I. Understanding and Defining Mood Disorders
A. The disorders described in this chapter used to be called "depressive disorders," "affective disorders," "depressive neuroses." Beginning with the DSM-III-R, grouped under the heading **mood disorders** because they all represent gross deviations in mood.

B. The experience of depression and mania contribute, either alone or in combination, to all mood disorders.

1. **Major depressive episode** is the most commonly diagnosed and most severe form of depression (see DSM-IV diagnostic criteria for Major Depression). (Book--case of Katie) DSM-IV primary criteria:
   a. Extremely depressed mood state lasting at least 2 weeks.
   b. Cognitive symptoms (e.g., feeling worthless, indecisiveness).
   c. Disturbed physical functions (e.g., altered sleep patterns, changes in appetite/weight, loss of energy), often referred to as **somatic or vegetative symptoms**. Such symptoms are central to this disorder.
   d. **Anhedonia**, or the loss of interest or pleasure in usual activities.
   e. Average duration of an untreated major depressive episode is 9 months.

2. **Mania** refers to abnormally exaggerated elation, joy, or euphoria. extraordinary activity (i.e., hyperactivity), decreased need for sleep, may include grandiose plans (i.e., believing that one can accomplish anything).
   Speech is typically rapid and may become incoherent, and may involve a flight of ideas (i.e., attempt to express many ideas at once).
A **hypomaniac** (hypo means below) episode is a less severe version of a manic episode that does not cause marked impairment in social or occupational functioning.

DSM-IV criteria for a manic episode includes:

- A duration of 1 week; less if the episode is severe enough to require hospitalization.
- Irritability often accompanies the manic episode toward the end of its duration.
- Anxiousness and depression are often part of a manic episode.
- Average duration of an untreated manic episode is 3-6 months.

**C. Unipolar disorder** refers to the experience of either depression or mania, and most individuals with this condition suffer from unipolar depression. However, mania by itself is extremely rare and so unipolar disorder usually refers to Unipolar Depression. **Bipolar disorder** refers to alternations between depression and mania. Feeling depressed and manic at the same time is referred to as a **dysphoric manic or mixed episode**.

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**II. Depressive Disorders**

**A. Major depressive disorder, single episode** is defined, in part, by the absence of manic or hypomaniac episodes before or during the episode.

The occurrence of 1 isolated depressive episode in a lifetime is rare, and unipolar depression is almost always a chronic condition that waxes and wanes over time, but seldom disappears.

**Major depressive disorder, recurrent** requires that two or more major depressive episodes that are separated by a period of at least 2 months during which the individual is not depressed.

Recurrent major depression is associated with a family history of depression. As many as 85% of single-episode cases later have a second episode of major depression.

1. Mean age of onset is 25 years for persons not in treatment, and 29 years for persons who are in treatment.
2. Incidence of depression and suicide seems to be increasing.
MOOD DISORDERS AND SUICIDE - 3

B. **Dysthymic disorder** shares many of the symptoms of major depression, but unlike major depression, the symptoms of dysthymia tend to be milder and remain relatively unchanged over long periods of time, as much as 20 or 30 years.

Dysthymic disorder is defined by persistently depressed mood that continues for at least 2 years.

During this time, the person cannot be symptom free for more than 2 months at a time. Many eventually experience a major depressive episode at some point.

1. Age of onset is typically in the early 20s (i.e., *late onset*).
2. Onset of dysthymia before age 21 (i.e., *early onset*) is associated with:
   a. Greater chronicity.
   b. Relatively poor prognosis (i.e., response to treatment).
   c. Stronger likelihood of the disorder running in the family.
   d. Greater prevalence of personality disorders.

C. **Double depression** refers to both major depressive episodes and dysthymic disorder.

Dysthymic disorder often develops first

Associated with severe psychopathology and a problematic future course.

Double depression is quite common, with as many as 79% of persons with dysthymia reporting a major depressive episode at some point in their lives.

Many do not recover after two years, and relapse rates are very high.

D. The frequency of severe depression following the **death of a loved one** is quite high.

Most mental health professionals do not consider depression associated with death or loss a disorder unless very severe symptoms appear (e.g., psychotic features, suicidal ideation, or the less-alarming symptoms last longer than 2 months).

**Grief** is usually resolved within several months post loss, but may be exacerbated at significant anniversaries, such as the birthday of the loved one or during holidays.

If grief lasts longer than 1 year or so the chance of recovering from severe grief is greatly reduced and mental health professionals may become concerned.
III. Bipolar Disorders

A. The core identifying feature of bipolar disorders is the tendency of manic episodes to alternate with major depressive episodes. Beyond that, bipolar disorders parallel depressive disorders (e.g., a manic episode can occur once or repeatedly).

B. **Bipolar I disorder** is the alternation of full manic episodes and major depressive episodes. The textbook presents the case of Bill to illustrate a full manic episode.
   1. Average age on onset is 18 years, but can begin in childhood.
   2. Tends to be chronic.
   3. Suicide is a common consequence.

C. In **bipolar II disorder**, major depressive episodes alternate with hypomanic episodes. (Book - case of Jane)
   Most are female.
   1. Average age on onset is 22 years, but can begin in childhood.
   2. Only 10 to 13% of cases progress to full bipolar I disorder.
   3. Tends to be chronic.

D. **Cyclothymic disorder** is a more chronic version of bipolar disorder where manic and major depressive episodes are less severe.
   Either a manic or depressive mood state for several years with very few periods of neutral (or euthymic) mood.
   For the diagnosis, the pattern must last for at least 2 years (1 year for children and adolescents).
   Increased risk for developing Bipolar I or II disorder.
   1. Average age of onset is about 12 or 14 years.
   2. Cyclothymia tends to be chronic and lifelong.
   3. Most are female.
MOOD DISORDERS AND SUICIDE - 5

E. Differences in the course of mood disorders specify the following:

1. **Longitudinal course specifiers** are used to address whether a person has had a past episode of depression or mania and whether the person recovered fully from past episodes. For example, one should determine whether dysthymia preceded a major depressive episode or whether cyclothymic disorder preceded bipolar disorder. Both scenarios tend to decrease chances of recovery and increase length of treatment.

2. **Rapid cycling pattern** applies only to bipolar I and II disorders. Rapid cycling pattern is used when a person has at least 4 manic or depressive episodes within a period of 1 year. Rapid cycling is a more severe form of bipolar disorder that does not respond well to treatment. Most of these patterns are severe, seen in females, and begin with a depressive episode.

3. **Seasonal pattern** applies to bipolar disorders and recurrent major depression and is used to indicate whether episodes occur during certain seasons, usually wintertime. Those with winter depressions display excessive sleep and weight gain. Seasonal affective disorder may be related to circadian and seasonal changes in the increased production of melatonin (i.e., a hormone secreted by the pineal gland). Phototherapy is a recommended effective treatment for this condition.

IV. Prevalence of Mood Disorders

A. About 7.8% of the North American population report some type of mood disorder during their lifetime

3.7% over the past year.

Females are twice as likely to have a mood disorder compared to males. The imbalance between males and females is accounted for solely by major depressive disorder and dysthymia.

Bipolar disorders are distributed equally between males and females.

B. Mood disorders are fundamentally similar in children and adults. Thus, there are no childhood mood disorders in the DSM-IV.

However, the clinical presentation of depression does change with age. For instance, children less than 9 years of age show more irritability and emotional swings rather than classic manic states, and are often mistaken as hyperactive.

Bipolar disorder also is rare in childhood, but rises substantially in adolescence and so does suicide. Estimates of the prevalence of mood disorders in children and adolescents vary widely. The consensus is that depressive disorder occurs less often in children than adults but that this difference closes somewhat during adolescence, where depression becomes more frequent compared to adults.
C. As many as 18% to 20% of elderly nursing home residents may experience major depressive episodes, which are likely to be chronic.

Late-onset depression is associated with marked sleep problems, hypochondriasis, and agitation.

It is difficult to diagnose depression in the elderly due to medical illnesses and symptoms of dementia.

Generally, the prevalence of major depressive disorder is the same or slightly lower in the elderly than in the general population. Anxiety disorders often accompany depression in the elderly.

The gender imbalance in depression disappears after age 65.

D. Across cultures, feelings of weakness or tiredness tend to characterize depression. Prevalence of depression seems to be similar across subcultures, although more so in economically depressed areas.

E. Some have speculated that mood disorders and creativity are related, even at the level of genetics. The correlation between famous writers and artisans and bipolar disorder is one example. (page 211)

F. Substantial overlap exists between the emotional states of anxiety and depression. Evidence for this is based on neurobiological findings that familial anxiety is related to familial depression. In addition, drug therapies for both conditions are similar.

Most persons with depression do display anxiety symptoms, but not all anxious patients are depressed. Symptoms common to anxiety and depressive disorders are referred to as negative affect. This may contribute to the creation of a mixed anxiety/depression diagnosis. Core symptoms of depression not found in anxiety states include anhedonia (inability to experience pleasure), psychomotor retardation, and negative cognitive content.
V. Causes of Mood Disorders

A. Biological dimensions: Familial and genetic influences

1. **Family studies** indicate that the rate of mood disorders in relatives of probands (i.e., the person known to have the disorder) with mood disorders is generally two to three times greater than the rate in relatives of normal probands. The most frequent mood disorder in relatives of bipolar patients is unipolar depression, not bipolar disorder.

2. **Twin studies** reveal that if one identical twin presents with a mood disorder, the other twin is 3 times more likely than a fraternal twin to have a mood disorder, particularly for bipolar disorder.

    Severe mood disorders may have a stronger genetic contribution than less severe disorders.

    Heritability rates being higher for females compared to males. The environment appears to play a larger role in causing depression in males than females.

    Twin studies also support the contention that unipolar and bipolar disorder are inherited separately.

3. Data from family, twin, and adoption studies also suggest that the biological vulnerability for mood disorders may reflect a more general vulnerability for anxiety disorders as well.

B. Biological dimensions: Neurobiological influences

1. Research indicates low levels of serotonin in the etiology of mood disorders but only in relation to other neurotransmitters, including norepinephrine and dopamine. One of the functions of serotonin is to regulate systems involving norepinephrine and dopamine. The permissive hypothesis stipulates that when serotonin levels are low, other neurotransmitters are permitted to range more widely, become dysregulated, and contribute to mood irregularities.

2. Another theory of depression has implicated the endocrine system, particularly elevated levels of cortisol. This has led to the controversial dexamethasone suppression test (DST). Dexamethasone is a glucocorticoid that suppresses cortisol secretion. As many as 50% of those with depression, when given dexamethasone, show less suppression of cortisol. However, persons with anxiety disorders also demonstrate nonsuppression.
3. **Sleep disturbances** are a hallmark of most mood disorders. Depressed persons move into the period of rapid eye movement sleep (REM) more quickly than nondepressed persons and also show diminished slow wave sleep (i.e., the deepest and most restful part of sleep). This REM effect is reduced for persons who have depression related to recent life stress. REM activity is intense in depressed persons. Depriving depressed persons of sleep improves their depression. Persons with bipolar disorder and their children show increased sensitivity to light (i.e., greater suppression of melatonin when exposed to light at night). A relationship between seasonal affective disorder, sleep disturbance, and disturbance in biological rhythms has thus been proposed.

4. Different **alpha electroencephalogram (EEG)** values have been reported in the two hemispheres of brains of depressed persons. Depressed persons show greater right-side anterior activation of the cerebral hemispheres (i.e., left-side activation) than nondepressed persons. This type of brain function may be an indicator of a biological vulnerability for depression.

C. Psychological dimensions

1. Stressful and traumatic events influence mood disorders, although the context, meaning, and memory of an event must be considered. In general, a marked relationship has been found between severe life events, onset of depression, poorer response to treatment, and longer time before remission. New research suggests that one third of the association between stressful life events and depression is due to a vulnerability whereby depressed persons place themselves in high risk stressful situations (i.e., reciprocal gene-environment model). In addition, stressful life events and circadian rhythm disturbances may trigger manic episodes. However, only a minority of people experiencing a negative life event develop a mood disorder; therefore, interaction with a biological vulnerability is likely. The textbook illustrates the relation between life stress and depression by returning to a discussion of the case of Katie.

2. According to the **learned helplessness theory of depression**, people develop depression and anxiety when they assume they have no control over life stress. A depressive attributional style has the following three characteristics.
   a. First, the attribution is internal in that one believes negative events are one's fault.
   b. Second, the attribution is stable in that one believes that future negative events will be one's fault.
   c. Third, the attribution is global in that the person believes negative events will influence many life activities.
d. Evidence is mixed as to whether learned helplessness is a cause or side effect of depression. Attributions are important as a vulnerability that contributes to a sense of hopelessness; a feature that distinguishes depressed from anxious individuals.

3. Aaron T. Beck proposed that depression results from a tendency to interpret life events in a negative way. Persons with depression often engage in several cognitive errors and think the worst of everything, as represented in thinking negatively about themselves, their immediate world, and their future (called the depressive cognitive triad). These beliefs may comprise a negative schema, or an automatic and enduring cognitive bias about aspects of life. Substantial empirical evidence supports this theory, although it has been difficult to establish the existence of negative schemas prior to major depressive episodes. The following examples of cognitive errors are illustrated in the textbook:

   a. **Arbitrary inference** refers to the tendency of depressed persons to emphasize the negative rather than positive aspects of a situation.

   b. **Overgeneralization** refers to the tendency to take one negative consequence of some event and generalize to all related aspects of the situation.

D. Social and cultural dimensions

1. **Marital dissatisfaction** and depression are strongly related, and marital disruption often precedes depression. This seems particularly true for men. In addition, high marital conflict and/or low marital support are important in the etiology and recurrence of depression. Conversely, continuing depression may lead to the deterioration of a marital relationship.

2. **Gender imbalances** occur across the mood disorders (with the exception of bipolar disorder) and this is a world-wide phenomenon. Several theories have arisen to explain why females display more anxiety and depressive disorders than males. Part of this may be due to perceptions of uncontrollability. Such perceptions are strongly influenced by socialization, where females are expected to be passive and sensitive to others. In addition, females may place more emphasis on intimate relationships and be more disturbed by problems in this area than males. Females may also be self-deprecating in times of stress. Finally, females are subjected to more discrimination, poverty, sexual harassment, and abuse than males.

3. The number and frequency of social relationships and contact may be related to depression. A lack of social support appears to predict the later onset of depressive symptoms, and high expressed emotion or dysfunctional families may predict relapse. Conversely, substantial social support is related to rapid recovery from depression.
MOOD DISORDERS AND SUICIDE - 10

E. An integrative theory of the etiology of mood disorders

1. Depression and anxiety may share common biological/genetic vulnerabilities, such as an overactive neurobiological response to stressful life events.

2. The onset of stressful life events may then activate stress hormones that affect certain neurotransmitter systems, including turning on certain genes. Extended stress may also affect circadian rhythms and activate a dormant psychological vulnerability characterized by negative thinking and a sense of helplessness and hopelessness.

3. In addition, psychological vulnerabilities such as feelings of uncontrollability may be triggered. All of this is dependent, however, on mediating environmental factors such as interpersonal relationships.

VI. Treatment of Mood Disorders

A. Three types of antidepressant medications are used to treat depressive disorders:

1. **Tricyclic antidepressants** are widely used treatments for depression, and include imipramine (Tofranil) and amitriptyline (Elavil). It is not yet clear how these drugs work, but initially at least they block the reuptake of norepinephrine and other neurotransmitters (i.e., down-regulation). This process may take anywhere between 2 to 8 weeks to work, and patients often feel worse and develop side effects before feeling better. Side effects include blurred vision, dry mouth, constipation, difficulty urinating, drowsiness, weight gain, and sexual dysfunction. Because of the side effects, about 40% of patients stop taking the drugs. Tricyclics alleviate depression in 50% of cases to as high as 65% to 70% of cases. Tricyclics may be lethal in excessive doses.

2. **Monoamine oxidase (MAO) inhibitors** work by blocking an enzyme monoamine oxidase that breaks down serotonin and norepinephrine. MAO inhibitors are slightly more effective than tricyclics and have fewer side effects. However, ingestion of tyramine foods (e.g., cheese, red wine, beer) or cold medications with the drug can lead to severe hypertensive episodes and occasionally death. New MAO inhibitors (not yet widely available) are more selective, short acting, and do not interact negatively with tyramine. MAO inhibitors are usually prescribed only when tricyclics are not effective.
3. **Selective serotonergic reuptake inhibitors** (SSRIs) specifically block the pre-synaptic reuptake of serotonin, thus increasing levels of serotonin at the receptor site. Fluoxetine (Prozac) is the most popular SSRI. Risks of suicide or acts of violence are no greater with Prozac than with any other antidepressant medication. Common side effects of Prozac are physical agitation, sexual dysfunction or low desire, insomnia, and gastrointestinal upset. St. John’s Wort (hypericum) is receiving increasing attention as an herbal solution for depression. Preliminary studies suggest that St. John’s Wort works better than placebo in alleviating depression and works as well as low doses of other antidepressant medications. St. John’s Wort also appears to alter serotonin function and has few side effects.

4. Current studies indicate that these drug treatments are effective with adults, but not necessarily with children, and may cause substantial negative side effects in children. Similar concerns are evident for elderly populations. Overall, recovery from depression may not be as important in treatment as preventing the next episode of depression from occurring. Drug treatment is therefore extended well past the end of a patient’s current depressive episode. Approximately 40% to 50% of depressed persons do not respond to these medications, and females of childbearing age must avoid conceiving while taking antidepressants.

5. **Lithium** is a common salt found in the natural environment, including drinking water. Lithium is the primary drug of choice in the treatment of bipolar disorder. Side effects may be severe, and dosage must be carefully regulated to prevent toxicity (poisoning) and lowered thyroid functioning. Substantial weight gain is also a common side effect. Debate exists as to how lithium works, but possibilities include the reduction of dopamine and norepinephrine or changes in neurohormones. About 30-60% of persons with bipolar disorder respond well to lithium treatment. In other cases of bipolar disorder, antiseizure medication may be effective.

B. **Electroconvulsive therapy (ECT)** is the treatment of choice for very severe depression. The patient is anesthetized and is given muscle-relaxing drugs to prevent bone breakage from convulsions during seizures and is then administered a brief (less than 1 second) electric shock introduced to the brain. The result is brief convulsions lasting for several minutes. Treatments are usually administered once every other day for a total of 6 to 10 treatments. Side effects are few and are limited to short-term memory loss and confusion; both of which usually disappear after a week or two. Approximately 50-70% of those persons not responding to medication benefit from ECT. However, relapse is seen in 60% of cases. The mechanism of action for ECT is unclear. **Transcranial magnetic stimulation (TMS)** is a new procedure that is related to ECT, but involves setting up a strong magnetic field around the brain. No good data exist yet to support the efficacy of TMS.
MOOD DISORDERS AND SUICIDE - 12

C. At least three major psychosocial treatments are available for depressive disorders.

1. Aaron Beck’s cognitive therapy involves teaching clients to examine the types of thinking processes they engage in while depressed and recognize cognitive errors when they occur. Clients are informed about how these processes lead to depression and faulty thinking patterns are modified. Clients also monitor and record their thoughts between therapy sessions and are assigned homework to change their behavior. Increased behavioral activity to elicit social reinforcement is also mandated. Treatment usually takes 10 to 12 sessions. The textbook illustrates Beck’s cognitive therapy with a dialogue between Beck and a patient named Irene.

2. Interpersonal Psychotherapy (IPT) focuses on resolving problems in existing relationships and/or building skills to develop new relationships. Like cognitive-behavioral approaches, IPT is highly structured and seldom takes longer than 15 to 20 weekly sessions. The therapist and client identify life stressors that precipitate depression, and then address interpersonal role disputes, adjustments to losing a relationship, acquisition of new relationships, and social skills deficits.

D. Current data suggest that combining medication and psychosocial treatments does not confer any immediate advantage over separate medication or psychosocial treatment. Medication alone typically works more quickly than psychosocial treatment. However, over 50% of patients on antidepressant medication relapse if their medication is stopped within 4 months after their last depressive episode.

E. Psychosocial interventions (i.e., cognitive therapy and IPT) seem helpful in preventing relapse. Findings provide strong support for continuing drug treatment in severe patients who are at high risk for relapse and who have had an initial positive response to antidepressant medication. Though medication is the preferred treatment for bipolar disorder, most clinicians emphasize the need for psychosocial interventions to manage interpersonal and practical problems, particularly noncompliance with medication regimen and family stress that has been show to be related to increased risk of relapse.
Suicide is the eighth leading cause of death in the United States, although many unreported suicides occur.

**Suicidal ideation** refers to serious contemplation about committing suicide.

**Suicidal attempt** refers to surviving an attempted suicide.

Suicide is overwhelmingly a white phenomenon - African Americans and Hispanics seldom commit suicide.

In 1999, white males accounted for 72% of all suicides. Together, white males and white females accounted for over 90% of all suicides. However, during the period from 1979-1992,

Suicide rates for Native Americans (a category that includes American Indians and Alaska Natives) were about 1.5 times the national rates. There was a disproportionate number of suicides among young male Native Americans during this period, as males 15-24.

**Suicide Among the Elderly**

Suicide rates increase with age and are highest among Americans aged 65 years and older. The ten year period, 1980-1990, was the first decade since the 1940s that the suicide rate for older residents rose instead of declined.

Men accounted for 84% of suicides among persons aged 65 years and older in 1999.

From 1980-1998, the largest relative increases in suicide rates occurred among those 80-84 years of age. The rate for men in this age group increased 17% (from 43.5 per 100,000 to 52.0).

Firearms were the most common method of suicide by both males and females, 65 years and older, 1998, accounting for 78.5% of male and 35.0% of female suicides in that age group.

Suicide rates among the elderly are highest for those who are divorced or widowed. In 1992, the rate for divorced or widowed men in this age group was 2.7 times that for married men, 1.4 times that for never-married men, and over 17 times that for married women. The rate for divorced or widowed women was 1.8 times that for married women and 1.4 times that for never-married women.

Risk factors for suicide among older persons differ from those among the young. Older persons have a higher prevalence of depression, a greater use of highly lethal methods and social isolation. They also make fewer attempts per completed suicide, have a higher-male-to-female ratio than other groups, have often visited a health-care provider before their suicide, and have more physical illnesses.
MOOD DISORDERS AND SUICIDE - 14

Suicide Among the Young

Persons under age 25 accounted for 14% of all suicides in 1999.1 From 1952-1995, the incidence of suicide among adolescents and young adults nearly tripled. From 1980-1997, the rate of suicide among persons aged 15-19 years increased by 11% and among persons aged 10-14 years by 109%. From 1980-1996, the rate increased 105% for African-American males aged 15-19.

For young people 15-24 years old, suicide is the third leading cause of death, behind unintentional injury and homicide. In 1999, more teenagers and young adults died from suicide than from cancer, heart disease, AIDS, birth defects, stroke, and chronic lung disease combined.

Among persons aged 15-19 years, firearm-related suicides accounted for more than 60% of the increase in the overall rate of suicide from 1980-1997.

The risk for suicide among young people is greatest among young white males; however, from 1980 through 1995, suicide rates increased most rapidly among young black males.9 Although suicide among young children is a rare event, the dramatic increase in the rate among persons aged 10-14 years underscores the urgent need for intensifying efforts to prevent suicide among persons in this age group.

Males are 4-5 times more likely to commit suicide than females, although females are three times more likely to attempt suicide than men. This is explained by the fact that men choose more lethal methods of suicide than women.

B. Emile Durkeim, a sociologist, defined a number of suicide types related to the cause of suicide:

1. **Formalized** or altruistic suicide is socially or familially sanctioned (e.g., killing oneself to avoid dishonor to self or family).

2. **Egoistic suicide**, which may be common in the elderly, is suicide caused by disintegration of social support.

3. **Anomic suicides** occur following some major disruption in one’s life (e.g., sudden loss of a high prestige job). Anomie means disorientation, anxiety and isolation.

4. **Fatalistic suicides** refer to suicide related to a loss of control over one's destiny (e.g., mass suicide of Heaven’s Gate cult members).
C. **Risk factors** for suicide include the following:

1. If a family member commits suicide, there is an increased risk that someone else in the family will also do so.

2. Low levels of serotonin may be associated with suicide and with violent suicide attempts. Low levels of serotonin are associated with impulsivity, instability, and the tendency to overreact to situations.

3. Existence of a psychological disorder is related to suicide, as over 90% of people who kill themselves suffer from a psychological disorder. As many as 60% of suicides occur in persons suffering from a mood disorder.

   Depression and suicide are still considered independent as suicide can occur without a mood disorder and not all persons with mood disorders try to kill themselves.

4. Alcohol use and abuse are associated with 25% to 50% of suicides.

5. Past suicide attempts is another strong risk factor in predicting subsequent suicide attempts.

6. Most important risk factor for suicide is a severe, stressful event that is experienced as shameful or humiliating.

D. Publicity about suicide appears to increase rates of suicide, and clusters of suicides (i.e., several people copying one person who committed suicide) seems to predominate in teenagers. The reasons for imitation or modeling of suicide are complex, but may be due to the media romanticizing suicide and elucidates methods to commit suicide.

E. Predicting suicide is difficult, but mental health professionals routinely assess for suicide, often directly via intent, a plan, and a means to carry it out. In general, the more detailed the plan, the more one is at risk for committing suicide.

   A suicide contract may be used to prevent a patient from killing him or herself, and at times, hospitalization is required.

   Programs to reduce suicide include curriculum-based programs that are designed to educate students about suicide and to provide means for handling stress.

F. Treatments for persons at risk for suicide may employ a problem-solving cognitive-behavioral intervention, coping-based interventions, and stress reduction techniques. Of these, the problem solving approach seems most effective.