

Chapter 3

Assessment and Treatment of Suicidal Patients in an Emergency Setting

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Suicidal ideation, suicide attempts, and the specter of completed suicide form one of the core problems in emergency psychiatry. Suicidal behavior is present in at least one-third of patients seen in the psychiatric emergency service (PES) (Dhossche 2000), and in some ways, the assessment and management of suicidal patients is the prototype of emergency mental health care.

Epidemiology

Suicide is the eighth leading cause of death in the United States, and more than 30,000 people in the United States kill themselves every year (Centers for Disease Control and Prevention [CDC] 2000). For every two victims of homicide in the United States, there are three people who take their own lives (CDC 2000).

Highlighting the seriousness of working with suicidal patients in the emergency setting is a study by Beck et al. (1985), who found that 7% of patients hospitalized for suicidal ideation without a recent attempt committed suicide during a follow-up period of 5 to 10 years. Another study followed patients who had been treated in an emergency room after self-poisoning. At 14-year follow-up, almost 22% of the patients had died and 7% had committed suicide (Suokas 2001).

A recent review of the literature on the epidemiology of suicide attempts found that lifetime prevalence rates ranged from 728 to 5,930 per 100,000 individuals (Welch 2001). Every day, approximately 86 Americans take their own lives and 1,500 make suicide attempts (CDC 2000). Drawing on this and other information that highlights the public health significance of suicide, U.S. Surgeon General David Satcher developed a National Strategy for Suicide Prevention. Key goals of this national strategy (U.S. Public Health Service 1999) include

- Developing and implementing suicide prevention programs.
- Promoting efforts to reduce access to lethal means and methods of self-harm.
- Implementing training for the recognition of at-risk behavior and for the delivery of effective treatment.
- Developing and promoting effective clinical and professional practices.

- Improving access to and community linkages with mental health and substance abuse services.

Many of these goals are relevant to a discussion of suicide in the emergency setting. In this chapter, we particularly highlight the importance of reducing access to lethal means of self-harm, improving access to mental health and substance abuse services, and developing more effective treatment in the emergency service.

The primary focus of this chapter is on a subset of individuals who commit suicide: those who have had some contact with the mental health system prior to their suicide. Considering the population of individuals who commit suicide despite evaluation by a mental health professional, there is evidence of considerable opportunities to improve care. For instance, Malone et al. (1995) found that physicians failed to document a suicide history in one-quarter of patients identified by a research assessment as having made a suicide attempt and as being currently depressed. We discuss the broad spectrum of suicidal ideation and suicide attempts and distinguish it from deliberate repetitive self-aggression. Suicide prevention programs that reach out to individuals at risk without any formal mental health contact are beyond the scope of this discussion.

The Spectrum of Suicidal Behavior

Attempts Versus Completions

A useful way of classifying suicidal behavior is to consider ideation, planning, attempts, and completed suicide. Attempts may be further subdivided into impulsive and premeditated attempts and medically serious and nonserious attempts. The relationship between ideation, various kinds of attempts, and completed suicide is complex. It does not represent a simple hierarchy of increasing severity.

In the National Comorbidity Survey (Kessler et al. 1999), about 14% of the American population reported having thoughts about suicide, 4% had a plan, and 4.6% had made an attempt. The cumulative probabilities were 34% for the transition from ideation to a plan, 72% from a plan to an attempt, and 26% from ideas of suicide to an unplanned attempt. Note that there are many unplanned attempts. Planned and unplanned attempts followed a somewhat different course: 90% of all unplanned and 60% of planned first attempts occurred within 1 year of the onset of ideation. Thus, thoughts about suicide are clearly a significant risk factor for suicide attempts, especially those after the onset of suicidal ideation.

A history of attempt increases the odds of completion more than any other risk factor. However, psychological autopsy data suggest that most individuals who completed suicide had not made a prior attempt, and at least one study of attempters found that only about 10% ultimately die by suicide (Mans et al. 1992). It would appear, then, that certain kinds of ideation and planning are more serious than certain types of suicide attempts.

Medical Seriousness and Impulsivity

Anyone who has practiced in the PES is aware that there are many individuals who make attempts but who, at least in the short run, do not complete suicide. Recent efforts in the field have focused on identifying a group of individuals who have made

medically serious suicide attempts, in order to get more information about those who seem to be at highest risk of suicide. For instance, Elliott et al. (1996) found significant differences between those who made medically serious attempts and those who made non-medically serious attempts. The former group had more patients with unipolar depression (34% vs 20%) and more patients with substance-induced mood disorder (30% vs 10%). By contrast, more patients making non-medically serious attempts had bipolar depression (19% vs. 6%) and more had borderline personality disorder (22% vs. 34%). Some evidence suggested that those who made non-medically serious attempts were more impulsive. Other studies have also found a significant inverse relationship, between impulsivity and lethality of the suicide attempt (Baca-Garcia et al. 2001).

One of the biggest challenges facing the emergency clinician is the way in which suicidal individuals relate to others. It might seem that those who commit suicide and who are in mental health treatment must have not been seen at the time that they felt suicidal. However, Isometsa et al. (1995) found that of the group of individuals who had had contact with a health professional prior to suicide, 41% had had contact within the months prior to suicide, and almost one-fifth of these individuals had seen the clinician on the day of the suicide.

A minority of patients who commit suicide and who have had contact with health professionals appear to have expressed ideation or intention to their therapists (Earle et al. 1994). Far more often, the final consultation is to acquire more medication (Obafunwa and Busuttill 1994). Suicidal ideation and intention are symptoms of desperation, but some who have such thoughts will not readily share them with a health professional. Thus, efforts to provide intensive treatment to those at highest risk cannot simply rely on self-report of suicidal ideation and planning.

Goals of Emergency Assessment

Sensitivity, Specificity, and the Problem of Prediction

In reviewing the literature on suicide, it is important to identify certain common threads. For instance, there is a large literature on risk factors for suicidal behavior. In reviewing this literature, one might conclude that a simple assessment for all possible risk factors for suicide would identify those individuals who will commit suicide. The problem is that suicide remains, at any given point in time, a rare event. Thus, any test that identifies the majority of individuals who complete suicide (i.e., it is sensitive enough to be useful as a screening tool) is very likely to identify a much larger group of people who do not commit suicide (i.e., it will not be adequately specific). One of the best studies to date (Allgulander and Fisher 1990), a prospective study of nearly 9,000 individuals with high suicide risk who were evaluated with a comprehensive clinical battery of assessment tools and statistical analysis, failed to find any clinical predictors that could successfully identify future completers and distinguish that group from the much larger group of individuals who would not complete suicide. Similarly, Pokorny (1983) found that in a sample of 4,800 patients consecutively admitted to an inpatient psychiatric service, there was no set of measures that did not both miss many at-risk cases and erroneously identify too many other individuals as being at risk. The author concluded that identifying individuals who will commit suicide is not currently feasible.

A landmark study by Motto and Bostrom (1990a) suggested that a relatively small number of items could predict individuals who would commit suicide (with a sensitivity of 79%). However, a follow-up study conducted by Motto and Bostrom (1990b) found that these criteria did not predict suicide with a different group of subjects. Thus, to date, every attempt to identify a simple scale or set of scales to distinguish between those who commit suicide and those who do not has failed.

Prediction Versus Treatment

What are the goals of the emergency evaluation of a potentially suicidal individual? From one perspective, the goal is to identify those at greatest risk in order to place them in secure environments and prevent them from acting on their impulses. This is an essentially linear view of the assessment process. Success is measured by the hospitalization of those at highest risk. When we evaluated the factors that distinguished patients who committed suicide after a PES evaluation from the factors that were associated *with* a high perceived risk but not with suicide, we found that all of the patients who committed suicide within 6 months of a PES visit had been hospitalized (P. L. Forster, ms. in submission). From the “triage” perspective this represents a success, but from a treatment perspective it raises the issue of what other steps might have been taken to prevent suicide. One issue that we touch on later is that suicide seems to be associated with disrupted treatment relationships and that in many systems there is often poor continuity of care from inpatient to outpatient treatment.

It is our contention that the goals of emergency evaluation are different than simply a triage assessment. Suicidal ideation and suicide attempts must be thought of as potentially severe symptoms of psychiatric illness, and the focus of assessment should be on finding the best treatment for that illness. This “treatment” perspective suggests that taking a risk (deciding not to hospitalize a patient because outpatient treatment seems to be the most effective intervention) can sometimes be the best decision.

If the literature is correct in suggesting that we cannot predict which individuals will complete suicide, then the focus of the emergency assessment of those with suicidal ideation or attempts in the PES should be to identify the factors that place people at high risk and, particularly, those factors, including illness, that may respond to treatment. Factors that place the individual at high risk may or may not be modifiable, but the assessment of risk factors helps to inform treatment planning. In general, high-risk individuals will be referred to more intensive and more secure environments. However, if hospitalization seems to be associated with a very high likelihood of disrupting outpatient treatment, emergency clinicians will have to balance treatment and security. For patients with acute risk factors who may need time to get past a crisis, safety may predominate. For patients with chronic risk factors, long-term treatment concerns may take precedence, with the recognition that a certain degree of safety will always be necessary for treatment to succeed.

Risk Factors: Fixed Versus Modifiable

In the assessment of an individual at risk for suicide, it is important to distinguish between the factors that help to identify very-high-risk individuals but that are not modifiable and the risk factors not only that place an individual at high risk but that may be modified by effective treatment. We begin this section by looking at risk factors

that are relatively difficult to modify. These risk factors operate as constraints on the assessment and treatment plan.

Fixed Risk Factors

“Fixed” risk factors—those that cannot be expected to change as a consequence of successful treatment of a psychiatric disorder— include previous suicide attempts, suicidal intent at the time of the most recent attempt, sex, ethnicity, age, marital status, economic situation, and sexual orientation.

Several psychiatric measures have been created to aid in the assessment of ideation and intent. Beck et al. (1979), one of the pioneers in this field, developed a scale for suicidal ideation that looks at the intensity and pervasiveness of suicidal ideas. Mieczkowski et al. (1993) also described a scale to measure suicidal intent.

The goal of these and similar scales is to distinguish people who have a suicidal preoccupation and who make well-planned suicide attempts with intent to die from the larger group of individuals who make suicide attempts motivated more by a wish to express frustration and need than by a wish to die. This latter group is described as having made suicidal “gestures,” by some authors, as opposed to suicide attempts.

Suicidal Ideation

Suicidal ideation can be thought of as both a modifiable and a fixed risk factor. Beck et al. (1999) found that the intensity of suicidal ideation at the worst point in the patient’s life was a stronger predictor of suicide than hopelessness or current suicidal ideation. The extent of suicidal thoughts may be linked to a relatively persistent lowering of the psychological barriers to completed suicide or to a heritable trait. In contrast, thoughts of suicide at a given moment may not be as useful for predicting suicide, although they may be more susceptible to change with treatment.

Age, Sex, and Ethnicity

It is often said that older individuals and males are at greater risk for suicide than those who are younger and female (CDC 2000). When the data on race and ethnicity are considered (CDC 2000), older women do not generally appear to be at higher risk than younger women. The increase in risk among older individuals is largely restricted to white males and Asian males. Black males, and to a lesser extent Hispanic males, have more nearly equal risk across the age spectrum, with moderate increased risk in the early 30s and then a similar magnitude of increased risk in old age.

In the context of the data showing that, among nonwhite males, only Asian males have an increased risk when older, it is interesting to note that the increase in risk among those who are older and female is uniquely found among Asian women. By contrast, white, Hispanic, and black women tend to have lower rates of suicide in older age.

Roughly 4 times as many men as women commit suicide, although women attempt suicide twice as often as men. Historically, this difference has been ascribed to the fact that women more often make suicide attempts with poisons (such as pills) rather than with firearms. However, the percentage of women attempting suicide with firearms has significantly increased over time.

Breaking down suicide completions by sex and use or nonuse of firearms demonstrates that the increased risk of suicide among older white and Asian men

correlates with a huge shift from nonfirearm suicide methods in early adulthood to firearm suicide methods in later life.

Yeates (1998), in a study of 141 suicide victims across the age spectrum by means of techniques of “psychological autopsy,” found that older age was significantly associated with more determined and well-planned suicides as well as with fewer warnings of suicidal intent. Thus, the experience of many PES professionals of seeing relatively few older suicide attempters reflects the fact that older individuals are less likely to have had any contact with a mental health professional and are more likely to complete a single and lethal suicide.

An appalling sense of loss associated with the suicide of a young person, as well as data showing a significant increase in suicides among those aged 15 to 25 in the last 20 years (particularly between 1970 and 1980), has led to an increased focus on suicide among younger individuals (CDC 2000). Suicide is the sixth leading cause of death among those aged 5 to 14 and the third leading cause of death among those aged 15 to 24 (CDC 2000). The suicide rate for white males aged 15 to 24 tripled between 1950 and 1998, while the rate for white females more than doubled during that time (CDC 2000).

A study by Flawton et al. (1993) followed young people who had made suicide attempts to identify those who subsequently completed suicide. This study found that the young people who committed suicide were more likely to come from lower social classes, to have been sick enough to have previously received inpatient psychiatric treatment, to have had significant substance abuse, to have been diagnosed with personality disorders, and to have made previous suicide attempts. Nasser and Overholser (1999) also found that young people who commit suicide are, by many measures, very psychiatrically disturbed. They often have had chronic psychiatric disturbances with significant comorbidity (e.g., depression, personality disorders, substance abuse) and psychiatric disorders that extend back to early childhood. A longitudinal study following children from age 8 to age 16 found that many of the adolescents with suicidal thoughts and suicide attempts had had significant behavioral and emotional problems as early, as age 8 (Sourander et al. 2001). Appleby et al. (1999a) identified a pattern of mental illness, substance abuse, social isolation, and unemployment among young people who commit suicide. Separation and rejection appear to be risk factors associated often with suicide in adolescents and young adults (Brent et al 1993, Rich et al 1986).

Sexual Orientation

A particularly strong risk factor for suicidal thoughts and behavior among adolescents is homosexual sexual orientation (Russell and Joyner 2001) (see below).

Herrell et al. (1999) and Fergusson et al. (1999) both found that having a gay, lesbian, or bisexual sexual orientation is associated significantly with suicidal behavior in adults as well. Fergusson et al. (1999) noted that at least 10 peer-reviewed studies found high rates of attempted suicide among young bisexual and homosexual research volunteers.

Marriage

Suicide rates are highest for those who are divorced or widowed. In 1992, the rate for divorced or widowed elderly men was 2.7 times that for married men and 1.4 times that for never-married men. The rate for divorced or widowed elderly women was 1.8

times that for married women and 1.4 times that for never-married women (CDC 2000). Later, in our discussion of modifiable risk factors, we highlight evidence that social isolation per se may be a key factor that underlies the effect of marriage.

Socioeconomic Status

The data on the relationship between suicide and socioeconomic status are mixed. The classic view was that suicide is associated with a higher socioeconomic status, but more recent population-based studies suggest a higher rate in those with a lower economic status (Taylor et al. 1998) Trouble repaying debts and an unstable financial situation often accompany suicidal ideation (Hintikka et al. 1998). An even more significant factor than economic status is the loss of employment (Kposowa 2001). For men this relationship lasts for only a few years, whereas for women the rate of suicide remains higher among the unemployed, regardless of the number of follow-up years.

History of Violence

Among risk factors that are not modifiable, it is not just suicidally destructive behavior that places individuals at higher risk. History of violent behavior of all kinds appears to increase the risk of subsequent suicide (Conner et al. 2001). Conner et al. (2001) found that violent behavior in the last year was a significant predictor of suicide and that this relationship was particularly powerful among those who had no history of alcohol abuse.

Potentially Modifiable Risk Factors

While identifying nonmodifiable risk factors helps to identify populations at risk and suggests that we intensify efforts to assess individuals who are, for instance, older white men, adolescent homosexuals, or recently unemployed men, the assessment of modifiable risk factors serves as the foundation for treatment planning in those with suicidal ideation or who have made suicide attempts.

Anxiety

A number of studies have suggested that anxiety is a major modifiable short-term risk factor for suicide. A landmark study by Fawcett (1992) of individuals who had been hospitalized for depression found that anxiety and anxiety-related symptoms, such as insomnia and difficulty in concentrating, were the most important predictors of suicide within a year of discharge. In that study, the predictors of suicide within a year were panic attacks, severe psychic anxiety, diminished concentration, global insomnia, moderate alcohol abuse, and anhedonia. The predictors of suicide after 1 year were previous attempts, hopelessness, and suicidal ideation. Busch et al. (1993) found that 13 of 14 inpatient suicides were associated with severe psychic anxiety. Our own study in the PES also identified anxiety as a major risk factor for suicide (P. L. Forster, ms. in submission).

Hopelessness and Life Satisfaction

Hopelessness was identified by Beck as a major risk factor for suicide (Beck et al. 1985). In the study by Fawcett (1992), hopelessness predicted long-term risk, but not short-term risk, of suicide. Young et al. (1996) suggested that hopelessness as a risk

factor for suicide may not be as modifiable as had previously been thought. In their study, hopelessness during a depressive episode was not predictive of suicide attempts. Rather, baseline hopelessness in the absence of major depression seemed to predict future suicide attempts. Koivumaa-Honkanen et al. (2001) found that in a general population of adults, self-reported life satisfaction predicted suicide over a 20-year span; men with the highest degrees of dissatisfaction were more than 25 times as likely to commit suicide as men who were satisfied.

Access to Means

Reducing access to means of committing suicide is one of the major goals of the Surgeon General's initiative to reduce the frequency of suicide. Several lines of evidence point to the importance of assessing in an emergency evaluation the ease with which individuals can access lethal means of committing suicide. According to Brent et al. (1991), guns are two times more likely to be found in the homes of suicide completers compared with suicide attempters. More recently, Brent (2001) reviewed all the studies that have examined this relationship and concluded there is a strong relationship between firearms in the home and risk of suicide. Although those who own guns often have purchased those guns to protect themselves, only 2% of gun-related deaths in the home are the result of a home owner's shooting an intruder, whereas 83% are the result of suicide (CDC 2000). A large study that looked at the relationship between handgun purchase and death found that in the first year after the purchase of the handgun, suicide was the leading cause of death (Wintemute et al. 1999). This increase in risk appeared to be greater for women than for men.

Individuals who commit suicide by jumping off buildings or bridges are not significantly different from those who use other methods of suicide (Gunnell and Nowers 1997). The completion rate among those who jump off tall buildings is much higher than the rate among those who attempt by different means. This information, as well as the information summarized above with regard to handguns, suggests that reducing access to lethal means such as bridges without barriers and evaluating and eliminating access to guns in those who are at risk may help to prevent suicide.

Continuity of Care

One aspect of the treatment received by many individuals in the mental health system, particularly the acute mental health system, is frequent disruptions in the continuity of care. These disruptions are also a significant modifiable risk factor for suicide. There is a significant cluster of suicides soon after discharge from psychiatric care (Goldacre et al. 1993), and two recent reviews of large numbers of suicide deaths (Appleby et al. 1999c; Burgess et al. 2000) found that disruptions in care were major preventable causes of suicide among those who had contact with the mental health system prior to their deaths. A study by Motto and Bostrom (2001) found that creating a sense of continuity of care or contact and caring for those who were resistant to seeking treatment was possible with a relatively modest effort. In his study, patients who refused to continue in treatment after evaluation but who received a letter at least four to five times a year had a significantly lower risk of suicide than similar patients who did not receive follow-up letters.

Psychiatric Illness

It is generally accepted that 90% or more of individuals who commit suicide have a serious psychiatric disorder. This finding is based on primarily retrospective, case-controlled studies of suicide. However, it is strengthened by high levels of consistency across different studies (Conwell et al. 1996; Harris and Barradough 1997; Henriksson et al. 1993). As reviewed by Mans et al. (2000), estimates of the presence of serious psychiatric disorder across 16 studies and four decades range from 81% to 100%. The best estimate of the lifetime risk of suicide among those with depression and alcoholism (Inskip et al. 1998) puts the risk at 6%-7%, with the risk of suicide among those with schizophrenia not much lower (4%).

Data on the risk of suicide among those with bipolar disorder or personality disorders are more variable. Early studies suggested that the risk among individuals with bipolar disorder was as high as 19% (Goodwin and Jamison 1990). These studies were biased by looking over a relatively short period of time at outcomes from populations at very high risk (often looking at inpatients who were subsequently discharged from the inpatient setting). More recent studies suggest that the risk of suicide in those with bipolar disorder is either equal to (Jamison 2000) or lower than (Isometsa et al. 1994a) the risk among those with unipolar depression.

Isometsa et al. (1994b) conducted a study of all individuals who committed suicide in Finland in 1 year. The most striking findings in this study were that most of the suicide victims had major depression and that most had received no treatment for depression. Only 3% had received antidepressants at therapeutic doses, and only 7% had received weekly psychotherapy. Moreover, none of the 24 psychotic subjects had been given adequate treatment. Isometsa et al. concluded that depression not only is a major risk factor for suicide but is usually untreated, or inadequately treated, in those who commit suicide.

In Isometsa et al.'s (1994a) study of bipolar individuals who committed suicide, the majority of suicides occurred during an episode of depression (79%). In the remaining cases, as many occurred in those in a mixed state (11%) as in those who had recently recovered from a psychotic episode of mania (11%). In this group of bipolar patients, the percentage in treatment was significantly higher than in Isometsa et al.'s (1994b) study of suicides among depressed individuals. For instance, 32% had been prescribed lithium. Still, a majority of the bipolar patients had not received adequate treatment.

Among patients with mood disorders, psychotic features do not appear to significantly increase the risk of suicide (Angst and Preisig 1995; Dilsaver et al. 1994). Although the lifetime risk of suicide among individuals with schizophrenia is lower than among individuals with major depression, patients with schizophrenia appear to make more serious suicide attempts (Radomsky et al. 1999). Schizophrenic patients with predominantly negative symptoms, such as lack of will, blunted affect, or social withdrawal, have a much lower risk of suicide than those with marked suspiciousness and/or delusions (Fenton et al. 1997). Heila et al. (1997) summarized seven studies that investigated completed suicide in individuals with schizophrenia. In general, the group at highest risk appears to be young adult men in whom the illness was diagnosed within the past 10 years. Other major risk factors for suicide in schizophrenia are the presence of depressive symptoms, alcoholism, and previous suicide attempts. In Heila et al.'s (1997) study of 92 patients who completed suicide, only 1 in 10 had current suicide-

commanding hallucinations, but two-thirds of the suicide completers met criteria for a depressive syndrome. Junginger (1995) found that most patients with command hallucinations ignore dangerous commands unless they are associated with delusions. Both Heila et al. (1997) and Rossau and Mortensen (1997) found that among schizophrenic patients, suicide appeared to occur most commonly following discharge from the hospital.

As reviewed by Mails et al. (2000), the rate of suicide among patients with borderline personality disorder is estimated to be between 3% and 9%—a risk comparable to that among patients with schizophrenia. The risk is greatest among those with substance abuse and depression (see below regarding the risks of suicide in complex cases).

Kramer et al. (1994) found a high correlation between suicidal ideation/suicide attempts and the diagnosis of posttraumatic stress disorder (PTSD). Moreover, Lehman et al. (1995) found a higher prevalence of completed suicides among those diagnosed with PTSD than in the general population. However, there are fewer large studies of suicide in PTSD than in major depression.

The data summarized in this subsection tend to oversimplify the diagnostic risk factors for suicide. Individuals with depression or psychotic disorders who commit suicide tend to have high rates of comorbidity with other disorders (Henriksson et al. 1993), especially substance abuse and personality disorders (Elliott et al. 1996). In one psychological autopsy study, only 12% of those who committed suicide met criteria for a single Axis I disorder; 44% had multiple Axis I disorders, 46% had contributory Axis III disorders, and between 31% and 51% met criteria for an Axis II disorder. Similarly, studies by Allebeck et al. (1991) and Duffy and Kreitman (1993) found that the combination of a personality disorder, a mood disorder, and substance use was particularly common among those who committed suicide.

The risk factors for suicide among those with substance use include the use of multiple substances, chronic substance abuse, major depression, serious medical illness, social isolation, and unemployment (Murphy et al. 1992). Motto (1980), in his prospective study of alcoholic patients, identified the presence of prior suicide attempt, the seriousness of the attempt, a negative attitude toward the interviewer, high intelligence, and having financial resources as risk factors for suicide. The risk of suicide among alcoholic individuals appears to be comparable to the risk among those with major depression (Inskip et al. 1998), and the risk of both suicide and homicide increases proportionately with alcohol intake (Klatsky and Armstrong 1993). Whereas studies of psychiatric illness and suicide find that individuals with mood disorders are more likely to commit suicide early in the course of their illness, those with alcoholism seem to be more likely to commit suicide late (Mans et al. 2000).

In summary, best estimates suggest that more than 90% of all suicides occur in those with a psychiatric illness. The most significant risk appears to be in patients with recurrent major depression or alcoholism or in patients with schizophrenia accompanied by positive symptoms (especially paranoia). Those patients who combine a mood disorder, substance abuse disorder, and personality disorder are at particularly high risk.

Social Isolation

Social isolation is a significant risk factor for suicide. Maris (1981) found that those who died from suicide were far more socially isolated across a host of domains than

those who died from natural causes. Nisbet (1996) suggested that the reason that black females have the lowest rate of suicides of all race and sex groups is because they tend to have large social networks that they use when they are distressed.

Medical Illness

Medical illness appears to be an important risk factor for suicide (CDC 2000), although the relationship between having a terminal illness and planning suicide may be overestimated (Allebeck et al. 1991). Less than 1% of cancer patients die by suicide, and only 30% of cancer patients who commit suicide are considered to have a terminal condition.

By contrast, the data for AIDS patients suggest that many take medications in an effort to hasten death. In a study by Cooke et al (1998), 12% of patients who died with AIDS had received immediately before their death an increase in medication that was intended to hasten death. Just being HIV positive is associated with, at most, a very small increase in risk of suicide (Marzuk et al. 1997). In the AIDS population, suicide appears to occur near the end of life. It should be noted that these data may be changing because of the development of antiretroviral therapy.

Other specific illnesses associated with suicide include epilepsy (Nilsson et al. 1997), cancer (Mans et al. 2000), and renal illness with dialysis.

Protective Factors

Just as there are modifiable factors that predict suicide, there are modifiable factors that protect against suicide. Factors that protect against suicide include feelings of responsibility toward family, fear of social disapproval, moral or religious objection to suicide, greater survival and coping skills, and a greater fear of suicide (Malone et al. 2000).

Risk Assessment in an Emergency Setting

Excess Mortality in Emergency Care Patients

A number of studies have examined the outcomes and long-term follow-up of individuals evaluated in an emergency setting. In 5-year follow-up study of individuals who had been treated in hospitals following suicide attempts, Ostamo and Lonnqvist (2001) found an increased mortality in this group, not just from suicide but also from homicide and "undetermined causes." The net effect of this increased mortality was that 15% of these suicide attempters died during the 5-year follow-up period. Suicide accounted for about 40% of the excess deaths. The standard mortality ratio was highest during the first year. The authors conclude that the risk of premature death following a suicide attempt is severe.

A 14-year study of self-poisoning patients treated in the emergency unit of Helsinki University Central Hospital (Suoka and Lonnqvist 1991) also found a high mortality rate (22%). Again about one-third of this increased mortality was due to suicide. As with the Ostamo and Lonnqvist (2001) study, risk factors for death in the Suokas and Lonnqvist study also included being male, previous suicide attempts, and a history of earlier psychiatric treatment, as well as the presence of medical illness. This study looked at psychological factors and found that the strength of the wish to die that led to the visit to the hospital was an important predictor of premature death.

A Neglected Population at Risk

In one study of emergency room patients who had deliberately harmed themselves, nearly 60% did not receive a psychiatric assessment (Hickey et al. 2001). The patients who were more likely not to have been assessed by a psychiatrist included those who had a past history of harming themselves, those who were younger (20-34 years), and those who had exhibited more difficult behavior during the time they were in the emergency room. The patients who presented between 5:00 P.M. and 9:00 A.M. were significantly less likely to be assessed than those seen between 9:00 A.M. and 5:00 P.M. Further self-harm attempts occurred in 38% of patients who had not been assessed, compared with 18% of those who had been assessed.

Risk Assessment

A suicidality assessment should be performed on every patient seen in a psychiatric emergency setting, regardless of whether the patient acknowledges suicidal ideation or has made a suicide attempt. One study found the following four questions to be a sensitive screen for significant risk of suicidality (Cooper-Patrick et al 1994) “Has there been a period of two weeks where you have had trouble sleeping, where you have felt depressed, sad, or lost interest in things, where you have felt worthless, simple or guilty, or where you have felt hopeless for a long period of time?” Patients who acknowledge risk factors should have a further assessment for the presence of an inadequately treated psychiatric disorder that places them at risk for suicide, such as a mood disorder, psychotic disorder, substance use disorder, or personality disorder, and should be assessed for modifiable risk factors such as anxiety, insomnia, and access to means of suicide.

One approach to continuing evaluating those at risk who deny suicidal ideation is to seek to elicit negative emotion, hopelessness, and anxiety. For instance, “How bad do you feel?” might lead to the questions “Have you ever thought about death or dying?” and “What do you think the future will be like.”

In a reluctant patient, it is generally more useful during screening evaluation to look at past suicidal ideation than at ideation in the present. Individuals are more likely to acknowledge that they felt very seriously suicidal in the past than they are to express those feelings in the present, especially if they are aware that the answers may lead to unwelcome restrictions on their ability to leave the emergency setting. Moreover, as we noted, the severity of suicidal ideation at its worst point in a person’s life is a better predictor of suicide than the current severity of suicidal ideation.

In evaluating an individual for suicide risk, it is also important to pay attention to one’s own emotional reactions to the patient. Clinicians often report that the suicidal individual is a difficult person to take care of. Motto and Bostrom (2001) found that a negative reaction to the patient by a clinician was a significant predictor of suicide. Others have pointed to “countertransference hate” in response to the suicidal patient. Regardless of the psychodynamics, it does appear that individuals with significant suicide risk are often not identified and not aggressively treated for their illness. It is reasonable to assume that there is something very difficult for a clinician about sitting with an individual who feels so hopeless that he or she is contemplating suicide, and that there may be a subconscious wish to avoid entering the darkness of that person’s experience and perhaps even a

feeling that the patient's hopelessness is a reasonable response to his or her life circumstances.

Many authors have developed outlines and structured interviews for assessing suicidality. For instance, Shea (1998) proposes the CASE (Chronological Assessment of Suicide Events) approach. Thienhaus and Piasecki (1997) suggested the following elements of an assessment:

1. Establishing the patient's situation in his or her current life and living environment
2. Identifying where the patient is on the continuum of suicide risk
3. Identifying the psychiatric diagnoses
4. If the patient has suicidal thoughts, determining how realistic the patient's plan is
5. Seriously examining and evaluating potential deterrents to suicide
6. Avoiding thinking of the behavior in a derogatory way (e.g., that the patient is being "manipulative" or has made a "suicidal gesture")
7. Really imagining the place and situation that the individual will be returning to after the evaluation
8. Making a realistic assessment of the impact of your interview on the patient and your sense of connection with that person (rather than making a "no suicide" contract)
9. Getting a second opinion if you have concern
10. Not discharging an intoxicated patient

Collateral Contact

In general, there is an argument to be made for clinicians who evaluate patients at risk for suicide to make contact with collateral sources of information, such as prior providers, family, and friends (Rives 1999). Patients may not be truthful about past psychiatric illness, prior suicide attempts, or even current thoughts of suicide. Although state laws regarding confidentiality vary, a strong ethical argument can be made to breach patient confidentiality in situations in which the patient appears to be at very high risk and he or she is unwilling to authorize contact.

Interventions and Treatment

Two recent studies that looked at patients who committed suicide after prior mental health contact identified similar ways of improving treatment for this population. One study (Burgess et al. 2000) examined deaths by suicide in the state of Victoria in Australia during the period from 1989 to 1994. In this study, chart data were examined by three clinicians, who made judgments about the preventability of the suicides. The study found that among those who had prior mental health contact, a large number (49%) had contact with a mental health professional in the 4 weeks prior to death. In the retrospective assessment of the clinicians who reviewed the cases, 20% of the suicides were preventable. The key factors associated with preventability were poor staff-patient relationships, resulting in incomplete assessment, and poor assessment, leading to poor treatment of depression. Another important factor was poor continuity of care. This last finding mirrored the results of the second study done in Britain (Appleby et al. 1999b).

In Appleby et al.'s (1999c) study, the results of a 2-year review of all suicides who had had contact with mental health services in the year before death were outlined. Of the total number of suicides, roughly one-quarter had had mental health contact. In the sample with the mental health contact, 24% committed suicide within 3 months of hospital discharge, suggesting that the post-hospitalization period was a time of particularly high risk. Suicide rates after hospitalization dropped rapidly during the first 5 weeks after discharge, so that the first month after discharge was the period of highest risk. Of those suicide completers who had had mental health contact, half had received services in the week before death. Just as in the previous study, the mental health teams, when asked, said that they believed about 22% of the suicides could have been prevented. Interestingly, they also specified that in 61% of the cases, at least one measure that would have significantly reduced risk. The most frequently cited interventions that might have reduced risk were interventions to improve patient compliance (29%) and those to provide closer supervision of the patients (26%).

Several of the findings cited in the study seem difficult to explain and suggest that the percentage of suicides that were judged preventable may not be a reliable estimate. The mental health teams felt that at final contact the immediate risk of suicide was absent in 30%, low in 54%, moderate in 13%, and high in only 2% of the cases. However, 16% of all the suicides occurred on inpatient units, and 5% of all the suicides occurred while the patients were on close observation for suicidality. Finally, 43% of the suicides were in the highest priority category for community care, which suggests that these patients were judged to be in need of intensive treatment for some reason.

We are skeptical about the findings of these two reviews in terms of the percentage of suicides that were "preventable" (e.g., clinicians judging that patients on constant observations were not at high risk) because of the seemingly inconsistent results and the obvious potential biases in relying on the writings or the judgments of the clinicians who were providing care.

Unfortunately, at least in the United States, legitimate concerns of clinicians about potential malpractice liability limit sharing information about how suicides with mental health contact might be prevented. In the first author's experiences after intensive review of hundreds of cases of suicide in quality improvement and forensic settings, about half of the cases seemed to have been "unexpected." In the other half, the clinicians faced an assortment of obstacles to providing effective treatment: most commonly, a lack of service integration (care being provided in multiple sites, with multiple providers, without good continuity); often, a failure to adequately treat all the identified problems (e.g., substance abuse problems comorbid with other disorders, anxiety, or insomnia symptoms); and in some cases, concerns about how to involve family members or other significant others in working with a patient at risk in the evaluation or treatment of a patient. Some of these obstacles could not have been overcome by the individual clinician (legal, or "systems," issues), but that does not mean that those suicides were not potentially preventable.

Another study by Appleby et al. (1999b) examined all of the patients who committed suicide in Greater Manchester following a psychiatric hospitalization and matched this group of patients with patients who were discharged from the inpatient unit but who did not commit suicide. Those who committed suicide were four times more likely to have had their care reduced at the final appointment before their death. In this

study, only one-third of the patients who committed suicide had an identifiable case manager at the time of death. This finding was no different from what was found for the group of patients who did not commit suicide, suggesting that there might have been a failure to provide intensive treatment to this group of patients. It is interesting to wonder about the transference and countertransference implications of a reduction in care immediately preceding suicide.

The importance of the clinical relationship as a mediating factor in suicide is illustrated by a study by Granboulan et al. (2001). In this study, 167 adolescents who had been hospitalized following a suicide attempt were examined to determine what factors were associated with higher compliance with follow-up care. Two important factors were the amount of time that the adolescent met with the psychiatrist while hospitalized and the duration of hospitalization. Just as clearly, the subjective factors that are the hardest to evaluate retrospectively (e.g., therapeutic alliance, empathy) are significant in the outcome for patients at risk.

Immediate Treatment Interventions

Treatment interventions can be somewhat artificially divided into those that have some possibility of changing the patient's suicidal ideation within the first few days after evaluation and those that take longer to be effective. Of particular interest to the psychiatric emergency clinician are those interventions that may have some immediate benefit.

Anxiety

Severe anxiety, agitation, and panic attacks are correlated with acute suicide risk, and denial of suicidal ideation in a patient who is extremely anxious should not be taken at face value (Fawcett et al. 1990; Hall et al. 1999; Schnyder et al. 1999). Patients with significant anxiety who are at risk for suicide should have that anxiety aggressively treated. Similarly, those with other, possibly related symptoms, such as insomnia, should have aggressive treatment for those conditions. Extreme anxiety or paranoia should always be treated in those at risk and may be grounds for intensive treatment by itself. Clinicians are often uncomfortable with prescribing medications for anxiolysis and insomnia because of concern about abuse of the medications. Given the high rate of suicide in these patients, it is clear that the risk of abuse needs to be balanced with the importance of providing effective treatment for anxiety.

Other Issues

Clinicians should pay attention to the following issues in making immediate treatment plans:

1. *First, do no harm.* Do not provide the patient with medications that are potentially toxic in overdose.
2. *Remove access to means of committing suicide.* It is extremely important to assess whether a patient who is suicidal has access to a weapon. Studies find that about half of all Americans have ready access to a gun, and easy access to a gun clearly is associated with an increased risk of suicide. Family members can be asked to take charge of a weapon in the house, if necessary.
3. *Offer the patient hope.* We have already cited several studies to suggest that

continuity of care and the quality and intensity of the treatment relationship are important factors that reduce suicide. In the emergency setting, the clinician should try to help patients see that their problems can be solved and that the clinician is personally willing and able to help. In this context, countertransference reactions need to be monitored, since a clinician who is feeling more empathy for a patient is more likely to be able to convey that message.

An intriguing study by Gustafson et al. (1993) found a significant relationship between follow-up to treatment and objective measurements of quality of care and of patient satisfaction. The key process variables that predicted follow-up were 1) being adequately involved with the patient, 2) obtaining a complete patient history, 3) performing appropriate laboratory tests, 4) developing an adequate diagnostic formulation, and 5) taking appropriate action. Included in adequate involvement with the patient were the identification of the patient's social support and contact with that social support and the establishment of contact with a therapist. In a busy PES, it may be difficult to do all these things, but this study suggests that the more careful the assessment, the more likely patients will be to comply with treatment.

Hospitalization

One of the important questions facing a clinician who is planning treatment for a suicidal patient is the question of whether to hospitalize. Several studies suggest that clinicians may be overly reliant on hospitalization as an intervention. For instance, Schnyder and Valach (1997) found that many of the patients who had attempted suicide were better integrated occupationally and socially in their communities than other patients evaluated in an emergency setting. Relatives and friends were more frequently involved in the consultation. Despite this, these patients were more frequently hospitalized. The authors suggest that junior physicians should be encouraged not to reflexively hospitalize patients who attempt suicide.

In a study by Waterhouse and Platt (1990), patients who had made suicide attempts were randomly assigned to a group that was admitted (38 cases) and a group that was discharged home (39 cases). In this relatively small study, there was no significant difference in outcome between the groups, both of which showed overall improvement. Rosenbluth et al. (1995) discussed some of the ethical issues involved in treatment planning with the suicidal patient. They pointed out that, in some cases, respecting a patient's autonomy may allow a better clinical relationship to develop and that, consequently, hospitalization may be a less effective intervention.

Zealberg and Santos (1996) suggested that referral of a suicidal patient to inpatient care should always occur if the method of attempt involved high lethality (e.g., firearms, hanging, jumping); if the patient has specific plans, means, and intent to commit suicide; if the patient continues to express a wish to die after the attempt; or if there is no social support network available. We certainly agree with the need to be very cautious in the assessment of patients with these characteristics, but we still feel that it is appropriate to temper rules like this with clinical judgment about what form of treatment is the most likely to be effective. In systems where a clinical relationship established in the emergency setting can continue afterward, and particularly where there is good availability for phone contact should symptoms worsen, more "risks" can, and probably should, be taken in terms of outpatient referral. Further, there are some people who

learned that suicidal behavior, such as ideation and “gestures,” will lead to inpatient hospitalization and who seek hospitalization for non-treatment purposes. With these individuals, if they are well known to the clinician, and if their behavior is unchanged (not worsened in severity), outpatient referral may be appropriate. These persons are often allowed to “wait” in the PES until they are no longer suicidal.

Psychosocial Treatment

There is mixed information regarding the potential of psychotherapeutic intervention to reduce the risk of suicide. In a study by Guthrie et al. (2001), 119 individuals who had taken an overdose were randomized to usual care or to four sessions of brief psychodynamic interpersonal therapy delivered in the patient’s home. This very short-term intervention was associated with a significant reduction in suicidal ideation at 6 months (an 8-point reduction in the treatment group versus a 1.5-point reduction in the control group). Those who participated were more satisfied with the treatment and less likely to report further attempts at self-harm.

In contrast, a study by Van Der Sande et al (1997b) found that an intensive inpatient and community intervention program for suicidal attempters was no more effective than “care as usual” In a separate article, Van Der Sande et al (1997a) completed a meta-analysis of all of the studies looking at psychosocial interventions in those at risk of suicide In this large analysis, they found that “crisis intervention,” as well as guaranteed inpatient treatment, did not result in any significant reduction in suicide attempts. On the other hand, the combined results of four studies looking at cognitive-behavioral therapies found a significant effect in reducing suicide attempts From this study and the Guthrie study, it appears that psychologically sophisticated and manualized treatments may be quite effective in the immediate reduction of suicide intentionality but that just providing “crisis intervention” may not.

Psychosis

Finally, in considering interventions for immediate treatment, it is worth noting the importance of providing effective treatment for psychotic individuals with depressive symptoms. However there is clear evidence that many of the atypical antipsychotic are more effective than typical antipsychotics in reducing depressive and anxiety symptoms in patients who are psychotic (see section on long-term treatment later in this chapter), and so those medications should be used in preference to typical antipsychotics. In addition, electroconvulsive therapy (ECT), although not readily available in many communities, can be effective in treating severe depression almost immediately and can even be done on an outpatient basis.

Long-Term Treatment Considerations

A study by Gustafson et al. (1993), in which the quality of the treatment plan and of the diagnostic evaluation was correlated with treatment compliance, emphasizes the importance, even in an emergency setting, of identifying psychiatric disorders that contribute to suicide risk. Obviously, the patient is going to be much more hopeful when given a clear diagnosis and a thoughtful explanation of how appropriate medications can be expected to reduce their suffering than in the context of a referral for unspecified treatment from an unknown provider.

Antidepressants

Effective treatment of major depression is often not provided to patients who commit suicide. Since depressive disorders are associated with half of all suicides, this failure is remarkable. Perhaps one context for this is the fact that tricyclic antidepressants (TCAs) were often associated with overdoses. Studies by Freemantle et al. (1994) and Crome (1993) identified major differences in toxicity between the older TCAs and the selective serotonin reuptake inhibitors (SSRIs). Amoxapine and desipramine had particularly high risk of toxicity and death in these studies, but all the older TCAs were dangerous. By contrast, maprotiline and trazodone had relatively low risks, and the SSRIs had essentially no risk.

Another controversy that may have discouraged people from prescribing antidepressants in an emergency setting is the suggestion that there is a short-term increase in suicide risk immediately after beginning antidepressants. Although there are many case reports of such increased risk, several studies found that antidepressants reduce suicidal ideation even early in treatment (Montgomery et al. 1995; Tollefson et al. 1994). Leon et al. (1999), in a study of 643 patients treated with fluoxetine, found a reduction in suicide attempts in the treated patients, despite the presence of severe psychopathology before treatment. Still, Muller-Oerlinghausen and Berghofer (1999) cited the weaknesses in the literature and recommended caution in prescribing medications that may induce akathisia, such as SSRIs. Perhaps a way out of this apparent bind is to use a combination of an SSRI and clonazepam. Smith et al. (1998) found a significantly faster response to the antidepressant, as well as a more powerful long-term effect, associated with this combination. If we treat anxiety and insomnia, and incidentally provide prophylaxis against akathisia or activation side effects by adding an anxiolytic to an antidepressant, we may be more effective in treating depressed patients in an emergency setting.

Isacson et al. (1997) found that the increased use of anti-depressants in Sweden between 1990 and 1994 was associated with a significant decrease in suicide rates. Whether this was a cause or an effect is unknown, but they suggested that the acute toxicity of antidepressants is of minor importance compared with the need to provide more aggressive treatment for depressed suicidal patients.

Mood Stabilizers

Several studies of patients with bipolar disorder who committed suicide found a relatively low rate of treatment with therapeutic levels of mood stabilizers. Isometsa et al. (1994a) found that only 16% of bipolar patients who committed suicide were receiving therapeutic doses of lithium. Although there is mixed evidence for the ability of other mood stabilizers to reduce suicide risk, there is compelling evidence that lithium treatment does reduce the risk. Tondo et al. (1998) found that lithium maintenance was associated with a marked reduction of life-threatening suicide attempts. Tondo et al. (1997) identified 28 studies with 17,294 patients with bipolar disorder. In their analysis of these studies, these authors concluded that there was a consistent reduction of suicide in patients treated with lithium.

Atypical Antipsychotics

Several studies have also found significant reductions in suicide rates among patients treated with dozapine. Meltzer and Okayli (1995) found that patients with neuroleptic-resistant schizophrenia who were treated with clozapine showed a marked reduction (86%) in suicide attempts and suicides. Meltzer (1998) cited studies that compared suicide deaths in patients in the clozapine registry with patients before clozapine was initiated and while taking clozapine. These studies found that the incidence of suicide during clozapine treatment with one-fifth the incidence of suicide prior to clozapine treatment.

Although the data are less compelling, there is evidence that olanzapine reduces depression and anxiety symptoms more than haloperidol (Tollefson et al. 1998). Marder et al. (1997) cited evidence for greater improvements on anxiety and depression scales in schizophrenic patients treated with risperidone compared with patients treated with haloperidol. By contrast, Palmer et al. (1999) reviewed several uncontrolled studies that suggested an increased risk of suicide after treatment with typical antipsychotics was initiated. Findings from these studies, however, may have been confounded by the fact that patients were often released from the hospital at roughly the same time that they began taking typical antipsychotics. Palmer et al. (1999) also examined studies which suggested that among those treated with typical agents, there was no effect on suicidality or perhaps a slight reduction in risk. In these studies, very low and very high doses of typical antipsychotics did appear to be associated with an increased risk. Thus, it is reasonable to suggest that increased use of atypical antipsychotics may lead to further reductions in suicide.

Treatment Planning

The information that we have cited in the foregoing subsections is generally consistent with the position that we have taken that ensuring effective treatment of psychiatric disorders is the key issue that should be the focus of treatment planning in the emergency service. At the very least, the studies on lithium and clozapine suggest that potentially toxic medications may not be contraindicated in treating severely ill and suicidal patients.

Medical-Legal Issues

Just as suicide has markedly shaped the practice of emergency psychiatry the threat of malpractice has had a profound impact on how we treat suicidal patients. The standard for malpractice is that the clinician must exercise the degree of knowledge and skill in diagnosis and treatment ordinarily possessed by his or her peers. Failures commonly associated with malpractice actions (Bongar et al. 1998) include the following:

- Failure to adequately evaluate or treat the patient pharmacologically
- Failure to specify under what criteria the patient might be hospitalized
- Failure to establish proper boundaries in therapy
- Failure to obtain consultation
- Failure to evaluate risk adequately
- Failure to obtain prior records, diagnose, or conduct a mental status examination
- Failure to establish a treatment plan

Although the results of individual malpractice cases can be very confusing, it appears that the largest risk of malpractice is associated with inadequate documentation. There is not really credible scientific evidence to suggest that clinicians, in individual cases, are effective at judging the risk of suicide. Also, juries are often reluctant to absolve patients from some responsibility for their actions. Thus, clinicians who adequately assess and document their assessment and who provide a coherent rationale for their treatment plan, even when their treatment plan involves a less restrictive alternative such as intensive outpatient care, are unlikely to be found to have committed malpractice. This is particularly true in cases in which the clinician obtained consultation contemporaneously.

The fear of malpractice action may needlessly constrain the PES clinician from carefully thinking through the most effective way to provide treatment for the patient's underlying disorder. This concern may actually have a stultifying effect on the clinician, reducing the assessment in an emergency setting to a review of risk factors and a decision whether or not to admit the patient, rather than encouraging a process of careful assessment and engagement of the patient and conveying a sense of hope that comes from a thoughtful treatment plan and a clear diagnosis.

Conclusion

Suicide is almost always the catastrophic result of inadequately treated psychiatric illness. Sometimes this outcome is inherent in the nature of the mental health treatment system or of the laws that society has established to balance the value of individual autonomy and the provision of effective treatment. Sometimes the outcome is the result of inadequate assessment, an inadequate treatment plan, or inadequate treatment. Still, working with patients at risk of suicide is something that is poorly rewarded in most systems of care, and malpractice law is generally a destructive way of perfecting the system that cares for the sickest patients.

Clinicians working in an emergency setting should make vigorous efforts to assess those individuals at risk, to identify inadequately treated psychiatric disorders, to ensure continuity of care, and to treat those symptoms and conditions that may be quickly reversible, such as anxiety, insomnia, and self-imposed social isolation. They must also be watchful of their own emotional reactions to the individual patient, or to the stress of the work environment, and seek to convey hope to those without hope.

Systems of care need to develop better linkages between acute care and aftercare. They also need to ensure adequate treatment for complex cases in which patients have multiple diagnoses (including mood disorders and substance abuse).

Researchers should be encouraged to explore not just the easily verifiable correlates of suicide but also the harder-to-identify but equally important subjective factors, including those related to relationships with caregivers.

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