Intrapsychic Symptom Dimensions of Adolescent Suicide Attempters

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The research literature on adolescent suicide is unclear as to whether psychopathology underlies the suicide attempt. A group of 46 adolescent suicide attempters were compared with a group of 46 adolescent nonattempters to determine whether suicidal adolescents differed from this comparison group in characteristics of psychopathology. The findings indicated that the attempters exceeded nonattempters on 8 of 11 measures of psychopathology. Such findings suggest that adolescent suicide attempters emit clear signs of psychological distress that can be detected by physicians treating this population.

Although the adolescent stage of development is often regarded as one of much turmoil for the majority of adolescents, some adolescents experience emotional distress that greatly impedes normal coping abilities.[1-3] In recent years such distress, along with a variety of environmental stressors, has resulted in a significant increase in the three major causes of adolescent death (ie, accidents, homicide, and suicide). Social scientists and health care practitioners have been especially concerned with the adolescent suicide rate, which has doubled in the last decade.[4,5]

Of particular concern to professionals who work with adolescents is the identification of characteristics that may be related to suicidal behavior so that early detection of adolescents at high risk for suicide may be possible.[6] Yet, as recently noted by Cohen-Sandler and Berman,[7] despite the obvious importance of suicide assessment and prediction, misconceptions and lack of knowledge persist to such an extent that acceptable, standard diagnostic procedures are still lacking. Cohen-Sandler and Berman,[7] Williams and Lyons,[8] and Warren,[9] among others, note that existing studies of the etiology of suicide among adolescents tend to lack a clinical perspective, to utilize nonstandardized measures, and generally to be so lacking in methodological rigor as to be of little value to the practitioner.

A major issue in the identification of predictors of adolescent suicidal behavior is the debate over the existence of psychopathology in adolescents who attempt suicide, that is, whether the suicide attempt or gesture represents (1) a mental illness, (2) a symptom of mental illness, or (3) merely a rational desire to change one's social environment or terminate one's life. Most investigators have linked a certain level of psychological disturbance to adolescent suicidal behavior, yet to what extent such disturbance reflects a "normal" inability to deal with stress or an actual psychopathological personality has not been clearly determined.[10-12] Hudgens[13] states that a psychiatric disorder is a necessary precondition for a suicide attempt. In contrast, Jacobs[14] contends that suicidal adolescents are no different in personality potentialities from other adolescents; they are only reacting or adapting to a specific incident or environmental stressor. Stengel and Cook[15] report that there is general agreement that only a minority of those who commit suicide suffer from a major mental disorder, the proportion of these hardly ever exceeding one third of the total.

Furthermore, the very existence of depression per se in adolescence has often been presumed, yet systematic and detailed studies of affective

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disorders in this age group are rarely found.[11] Some contend that suicidal adolescents do not typically reveal adult signs of depression but instead manifest "depressive equivalents," ie, psychosomatic symptoms, boredom, restlessness, delinquent behaviors, and promiscuity.[16,17] A recent study found that depressed children are not necessarily suicidal, and conversely, not all suicidal children meet the criteria for depression.[7] In a study of over 100 adolescent suicide attempters, Tishler et al found that over 80 percent of the attempters experienced sleep disturbances and situationally inappropriate affect, while over 60 percent exhibited recent weight change.[18] Goldberg[6] and Marks and Haller[10] found in their studies of adolescent suicide that the depressive symptoms of suicidal adolescents were similar to those of adult suicide attempters and completers. Inamdar et al,[19] in a study of 30 adolescent patients identified with depressed mood, concluded that although there are many similarities between the features of adult and adolescent depression, there are many differences that warrant more cautious comparison and further study.

The present study is part of a larger study that has examined individual and familial variables in adolescent suicide attempts.[20,21] This investigation is designed to examine systematically the suicidal adolescent's psychological status compared with a nonsuicidal comparison group. The major hypothesis of this study is that adolescent suicide attempters will significantly differ from nonsuicidal adolescents in characteristics indicative of psychopathology, ie, psychological distress and self-esteem.

Methods

Subjects

The participants in this study were 92 adolescents between the ages of 12 and 18 years who were treated at the emergency room of Children's Hospital, Columbus, Ohio. Forty-six of these patients presented for attempted suicide during 1979 and 1980. The comparison group consisted of the remaining 46 nonsuicidal adolescents from the same emergency room (admitted for minor injuries during the same time period) matched as closely as possible for sex and socioeconomic status. On intake, both groups were administered a questionnaire by clinically trained interviewers as soon as the adolescents were physically able. Shneidman[22] has recommended that the suicidal patient be evaluated as soon after the suicidal act as possible. McKenry et al[20] provide more detail regarding the sampling procedures.

The adolescent suicide attempters closely resembled the comparison group of nonattempters on several salient demographic factors. Twenty-eight girls and 18 boys made up the group of suicide attempters, and 29 girls and 17 boys constituted the comparison group of nonattempters. The average school level for each group of adolescents was approximately ninth grade. The same number of adolescents from each group were living in single-parent families (n = 22); in all but two cases (in the suicidal group) the mother was the custodial parent. Both groups of adolescents fell within the same socioeconomic class, lower middle class, according to the Hollingshead and Redlich two-factor index of social position[23]; this social class reflects the catchment area of Columbus Children's Hospital. The attempter and comparison groups were thus determined to be similar in terms of relevant demographic variables.

Instrumentation

Instruments for this study consisted of a demographic background information questionnaire, subscales and global severity index of the SCL-90 Brief Symptom Inventory (BSI),[24] and the Rosenberg Self-Esteem Scale.[25]

The BSI is a brief form of the SCL-90. The SCL-90 is a 90-item self-report symptom inventory developed to measure a person's current mental status. Each item is rated on a five-point Likert-type scale of distress ranging from "not-at-all" to "extremely." Nine primary distress-symptom dimensions are identified: (1) somatization, (2) obsessive-compulsiveness, (3) interpersonal sensitivity, (4) depression, (5) anxiety, (6) hostility, (7) phobic anxiety, (8) paranoid ideation, and (9) psychoticism. In addition, the global severity index was developed to provide an overall assessment of the subject's psychopathological status. The SCL-90 was designed to be used with psychiatric and medical patients and has been normalized for adolescents.[24]

The Rosenberg Self-Esteem Scale is a 10-item scale designed to measure attitudes toward the self along a favorable to unfavorable dimension. The 10 items are of the Likert type, allowing one of

four responses: strongly agree, agree, disagree, and strongly disagree. Positively and negatively worded items are presented alternatively in an attempt to guard against response set. The scale was constructed for use with high school students, and Rosenberg's findings indicate that it can make theoretically meaningful discriminations between groups of adolescents.[25]

Results

Multivariate analysis of variance and analysis of variance were used to test the hypotheses of this study. The independent variable was suicide attempt status of the adolescent (ie, attempter or nonattempter), whereas the dependent variables were symptom dimensions of psychopathological behavior (ie, measures of psychosocial distress and self-esteem).

A one-way multivariate analysis of variance was used to assess differences in psychological distress as a result of suicide attempt status. Results of this analysis indicated that the adolescent attempters overall were significantly more distressed than nonattempters ($P < .01$). Attempters significantly exceeded nonattempters on seven of the ten symptom dimensions: anxiety ($P < .01$), obsessive-compulsiveness ($P < .01$), interpersonal sensitivity ($P < .05$), depression ($P < .001$), hostility ($P < .01$), psychoticism ($P < .01$), and the global severity score ($P < .01$). The subscale scores for the attempter group exceeded the normative scores established for psychiatric inpatients. Only somatic complaints, phobic anxiety, and paranoid ideation failed to contribute the differentiating adolescent attempters from nonattempters.

One-way analysis of variance was used to determine differences between adolescent attempters and nonattempters in self-esteem. Analysis indicated that attempters had significantly less ($P < .001$) self-esteem than nonattempters.

Discussion

This exploratory study revealed that adolescent suicide attempters differ significantly from nonattempters on several symptom dimensions of psychopathology, ie, psychological distress and self-esteem. Thus, these findings suggest that the suicidal adolescents evidenced numerous symptoms of psychological disturbance that could obviate any rational coping abilities. The symptom profile found here (comparable to that of patients in mental hospitals) indicates these attempters were in such a psychological state that they were unable to see alternatives to stressors or problems in their environment and tended to overreact to such problems by turning anxious and hostile feelings inward in the form of suicide attempt.

Obvious limitations should be observed when one tries to generalize to a wider sample of suicidal adolescents from a small, nonrandom sample. Another limitation in this investigation is the use of a correlational model that precludes stating the direction of the significant relationships between psychopathology and adolescent suicide attempts. One possibility that must be explored in explaining any differences is that these adolescent suicide attempters were reacting to excessive stress at the moment as opposed to evidencing a longstanding history of psychopathology and resulting inability to cope with the pressures of a normative or situation stressor event. However, the very number of significant differences between adolescent suicide attempters and nonattempters as a function of symptoms of psychopathology, in addition to the comparison of the psychological distress scores with norms established for the SCL-90 (BSI), would tend to support the hypothesis that psychological instability plays an important role in the etiology of adolescent suicidal behavior.

These data clinically translate to the family physician evaluating or treating adolescents. The notion that suicidal adolescents typically emit few, if any, clear signs of psychological distress or psychopathology could certainly be called into question by the findings of this study. It might therefore be advisable for any adolescent patient who presents for evaluation or is in treatment to be routinely assessed for various symptoms of psychopathology that might be symptomatic of self-destructive behavior, especially if the family physician is aware of any particular stressor event or problem facing this adolescent. The notion that adolescents who attempt suicide may be having only minor adjustment difficulties is not always accurate, and more severe psychopathology may underlie the suicidal act.

Family physicians can easily detect such symptoms by merely augmenting their customary examination with some probing questions regarding current life experiences and feelings. To do this family physicians must establish a supportive med-

Table 1. Brief Adolescent Assessment Outline*

1. Initial appearance and behavior (dress, physical characteristics, motor activity, reactions to interviewer, eye contact, relatedness, social behavior, age appropriateness)
2. Affect (type)
3. Cognition (thinking, memory, awareness, intellect)
   - Orientation (person, place, time)
   - Thought: content (suidical, homicidal, escape, bodily concerns, delusions), form (relevance, fluidity, concreteness), distractability
   - Relationship to reality (degree of fantasy involvement, ability to pretend)
   - Judgment
   - Memory (recent and past)
   - Altered states of awareness (hallucinations)
   - Speech, hearing, and language (amount, style, impediments, age appropriateness)
4. Predominant defenses and adaptive mechanisms
5. Somatic functioning and concern (appetite, sleep, sphincter control)
6. Motivation (patient's own evaluation of any problems referred to in the history or other concerns producing distress)
7. Stated goals and interests (attitudes toward family, peers, school)
8. Prior suicide attempts by patient, other family member, friend

From Tishler et al[26]
*Adapted from Revised Mental Status Evaluation, mimeograph. Belmont, Mass, McLean Hospital, Children's Center, 1975

ical relationship with their adolescent patients, apart from the one they have with their parents, so that the adolescents will feel free to discuss their concerns. The family physician who wants to be more systematic in the identification of symptoms of psychological distress can administer as part of the routine examination a brief psychological inventory as outlined in Table 1.[26]

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