

suicide attempt
[created by Paul Young 27/11/07]

general

- Suicide and suicide attempts are a major cause of death and morbidity worldwide.
- Suicide is generally a complication of a psychiatric disorder, but it requires additional risk factors because most psychiatric patients never attempt suicide. More than 90% of suicide victims have a diagnosable psychiatric illness, and most persons who attempt suicide have a psychiatric disorder. The most common psychiatric conditions associated with suicide or serious suicide attempt are mood disorders
- Suicide, the eighth leading cause of death in the United States, accounts for more than 30 000 deaths per year. The suicide rate in men (18.7 suicides per 100 000 men in 1998) is more than four times that in women (4.4 suicides per 100 000 women in 1998).
- In females, suicide rates remain relatively constant beginning in the midteens. In males, suicide rates are stable from the late teenage years until the late 70s, when the rate increases substantially (to 41 suicides per 100 000 persons annually in men 75 to 84 years of age).
- Investigators have proposed many models to explain or predict suicide. One such explanatory and predictive model is the stress- diathesis model.
- One stressor is almost invariably the onset or acute worsening of a psychiatric disorder, but other types of stressors, such as a psychosocial crisis, can also contribute.
- The diathesis for suicidal behavior includes a combination of factors, such as gender, religion, familial and genetic components, childhood experiences, psychosocial support system, availability of highly lethal suicide methods.

what is suicidal behaviour?

- Suicidal behavior refers to the most "clear-cut" and unambiguous act of completed suicide but also includes a heterogeneous spectrum of suicide attempts that range from highly lethal attempts (in which survival is the result of good fortune) to low-lethality attempts that occur in the context of a social crisis and contain a strong element of an appeal for help.
- Suicidal ideation without action is more common than suicidal behavior. In most countries, men have a higher reported rate of completed suicide, whereas women have a higher rate of attempted suicide. Men tend to use means that are more lethal, plan the suicide attempt more carefully, and avoid detection. In contrast, women tend to use less lethal means of suicide, which carry a higher chance of survival, and they more commonly express an appeal for help by conducting the attempt in a manner that favors discovery and rescue.

clinical correlates of suicidal behaviour

- Approximately 60% of all suicides occur in persons with a mood disorder
- Lifetime mortality from suicide in discharged hospital populations is approximately 20% in persons with bipolar disorder (manic depression), 15% in persons with unipolar depression, 10% in persons with schizophrenia, 18% in persons with alcoholism, and 5% to 10% in persons with both borderline and antisocial personality disorders. These personality disorders are characterized by emotional lability, aggression, and impulsivity. The lifetime mortality due to suicide is lower in general psychiatric populations.
- Suicide attempters differ in two important ways from nonattempters with the same psychiatric disorder:
 - (i) they experience more subjective depression and hopelessness and, in particular, have more severe suicidal ideation. They also perceive fewer reasons for living despite having the same objective severity of psychiatric illness and a similar number of adverse life events. One possible explanation for the greater sense of hopelessness and greater number of suicidal ideations is a predisposition for such feelings in the face of illness or other life stressor.
 - (ii) they are more aggressive toward others and their environment but are more impulsive in other ways that involve, for example, relationships or personal decisions about a job or purchases. A propensity for more severe suicidal ideation and a greater likelihood of acting on powerful feelings combine to place some patients at greater risk for suicide attempts than others.
- Other clinical features that increase the risk for suicidal behavior include comorbid substance abuse and alcoholism, a history of physical or sexual abuse during childhood, a history of a head injury or neurologic disorder, and cigarette smoking.
- Studies have reported a relationship between cigarette smoking and major depression that may contribute to the risk for suicide.

familial & genetic factors

- Persons who attempt or commit suicide have a significantly increased reported rate of suicidal acts in their families. This relationship holds true even after adjustment for rates of psychoses and mood disorders.
- The heritability of suicide is comparable to the heritability of other major psychiatric disorders, such as bipolar disorder and schizophrenia.
- The specific genetic factors that contribute to this risk, independent of the genetic factors involved in psychiatric disorders themselves, remain unknown.
- Nongenetic familial factors that may contribute to suicide risk include the effect of parenting, physical or sexual abuse-possibly due to greater parental impulsivity and other psychiatric disorders, including alcoholism and substance abuse, that contribute to adverse parenting.

medical illness & suicide risk

- Compared with the risk of the general population, persons with a potentially fatal illnesses, such as cancer, have only a relatively modest two- to fourfold increased risk for suicide, unless they have a comorbid psychiatric disorder.
- In contrast, disorders of the central nervous system such as epilepsy, AIDS, Huntington disease, head injury, and cerebrovascular accidents carry a much higher relative risk for suicide. Pathology involving the brain may trigger depression and suicidal ideation and may impair restraint or inhibition of the desire to act on such thoughts.

psychosocial & environmental correlates

- Rural areas, high rates of gun ownership, poverty, unemployment, and social isolation have all been implicated in suicide. How important these factors are by themselves is unknown.
- Because psychiatric disorders can lead to a decrease in socioeconomic status, the breakup of a marriage or significant relationship, or the failure to form meaningful relationships, separating the effect of psychosocial adversity from that of psychiatric illnesses can be difficult. Psychiatric illness can lead to psychosocial adversity, and both factors can combine to increase the person's level of stress and thereby potentially increase the risk for suicidal behavior.

availability of means

- The availability of highly lethal suicide methods and rates of suicide appear to be related. Reported suicide rates of more than 100/100 000 persons each year in rural China and Sri Lanka partly result from the availability of highly lethal methods for suicide, such as pesticides
- The use of new-generation antidepressant medications, such as selective serotonin reuptake inhibitors, is associated with no difference in suicide attempt rates compared with tricyclics

assessment & management

- It is estimated that 50% of persons who commit suicide had sought professional help within 1 month of the act.
- The management of the suicidal patient involves three major components:
 - 1) diagnosis and treatment of existing psychiatric disorders,
 - 2) assessment of suicide risk, and
 - 3) removal of the means for suicide and specific treatment to reduce the propensity to attempt suicide.
- Suicidal patients generally present in one of two ways:
 - 1) with a psychiatric disorder for which they seek treatment or
 - 2) particularly with mood or anxiety disorders, with a medical problem
- Careful assessment of symptoms such as depressed mood, hopelessness, guilt, insomnia, tiredness, anorexia, weight loss, constipation, and poor concentration can indicate major depression
- Effective treatment of major depression is critical because less than 1 in 6 patients who commit suicide during a major depressive episode are receiving adequate dosages of antidepressant medication.
- Some patients seek help-often by presenting to an emergency department-after a suicide attempt involving methods with a low level of lethality. The low lethality of the presenting suicide attempt should not lead to the conclusion that the potential for more serious suicide attempts or completed suicide is low. Careful psychiatric evaluation, including a history of past suicidal behavior, may reveal more lethal suicide attempts.
- Comorbid alcoholism or substance abuse significantly increases the risk for suicide in persons with a mood disorder or schizophrenia. Appropriate management and treatment of these psychiatric disorders should be initiated.
- The best predictor of suicidal behavior is a history of a suicide attempt and current suicidal ideation. The association of suicidal ideation and action is stronger in the short term rather than in the long term. Suicidal ideation that includes a plan for suicide or evidence that the individual has been engaging in preparations for a suicide attempt are serious signs of short-term risk. Suicidal men are half as likely as suicidal women to report suicidal ideation to their physician before suicide.
- Available relatives can sometimes provide additional information about behaviors that indicate planning a suicide attempt or statements from the patient that suggest a specific plan.
- Depending on the presence of a plan for suicidal behavior or the severity of the suicidal ideation, the patient may require observation up to and including admission to hospital.
- Scientific evidence about the specific treatments beneficial for suicidal behavior (rather than the psychiatric condition that is being treated) is lacking. However, recent evidence has shown that lithium used as a mood stabilizer may have specific antisuicidal properties beyond its mood-stabilizing effects in patients with bipolar disorder and in unipolar patients with recurrent depressions. Lithium is used to prevent the recurrence of manic or depressive episodes in these conditions, but it also appears to significantly reduce the risk for suicide and suicide attempts. The antisuicidal effect of lithium is striking because of the potential toxicity of the drug on overdose; this suggests that lithium must also decrease the number of suicide attempts, and retrospective data support this conclusion. The antisuicidal effects of anticonvulsant mood stabilizers remain to be tested.
- In schizophrenia, evidence shows that the atypical antipsychotic clozapine may reduce suicidal behavior independent of its therapeutic advantages as an antipsychotic agent