

# SUICIDE ASSESSMENT:



ORVIDAS



# TARGETING ACUTE RISK FACTORS

## Focus on time-sensitive factors that may respond to treatment

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At his wife's urging, Mr. L, age 34, presents to the local emergency room (ER). Approximately 1 week ago, he woke up in the middle of the night and told her he was afraid he would die because he had heart palpitations, a choking sensation, dizziness, and shortness of breath.

The ER physician rules out an acute medical illness and requests a psychiatric consultation. Mr. L is reluctant to talk to the psychiatrist, saying he has just had a difficult couple of weeks because of problems at work. With Mr. L's permission, the psychiatrist speaks with his wife and learns that for several weeks Mr. L has been having problems falling asleep and has been waking up early. Mrs. L noticed her husband is unable to sit still, not enjoying his favorite television shows, and drinking more alcohol at night.

The clinical picture became clearer after Mr. L tells the psychiatrist that approximately 1 month ago, he lost his appetite, had low energy and concentration, and began to feel depressed. He denies having suicidal thoughts or plans, but says his suffering is increasing and he doesn't know what to do.

Suicide is our worst outcome; at times it can seem like we are helpless to change its frequency or evaluate its likelihood. As clinicians, we are not expected to predict who will commit suicide, but are expected to perform an adequate suicide risk assessment and determine who is at high risk. We need to clearly document a patient's suicide risk level in his or her chart, and our subsequent actions need to be consistent with that assessment. For instance, arranging for additional supports—including psychiatric hospitalization when necessary—for a patient deemed to be at high risk for suicide is considered the standard of care. In this article, I:

- discuss demographic factors related to suicide
- explore the importance of time-related suicide risk factors and the



## Suicide assessment

### Clinical Point

Patients who commit suicide often communicate their suicidal intent, but usually tell family members rather than clinicians

Table 1

### Acute suicide risk factors: 3 A's + 3 P's

Alcohol abuse
Attention (or concentration) impairment
Awake (insomnia)
Panic attacks
Pleasure (diminished)
Psychic anxiety
Source: Reference 11

few treatments shown to reduce suicide risk

- review protective and preventive factors.

### Sobering statistics

Over the past decade, suicide rates in the United States have remained fixed at slightly more than 30,000 per year. In 2009—the most recent year for which statistics are available from the Centers for Disease Control and Prevention—there were 36,547 suicides in the United States, making it the 10<sup>th</sup> leading cause of death.<sup>1</sup> The rates of suicide completions and attempts vary by sex and age. Males complete suicide 4 times more often than females, whereas females attempt suicide 3 times more often. Among individuals age 15 to 24, 86% of those who completed suicide were male; in older persons (age >65), 85% were male.<sup>2</sup> Although rates of completed suicide are highest among older adults, rates of suicide attempts are greatest among young persons. The ratio of attempted-to-completed suicide is 100 to 200:1 in individuals age 15 to 24 but 4:1 in those age >65.<sup>2</sup>

Whites and Native Americans have the highest suicide rates (12.3 and 12.9 per 100,000, respectively).<sup>2</sup> Guns are the most common method of completed suicide in all age groups in the United States: they are used in 53% of all suicides and 76% of those among persons age >70.<sup>3</sup> In >90% of completed suicides, the decedent had been diagnosed with ≥1 psychiatric disorder.<sup>3</sup> By far, the most common psychiatric illness is major depressive disorder, present in 75% of those who commit suicide.<sup>3</sup>

### Understanding intent

Many physicians believe that patients will tell them if they are feeling worse and are starting to think more seriously about suicide. There is no better example of this than the “contract for safety” or “no-harm contract,” in which a patient signs a paper agreeing to notify a clinician if he begins to develop more intense suicidal feelings. Studies have shown that these “no-harm contracts” do not prevent suicide; this makes sense because if a patient decides to kill himself, telling a clinician puts up an obstacle.<sup>4,6</sup>

Patients who commit suicide often communicate their suicidal intent, but usually tell family members rather than clinicians. In 1 study, 78% of patients who committed suicide on an inpatient unit denied suicidal ideation at their last communication with staff; although 60% told their spouse and 50% told other relatives, only 18% told their physician.<sup>7</sup> In this study, precautions provided a false sense of security: 51% of patients were receiving 15-minute suicide checks or 1-to-1 observation at the time of suicide.<sup>7</sup>

### Who is at risk?

The most recent American Psychiatric Association Task Force Report on Suicide identified 57 risk factors for suicide.<sup>8,9</sup> This has led to confusion among clinicians and may have led some clinicians to repeatedly ask patients about suicidal ideation rather than conduct a suicide risk assessment.

Although a history of suicide attempts and a family history of suicide are well-established risk factors,<sup>9</sup> these are not acute factors. It is important to differentiate between suicide attempts and suicide completions. Although many suicide attempts are accurate substitutes for actual suicides, there is a spectrum of intent in suicide attempts that differentiates them in terms of lethality.<sup>10</sup> Clinicians need a more thorough understanding of who is at acute risk for suicide, which will help them make decisions about patients' imminent risk to themselves.

In the only study that examined time-related predictors of suicide, Fawcett et al<sup>11</sup> used the Schedule for Affective Disorders and Schizophrenia (SADS) to evaluate 954

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patients with major affective disorders over 10 years. Raters were blinded to treatment, and clinicians could use any combination of psychotherapy or pharmacotherapy. These researchers found that acute risk factors—those associated with suicide within 1 year—were psychic anxiety, anhedonia, diminished concentration, insomnia, panic attacks, and active alcohol abuse (*Table 1*).<sup>11</sup> These factors were present in the context of an underlying depressive disorder. Hopelessness, suicidal ideation, and a history of suicide attempts were linked to suicide between 2 and 10 years.

Busch et al<sup>12</sup> performed a retrospective study on an inpatient unit using the SADS to evaluate symptoms present the week before patients' suicides. They found that 79% of patients had extreme psychic anxiety, agitation, or both, and that 54% had active psychosis. The same authors studied an additional 12 cases of inpatient suicide and found 9 patients had severe anxiety, agitation, or both, and insomnia. The median time to suicide from admission was 3.5 days and none of the 12 patients had been started on an antidepressant, antipsychotic, or anxiolytic. This underscores the need to initiate symptomatic treatment quickly, even before reaching a definitive diagnosis.

The Columbia Suicide Severity Rating Scale (C-SSRS), which evaluates suicide ideation and behavior in the past week and lifetime, has predictive validity in determining those at highest risk for making a suicide attempt within up to 24 weeks of follow-up.<sup>13</sup> A limitation of the C-SSRS is that it has predictive validity for suicide attempts only, and not suicide completions.

### Treatments to lower risk

Although identifying risk factors such as older age, being unmarried, male sex, experiencing a recent loss, a family history of completed suicide, and being white or Native American are helpful in evaluating a patient's suicide risk, they are not time-sensitive or modifiable, which limits their value.

In contrast, most of the acute risk factors identified by Fawcett et al potentially are treatable. Psychic anxiety, insomnia, and panic attacks can be treated with benzodi-

Table 2

### Treatments to lower suicide risk

Acute
Benzodiazepines—to diminish panic, anxiety, insomnia
Antipsychotics—if acute psychosis is present
Trazodone (or non-benzodiazepine hypnotics)—if insomnia is present without daytime anxiety
Diagnosis-specific
Clozapine—for patients with schizophrenia and high suicide risk
Lithium—for patients with bipolar disorder (if not contraindicated); consider for patients with refractory unipolar depression at high suicide risk
Electroconvulsive therapy—for patients with severe depression and high suicide risk
<b>Source:</b> References 14-20

azepines or other anxiolytics and sedative/hypnotics. Active psychosis, which Busch et al identified as a risk factor for inpatient suicide, may respond to antipsychotics.

Other medications have been identified as modifying suicide risk (*Table 2*).<sup>14-20</sup> Among patients with major affective disorders, lithium has been shown to reduce suicidal acts by 93%, suicide attempts by 93%, and suicide completions by 82%.<sup>14</sup> Lithium produces the largest suicide risk reduction in unipolar depression, at 100%, followed by bipolar II disorder (82%) and bipolar I disorder (67%).<sup>15</sup> Several studies have demonstrated that lithium can reduce the mortality rate from suicide for patients with affective disorders, and that this effect persists.<sup>16,17</sup>

Clozapine has been associated with reduced rates of suicide attempts and completed suicides in patients with chronic psychosis. In a meta-analysis, long-term clozapine treatment was associated with an approximately 3-fold overall reduction of risk of suicidal behaviors,<sup>18</sup> although a prospective study found no reduction in risk of completed suicide in patients with schizophrenia treated with clozapine.<sup>19</sup>

In one study, electroconvulsive therapy (ECT) reduced suicidal thoughts and acts by 38% after 1 week and 80% overall.<sup>20</sup> There have been reports of amelioration of sui-

### Clinical Point

Acute risk factors for suicide include anxiety, anhedonia, poor concentration, insomnia, panic attacks, and alcohol abuse



## Suicide assessment

### Clinical Point

**Benzodiazepines, sedatives/hypnotics, or antipsychotics may successfully treat acute suicide risk factors such as anxiety or psychosis**

### Related Resources

- American Association of Suicidology. [www.suicidology.org](http://www.suicidology.org).
- Harvard School of Public Health. Means Matter. [www.hsph.harvard.edu/means-matter](http://www.hsph.harvard.edu/means-matter).
- Simon RI. Preventing patient suicide: clinical assessment and management. Arlington, VA: American Psychiatric Publishing; 2011.

#### Drug Brand Names

Citalopram • Celexa      Lithium • Eskalith, Lithobid  
Clonazepam • Klonopin      Trazodone • Desyrel, Oleptro  
Clozapine • Clozaril

#### Disclosure

Dr. Freeman reports no financial relationship with any company whose products are mentioned in this article or with manufacturers of competing products.

cidal thoughts after just 1 ECT treatment.<sup>21</sup> There are no published studies that show a reduction in suicide completions with ECT; however, this may be due to the relatively small number of patients who receive ECT and the infrequency of completed suicides.

**Protective factors.** The balance between protective factors and risk factors determines appropriate clinical decision making when attempting to evaluate a patient's suicide risk. Perhaps the best measure of protective factors is the Reasons for Living Inventory, developed by Linehan et al,<sup>22</sup> which has been validated in some populations, including adolescents and young adults.<sup>23</sup> This inventory delineates protective factors against suicidal ideation and behavior rather than completed suicides.

Similar to suicide protection, suicide prevention focuses on factors that can serve as obstacles to a patient's desire or ability to commit suicide. A large systematic literature review by Mann et al<sup>24</sup> found that only primary care physician education and restricting access to lethal means prevented suicide. When working to remove lethal

means from a suicidal patient's home, it is critical to verify that this has been done rather than merely making a suggestion to a family member. It is necessary to follow up with a phone call and document the completion of this task.

When a patient commits suicide, it is common for psychiatrists to feel like there must have been something they could have done to prevent such a tragedy. Although typically that is not the case, there is more we can do to improve our suicide risk assessment skills. Focusing on acute, modifiable suicide risk factors may help us lower a patient's risk. Also, shortening the time frame now considered acute (within 1 year) to hours and days and looking for additional risk factors may improve mental health professionals' ability to accurately assess acute suicide risk.

#### CASE CONTINUED

#### Hospitalization and improvement

The psychiatrist determines Mr. L is at high risk for suicide and recommends psychiatric hospitalization. She starts him on citalopram, 10 mg/d, and clonazepam, 0.5 mg twice daily and 1 mg at bedtime, to help with anxiety and insomnia. After 3 days, Mr. L tolerates the medications, sleeps better, and feels more hopeful about the future. The psychiatrist increases citalopram to 20 mg/d.

Four days later, Mr. L is eating better, can concentrate, and denies further episodes of dizziness or anxiety. The inpatient psychiatrist assesses his acute suicide risk as low and discharges him to a week-long partial hospitalization program.

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## Bottom Line

Evaluating patients for suicide risk should focus on assessing acute factors, including psychic anxiety, anhedonia, diminished concentration, insomnia, panic attacks, and alcohol abuse. Several of these factors can be treated with pharmacotherapy or electroconvulsive therapy.

# This month's instant poll



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Ms. W, age 42, presents at the local emergency department (ED) with heart palpitations. Upset because a long-term relationship recently ended, she says she has been depressed, drinking alcohol each night to help her sleep, and considering ending her life. ED physicians rule out an acute medical illness. **What would you do?**

- Start her on fluoxetine, 20 mg/d, and refer her for psychotherapy
- Recommend that she be admitted to the psychiatric unit
- Refer her for alcohol abuse treatment
- Start her on lithium, 300 mg twice a day

See 'Suicide assessment: Targeting acute risk factors' page 52-57

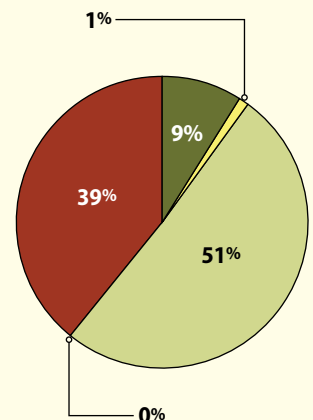


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## NOVEMBER POLL RESULTS

For 15 years, Mr. Z, age 67, has been treated for obsessive-compulsive disorder (OCD) with sertraline, 150 mg/d. Even with his prescription, he still exhibits symptoms of the disorder, including compulsively washing his hands and a superstition about the number 6. **How would you handle his treatment-resistant OCD?**

- 9%** Switch him to an antipsychotic, such as aripiprazole
- 1%** Prescribe an opioid, such as oral morphine
- 51%** Recommend cognitive-behavioral therapy
- 0%** Consider cingulotomy
- 39%** Increase sertraline to 250 mg/d



▲ Data obtained via [CurrentPsychiatry.com](http://CurrentPsychiatry.com), November 2011

**SUGGESTED READING:**  
Khalsa SS, Schiffman JE, Bystritsky A. *CURRENT PSYCHIATRY.* 2011;10(11):44-52.