

Suicidality in the General Hospitalized Patient

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Suicidality—the wish of an individual to die—in a hospitalized patient can present an unsettling and challenging clinical situation for hospital physicians. This is not surprising, since most health care providers are not prepared to deal with a patient whose wishes are diametrically opposed to the primary goal of hospitalization, namely survival. Most hospital staff, with the exception of mental health professionals, have not been trained to identify and manage patients at risk for suicide. Because suicide attempts (actions taken with the goal of causing one's own death) are relatively uncommon in the general hospital setting,¹ few studies examining inpatient suicide are available, making it difficult for physicians to educate themselves about suicidality. The combination of these factors adds to the mystery and anxiety surrounding the management of patients at risk for suicide. This article reviews existing literature and integrates it with the authors' clinical experience to dispel some myths about suicide and provide practical advice for efficient identification and sensitive treatment of suicidality in hospitalized patients.

EPIDEMIOLOGY

The most recent large-scale studies of suicide attempts in American general hospitals were conducted in the 1970s.¹⁻⁵ Despite dramatic changes in hospital care in recent times, astonishingly little attention has been directed to identifying and managing suicidal ideation (thoughts of suicide) on US general medical/surgical wards since the 1970s. We include the findings of older US studies as well as more recent international studies for the sake of completeness, but these data should be interpreted with caution because the reports may not reflect recent US trends.

As might be expected, suicidal ideation and suicide attempts are less frequent on general medical/surgical wards than on psychiatric wards.^{4,6} Recent multiyear studies in Taiwan and Hong Kong estimated suicide attempts at 9.46 and 8.7 per 100,000 general hospital admissions, respectively.^{7,8} Approximately 5% of the

TAKE HOME POINTS

- Suicide is an uncommon but preventable cause of death in hospitalized patients.
- Because suicidality is often due to depression, recognizing depression is a key step in preventing suicide.
- Other mental disorders and pain also increase the risk of suicide.
- Mental disorders increase the morbidity and mortality of many medical and surgical illnesses. Therefore, appropriate psychiatric diagnosis and treatment will also improve the prognosis of the medical/surgical illness and the overall outcome of hospitalization.
- Observation and active listening are essential clinical tools in recognizing suicidality. If suspicious, a clinician should directly ask the patient about suicidality.
- If a patient is suicidal, the clinician should first ensure the patient's safety, then consult with a psychiatrist to help make a diagnosis and recommend a treatment plan.

patients who attempted suicide in both of these studies were successful.

The available data indicate that patients who die as a result of a suicide attempt (completed suicide) while hospitalized are a population different from suicide victims in the general population. In a 2002 study based in Finland,⁹ hospitalized suicide victims were almost 15 years older on average and were more likely to use violent means (eg, hanging, cutting, jumping) than were patients who committed suicide in the community. The pre-suicide

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psychiatric diagnoses of hospitalized suicide victims, as ascertained by psychologic autopsy, also differed from those in the community sample, with substantially higher rates of major depression (62% versus 30%), lower rates of alcohol dependence (12% versus 33%), and fewer personality disorders (8% versus 31%). As is the case with suicide in general,¹⁰ depressive disorders were the most frequently diagnosed psychiatric illnesses in both groups of this study (70% and 53%). Reich and Kelly's 1976 study¹ of general hospital suicide attempts (observed over a 7-year period at Brigham Hospital) found that only approximately 12% of patients did not have a psychiatric diagnosis.¹ Farberow's 1966 study² of suicides among hospitalized American veterans also found high incidences of depression and symptoms of personality disorders.

Despite the age of the American studies and the cultural differences in newer reports, these epidemiologic studies of hospital suicides yield useful principles. Depression may be a more important predictor of suicide in the hospital than in the community, making detection of depressive symptoms a critical factor in preventing hospital suicides. When hospital patients attempt suicide, they are more likely to employ reliably lethal methods; therefore, indications of suicidality in the hospital need to be taken very seriously.

SUICIDALITY: MEDICAL MORBIDITY AND PSYCHIATRIC ILLNESS

Although suicide is the most feared result of untreated psychiatric illness, it is only one of many potential consequences. Mental disorders have a significant impact on the morbidity and mortality of common medical and surgical illnesses^{11–14} as well as on overall quality of life.^{15–17} One of the best studied and most common examples of the interaction between mental and medical disorders is that between depression and coronary artery disease (CAD), an illness that affects approximately 13 million Americans.¹⁸ The prevalence of depression in patients with concomitant CAD is at least 18%, substantially higher than in the general population.¹⁹ Analysis of the Baltimore Epidemiological Catchment Area data estimated that in patients without a prior history of CAD, the relative risk of myocardial infarction in patients who were depressed was 2.6 times higher than in nondepressed patients.²⁰ Studies have also demonstrated that the course of diagnosed CAD can be dramatically influenced by depression. For example, depression confers a 3 to 5 times greater risk of cardiac-related death at 6 and 18 months after a myocardial infarction.^{21,22} A recent meta-analysis of community studies calculated that depression made the likelihood of mortality from any cause

1.5 to 2 times greater. Similarly, untreated depression has been linked to poor treatment response in cancer, stroke, HIV, and diabetes.²³ In a study of 51,119 patients who suffered a stroke, patients diagnosed with a mental illness 1 month after their stroke had a 33% greater chance of dying within 3 years, even though they tended to be younger (64 versus 67 years) and had fewer chronic conditions.²⁴ An analysis of studies published between 1966 and 1995 addressing the relationship between mental illness and mortality concluded that all psychiatric disorders increase the risk of premature death.²⁵ Mental illness also appears to adversely affect medical treatment compliance¹⁴ and adherence to lifestyle recommendations.^{26,27} Given their significant impact on the outcomes of so many illnesses, it is important to screen for psychiatric disorders routinely during the review of systems and to integrate their treatment in management and disposition of the medical/surgical patient. Recognizing suicidality, therefore, can be a first step in improving the prognosis of the patient as a whole.

Pain has been identified as a significant contributor to a patient's suicidality. In a recent British study of 1665 patients who presented to the hospital for deliberate self-harm, 17% of the 463 with medical problems cited pain as a precipitant for the act.²⁸ In comparison with other medically ill patients admitted for self-harm in the same 2-year period, the patients who had attempted self-harm because of pain were older; in addition, more were married, and fewer had psychiatric or substance use disorders. Importantly, 60% had been experiencing the same pain for more than 6 months, suggesting that there are opportunities to improve pain management and decrease the potential for suicide attempts.

DETECTING SUICIDALITY

Observation and active listening are essential clinical tools in recognizing suicidality. Exploration (rather than neglect) of unusual affect, behavior, statements, or requests can produce useful clues about a patient's state of mind. Ignoring such clues may result from a provider's discomfort, lack of training, and/or simple time pressure; however, ignoring these clues can have tragic consequences. In a study of 75 cases of self-harm on a medical/surgical ward, 24% of the patients suffered from perceived family desertion or conflict, and 13% of the patients had disputes with their doctors and/or families about their discharge planning.⁸ Reich and Kelly¹ found that "signs of rising tension, such as anger, agitation, acute psychosis, or sudden change of mood" were present in each of the 17 cases of inpatient suicide. Similarly, Shapiro and Waltzer³ noted in their 1980 study that "in almost every instance of suicidal activity warning

signs and indications of potential danger were present.” Just as one would pursue clues suggesting medical complications, one should be alert and responsive to signs of psychiatric disturbances, such as suicidality.

Asking about suicidality directly is the most effective method of uncovering thoughts of self-harm. It is just as important for physicians to be able to ask about suicide as it is to query other discomfiting topics, such as sexual history or substance abuse. The importance of learning this skill cannot be overstated. In developing a screening test for psychiatric illness in a primary care population, Broadhead et al²⁹ evaluated 3 interview questions for their ability to detect a suicide plan. Asking about “thoughts of death” was 100% sensitive and 81% specific in discovering suicidality. Asking about “feeling suicidal” was 83% sensitive and 98% specific, and asking, “Do you wish that you were dead?” was 92% sensitive and 93% specific.²⁹ Any of these questions can yield useful information. The authors initially ask the patient if she is having thoughts about death; an affirmative response then leads to further discussion about the types of thoughts and whether they include self-harm.

Identifying Depression

Although depression is only one of many psychiatric illnesses associated with suicidality, it is the most common diagnosis in individuals with suicidal ideation. Therefore, recognizing depression is a key step in preventing suicide. The common symptoms of depression are familiar to most physicians and include depressed mood, anhedonia, insomnia, decreased energy, poor concentration, and decreased appetite (Table 1). In the inpatient, it may be difficult to determine whether depressive symptoms result from the physical illness, an emotional reaction to the hospital milieu, or an undiagnosed mood disorder. Significant and consistent anhedonia and/or depressed mood may distinguish depression from adjustment to an illness or hospital surroundings. Anhedonia/depressed mood may manifest as overt sadness but can also appear as a lack of emotional reaction: for example, the patient who greets both good and bad news about his/her condition with indifference. In addition, emotional problems associated with adjustment to a new situation tend to be mild and transient symptoms that generally diminish quickly. In contrast, the depressed patient has enduring or escalating symptoms throughout the hospitalization. The physician should also inquire about whether the symptoms of concern were present before admission—preexisting symptoms obviously cannot be attributed to being hospitalized. It is worth noting that

Table 1. Symptoms of Depression

DSM-IV-TR criteria*

Depressed mood
Change in Sleep pattern
Decreased Interest
Excessive Guilt
Decreased Energy
Poor Concentration or indecisiveness
Diminished Appetite or weight loss
Change in Psychomotor activity
Thoughts of Suicide or death

Other clues

Little change in affect or lack of reactivity
Minimal interest in treatment or prognosis
Irritability
Disproportionate anxiety
Hopelessness or helplessness
Refusal of visitors
Unrelenting pain
Feelings of worthlessness
Crying spells

*For the diagnosis of a major depressive episode, DSM-IV-TR requires that depressed mood or anhedonia and at least 4 other criterion symptoms be present for at least 2 weeks.

the DSM-IV-TR states that symptoms of ambiguous origin, unless they are completely accounted for by medical illness, should be attributed to a depressive disorder.³⁰

MYTHS ABOUT SUICIDALITY

There are several misconceptions about suicide in general, and hospital-based suicide in particular; that can lead to mismanagement of patients at risk for suicide (Table 2). Although there are data that belie each of these conventional beliefs, some practitioners continue to hold and teach these misleading views. Perhaps the most common worry regarding talking about suicidality is that the patient will be spurred to action by the physician’s probing. Contrary to that commonly held concern, asking about thoughts of self-harm does not give patients “ideas”.³¹ Another popular myth is “people who talk about it don’t do it.” The opposite appears to be true, as 69% of people who eventually complete suicide communicate their intent at some time in the prior year.³² The fact that a patient has repeatedly threatened or attempted suicide does not mean that he “is not serious,” or will not complete suicide. The expression of

Table 2. Suicide Myths

Discussing suicide may “give the patient ideas”
Patients who repeatedly make suicide threats don’t really want to die
A history of prior attempts means that the patient is not serious
Depression is a normal reaction to medical illness
Wanting to die is common in the seriously ill patient
Suicidality and depression will simply fade away with time

suicidal ideation should be taken as a sign that the patient is at risk for suicide.¹⁰ For example, many patients with borderline personality disorder make frequent suicide threats and engage repeatedly in self-injurious behavior. As such, their reports of suicidality are frequently given little weight. However, approximately 10% of these patients eventually die from suicide. Moreover, in patients with borderline personalities, the best predictor of death by suicide is the number of prior attempts.³³ The rules of probability dictate that making more attempts increases the suicidal patient’s chance of “success,” intended or not. Thus, every suicidal threat should be taken seriously and carefully assessed in the context of the individual situation.

Another widespread but erroneous assumption is that suicidal ideation is an expected, fleeting response to serious medical illness; even some psychiatrists adhere to this belief.³⁴ In Kishi et al’s study³⁵ of 496 patients who had suffered acute life-threatening illnesses, only 36 (7%) had suicidal ideation upon initial evaluation. Twenty-eight (78%) of the suicidal patients had depression as compared with only 8 (22%) of nonsuicidal patients. A history of psychiatric illness was also much more prevalent in the suicidal group (62% versus 27%). Upon follow-up, suicidal ideation resolved only in the patients whose depression was successfully treated. Other studies have confirmed that suicidality, rather than being a normal reaction to serious illness, is typically a result of clinical depression.^{36,37}

MANAGEMENT

As with serious complications of medical illness, the treatment of suicidality necessitates a logical, stepwise approach to ensure the safety of the patient, discover the cause for the complication, and address it appropriately. During this process, patients should be educated about their symptoms and should participate in the plans for diagnosis and treatment.

Assessing Suicidal Intent

After suicidal ideation has been identified, the first priority should be to determine the degree of suicidal

Table 3. Selected Demographic Risk Factors for Suicide

Risk Factors	Attempt	Completion
Female gender	+	
Young (< 30 years old)	+	
Elderly (> 60 years old)		+
Male		+
Caucasian		+
Native American	+	
Financial difficulty	+	+
Social isolation	+	+
Recent adverse event	+	+

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intent—that is, the patient’s resolve about wanting to die. Most patients who consider ending their lives do not proceed to suicidal behavior and are not at imminent risk. As with suicidal ideation, the best method to gauge the likelihood that a patient may attempt to kill himself is to ask the patient whether he is planning to act on suicidal thoughts. Behaviors such as refusing to eat, declining medications, rejecting the visits of close family and friends, and requesting early discharge can provide further evidence of suicidal intent and should prompt a psychiatric consultation. Demographic factors associated with suicide (**Table 3**) should be incorporated into the risk assessment. If there is any reason to suspect that an attempt is imminent, a trained attendant should continuously monitor the patient until the patient is assessed by a psychiatrist. Involuntary commitment should be initiated if the patient attempts to leave the hospital prior to psychiatric evaluation. If there is no reason to expect an impending attempt, then less restrictive measures may be acceptable. The procedures used to ensure the patient’s safety and the justifications for doing so should be well thought out, carefully documented, and discussed with the patient, family, and relevant hospital staff. It is important to perform a good risk assessment as part of the clinical evaluation and not wait for the psychiatric consultant to do so. Performing an assessment allows the primary physician to keep the patient safe and her caretakers informed, thus minimizing the risk of poor clinical outcome for the patient and/or legal liability for the provider.

Diagnosis and Treatment Plan

The next phase of management is diagnosis. The assistance of a psychiatrist is essential for investigating

the cause of suicidality, and a consultation should be requested immediately after the patient's safety is ensured. Depression is the most common cause for suicidality, but it is by no means the only cause. Other psychiatric syndromes with high rates of suicide include substance abuse (35% attempt suicide),³⁸ bipolar disorder (15% complete suicide),³⁹ schizophrenia (4.9% complete suicide),⁴⁰ and personality disorders (30%–60% attempt suicide).⁴¹ The diagnosis and treatment of these disorders requires the assistance of a psychiatrist. Successful collaboration with a psychiatrist will involve the same rules that guide other relationships with other consulting physicians. The consultant can provide more effective assistance if she has a description of the symptoms, a good summary of medical history and current illness, and a well-formulated question. The primary physician should also inform the patient of the consultation and the reason for it. The primary physician and the patient deserve to know why the treatment recommendations are being made by the psychiatrist and how they will be helpful to the patient. The primary physician and the consultant should also discuss the ways in which both the mental illness and the proposed therapy may alter the course and prognosis of the physical condition. If the patient's mental or physical condition takes an unexpected turn, the consultant should be notified as such changes may require modifications of the psychiatric treatment plan. Finally, the frequency and type of follow-up should be established long before the day of discharge. If these areas are not appropriately addressed by the consultant, it is advisable to request clarification.

CONCLUSION

Suicidality is a serious, albeit uncommon, situation encountered by the hospital physician. Keeping the suicidal patient from harm is only the first step in the management of suicidality. Suicidal ideation may be the first sign of other, more serious psychiatric problems and should lead to a thorough psychiatric evaluation. Appropriate psychiatric treatment will not only reduce the morbidity and mortality associated with the underlying mental illness but will also improve the prognosis of medical/surgical problems and the overall outcome of hospitalization. **HP**

Test your knowledge and comprehension of this article with the *Clinical Review Quiz* on page 37.

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