81 times more likely to have received counseling (95% CI = 1.17–2.29), and those who had made >1 attempt were 2.59 times as likely to have received counseling (95% CI = 1.74–3.86). Depressed adolescents were 2.02 times more likely than their nondepressed counterparts to have received counseling (95% CI = 1.48–2.75).

Only 1 variable associated with the suicidal adolescents’ ability to secure services was associated with receipt of counseling. Those who had a

TABLE 2. Sources of Care for Suicidal Individuals Who Received Psychological or Emotional Counseling (n = 682)*

<table>
<thead>
<tr>
<th>Service Location</th>
<th>Frequency</th>
<th>Weighted %</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private doctor’s office</td>
<td>257</td>
<td>37.37</td>
<td>32.37–42.37</td>
</tr>
<tr>
<td>Community health clinic</td>
<td>103</td>
<td>18.14</td>
<td>13.18–23.1</td>
</tr>
<tr>
<td>School</td>
<td>229</td>
<td>33.72</td>
<td>28.02–39.42</td>
</tr>
<tr>
<td>Hospital</td>
<td>91</td>
<td>13.21</td>
<td>9.19–17.23</td>
</tr>
<tr>
<td>Other</td>
<td>131</td>
<td>19.11</td>
<td>14.05–24.17</td>
</tr>
</tbody>
</table>

* Multiple responses permitted.
DISCUSSION

Interpreting the Findings

This study had a much more specific remit than others of its ilk. It looked at the use of counseling services by suicidal adolescents as a discrete group, rather than as part of a broader group of young people with mental health problems. This afforded us the unique opportunity to consider the potential role of psychological and emotional counseling services in suicide prevention.

The results demonstrate a mixed picture of the use of counseling services by suicidal adolescents. Less than one third of suicidal adolescents receive any psychological or emotional counseling—in other words, more than two thirds do not receive such counseling. This has implications for the prevention of youth suicide, in that it is clear that while counseling services may be well placed to intervene with adolescents who come through their doors, alternative strategies will be necessary for those who do not attend services. Such strategies might include targeted recruitment of these adolescents by existing mental health counseling services, but also broader, population-based approaches aimed at identifying those at risk.

The most encouraging finding, and one which has not been demonstrated in the broader literature, is that most factors related to the adolescent’s ability to secure services, such as income level and health insurance status, had no bearing on the likelihood of receiving counseling. This finding runs contrary to those from more generic studies of utilization of mental health services, which have suggested that those of high socioeconomic status are significantly more likely to be able to access counseling. In the current study, those in most need were more likely to access counseling. The bimodal nature of this finding is somewhat anomalous, but may perhaps be explained by the fact that suicidal thoughts and behaviors may be particularly apparent in very young adolescents and in older adolescents who have experienced symptoms for some time. In addition, those <18 years old have greater access to school-based counseling services, may still be covered by their parents’ health insurance, and may be more likely to attend such services at the suggestion of an adult (either a parent or a teacher). This complex relationship clearly warrants further study.

A second sociodemographic factor was also related to use of counseling services, namely race. Compared with white adolescents, those from Asian backgrounds were least likely to use services. Cultural factors, including the interpretation of symptoms of suicidality and the perceived appropriateness of counseling services, may play a role here.

The sources of care are worthy of consideration. Most commonly, suicidal adolescents who received psychological or emotional counseling did so from a private doctor’s office or from their school. Other studies that have considered sources of mental health care for groups of depressed adolescents have reported similar findings.

The Add Health data does not provide a breakdown on private doctors by specialty, making it impossible to determine if they were psychiatrists or primary care physicians. Both are well-placed to provide counseling: psychiatrists because of their specialist skills in the area, and primary care physicians because of their being in a position to opportunistically detect suicidality in adolescents presenting physical health problems. The latter is supported by the finding that having had a physical examination was predictive of receipt of psychological or emotional counseling.

A recent review of school-based mental health and social services suggested that counseling is primarily provided by school counselors, school psychologists,
and school social workers. School counselors, school psychologists, and school social workers provide practical and emotional support, offer counseling and case management, and act as a link between the home, the school, and the community. Psychological and emotional counseling is delivered under different models by these professionals, including through school-based health centers in ~10% of schools. School-based health centers deliver these services within the context of primary care. Counseling provided in schools may be a particularly important source of mental health care, because this setting is not associated with many of the traditional barriers to access for adolescents, such as stigma and cost. School counselors, school psychologists, and school social workers may be able to collaborate with teachers who can play an important role in detecting depression in vulnerable students and helping them to seek care. Likewise, they may be able to work in concert with students who can identify warning signs among their peers.

It is clearly important that a range of options exists (both within and outside the school setting) to maximize the likelihood of suicidal adolescents seeking and receiving counseling. Doctors, and in particular primary care physicians, need to be adequately trained in recognizing and managing suicidal symptoms, and in referring on to specialists. Likewise, it is important that school counselors, school psychologists, and school social workers providing these multi-entry points into counseling services have adequate initial and ongoing training, and that they have adequate back-up. These steps are necessary to ensure that adolescents receive the care that they need.

Study Limitations

Our study had several limitations that must be acknowledged. First, the stigma associated with suicide may have led participating adolescents to under-report suicidal thoughts and behaviors, although it is encouraging to note that 92% of the suicidal adolescents reported that they responded “very honestly” or “completely honestly” to the survey. Second, adolescents’ interpretation of suicidality may have varied from “transient notions about life being meaningless to intense preoccupation with taking one’s own life,” resulting in some adolescents being included for whom formal psychological or emotional counseling would not have been required. Third, a proportion of these adolescents, despite indicating that they had suicidal thoughts, may not have perceived that they had any need for counseling (although they too might have needed some understanding of these thoughts and concerns).

Therefore, the study assumes that most health service utilization occurred during or after the period in which the adolescent felt suicidal (indeed, that it occurred in response to it), but for some adolescents, counseling may have occurred before their feeling suicidal and may not have been related to suicidal thoughts and behaviors (although it may still have been a point for early intervention). Finally, no evidence was available from Add Health regarding other interventions (eg, pharmacological treatment for depression), the quality of counseling received by suicidal adolescents, and the outcomes of that counseling.

CONCLUSION

Only one third of those who report suicidal ideation and behavior receive psychological or emotional counseling. Although not all of these young people may identify a need for counseling, this finding still suggests that many of those at risk of harming themselves do not receive professional help. However, on the positive side, those who do use counseling services tend to do so on the basis of their being in the greatest need, rather than on the basis of their parents’ capacity to pay for services. Counseling services have an important role to play in suicide prevention, and a variety of sources of care need to be available. Although counseling services are vital, a range of other strategies is necessary to reduce the youth suicide rate, including education, early screening, and intervention services.

ACKNOWLEDGMENTS

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