

Will my patient attempt suicide again?

Risk factors help you identify patients who need immediate hospitalization for safety

Source of a relationship—as "cries for attention" that were relatively innocuous. Her third suicide attempt, however, was an acetaminophen overdose approximately 1 year ago that resulted in hospitalization and irreversible liver damage.

Ms. J acknowledges that over the last several weeks she has been thinking about suicide almost constantly, especially as the anniversary of her fiance's death approaches. She says she has a nearly full bottle of zolpidem in her medicine cabinet and fantasizes about taking all of them and just "going to sleep."

Many patients—especially those with depression—experience recurrent thoughts of death or a wish to die, but only about 10% attempt suicide.¹ To identify those who are at highest risk and warrant hospitalization, it is vital to assess how a history of suicidal behavior and other factors impact the risk for future suicide attempts. This article:

- examines research on patients who have attempted suicide and risk factors for repeat suicide attempts
- describes characteristics of patients with multiple attempts
- explores the link between a history of self-injurious behavior and suicide attempts.



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Suicide attempts

Clinical Point

Persons with a previous suicide attempt are 38 times more likely to commit suicide than those with no past attempts

Table 1

Repeated suicidal behavior: Factors that increase risk

History of ≥1 suicide attempts Feelings of hopelessness

Presence of an Axis I or II disorder

High levels of perceived stress

History of physical or sexual abuse

Source: References 7,8

A strong predictor

A previous suicide attempt is among the strongest predictors of future suicide attempts.²⁻⁴ In a sample of clinically referred European adolescents, those who had attempted suicide were 3 times more likely to try again during the 1-year follow-up compared with those who had never attempted suicide.⁵ In addition, Harris et al⁶ found that patients with a previous suicide attempt were 38 times more likely to eventually commit suicide than those with no past attempts.

Other risk factors

Other factors might help predict which individuals will continue to engage in suicidal behavior after a first attempt (*Table* 1).^{7,8} Spirito et al⁷ followed 58 adolescent suicide attempters for 3 months after their initial attempt. Seven (12%) made a subsequent attempt, and 26 (45%) reported continued suicidal ideation. Depressed mood was the strongest predictor of subsequent suicidal behavior, followed by poor family functioning, affect regulation difficulty, and hopelessness.

Hopelessness. Beck et al⁹ found that patients who scored ≥9 on the Beck Hopelessness Scale (BHS)—the most common self-report measure of hopelessness—were approximately 11 times more likely to commit suicide than patients who scored ≤8. A study of hospitalized suicide attempters found that BHS scores were unique predictors of future suicide attempts.¹⁰ Several studies have found that persons who remain consistently hopeless are more likely to kill themselves compared with those who have fluctuating hopelessness levels.^{11,12}

Psychiatric diagnoses. More than 90% of persons who eventually commit suicide have a diagnosable mental disorder.⁸ Although almost all Axis I and II disorders can increase the likelihood of a suicide attempt, certain disorders—including major depression, bipolar disorder, schizophrenia, substance use disorders, eating disorders, borderline personality disorder, and antisocial personality disorder—increase risk more than others.⁸

History of abuse—specifically sexual abuse—is associated with suicidal behavior. A study of depressed women age >50 found that among those who were sexually abused before age 18, 83% reported 1 suicide attempt and 67% made multiple attempts.¹³ Among women who had not experienced childhood sexual abuse, 58% reported a past suicide attempt and 27% made multiple attempts.¹³

In a separate study of psychiatric inpatients, those who had been physically or sexually abused were more likely to have made a suicide attempt than patients with no such history.¹⁴ This study did not find a difference in reported abuse between single and multiple suicide attempters.

Stressors. In many cases suicide attempts are precipitated by acute or chronic stressors, including:

- job stress
- chronic illness
- financial problems
- relationship discord
- retirement and declining physical health (especially for older men)
- death of a loved one.¹⁵

Anniversaries of the death of a loved one or other difficult life events can increase the risk for suicide attempts.¹⁶

Risk is not necessarily cumulative—and not all risk factors are weighted equally. In general, however, the more risk factors a patient has, the greater the likelihood that he or she may attempt suicide.¹⁷

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Red flag: Multiple attempts

When assessing a patient's suicide history, ask about the number of attempts. A person who makes >1 suicide attempt—a multiple attempter—has a significantly higher chance of making subsequent attempts compared with those with 1 or no attempts.^{18,19}

Persons who make multiple attempts share certain characteristics (*Table 2*).¹⁹⁻²¹ Rudd et al¹⁹ compared 68 multiple attempters with 128 single attempters and found that multiple attempters had higher levels of:

- suicide ideation
- depression
- hopelessness
- perceived stress.

Multiple attempters also had more Axis I disorders and poorer social problemsolving skills and experienced their first psychiatric disorder at an earlier age than single suicide attempters.

Similarly, Foreman et al²⁰ found that compared with single suicide attempters, multiple attempters had higher levels of depression, hopelessness, and suicidal ideation and met criteria for more Axis I diagnoses. Multiple attempters also were more likely to be:

• diagnosed with substance use disorders, psychotic disorder, or borderline personality disorder

• unemployed and have relationship difficulties, a history of emotional abuse, and a family history of psychiatric problems and suicide.

Miranda et al²¹ found that compared with single suicide attempters and suicide ideators, multiple attempters had Axis I disorders more often and had a stronger wish to die during the attempt. In this study, multiple suicide attempts increased by more than 4 times the likelihood that a person with a history of suicidal thoughts and/or behaviors would make another attempt.

Among 326 individuals in a military medical setting treated for suicidal behavior or severe suicidal ideation, multiple suicide attempters reported higher levels of ongoing distress that was unrelated to specific life stressors.²² This suggests these

Table 2

Common characteristics of multiple suicide attempters

History of Axis I disorder (major depressive disorder, bipolar disorder, schizophrenia, substance use disorders, eating disorders) High levels of perceived stress High levels of depression Symptoms of borderline personality disorder

Poor problem-solving skills

Family history of psychiatric illness

Source: References 19-21

patients may not respond well to psychological interventions that focus on problemsolving.

Self-harm and suicidal behavior

Patients who engage in nonsuicidal self harm-also called self-injurious behavior (SIB)-may be mistaken for suicide attempters. Although differences exist between suicide attempters and those who engage in SIB, evidence suggests that a history of SIB increases risk for suicidal behavior.^{23,24} In a retrospective study of 4,167 self-harmers, females who engaged in ≥ 4 acts of SIB were more likely to die from suicide than those who engaged in ≤3 acts.²⁵ A cross-sectional analysis of data from 3,069 students responding to a random Webbased survey found that an increased incidence of SIB significantly increased the odds of suicidal behavior.26

One hypothesis suggests that some persons use SIB as a coping mechanism, and SIB and suicide are on the same continuum of behaviors. Others postulate that suicide attempters may use SIB to habituate themselves to suicidal behavior. Joiner²⁷ suggests that individuals who commit suicide have rehearsed the suicidal behavior, thus

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Clinical Point

Assess for selfinjurious behavior (SIB) because a history of SIB may increase risk for suicidal behavior



Suicide attempts

Clinical Point

Perform a suicide inquiry to determine if a patient requires hospitalization, but be aware patients may lie about their suicidal intent

Hospitalize? 4 questions to guide your decision

Table 3

Are you having thoughts of hurting or killing yourself? *If yes:* What are you thinking/planning to do?

Do you have access to lethal means?

What is the likelihood that you will hurt yourself?

Have you ever done something to hurt yourself (either suicide attempt or self-injurious behavior)? *If yes:* How many times?

rendering it less foreign and enabling increased lethality.

Although the link between SIB and suicide attempts remains unclear, evidence suggests SIB is a risk factor for suicidal behavior and therefore should be assessed when evaluating a patient's suicide risk.

CASE CONTINUED

Ms. J has several risk factors for making another suicide attempt. She has 3 previous attempts, and because her last attempt caused liver damage we know she is capable of lethal behavior. In addition, the anniversary of the death of her fiancé is approaching. Ms. J also reports almost constant suicidal ideation, with a specific plan (to overdose). Her fantasies of taking pills could be interpreted as mental rehearsal and desensitization to the behavior.

Because we believe Ms. J is at high risk for a serious, if not lethal, suicide attempt we conduct a 4-question suicide inquiry. It is clear that Ms. J had suicidal thoughts and a plan. Her answer to "How likely is it that once you leave my office you will do something to hurt yourself?" is the key to determining whether or not she requires hospitalization. Ms. J states that she is "pretty certain she will hurt herself" once she leaves the office, so we hospitalize her.

To determine if a patient requires immediate hospitalization, perform a specific suicide inquiry. Although there is no surefire way to determine if a patient will kill himself or herself, asking specific questions can help you gauge risk. Based on evidence²⁸ and my clinical experience, I focus on patients' answers to 4 questions (*Table 3*). Affirmative answers to these questions are a strong indication that a patient requires hospitalization.

Occasionally, patients are not truthful when asked about their suicidal intent. If you suspect a patient is lying, clinical judgment and the patient's history guide the decision on hospitalization.

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Bottom Line

A past suicide attempt is a strong predictor of a future attempt. In your clinical assessment of suicidal patients, ask about their history of suicide attempts—including the number of attempts—and self-injurious behaviors. The risk of suicide increases with the number of past suicide attempts.

treatment and consider tapering Effexor XR in the third trimester. Labor, Delivery, Nursing—The effect on labor and delivery in humans is unknown. Venlafaxine and ODV have been reported to be excreted in human milk. Because of the potential for serious adverse reactions in nursing infants from Effexor XR, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother. Pediatric Use—Safety and effectiveness in the pediatric population have not been established (see BOX WARNING and WARNINGS: Clinical Worsening and Suicide Risk). No studies have adequately assessed the impact of Effexor XR on growth, development, and maturation of children and adolescents. Studies suggest Effexor XR may adversely affect weight and height (see PRECAUTIONS-General, *Changes in Height and Changes in Weight*). Should the decision be made to treat a pediatric patient with Effexor XR, regular monitoring of weight and height is recommended during treatment, particularly if long term. The safety of Effexor XR regular monitoring of weight and height is recommended during treatment, particularly if long term. The safety of Effexor XR regular monitoring of weight and height is recommended during treatment, particularly if long term. The safety of Effexor XR regular monitoring of weight and height is recommended during treatment were similar to that observed in adult patients. The precautions for adults apply to pediatric patients. Greater sensitivity of some older individuals cannot be ruled out. SSRIs and SNRIs, including Effexor XR, have been associated with (see PRECAUTIONS: Hyponatremia). ADVERSE REACTIONS: Associated with Discontinuation of Treatment— The most common events leading to discontinuation in MDD, GAD, SAD, and PD trials included nausea, anorexia, anaveky, impolence, dry mouth, dizziness, insomina, somolence, hypertension, diarriea, paresthesia, turnor, anorexia, andeyy. cases of clinically significant hyponatremia in elderly patients, who may be at greater risk for this adverse event. The most common events leading to discontinuation in MDD GAD, SAD, and PD trials included nausea, anorexia, anxiety, impolence dy mouth, diziness, insomnia, somnelonce, hypertension, diarrhea, parestheais, termor abnormal (mostly blurred) vision, abnormal (mostly delayed) ejacutation, asthenia, vornting, nervousness, headack, vasodilatation, thinking abnormal, decreased libido, and swealing. *Commonly Observed Adverse Events in Controlled Clinical Trials for MDD, GAD, SAD, and PD—Eoty as a Whole:* asthenia, vornting, nervousness, headack, warolitani, thinking abnormal, decreased libido, and swealing. *Commonly Observed Adverse Events in Controlled Clinical Trials for MDD, GAD, SAD, and PD—Eoty as a Whole:* asthenia, vornting, nervousness, headacke, warolitanion, the events, and the event of th osteoporosis, ceteoscierosis, plantar fascilitis, rheumatoli afrihritis, tendori rupture. **Nervous system** - Frequent: akathisia, apathy, ataxia, confusion, depersonalization, hypesthesia, thinking abnormal, trismus, vertigo; Infrequent: akathisia, apathy, ataxia, irrumoral presentesia, CMS stimulation, emotional lability, euphoria, hallicinations, hostility, hyperesthesia, hyperkinesia, hypotionia, incoordination, libido increased, maric reaction, mycolonus, neuralgia, neuropathy, psychosis, seizure abnormal speech, stupo; suicidal ideation; Rare: abnormal charvor, adjustment disorder, akmesia, alcohol abuse, aphasia, bradykinesia, buccoglossal syndrome, cerebrovascular accident, feeling drunk, loss of consciousness delusions, dementia, dystonia, energy increased, facial paralysis, abnornal gait, Guillain-Barré syndrome, homicidal ideation, hyperchloritydria, hypokinesia, hysteria, impulse control difficulties, motion sickness, neurits, nystagmus paranoir acation, paresis, psychotic depression, reflexes decreased, reflexes the sinterased, toticollis, **Respiratory system** - Frequent: Caugh increased, dyspnez, infrequent: asthma, chest congestion, epistaxis, hyperventilation, layny edem, pleursy, pumonary embolus, sleep apnea. **Skin and appendages** - Frequent: Burtis, Nista appedia, contal dermattis, lichenoid dermattis, hair discoloration, skin discoloration, furunculosis, hirsitism, leukoderma, miliaria, petechia dermattis, ucinato, unature ash, vesiculobulous rash, seborthea, skin atophy, skin hypertophy, skin shypersion; Infrequent: conjunctivitis, diplopia, dri yeye, eye pain, ditto defect. **Uncepital system** - Frequent: abuminuria, urination ingain et infrequent anenorthage, typestensis, keratitis, labyrinthitis, mosis, papilledema, decreased pupillary incortinate, existis, dystin, brematura, kidney calculus, kidney pain, leukortmea, menorrhage, dupoting, and indives externa, scientis, unertis, ouritis, ovaria cyst, proionged erection, gynecomatia (makorting), metorrhage, inductura, heres pain, bolyuri, pu of suicide risk factors than SSRI-treated patients. The extent to which the finding of an increased risk of fatal outcomes can be attributed to the toxicity of ventataxine in overdosage as opposed to some characteristic(s) of ventataxine-treated patients is not clear. Treatment should consist of those general measures employed in the management of overdosage with any antidepressant. Ensure an adequate airway, oxygenation and ventilation. Monitor cardiac hythm and vital signs. General supportive and symptomatic measures are also recommendel. Induction of emessis is not recommended. Castric lavage with a large bore orogastric tube with appropriate airway protection, if needed, may be indicated if performed soon after ingestion or in symptomatic patients. Activated charcoal should be administered. Due to the large volume of distribution of this drug, forced diuresis, dialysis, hermopertuison, and exchange translusion are unlikely to be of benefit. No specific antidotes for ventataxine are known. In managing overdosage, consider the possibility of multiple drug involvement. Consider contacting a poison control centers are listed in the Physicians: Desk Reference[®] (PDR). **DOSAGE AND ADMINISTRATION**: Consult full prescribing information or dosing instructions. **Switching Patients** to or From an **MADI**—At least 14 days should elapse between discontinuation of an MAOI and initiation of therapy with Effexor XR At least 7 days should be allowed after stopping Effexor XR before starting an MAOI (see **CONTRAINDICATIONS**).

and WARNINGS). This brief summary is based on Effexor XR, Prescribing Information W10404C036 ET01, revised February 2008

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Related Resources

• Joiner TE. Why people die by suicide. Cambridge, MA: Harvard University Press: 2005:46-93.203-22

- American Foundation for Suicide Prevention. www.afsp.org.
- SAVE: Suicide Awareness Voices of Education, www.save.org.

Drug Brand Name

Zolpidem • Ambien

Disclosure

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

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