Suicide Assessment and Prevention

HOW TO RECEIVE CREDIT

- Read the enclosed course.
- Complete the questions at the end of the course.
- Return your completed Answer Sheet/Evaluation to NetCE by mail or fax, or complete online at www.NetCE.com. Your postmark or facsimile date will be used as your completion date.
- Receive your Certificate(s) of Completion by mail, fax, or email.

Faculty

Mark Rose, BS, MA, LP, is a licensed psychologist in the State of Minnesota with a private consulting practice and a medical research analyst with a biomedical communications firm. Earlier healthcare technology assessment work led to medical device and pharmaceutical sector experience in new product development involving cancer ablative devices and pain therapeutics. Along with substantial experience in addiction research, Mr. Rose has contributed to the authorship of numerous papers on CNS, oncology, and other medical disorders. He is the lead author of papers published in peer-reviewed addiction, psychiatry, and pain medicine journals and has written books on prescription opioids and alcoholism published by the Hazelden Foundation. He also serves as an Expert Advisor and Expert Witness to law firms that represent disability claimants or criminal defendants on cases related to chronic pain, psychiatric/substance use disorders, and acute pharmacologic/toxicologic effects. Mr. Rose is on the Board of Directors of the Minneapolis-based International Institute of Anti-Aging Medicine and is a member of several professional organizations.

Faculty Disclosure

Contributing faculty, Mark Rose, BS, MA, LP, has disclosed no relevant financial relationship with any product manufacturer or service provider mentioned.

Division Planner

Mark J. Szarejko, DDS, FAGD

Director of Development and Academic Affairs

Sarah Campbell

Division Planner/Director Disclosure

The division planner and director have disclosed no relevant financial relationship with any product manufacturer or service provider mentioned.

Audience

This course is designed for dental professionals who may identify persons at risk for suicide and intervene to prevent or manage suicidality.

Accreditations & Approvals

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A complete Works Cited list begins on page 34.

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NetCE is approved as a provider of continuing education by the Florida Board of Dentistry, Provider #50-2405.

Designations of Credit

NetCE designates this activity for 6 continuing education credits.

AGD Subject Code 149.

This course meets the Dental Board of California's requirements for 6 units of continuing education.

Dental Board of California course #06-3841-00387.

Special Approvals

This course is approved by the State of Washington Department of Health to fulfill the requirement for Suicide Prevention training for healthcare professionals. Approval number TRNG.TG.60715375-SUIC.

About the Sponsor

The purpose of NetCE is to provide challenging curricula to assist healthcare professionals to raise their levels of expertise while fulfilling their continuing education requirements, thereby improving the quality of healthcare.

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Disclosure Statement

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Course Objective

The purpose of this course is to provide dental professionals with an appreciation of the impact of depression and suicide on patient health as well as the skills necessary to identify and intervene for patients at risk for suicide.

Learning Objectives

Upon completion of this course, you should be able to:

1. Review the epidemiology of suicide.
2. Describe the impact of suicide in the treatment of special populations, including among military veterans.
3. Identify risk and protective factors for suicide.
4. Discuss warning signs of imminent suicide and the importance of lethal means.
5. Evaluate tools available for the assessment and evaluation of suicide risk.
6. Outline key components of an effective suicide prevention plan.

EVIDENCE-BASED PRACTICE RECOMMENDATION

Sections marked with this symbol include evidence-based practice recommendations. The level of evidence and/or strength of recommendation, as provided by the evidence-based source, are also included so you may determine the validity or relevance of the information. These sections may be used in conjunction with the course material for better application to your daily practice.

INTRODUCTION

In 2019, there were 47,511 reported suicide deaths in the United States, making it the 10th leading overall cause of mortality [1]. Every day, approximately 130 Americans take their own life, and one person dies by suicide every 11.2 minutes. An estimated 90% of persons who die by suicide have a diagnosable psychiatric disorder at the time of death, although only 46% have a documented diagnosis [2; 3].

For the approximately 48,000 suicide deaths each year, an estimated 200,000 additional individuals are affected by the loss of a loved one or acquaintance by suicide [5; 46]. This translate to about six survivors intimately affected per suicide. However, a 2019 study estimated that the rate is much higher, projecting a rate of 135 individuals exposed to a single suicide in addition to those intimately affected (equaling more than 6.9 million individuals) [13; 14]. Among these, 20% (or more than 1 million individuals) reported that the experience had a devastating impact or caused a major-life disruption [4]. These figures do not take into account the physical and emotional pain and trauma endured by persons who survive suicide attempts [5].

The total economic burden of suicide is estimated to be $69 billion annually, with the costs falling most heavily on adults of working age [2]. Depression causes an estimated 200 million lost workdays each year at a cost to employers of $17 to $44 billion [6]. However, the accuracy of attempts to quantify such costs on a national scale is hampered by incomplete data, such as the under-reporting of suicides and an absence of reliable data on suicide attempts [5].

Among persons with a mood disorder, 12% to 20% will ultimately die by suicide. The first three months after diagnosis is the period of highest risk for a first attempt, with the three months following the first attempt being the highest risk period for a second attempt [7].

Case Scenario: Patient A

Two case studies will be referenced throughout the text to illustrate the challenges of assessing and treating patients with possible suicide attempt.

Patient A, 19 years of age, is brought to the local emergency department by ambulance after being found unconscious on the floor of her mother's living room, an empty pill bottle nearby. She exhibits quiet, shallow breathing but otherwise no spontaneous movement; she does react to deep, noxious stimuli by opening her eyes and moving her extremities but does not speak or respond to questioning. Her neck is supple, and a screening cranial nerve and motor exam shows no focal neurologic deficits. Her blood pressure is 110/70 mm Hg, pulse is 114 beats per minute, respiration 12 breaths per minute, and temperature 98.8°F; the lungs are clear. The empty bottle is a prescription for a tricyclic antidepressant made out to Patient A's mother. The friend who found her has followed and provides some context: she is not working at present, lives with a boyfriend who recently left her ("they fight a lot"), and has been living at her mother's home for several days. She is admitted to the intensive care unit and intubated, primarily to protect her airway from aspiration should she vomit.

EPIDEMIOLOGY OF SUICIDE

Every year, more than 700,000 people around the world die by suicide, with 77% occurring in low- and middle-income countries. The suicide rate has increased by more than 60% in the past 45 years, with suicide rates among young people increasing at alarming rates in both developed and developing countries [8]. Suicide is the 4th leading cause of death for people 15 to 29 years of age. However, since 2000, the overall rate appears to have decreased slightly.

Suicide rates vary according to race, ethnicity, sex, and many other factors, including age [8]. In almost every country, suicide is predominated by male victims, with the exception of China, which is the only country in which the female suicide rate (14.8 per 100,000) exceeds the male rate (13 per 100,000) [9]. In the United States, the number of deaths by suicide is nearly four times greater among men (37,256) than among women (10,255). Overall, suicide accounts for 1.7% of all deaths in the United States and a death rate of 13.9 per 100,000 [1].

From the mid-1950s to the late 1970s in the United States, the suicide rate tripled among men 15 to 24 years of age and doubled among women 15 to 24 years of age. The suicide rate reached a plateau during the 1980s and early 1990s and began decreasing during the mid-1990s [10]. However, the age-adjusted suicide rate increased 35% between 1999 and 2018, with increases in most groups younger than 75 years of age [11]. The suicide rate is consistently highest among men 75 years of age and older (40 deaths per 100,000). Among the elderly, the suicide rate peaked in 1987, at 21.8 per 100,000 people, and has since declined nearly 13% (to 19.2 per 100,000 in 2018) [11; 13]. Despite the growing recognition of suicide as a problem demanding public health attention, the overall rates of suicide in the United States have increased over the last half-century [13].

Although official national statistics are not compiled on attempted suicide (i.e., nonfatal actions), it is estimated that 1.2 million adults (18 years of age and older) attempt suicide each year [13]. Overall, there are roughly 25 attempts for every death by suicide; this ratio changes to 100 to 200:1 for the young and 4:1 for the elderly [13; 16]. The risk of attempted (nonfatal) suicide is greatest among women and the young, and the ratio of female-to-male nonfatal suicide attempts is 2 to 3:1 [2; 10; 13].

THE MISREPORTING OF DEATH BY SUICIDE

There is broad agreement that not all suicide deaths are accurately recorded and reported. Reasons for under-reporting include [5; 18; 19; 20; 21]:

- Families or family physicians may hide evidence due to the stigma of suicide.
- The determination of death is judged by local standards, which can vary widely.
- Ambiguous cases involving suicide may end up classified as "accidental" or " undetermined."
- Compared with the "accidental" or " undetermined" motive categories, a larger number of deaths are officially classified as "ill-defined and unknown causes of mortality," in which even the actual cause of death is uncertain and some of which are undoubtedly suicides.
- The frequency of physician-assisted suicide for the terminally ill is unknown but is probably both substantial and increasing.

In contrast, some ambiguous cases are classified as suicides, often in institutions such as prisons, hospitals, religious orders, and the military, where the verdict of suicide is likely to be less embarrassing than homicide. Other motivations for declaring a death a suicide, despite much doubt surrounding a case, are that homicides must be investigated and a murderer sought and accidental death may be the basis of negligence lawsuits [5].

SUICIDE REPORTING IN THE MEDIA

Suicide rates may temporarily spike with intense media coverage of a suicide, especially among youth, and both news reports and fictional accounts of suicide in movies and television can produce this effect [22; 23; 24]. Imitation is often the key factor and is most powerful with the highly publicized suicides of entertainment celebrities [5; 25].

Media coverage of suicide can lead to misinformation, as when suicide is attributed to a single event, such as the loss of a job or a relationship, without mention of a broader context involving ongoing problems with depression, substance abuse, or lack of access to treatment for these conditions. On the other hand, responsible coverage of suicide can educate audiences about the causes, warning signs, and treatment advances and prevention of suicide [5].

Thirty-six hours after admission, Patient A has been extubated and is awake, sitting up, and talking to a young man (the boyfriend) at her bedside. As you approach, she smiles sheepishly and asks, "Can I go home now?" Before answering, which of the following management options would you consider appropriate at this juncture?

- *Have physical therapy assess strength and ambulation. If normal, discharge her home to the care of her family.*
- *Ask the young man to step out, then take a careful medical and social history, exploring in detail her mindset, actions, and intent in the period leading up to admission.*
- *Anticipate transfer out of the intensive care unit and the need for an around-the-clock "sitter" in her room as a suicide prevention precaution.*
- *Request social service consult to assess her resources and support system and a psychiatry consult to assess the need for further inpatient care and recommend a plan for outpatient follow-up.*

PATHOPHYSIOLOGY OF SUICIDAL BEHAVIOR

Although suicide is a potential complication of all psychiatric disorders, serious suicidal actions have a neurobiologic basis that is distinct from the psychiatric illnesses with which they are associated [26].

Alterations in several neurobiologic systems are associated with suicidal behavior, most prominently hyperactivity of the hypothalamic-pituitary-adrenal (HPA) axis, serotonergic system dysfunction, and excessive activity of the noradrenergic system. While the first and the last system appear to be involved in the response to stressful events, serotonergic dysfunction is thought to be trait-dependent and associated with disturbances in the regulation of anxiety, impulsivity, and aggression [27; 28]. Altered functioning of these systems may stem from both genetic and developmental causes. Exposure to extreme or chronic stress during childhood has developmental consequences on these systems that persist into adulthood. Genetic differences may also contribute to alterations in the functioning of these neurobiologic systems, and the interactive effect of adverse childhood experiences, such as physical abuse, sexual abuse, or caregiver abandonment, with genetic vulnerability is increasingly believed to play a role in suicidal behavior [27; 29].

Neurobiologic and psychologic perspectives have converged to identify the most prominent risk factors for suicidal behavior: dysregulated impulse control and a propensity to intense psychologic pain that includes hopelessness, often in the context of a mood disorder. These factors are believed to largely reflect serotonergic system dysregulation [30]. Investigation into the role played by serotonergic dysfunction in suicidal behavior has identified two prominent regions: the dorsal and median raphe nuclei in the midbrain, which host the main serotonergic cell bodies, and the prefrontal cortex,

particularly the ventral prefrontal cortex, which is innervated by the serotonergic system. In vivo and postmortem examinations have revealed serotonergic hypofunction in these two brain systems in persons who have died by suicide or made serious suicide attempts. The deficient serotonergic input in the ventral prefrontal cortex stemming from this serotonin hypofunction can result in a breakdown in inhibitory function leading to a predisposition to impulsive and aggressive behavior. This vulnerability to deficient impulse control coupled with the development of psychiatric illness or other life stressors elevates the risk of acting on suicidal thoughts [31].

SUICIDE AND SPECIAL POPULATIONS

WOMEN

A woman takes her own life every 51.25 minutes in the United States [1]. Suicide is more common among women who are single, recently separated, divorced, or widowed, and the suicide rates for women peak between the ages of 45 to 64 years. Precipitating life events for women who attempt suicide often involve interpersonal losses or crises in significant social or family relationships. As noted, more women attempt suicide than men, and there is a 2 to 3:1 ratio of women versus men with a history of attempted suicide. The higher rates of attempted suicide among women are likely due to the higher rates of mood disorders such as major depression, persistent depressive disorder (dysthymia), and seasonal affective disorder. Factors that may contribute to the lower rates of suicide deaths in women relative to men include stronger social supports, feeling that their relationships are a deterrent to suicide, differences in preferred suicide method, and greater willingness to seek psychiatric and medical intervention [2; 13].

YOUTH

In 2020, suicide was the third leading cause of death for young people 10 to 24 years of age, exceeded only by unintentional injury and homicide [32]. As noted, an estimated 100 to 200 attempts are made for every suicide completion in this age group. Between 2008 and 2015, encounters for suicide ideation and/or attempt at children's hospitals nearly doubled [51]. Risk factors for suicide among the young include suicidal thoughts, psychiatric disorders (e.g., depression, impulsive aggressive behavior, bipolar disorder, panic disorder), drug and/or alcohol abuse, and previous suicide attempts. The risk is further elevated with situational stress or access to firearms [2; 13].

Children 10 to 14 Years of Age

In 2020, suicide was the second leading cause of death for children 10 to 14 years of age, with a rate of approximately 3 per 100,000 [11; 32]. The rate of suicide and percentage of total deaths varies considerably by race (***Table 1***) [122].

College Students

More than 1,000 suicides occur each year on college campuses, and 1 in 10 college students have made a suicide plan [34]. A 2011 survey of 27,774 college students from 44 campuses found that 6.6% had seriously contemplated suicide and 1.1% had attempted suicide [16]. In the 12 months before the survey, 60.5% reported feeling very sad, 45.2% reported feeling hopeless, and 30.3% reported feeling so depressed they were unable to function [16]. More than 45% reported feelings of hopelessness; however, only 6.7% of men and 13.1% of women reported a diagnosis of depression, suggesting that many students are not receiving adequate diagnosis and/or treatment [16]. A 2015 follow-up survey including 93,034 college students from 108 campuses found a much higher rate of suicidality, with 24% of the survey population reporting seriously contemplating suicide, nearly 20% reporting self-injury, and 9% reporting a suicide attempt [33]. Rates of suicidality were highest among racial/ethnic, sexual, and gender minorities.

DEATHS BY SUICIDE AMONG U.S. CHILDREN 10 TO 14 YEARS OF AGE BY RACE IN 2020			
Race	**Rate Per 100,000 Population**	**Total Suicide Deaths**	**Percentage of Total Deaths**
Alaska Native/Native American	6.3	21	35%
Asian	1.3	15	14.5%
Black/African American	3.0	93	11.5%
Multiracial	2.1	24	19.7%
White	2.8	424	18.4%
Source: [122]			*Table 1*

Students with a pre-existing mental health condition or who develop mental health conditions in college are at highest risk of suicide. In the 2015 study, 25% students were diagnosed with and/or received treatment for a mental health condition in the previous 12 months [33]. Risk factors for suicide among college students include depression, sadness, hopelessness, and stress [13].

Other Considerations in Youth Suicide

Most adolescent suicides occur at home after school hours. Adolescent nonfatal suicide attempters are typically girls who ingest pills, while those who die by suicide are typically boys who die from gunshot wounds. Intentional self-harm should be considered serious and in need of further evaluation because not all adolescent attempters admit their intent. Most adolescent suicide attempts are triggered by interpersonal conflicts and are motivated by the desire to change the behavior or attitude of others. Repeat attempters may use this behavior as a coping mechanism for stress and tend to exhibit more chronic symptomatology, worse coping histories, and higher rates of suicidal and substance abuse behaviors in their family histories [13]. The presence of multiple emotional, behavioral, and/or cognitive problems may be a more important predictor of suicide behavior risk than a specific type of problem (e.g., an addictive behavior or an emotional problem) [13; 33]. The presence of acne is associated with social and psychologic problems, and certain acne medications have been linked with an increased risk of suicidal ideation [36].

OLDER ADULTS (65 YEARS OF AGE AND OLDER)

The elderly account for roughly 19.3% of suicides but only 16% of the population [13]. Suicide rates rise with age for men, especially after 65 years of age, and the suicide rate in elderly men is 5 times that of same-aged women; more than 85% of elderly suicides are among men [13; 35]. The overall rate of elderly suicide is nearly 20 per 100,000. However, the rate is 40 per 100,000 among elderly White men and 51.8 per 100,000 among White men older than 85 years of age, a rate that is almost 2 times the rate for men of all ages. In contrast, the suicide rate of women declines after 60 years of age [13; 35].

Although undiagnosed and/or untreated depression is the primary cause of suicide in the elderly, suicide completion is rarely preceded by only one factor. Risk factors for suicide in this population include a previous suicide attempt; mental illness; physical illness or uncontrollable pain; fear of a prolonged illness; major changes in social roles, such as retirement; loneliness and social isolation (especially in older men who have recently lost a loved one); and access to lethal means, such as firearms in the home [13].

LESBIAN, GAY, BISEXUAL, AND TRANSGENDER (LGBT+) INDIVIDUALS

The true incidence of suicide among lesbian, gay, bisexual, transgender, and other gender and sexual minority (LGBT+) youth is unknown, but research indicates higher rates of suicidal behavior among LGBT+ youth (15 to 24 years of age) compared with heterosexual youth [33; 43]. Among adolescents and young adults, the lifetime prevalence of suicide attempts ranges from 20.5% to 52.4% among LGB individuals versus 4.2% to 24.8% among same-aged heterosexuals [39; 40; 42]. Among adolescents and young adults, past-year suicide attempts are more than 4.5 times higher among LGB youth than same-aged heterosexual youth [13; 37; 47].

LGBT+ youth generally have more risk factors, more severe risk factors, and fewer protective factors, such as family support and safe schools, than heterosexual youth. There are also risks unique to this population related to sexual orientation, such as disclosure to family or friends [13]. The impact of stigma and discrimination against LGBT+ individuals is enormous and is directly tied to risk factors for suicide such as isolation, alienation and rejection from family, and lack of access to culturally competent care [43]. Family connectedness, perceived caring from other adults, and feeling safe at school were reported as significant protective factors in a survey of 6th-, 9th-, and 12th-grade LGBT+ students [37; 38]. It has also been noted that LGBT+ adults have a two-fold excess risk of suicide than their heterosexual counterparts [37].

EVIDENCE-BASED PRACTICE RECOMMENDATION

The American Academy of Child and Adolescent Psychiatry asserts that family connectedness, adult caring, and school safety are highly significant protective factors against suicidal ideation and attempts in gay, lesbian, and gender-variant youth.

(https://jaacap.org/article/S0890-8567(12)00500-X/fulltext. Last accessed March 24, 2023.)

Level of Evidence: Expert Opinion/Consensus Statement

The effect of race/ethnicity and other demographic characteristics on suicidal behavior in the LGB population has also been studied little, but reports suggest high suicide attempt rates among African American gay/bisexual men, among gay/bisexual men of lower socioeconomic status, and among LGB Latinx [35].

Depression and suicide are also common among transgender individuals. One survey assessed transgender individuals' school experiences from kindergarten through grade 12. Of the individuals who were out as transgender during their school years, 77% reported at least one negative experience, including physical attacks, verbal abuse, and mistreatment by teachers and/or administrators. Among those with negative school experiences, 58% attempted suicide, compared with 37% of transgender individuals without negative school experiences. Among out transgender college students, 24% reported that they were physically, verbally, or sexually harassed. [38]. Across all age groups, 39% of transgender individuals reported experiencing serious psychologic distress in the past month, compared with 5% of the general U.S. population. Up to 82% of transgender persons have considered suicide in their lifetimes [124]. In addition, 40% of individuals reported attempting suicide, more than nine times the rate in the United States [38; 47; 124].

MILITARY SERVICE MEMBERS

Although the true incidence of suicide among military service members and veterans is difficult to estimate due to the lack of national suicide surveillance data, the U.S. Department of Veterans Affairs (VA) estimates that 18% of all deaths from suicide in the United States are in military war veterans [79]. Despite preventive measures taken by the military, the number of suicides in this population continues to increase [52; 54; 56; 79]. Although the majority of military suicides occur among young men shortly after their discharge from military service, military women 18 to 35 years of age die by suicide nearly three times more frequently than civilian women of the same age group [57; 58]. Servicewomen, in particular, experience high rates of interpersonal violence, including childhood abuse, intimate partner violence, and sexual trauma during adulthood (e.g., military sexual assault) [123].

Patient A is transferred to a regular floor and a sitter is assigned to her room. With the aid of additional clinical observation and consultations, a clearer picture emerges. In the presence of staff, Patient A appears open and optimistic and takes initiative; when her boyfriend or family are present, she becomes passive, more withdrawn, and demanding, expecting others to attend to her needs. Patient A's parents divorced when she was 11 years of age, and two years later, she came under psychiatric care, followed by counseling, because of depression and a brief period of suicide ideation. She had attended college but dropped out after two years. In recent months, her life had become more chaotic. She was unhappy in her job and subject to fits of anger and despondency. She was often at odds with her live-in boyfriend, who, on occasion, threatened to leave her and in fact did so four days prior to her admission. The decision to take an overdose of her mother's medication was judged to have been abrupt and impulsive, perhaps a "suicide gesture"—partly misdirected anger and partly designed to win back the attention of her boyfriend. Nevertheless, she almost succeeded in taking her life. The consultant's diagnosis is borderline personality disorder and likely major depression. She is transferred to the inpatient psychiatry service for further evaluation and care. Some days later, she is discharged to a mental health clinic for psychiatric and social service follow-up combined with ongoing counseling.

HEALTHCARE PROFESSIONALS

Some occupations are known to have higher rates of suicide than others. Job factors, including chronic stress, vicarious trauma, low job security, and low pay, can contribute to risk of suicide, as can easy access to lethal means (e.g., medications, firearms) among people at risk. Other factors that can influence the link between occupation and suicide include gender, socioeconomic status, economic environment, cultural factors, and stigma [115].

Healthcare workers have historically been at disproportionate risk of suicide, due to a variety of factors, including difficult working conditions, such as [115]:

- Long work hours
- Irregular shifts
- Emotionally difficult situations
- Risk for exposure to infectious diseases and other hazards on the job, including workplace violence
- Routine exposure to human suffering and death (vicarious or secondary trauma)
- Access to lethal means (e.g., medications) and knowledge about using them

In 2019, a large review of more than 60 scientific studies was conducted to address conflicting data on the nature of suicide among healthcare workers. The researchers found that physicians were at a significant and increased risk for suicide, with female physicians at particularly high risk [116]. A cross-sectional survey involving 7,378 nurses found that nurses were at increased risk for past-year suicidal ideation (5.5%) [117]. In addition, nurses with suicidal ideation were less likely to be willing to seek help (72.6%) than nurses without suicidal ideation (85%). Burnout was strongly associated with suicidal ideation, even after controlling for other personal and professional characteristics [117].

RISK AND PROTECTIVE FACTORS FOR SUICIDE

Suicide is now understood to be a multidimensional disorder stemming from a complex interaction of biologic, genetic, psychologic, sociologic, and environmental factors [59; 60]. One of the first social scientists to empirically investigate contributing factors to suicide was Émile Durkheim. Instead of focusing only on shared traits among persons who had died by suicide, Durkheim compared one group with another and originated the scientific study of suicide risk factors [5; 61]. Protective factors reduce suicide risk by enhancing resilience and counterbalancing risk factors, while risk factors increase the potential for suicidal behavior. Protective and risk factors may be biopsychosocial, environmental, or sociocultural in nature [5].

PROTECTIVE FACTORS

Several protective factors against suicide behavior have been identified [5; 62]. These include:

- Access to effective clinical care for mental, physical, and substance use disorders, and support for help-seeking
- Restricted access to highly lethal means of suicide
- Strong connections to family and community support
- Emotionally supportive connections with medical and mental health providers
- Effective problem-solving and conflict-resolution skills
- Cultural and religious beliefs that discourage suicide and support self-preservation
- Reality testing ability
- Pregnancy, children in the home, or sense of family responsibility
- Life satisfaction

RISK FACTORS

In addition to risk factors specific to special populations, there are many general risk factors common among most populations. General biopsychosocial risk factors include [2; 5; 62]:

- Psychiatric disorders
- Alcohol and other substance use disorders
- Hopelessness
- Impulsive and/or aggressive tendencies
- History of physical or sexual trauma or abuse, especially in childhood
- Medical illness involving the brain or central nervous system (CNS)
- Family history of suicide
- Suicidal ideas, plans, or attempts (current or previous)
- Lethality of suicidal plans or attempts

In addition, environmental factors can impact an individual's suicide risk. Attention to the presence of job or financial loss, relationship or social loss, easy access to lethal means, and local clusters of suicide (due to contagious influence) is necessary.

Lack of social support and sense of isolation are risk factors for suicide, along with cultural factors. Some cultural practices and/or beliefs can predispose an individual to suicide, such as stigma associated with help-seeking behavior; barriers to accessing mental health care and substance abuse treatment; certain cultural and religious beliefs (e.g., suicide as an honorable act); and media exposure to and the influence of others who have died by suicide [2; 5; 62].

EVIDENCE-BASED PRACTICE RECOMMENDATION

According to the American Psychiatric Association, the assessment and treatment of major depressive disorder should consider the impact of language barriers, as well as cultural variables that may influence symptom presentation, treatment preferences, and the degree to which psychiatric illness is stigmatized.

(https://psychiatryonline.org/pb/assets/raw/sitewide/practice_guidelines/guidelines/mdd.pdf. Last accessed March 24, 2023.)

Strength of Recommendation: I (Recommended with substantial clinical confidence)

Psychiatric Disorders

At least 90% of people who die by suicide have diagnosable psychiatric illness [2; 3]. The psychiatric conditions with the greatest association with suicidal behavior are depression, bipolar disorder, substance abuse, schizophrenia, and personality disorders.

Depression

Major depression is the psychiatric diagnosis most commonly associated with suicide. The risk of suicide in persons with major depression is roughly 20 times that of the general population [13]. About 30% of all patients with major depression attempt suicide, half of whom ultimately take their own lives [63]. More than 60% of persons who die by suicide are clinically depressed at the time of their deaths, although this climbs to 75% when patients with comorbid depression and alcohol use disorder are added. Seven of every 100 men and 1 of every 100 women diagnosed with depression will die by suicide [13].

In one survey of adults who experienced depression in the previous year, 56.3% thought it would be better if they were dead during their worst or most recent episode, 40.3% contemplated suicide, 14.5% made a suicide plan, and 10.4% attempted suicide [65]. Among persons with depression, those with a history of multiple episodes of depression and those with an alcohol or other substance use disorder are at greatest risk [2]. Persons with depression who exhibit the following symptoms are at heightened risk for suicide [2; 13]:

- Extreme hopelessness or desperation
- A lack of interest in previously pleasurable activities
- Intense anxiety and/or panic attacks
- Insomnia
- Talk of suicide or history of attempts
- Irritability, agitation, or enraged behavior
- Isolation

Feelings of hopelessness (e.g., belief that there is no solution) are more predictive of suicide risk than a diagnosis of depression per se. It is also important to remember that patients who desire an early death during a serious or terminal illness are usually experiencing a treatable depressive illness [2].

Bipolar Disorder

Between 5 and 10 million Americans currently have bipolar disorder. Of these, as many as 1 in 5 will die by suicide [67]. Like depression, bipolar disorder is treatable, and effective treatment decreases the risk of suicide.

Alcohol and Substance Abuse

Alcohol and drug abuse are second only to depression and other mood disorders as conditions most associated with suicide. Substance use disorders and disordered mood are often comorbid. The suicide risk among patients with alcohol use disorder is 50% to 70% higher than the general population.

Alcohol abuse is a factor in roughly 30% of suicides, and about 7% of persons with alcohol dependence die by suicide [2; 13; 68].

In 2011, an estimated 228,366 emergency department admissions were made for alcohol- or drug-related suicide attempts. Almost all (94.7%) involved either a prescription drug or an over-the-counter medication [69]. Approximately 64.4% involved multiple drugs, and 29% involved alcohol [69].

As mentioned, comorbid psychiatric and substance use disorders substantially increase the risk of suicide behavior. Combined data from 2004 and 2005 indicated that 16.4 million adults 18 years of age and older experienced a major depressive episode in the previous year. Of these persons, more than 10% attempted suicide. But when alcohol abuse or illicit drug use occurred with major depression, the proportion of suicide attempts rose to nearly 14% for alcohol abuse and close to 20% for illicit drug use [65]. A 2017 study conducted among more than 10,000 individuals in a prison population showed that those with a documented substance abuse disorder or other psychiatric disorder had a higher rate of attempted suicide (2.0 and 9.2 greater odds, respectively) than those without a diagnosis [41].

There are several possible explanations for the association between alcohol/drug use and suicide. Alcoholism can cause loss of friends, family, or job, leading to social isolation; however, the reverse is equally plausible. Alcohol abuse and suicide may also both represent attempts to deal with depression and misery. Alcohol increases the sedating effects of some drugs that are frequently used in suicide attempts and may increase impulsive actions, making suicide attempts and completions more common [18; 70]. To claim that alcoholism "causes" suicide is simplistic; while the association of alcohol and suicide is clear, a causal relationship is not. Both alcoholism and suicide may be responses to the same pain [18].

Schizophrenia

Suicide is the largest cause of premature death among individuals with schizophrenia, and young, unemployed men are at highest risk. Other risk factors include recurrent relapses; fear of deterioration, especially among persons with high intellectual ability; positive symptoms of suspiciousness and delusions; and depressive symptoms [59; 60]. The suicide risk is highest during early stages of the illness, early relapse, and early recovery. The risk decreases with prolonging illness duration [59; 60].

Personality Disorders

An estimated 20% to 50% of young people who die by suicide have a diagnosable personality disorder, with borderline personality and antisocial personality disorders being most frequently associated with suicide. Histrionic and narcissistic personality disorders and certain psychologic traits, such as impulsivity and aggression, are also associated with suicide [59; 60].

Medical Disorders

Illnesses affecting the brain and CNS have a greater effect on suicide risk compared with other medical conditions. These conditions include epilepsy, AIDS, Huntington disease, traumatic head injury, and cerebrovascular accidents. In contrast, cancer and other potentially fatal conditions carry a more modest suicide risk [71].

Sociodemographic Factors

Suicide is an individual act that also occurs in the context of a broader culture, and specific sociodemographic factors are associated with suicide risk, including marital status, occupation, and previous suicide attempt(s) [59; 60].

Marital Status

Divorced, widowed, and single people have a higher suicide risk. Marriage appears to be protective for men, but not so for women. Marital separation also increases the risk of suicide [59; 60].

Occupation

Certain occupational groups, such as veterinary surgeons, pharmacists, dentists, farmers, and medical practitioners, have higher rates of suicide. Although obvious explanations are lacking, access to lethal means, work pressure, social isolation, and financial difficulties may account for the heightened risk [59; 60].

Unemployment and suicide are also correlated, although the nature of the association is complex. Poverty, social deprivation, domestic difficulties, and hopelessness likely mediate the effect of unemployment, but persons with psychiatric illness and personality disorders are also more likely to be unemployed. Recent job loss is a greater risk factor than long-term unemployment.

Previous Suicide Attempt

Approximately 20% of people who kill themselves had made a previous attempt, making previous serious suicide attempts a very high risk factor for future attempts [2].

Incarceration

Suicide is the single most common cause of death in correctional settings, and collectively, inmates have higher suicide rates than their community counterparts. One study found that the rate of suicide among male prisoners is 5 to 6 times higher than in the general population and as much as 20 times higher among women prisoners. Also, for every suicide death there are many more suicide attempts [44; 72].

Inmates at highest risk of suicide include young men, the mentally ill, the socially disenfranchised and socially isolated, substance abusers, previous suicide attempters, and juveniles placed in adult correctional facilities. Factors that increase the likelihood of suicidal behavior include the psychologic impact of arrest and incarceration; the stresses of prison life, including physical and sexual predation and assault from other inmates; and the absence of formal policies regarding managing suicidal patients, staff training, or access to mental health care [44; 72].

Vicarious Trauma and Burnout

Compassion fatigue is comprised of two components: burnout and vicarious traumatic stress [118]. The first component consists of characteristic negative feelings such as frustration, anger, exhaustion, and depression. The second component, vicarious traumatic stress, may result when the professional is negatively affected through vicarious or indirect exposure to trauma material through their work. Compassion fatigue is associated with a variety of negative mental health repercussions, including increased risk for depression and suicidal ideation.

Being aware of the factors that increase a professional's risk of burnout is very valuable in contributing to a prevention strategy. Contributing factors may be individual/personal, systemic, or frequently a combination of both. It is important to know what does not work (or what makes a toxic environment) first in order to prevent exposure and the associated fallout from such exposure.

Creative Personalities

Anecdotes of famous painters, writers, and musicians who were depressed and died by suicide have occurred for centuries, but only recently has science been able to identify the underlying basis of vulnerability to depression and suicide among creative people. Treatment of major depressive or bipolar illness in artists presents unique problems, one of which is the concern that creativity and the disorder are so intertwined that treatment might suppress the artist's unique talent [73; 74; 76].

Holiday Suicide Myth

The idea that suicide occurs more frequently during the holiday season is a myth perpetuated in part by the media and has been debunked [2]. The National Center for Health Statistics of the Centers for Disease Control and Prevention (CDC) reports that the suicide rate is actually lowest in December, with peak rates in the spring and the fall. This pattern has remained constant for many years [77]. The holiday suicide myth has been considered important to counter because it provides misinformation about suicide that might ultimately hamper prevention efforts [78].

ACTIVE-DUTY MILITARY AND VETERANS

Protective Factors

Several general protective factors may be more prevalent among military service members and veterans, including strong interpersonal bonds, responsibilities/duties to others, steady employment, sense of belonging/identity, and access to health care [79]. Historically, the selection bias for healthy recruits, employment, purposefulness, access to health care and a strong sense of belonging were believed to be protective against suicide, but increasing rates have challenged this assumption [79]. In one study, having a service-connected disability was associated with a lower risk of suicide in veterans, likely due to greater access to VA health care and regular compensation payments [52]. It is interesting to note that many of these protective factors do not apply to discharged or retired veterans. Other potentially protective factors include older age, African American/Black race, and admission to a nursing home [79].

Risk Factors

Veterans and military members often possess many risk factors for attempting or completing suicide. This includes combat exposure (particularly deployment to a combat theater and/or adverse deployment experiences), combat wounds, post-traumatic stress disorder (PTSD) and other mental health problems, comorbid major depression, traumatic brain injury, poor social support, feelings of not belonging or of being a burden to others or society, acquired ability to inflict lethal self-injury, and access to lethal means [52; 58; 81; 82; 83]. There is conflicting evidence of the role of PTSD in suicide risk, with some studies finding PTSD diagnosis to be protective while others indicated it increased risk. Other possible risk factors include [79; 123]:

- Disciplinary actions
- Reduction in rank
- Career threatening change in fitness for duty
- Perceived sense of injustice or betrayal (unit/command)
- Command/leadership stress, isolation from unit
- Transferring duty station
- Administrative separation from service/unit
- Military sexual trauma

Case Scenario: Patient B

Patient B is 56 years of age, married with one grown daughter. She consults a primary care physician because of a gradual decline in health over the past 12 to 18 months. She has come at the insistence of her daughter, who accompanies her. Her given purpose is vague: a "check-up" and perhaps laboratory work. Her daughter tells the nurse, "My mother's not well. She's home alone, doesn't get enough sleep, and won't eat right. She complains about her stomach and thinks she has food allergies; she has tried special diets, supplements, and herbal remedies and claims she's getting better, but she's not." The patient is petite, well-groomed, and smiles readily. She tells the physician, "I'll be okay, but I do want to be sure I'm not anemic or have a thyroid problem." She gives a history of chronic, recurrent abdominal discomfort, bloating, periodic constipation, and intolerance to many foods. As a young woman, she was told she has irritable bowel syndrome and was given trials of medication, but she reports being unable to take these medications and being "very sensitive to any prescription medication." She thinks she has lost maybe 5 pounds in the past year. Her examination is unrevealing, except she is thin and there is a hint of generalized muscle atrophy. Over the course of the interview, she appears tired and to have a slightly blunt affect. The following laboratory tests are ordered: complete blood count, chemistry profile, vitamin D and B12 levels, and thyroid function tests. She is given an appointment to return in five days to discuss the results and plan a course of treatment.

IMMINENT SUICIDE

While risk factors for suicide represent broader, durable, and ongoing factors, a suicide crisis is a time-limited event that signals an immediate danger of suicide. A suicide crisis can be triggered by a particularly distressing event, such as loss of a loved one or career failure, and involve an intense emotional state in addition to depression, such as desperation (anguish plus urgent need for relief), rage, psychic pain or inner tension, anxiety, guilt, hopelessness, or acute sense of abandonment. Changes in behavior or speech can suggest that suicide is imminent; speech may be indirect, with statements such as, "My family would be better off without me." Persons contemplating suicide may also talk as if they are saying goodbye or going away, exhibit actions ranging from buying a gun to suddenly putting one's affairs in order, or deterioration in social or occupational functioning, increasing use of alcohol, other self-destructive behavior, loss of control, or rage explosions [2].

WARNING SIGNS

Most people who are suicidal exhibit warning signs, whether or not they are in an acute suicide crisis. These warning signs should be taken seriously and include observable signs of serious depression, such as unrelenting low mood, pessimism, hopelessness, desperation, anxiety, psychic pain, and inner tension; withdrawal from friends and/or social activities; sleep problems; and loss of interest in personal appearance, hobbies, work, and/or school [2; 13]. Other signs include:

- Increased alcohol and/or other drug use
- Recent impulsiveness and taking unnecessary risks
- Talk about suicide, death, and/or no reason to live
- Making a plan (e.g., giving away prized possessions, sudden or impulsive purchase of a firearm, or obtaining other means of killing oneself, such as poisons or medications)
- Unexpected rage, anger, or other drastic behavior change
- Recent humiliation, failure, or severe loss (especially a relationship)
- Unwillingness to "connect" with potential helpers.

The following expressions of thoughts, feelings, or behaviors may also be warning signs of suicidal behavior [13]:

- Can't stop the pain
- Can't think clearly
- Can't make decisions
- Can't see any way out
- Can't sleep, eat, or work
- Can't get out of the depression
- Can't make the sadness go away
- Can't see the possibility of change
- Can't see themselves as worthwhile
- Can't get someone's attention
- Can't seem to get control

A mnemonic device, IS PATH WARM, has been developed for use in identifying suicide risk [84]. This mnemonic device was derived from the consensus of internationally renowned clinical researchers held under the auspices of the American Association of Suicidology. It consists of the following [84]:

- **I**deation
- **S**ubstance abuse
- **P**urposelessness
- **A**nxiety
- **T**rapped
- **H**opelessness
- **W**ithdrawal
- **A**nger
- **R**ecklessness
- **M**ood change

Intentional Self-Harm

Intentional self-harm is behavior related to, but distinct from, suicide behavior and includes suicide attempts and nonsuicidal self-injurious behaviors, such as burning, cutting, and hair pulling, that does not have fatal intent [85]. Self-injurious behavior falls into three categories [85]:

- Major self-injury: Infrequent, usually associated with psychosis or intoxication
- Stereotypic self-injury: Repetitive and reflects a biologic drive of self-harm
- Superficial-to-moderate self-injury: The most common form and is used by self-mutilators to relieve tension, release anger, regain self-control, escape from misery, or terminate a state of depersonalization

Patients with a history of intentional and repetitive self-harm are likely to be highly impulsive with a diagnosis of borderline personality disorder, and distress over their inability to curtail the behavior may heighten suicide risk [85; 86; 87]. It is essential to recognize that previous nonlethal self-harm does not preclude the development of suicidal ideation or plans with serious intent and lethality [62]. It is important to assess the intent of self-harm behaviors during the risk assessment.

Five days after the initial visit, in anticipation of follow-up later that day, the physician reviews Patient B's laboratory results, all of which are normal. That afternoon, the patient is a "no-show," and no further action is taken. Some time the following week, the office nurse asks her colleague about Patient B, stating "Something about her really bothered me." She recommends that the physician call the patient to follow-up, which he does. The daughter answers with a mix of concern and relief. She states, "I'm really worried about my mother. She's not making sense at times, seems really down, and says we'd all be better off if she just went to sleep and didn't wake up…I didn't mention it last week, but she and my dad are not doing well. He's busy, on the road a lot, and I get the feeling she thinks he's unfaithful to her." At this juncture what do you do?

- *Ask the daughter to bring her mother to the office today, along with all supplements and herbal medicines she may have been taking.*
- *Consider the key issue(s) and give some thought to your clinical approach (e.g., sequencing the encounter and useful tools that will help to identify major depression and assess suicide risk).*
- *Anticipate logistical barriers in relation to time of day and the possible need for immediate psychiatric consultation and/or hospitalization.*

SUICIDE ATTEMPTS

LETHAL MEANS

In the United States in 2019, use of a firearm was the cause of death in 50.4% of suicides and is the number one means among all individuals 15 years of age and older. Gun use accounts for 47% of all suicide deaths in individuals 15 to 24 years of age, reaching a low of 42.1% in those 35 to 44 years of age, and increasing to 51.8% in those 55 to 64 years of age. Firearm use for suicide completion is extremely high among the elderly, with individuals 75 to 84 and 85 years of age and older having the highest rates, at 75.4% and 76.6%, respectively. Gun use is also the most common suicide method among youth, accounting for 31.5% of all suicide deaths [1; 78].

Although most gun owners report keeping a firearm in their home for the purpose of protection or self-defense, 83% of gun-related deaths in these homes are the result of a suicide, usually by someone other than the gun owner. Guns are involved in more deaths by suicide than by homicide, and overall, death by firearm is the most common suicide method [12].

The suicide rates among youths 15 to 24 years of age by firearm increased from 5.3 per 100,000 in 2001 to 6.6 per 100,000 in 2019, while the suicide rates by suffocation (e.g., hanging) increased from 3.1 per 100,000 in 2001 to 5.0 per 100,000 in 2019. These trends among teens and young adults have been mirrored by children 5 to 14 years of age, in whom deaths by firearms and suffocation have been increasing since at least 2001 [1; 78].

The most common method of suicide death among women in all age groups from 2001 to 2019 was poisoning (35.5%); however, in 2018, firearms surpassed poisoning for the first time since 2000 among female victims [15; 78]. Although intentional overdose is the most common method for suicide attempts in women, it is much less likely to result in death. Many over-the-counter medications, prescription drugs, dietary supplements/herbal medications, or illicit drugs may be used to attempt suicide. Ibuprofen is a popular over-the-counter analgesic and a common drug of choice in intentional overdoses. There were more than 12,490 intentional overdose ingestions of ibuprofen reported by U.S. poison control centers in 2018, resulting in one death [89]. Opioid analgesics result in many deaths due to intentional overdose. In one study, researchers found that the percentage of individuals who died by suicide and had opioids in their system more than doubled, from 8.8% to 17.7%, between 2006 and 2017 [45].

Ingestion of other toxic substances (including bleach, poisons, and agricultural chemicals), jumps from tall heights, and exsanguination are also relatively common methods of suicide attempt and completion. When assessing risk, it is important to consider the patient's level of impulsivity and the potential lethality of available means (particularly firearms).

MOTIVES BEHIND SUICIDAL BEHAVIOR

Although thousands of books have explored the question of why people kill themselves, in most cases the answer can be summed up in three words: to stop pain. The pain may be physical, as in chronic or terminal illness, but is usually emotional. However, Stone has delineated a more elaborate description of the motivations for suicide, including [18]:

- Altruistic/heroic suicide: Occurs when someone (more or less) voluntarily dies for the benefit of the group. Examples include the Japanese kamikaze pilots in WWII and the Buddhist monks who burned themselves to death protesting the Vietnam war.
- Philosophical suicide: Various philosophical schools, such as the stoics and existentialists, have advocated suicide under some circumstances.

- Religious suicide: Often as martyrdom, this type of suicide has a long history that spans from early Christianity to the Branch Davidians in Waco, Texas, and some members at Jonestown, Guyana.
- Escape: This type of suicide represents an escape from an unbearable situation, such as persecution, a terminal illness, or chronic misery.
- Excess alcohol and other drug use
- Romantic suicide: This includes suicide pacts (dual suicide), which constitute about 1% of suicides in Western Europe. Participants are usually older than 51 years of age, except in Japan, where 75% of dual suicides are "lovers' pacts."
- "Anniversary" suicide: Suicide involving the same method or date as a deceased loved one.
- "Contagion" suicide: Occurs when one suicide appears to trigger others (e.g., "cluster" and "copycat" suicides), most often among adolescents.
- Manipulation: Usually involving the theme "If you don't do what I want, I'll kill myself." The word "manipulative" does not imply a lack of seriousness, as fatal suicide attempts can be made by people hoping to influence or manipulate the feelings of others even though they will not be around to witness the outcome. However, the intent of manipulative attempts is to produce guilt in the other person, and a nonfatal result is usually intended.
- Call for help: An expression of unbearable pain and misery that is more frequent in the young.
- "Magical thinking" and vengeance: Associated with a feeling of power and complete control. This motivation to attempt suicide is driven by a "you'll be really sorry when I'm dead" fantasy. A fatal outcome is intended, and this is sometimes called "aggressive suicide."
- Cultural approval: In some cultures, such as Japanese culture, society has traditionally accepted or encouraged suicide when matters of honor were concerned.
- Lack of an outside source to blame for one's misery: Evidence exists that rage and homicide is the extreme response when an external cause of one's unhappiness can be identified, and depression and suicide is the extreme response in the absence of a perceived or identifiable external source.

SCREENING AND ASSESSMENT OF SUICIDE RISK

Many persons who die by suicide have contact with healthcare providers in the time preceding their deaths. Roughly 45% of all persons who die by suicide had contact with a mental health professional in the year before their deaths, and 75% of elderly persons who die by suicide had visited their physician in the month before their death [2; 5]. Although close to 90% of these cases had diagnosable psychiatric illness at the time of death, only 30% reported suicidal ideation or intent to a health professional before their suicide attempt [2]. These figures suggest a widespread inadequacy in identifying and assessing at-risk persons by healthcare professionals, and numerous studies have concluded that health professionals often lack sufficient training in the proper assessment, treatment, management, or referral of suicidal patients [2; 5]. Many health professionals also lack training in identifying grieving family members of loved ones who have died by suicide [5]. Primary care providers occupy a niche in the healthcare system and have perhaps the greatest opportunity to impact suicidal persons through educational means [5; 46; 59; 60; 91].

SCREENING IN THE PRIMARY CARE SETTING: EXPERT CONSENSUS

Many organizations have issued consensus statements regarding screening for suicide risk in the primary care setting. The U.S. Preventive Services Task Force (USPSTF) states that although suicide screening is of high national importance, it is very difficult to predict who will die from suicide and has found insufficient evidence for routine screening by primary care clinicians to detect suicide risk and limited evidence of the accuracy of screening tools to identify suicide risk in the primary care setting [92; 96]. The USPSTF recommends physicians screen all adolescents 12 to 18 years of age for major depressive disorder. The Canadian Task Force on Preventive Health Care found insufficient evidence for routine screening by primary care clinicians to detect depression and suicide risk [93].

However, the American Academy of Pediatrics (AAP) recommends universal screening for suicide risk throughout adolescence (12 years of age and older) and clinically indicated screening for children 8 to 11 years of age [94]. Screening should be performed in a developmentally and medically appropriate manner. The AAP notes that screening for depression is not the same as screening for suicide risk and that screening for depression alone misses 36% of patients at-risk for dying by suicide [94]. Screening children younger than 8 years of age is not recommended, but warning signs or parental reports of self-harm or suicidal behaviors should be assessed further; these may include [94]:

- Talking about wanting to die or wanting to kill oneself
- Grabbing their throat in a "choking" motion, or placing their hand in the shape of a gun pointed toward their head
- Acting with impulsive aggression
- Giving away their treasured toys or possessions

The American Academy of Child and Adolescent Psychiatry recommends clinician awareness of patients at high risk for suicide (i.e., older male adolescents and all adolescents with current psychiatric illness or disordered mental state, particularly major depressive disorder), especially when complicated by comorbid substance abuse, irritability, agitation, psychosis, or previous suicide attempt [95; 125]. Suicide risk should be assessed at each visit in patients with long-term SSRI use.

ASSESSMENT OF SUICIDE RISK

Initial Inquiry

Healthcare providers may encounter a patient they suspect is suicidal. This suspicion may be prompted by the presence of one or more of the risk factors for suicide described previously, patient history, a statement expressed by the patient, or by their intuition. This scenario may present a dilemma of how to proceed. Although some healthcare professionals are uncomfortable with suicidal patients, it is essential not to ignore or deny the suspicion of suicide risk. The first and most immediate step is to allocate adequate time to the patient, even though many others may be scheduled. Showing a willingness to help begins the process of establishing a positive rapport with the patient. Closed-ended and direct questions at the beginning of the interview are not very helpful; instead, use open-ended questions such as, "You look very upset; tell me more about it." Listening with empathy is in itself a major step in reducing the level of suicidal despair and overall distress [59; 60]. It is helpful to lead into the topic gradually with a sequence of useful questions, such as [59; 60]:

- Do you feel unhappy and helpless?
- Do you feel desperate?
- Do you feel unable to face each day?
- Do you feel life is a burden?
- Do you feel life is not worth living?
- Have you had thoughts of ending your own life?

It is important to ask these questions after rapport has been established, when the patient feels comfortable expressing his or her feelings, and when the patient is in the process of expressing negative feelings [59; 60].

After the patient confirms an initial suspicion of suicidal ideation, the next step is to assess the frequency and severity of the ideation and the possibility of suicide. It is important to ask the patient about whether a method has been developed and planned, the accessibility to the means to attempt suicide, and the magnitude of lethal intent in a manner that is not demanding or coercive, but is asked in a warm and caring way that demonstrates empathy with the patient. Such general questions might include [59; 60]:

- Have you made any plans for ending your life?
- How are you planning to do it?
- Do you have in your possession [pills/guns/other means]?
- Have you considered when to do it?

In general, the more an individual has thought about suicide, made specific plans, and intends to act on those plans, the greater the suicide risk. Thus, as part of the assessment of suicide risk it is essential to inquire specifically about the patient's suicidal thoughts, plans, behaviors, and intent. Such questions may often flow naturally from discussion of the patient's current situation, but in other cases they should be explicitly asked [62].

Other questions may help further elucidate suicidal thoughts, plans, or behaviors, including [62]:

Patient's Feelings about Living

- Have you ever felt that life was not worth living?
- Did you ever wish you could go to sleep and just not wake up?

Thoughts of Death, Self-Harm, or Suicide

- Is death something you've thought about recently?
- Have things ever reached the point that you've thought of harming yourself?

Follow-Up Questions

- When did you first notice such thoughts?
- What led up to the thoughts (e.g., interpersonal and psychosocial precipitants, including real or imagined losses; specific symptoms such as mood changes, anhedonia, hopelessness, anxiety, agitation, psychosis)?
- How often have those thoughts occurred (including frequency, obsessional quality, controllability)?
- How close have you come to acting on those thoughts?
- How likely do you think it is that you will act on them in the future?
- Have you ever started to harm (or kill) yourself but stopped before doing something (e.g., holding knife or gun to your body but stopping before acting, going to edge of bridge but not jumping)?
- What do you envision happening if you actually killed yourself (e.g., escape, reunion with significant other, rebirth, reactions of others)?
- Have you made a specific plan to harm or kill yourself? If so, what does the plan include?
- Do you have guns or other weapons available to you?
- Have you made any particular preparations (e.g., purchasing specific items, writing a note or a will, making financial arrangements, taking steps to avoid discovery, rehearsing the plan)?
- Have you spoken to anyone about your plans?
- How does the future look to you?

- What things would lead you to feel more (or less) hopeful about the future (e.g., treatment, reconciliation of relationship, resolution of stressors)?
- What things would make it more (or less) likely that you would try to kill yourself?
- What things in your life would lead you to want to escape from life or be dead?
- What things in your life make you want to go on living?
- If you began to have thoughts of harming or killing yourself again, what would you do?

For persons with previous suicidal or self-harm behavior, the following questions address the antecedents, methods, and aftermath [62]:

- Can you describe what happened (e.g., circumstances, precipitants, view of future, use of alcohol or other substances, method, intent, seriousness of injury)?
- What thoughts were you having beforehand that led up to the attempt?
- What did you think would happen (e.g., going to sleep versus injury versus dying, getting a reaction out of a particular person)?
- Were other people present at the time?
- Did you seek help afterward yourself, or did someone get help for you?
- Had you planned to be discovered, or were you found accidentally?
- How did you feel afterward (e.g., relief versus regret at being alive)?
- Did you receive treatment afterward (e.g., medical versus psychiatric, emergency department, inpatient versus outpatient)?
- Has your view of things changed, or is anything different for you since the attempt?
- Are there other times in the past when you've tried to harm (or kill) yourself?

Repeated Suicidal Thoughts or Attempts

- About how often have you tried to harm (or kill) yourself?
- When was the most recent time?
- Can you describe your thoughts at the time that you were thinking most seriously about suicide?
- When was your most serious attempt at harming or killing yourself?
- What led up to it, and what happened afterward?

Persons with Psychosis, Hallucinations, and Delusions

- Can you describe the voices (e.g., single versus multiple, male versus female, internal versus external, recognizable versus unrecognizable)?
- What do the voices say (e.g., positive remarks, negative remarks, threats)? If the remarks are commands, determine if they are for harmless versus harmful acts; ask for examples.
- How do you cope with (or respond to) the voices?
- Have you ever done what the voices ask you to do? What led you to obey the voices? If you tried to resist them, what made it difficult?
- Have there been times when the voices told you to hurt or kill yourself? How often? What happened?
- Are you worried about having a serious illness or that your body is rotting?
- Are you concerned about your financial situation even when others tell you there is nothing to worry about?
- Are there things that you have been feeling guilty about or blaming yourself for?

Potential to Harm Others

- Are there others who you think may be responsible for what you are experiencing (e.g., persecutory ideas, passivity experiences)? Are you having any thoughts of harming them?
- Are there other people you would want to die with you?
- Are there others who you think would be unable to go on without you?

When assessing for suicide, it is important to be cautious of misleading information or false improvement [59; 60]. When an agitated patient suddenly appears calm, he or she may have made the decision to attempt suicide and feels calm after making the decision. Denial is another important consideration. Patients may deny harboring very serious intentions of killing themselves.

All patients at acute risk for suicide who are under the influence (intoxicated by drugs or alcohol) should be evaluated in an urgent care setting and be kept under observation until they are sober. If the patient is intoxicated when the initial assessment is completed, it should be repeated after he or she is sober [79].

Lethal Means

All persons at risk for suicide should be assessed for availability or intent to acquire lethal means, including firearms and ammunition, drugs, poisons, and other means in the patient's home [79].

Clinicians should always inquire about access to firearms and ammunition and how they are stored. For military members and veterans, this includes assessing privately owned firearms. In addition, medication reconciliation should be performed for all patients. For any current and/or proposed medications, consider the risk/benefit of any medications that could be used as a lethal agent to facilitate suicide. Consider prescribing limited supplies for those at elevated risk for suicide or with histories of overdose or the availability of a caregiver to oversee the administration of the medications. In addition to medications, the availability of chemical poisons, especially agricultural and household chemicals, should be assessed, as many of these are highly toxic [79].

DETERMINING LEVEL OF RISK AND APPROPRIATE ACTIONS

The formulation of the level of risk for suicide guides the most appropriate care environment in which to address the risk and provide safety and care needs. The first priority is safety. Patients assessed as having a clear intention of taking their lives will require higher levels of safety protection than those with less inclination toward dying. Patients who are at high risk for suicide may require inpatient care to provide for increased level of supervision and higher intensity of care. Those at intermediate and low acute risk may be referred to an outpatient care setting and, with appropriate supports and safety plans, may be able to be followed-up in the community (***Table 2***) [79].

Risk Assessment Tools

Rating scales can be helpful in the assessment process. However, a clinical assessment by a trained professional is required to assess suicide risk. This professional should have the skills to engage patients in crisis and to elicit candid disclosures of suicide risk in a non-threatening environment. The assessment should comprise a physical and psychiatric examination, including a comprehensive history (with information from patient, parents, and significant others whenever possible) to obtain information about acute psychosocial stressors, psychiatric diagnoses, current mental status, and circumstances of prior suicide attempts. Assessment tools may be used to evaluate risk factors, in addition to the clinical interview, although there is insufficient evidence to recommend one tool over another.

DETERMINE LEVEL OF RISK FOR SUICIDE AND APPROPRIATE ACTION			
Risk of Suicide Attempt	**Indicators of Suicide Risk**	**Contributing Factors[a]**	**Initial Action Based on Level of Risk**
High acute risk	Persistent suicidal ideation or thoughts Strong intention to act or plan Not able to control impulse Recent suicide attempt or preparatory behavior[b]	Acute state of mental disorder or acute psychiatric symptoms Acute precipitating event(s) Inadequate protective factors	Maintain direct observational control of the patient Limit access to lethal means Immediate transfer with escort to urgent/emergency care setting for hospitalization
Intermediate acute risk	Current suicidal ideation or thoughts No intention to act Able to control the impulse No recent attempt or preparatory behavior or rehearsal of act	Existence of warning signs or risk factors[b] and limited protective factors	Refer to behavioral health provider for complete evaluation and interventions Contact behavioral health provider to determine acuity of referral Limit access to lethal means
Low acute risk	Recent suicidal ideation or thoughts No intention to act or plan Able to control the impulse No planning or rehearsing a suicide act No previous attempt	Existence of protective factors and limited risk factors	Consider consultation with behavioral health to determine need for referral and treatment Treat presenting problems Address safety issues Document care and rationale for action

[a]Modifiers that increase the level of risk for suicide of any defined level include acute state of substance use, access to means (e.g., firearms, medications), and existence of multiple risk factors or warning signs or lack of protective factors.
[b]Evidence of suicidal behavior warning signs in the context of denial of ideation should call for concern (e.g., contemplation of plan with denial of thoughts or ideation).

Source: U.S. Department of Veterans Affairs. VA/DoD Clinical Practice Guideline for Assessment and Management of Patients at Risk for Suicide. Available at http://www.healthquality.va.gov/guidelines/MH/srb. *Table 2*

High Acute Risk

Considering all the information gathered in the assessment, the clinician will formulate the level of risk in one of the following categories: high acute risk, intermediate acute risk, low acute risk, not at elevated risk [79].

High acute risk patients include those with warning signs, serious thoughts of suicide, a plan and/or intent to engage in lethal self-directed violence, a recent suicide attempt, and/or those with prominent agitation, impulsivity, and/or psychosis. In such cases, clinicians should ensure constant observation and monitoring before arranging for immediate transfer for psychiatric evaluation or hospitalization [79]. Patients at high acute risk should be immediately referred for a specialty evaluation with particular concern for ensuring the patient's safety and consideration for hospitalization.

Intermediate Acute Risk

Intermediate acute risk patients include those with suicidal ideation and a plan but with no intent or preparatory behavior. Combination of warning signs and risk factors to include history of self-directed violence (suicide attempt) increases a person's risk for suicide. Patients at intermediate risk should be evaluated by a behavioral health provider. The decision whether to urgently refer a patient to a mental health professional or emergency department depends on that patient's presentation. The patient who is referred may be hospitalized if further evaluation reveals that the level of illness or other clinical findings warrant it. The patient may be managed in outpatient care if patient and provider collectively determine that the individual is capable of maintaining safety by utilizing non-injurious coping methods and utilize a safety plan [79].

Low Acute Risk

Low acute risk patients include those with recent suicidal ideation who have no specific plans or intent to engage in lethal self-directed violence and have no history of active suicidal behavior. Consider consultation with behavioral health to determine need for referral to treatment addressing symptoms and safety issues. These patients should be followed up for reassessment. Patients at low acute risk should be considered for consultation with or referral to a behavioral health practitioner [79].

Not at Elevated Acute Risk or Risk Unknown

Persons with a mental disorder who are managed appropriately according to evidence-based guidelines and do not report suicidal thoughts are outside the scope of the classification of risk for suicide. Patients who at some point in the past have reported thoughts about death or suicide but currently do not have any of these symptoms are not considered to be at acute risk of suicide. There is no indication to consult with behavioral health specialty in these cases, and the patients should be followed in routine care, continue to receive treatment for their disorder, and be re-evaluated periodically for thoughts and ideation. Patients at no elevated acute risk should be followed in routine care with treatment of their underlying condition and evaluated periodically for ideation or suicidal thoughts. Patients for whom the risk remains undetermined (i.e., no collaboration of the patient or provider concerns about the patients despite denial of risk) should be evaluated by a behavioral health practitioner [79].

DOCUMENTATION

In order to ensure optimal patient care and to prevent miscommunication and litigation, the results of any suicide risk assessment should be fully documented. At a minimum, documentation should include the following points, noted by the mnemonic SUICIDE [17]:

- **S**uicide assessment: The results of suicide screening or assessment, including any relevant history (personal or family), access to lethal means, suicide plans, recent history of stressful events, and protective factors, should be noted.
- **U**npredictable: Family members and/or other supportive third parties should be alerted that suicide can be unpreventable, even given the best efforts and plans.
- **I**nterventions: All interventions planned and undertaken should be included in the patient's record.
- **C**lear and comprehensive: It is important to ensure that all documentation is clear and comprehensive, with specific notes regarding the patient's own words.
- **I**ntent: The intentions of any suicide attempt(s) or intentional self-harm should be noted.

- **D**iscussions with family members and/or other supportive third parties: Supportive third parties can be invaluable to the treatment process, and their inclusion in risk assessments and treatment planning should be documented.
- **E**ducate, engage, empathize: Documentation should include notes regarding the patient's involvement in treatment planning and the creation of a safety plan.

Patient B arrives at the office with her daughter. She appears withdrawn and preoccupied, having a look of resignation and despair. Seated together, you begin the interview in a positive, affirming manner: "I'm pleased that all your laboratory work, including your thyroid tests, is normal. You know you told me you would be okay, and I believe if we work together, so as to know and understand better what you are going through, we can relieve many of your symptoms and get you to a much better place." She is receptive, and after further discussions, the following picture emerges: Patient B has been unhappy for "a very long time." There is little to add to the somatic complaints related on the first visit. She sleeps poorly and is tired all the time; she has lost interest in what was previously an active social life and rarely "goes out." There is a good deal of psychic stress and pain attached to the relationship with her husband, and a sense of hopelessness has been building for months. In recent days, she has not slept and has periods of confusion. She wishes not to be a burden to those closest to her and has thought often of ending her life. Recently she has been thinking about just how to do this, the options available to her, and how it might be done so as to mask her intent. At the conclusion of the interview, you glance at the nurse with an expression of appreciation, and shudder to think how easily you might have missed all this.

- *Recall the mnemonic device IS PATH WARM. How many of the elements are positive for Patient B? Which ones?*
- *Would you rate Patient B's suicide risk as low? Intermediate? High?*
- *Which of the following management options is the LEAST appropriate at this juncture?*
  - *Send the patient home with a prescription for an antidepressant and a plan for regular return psychotherapy sessions in your office.*
  - *Refer her to a psychiatrist (appointment in 48 to 72 hours) and negotiate a "contract" with the patient that she is not to take matters into her own hands but will call you immediately if she has thoughts of doing so.*
  - *Arrange admission to the hospital medical service with a "sitter" and place an urgent psychiatry consultation.*
  - *Call your psychiatry consultant to summarize the case and request immediate consultation or admission to the inpatient psychiatry service.*

MANAGEMENT OF SUICIDAL PATIENTS

The opportunity for an emotionally disturbed patient with vague suicidal ideation to vent his or her thoughts and feelings to an understanding health or mental health provider may bring a degree of relief such that no further intervention is needed. However, in all cases the encouragement of further contact and follow-up should be conveyed to the patient, especially when inadequate social support is present. Independent of the actual catalyst, most suicidal persons possess feelings of helplessness, hopelessness, and despair and a triad of three cognitive/emotional conditions [59; 60]:

- Ambivalence: Most suicidal patients are ambivalent, with alternating wishes to die and to live. The healthcare provider can use patient ambivalence to increase the wish to live, thus reducing suicide risk.

- Impulsivity: Suicide is usually an impulsive act, and impulse, by its nature, is transient. A suicide crisis can be defused if support is provided at the moment of impulse.
- Rigidity: Suicidal people experience constricted thinking, mood, and action and dichotomized black-and-white reasoning to their problems. The provider can help the patient understand alternative options to death through gentle reasoning.

Healthcare professionals should assess the strength and availability of emotional support to the patient, help the patient identify a relative, friend, acquaintance, or other person who can provide emotional support, and solicit the person's help [59; 60]. The engagement of supportive third parties in the patient's life can be a useful tool in preventing suicide completion.

Adherence to established best practices general assures that assessment and care will be ethical and legal. It is important to consider and document informed consent. Underlying key ethical principles include respect for persons, autonomy, and beneficence [121].

PHARMACOTHERAPY TO REDUCE SUICIDE RISK

Abundant evidence has demonstrated that lithium reduces the rate of suicidal behavior in patients with bipolar disorder and recurrent major depression and that clozapine reduces suicidal behavior in schizophrenia [97; 98; 99; 100; 101; 102]. Both drugs reduce suicide risk independently of their effect on the primary psychiatric disorder. Although the exact anti-suicide mechanism of both drugs has yet to be identified, lithium enhances serotonergic activity and clozapine is a potent 5-HT2A antagonist. Serotonergic modulation is a likely explanation of the suicide-reducing effects of both medications, because aggression levels and suicide are correlated with prefrontal cortical 5-HT2A binding [71; 104; 105].

PSYCHOTHERAPY TO REDUCE SUICIDE RISK

In addition to pharmacotherapy, various psychotherapy approaches have been shown to decrease suicide risk in patients at low or intermediate risk for suicide [55]. Post-admission cognitive therapy is a cognitive-behavioral therapy approach designed to help patients who have suicide-related thoughts and/or behaviors. It consists of three phases of therapy for outpatients or inpatients [55]:

- The patient is asked to tell a story associated with her or his most recent episode of suicidal thoughts, behavior, or both.
- The patient is assisted with modifying underdeveloped or overdeveloped skills that are most closely associated with the risk of triggering a suicidal crisis.
- The patient is guided through a relapse-prevention task.

Another cognitive-behavioral approach is cognitive-behavioral psychotherapy for suicide prevention, which involves "acute and continuation phases, each lasting about 12 sessions, and includes a chain analysis of the suicidal event, safety plan development, skill building, psychoeducation, family intervention, and relapse prevention" [53].

Dialectical behavior therapy was originally designed to address the self-harm impulses of patients with borderline personality disorder, but it has good evidence for use in most suicidal individuals. Dialectical behavioral therapy is an adaptation of cognitive-behavioral therapy and is based on the theoretical principle that maladaptive behaviors, including self-injury, are attempts to manage intense overwhelming affect of biosocial origin. It consists of the two key elements of a behavioral, problem-solving approach blended with acceptance-based strategies and an emphasis on dialectical processes.

Dialectical behavioral therapy emphasizes balancing behavioral change, problem-solving, and emotional regulation with validation, mindfulness, and acceptance of patients. Therapeutic targets are ranked in hierarchical order, with life-threatening behaviors addressed first, followed by therapy-interfering behaviors, and then behaviors that interfere with quality of life.

MENTAL HEALTH REFERRAL

Depending on the level of suicide risk, referral to a mental health professional (e.g., psychologist, counselor, therapist), psychiatrist, or hospitalization may be warranted. Long-term treatment and follow-up will be required for many patients, and appropriate referral to outpatient facilities is often necessary. If the person is currently in therapy, the therapist should be called and involved in the management decision. If the patient does not have a therapeutic relationship with a mental health professional, referral to one should be made. Suicidal patients should be referred to a psychiatrist when any of the following are present: psychiatric illness; previous suicide attempt; family history of suicide, alcoholism, and/or psychiatric disorder; physical illness; or absence of social support [59; 60]. After deciding to refer a patient to a mental health professional, the clinician should explain to the patient the reason for the referral and help alleviate patient anxiety over stigma and psychotropic medications. It is also important to help the patient understand that pharmacologic and psychologic therapies are both effective and to emphasize to the patient that referral does not mean "abandonment." The referring clinician should also arrange an appointment with the mental health professional, allocate time for the patient following the initial appointment with the therapist or psychiatrist, and ensure the ongoing relationship with the patient [59; 60].

REFERRAL TO BE HOSPITALIZED

Some indications for immediate hospitalization include recurrent suicidal thoughts, high levels of intent of dying in the immediate future (the next few hours or days), the presence of agitation or panic, or the existence of a plan to use a violent and immediate suicide method [59; 60]. When hospitalizing a patient, she or he should not be left alone; the hospitalization and transfer of the patient by ambulance or police should be arranged and the family, and any appropriate authorities should be informed [59; 60].

The Department of Veterans Affairs recommends choosing the appropriate care setting that provides the patient at risk of suicide maximal safety in the least restrictive environment. Despite insufficient evidence to demonstrate the effectiveness of acute hospitalization in the prevention of suicide, hospitalization is indicated in suicidal patients who cannot be maintained in less restrictive care settings.

(https://www.healthquality.va.gov/guidelines/MH/srb. Last accessed March 24, 2023.)

Level of Evidence: Expert Opinion/Consensus Statement

A patient may be discharged to a less restrictive level of care from an acute setting (emergency department/hospital/acute specialty care) after a behavioral health clinician evaluated the patient, or a behavioral health clinician was consulted, and all three of the following conditions have been met [79]:

- Clinician assessment indicates that the patient has no current suicidal intent.
- The patient's active psychiatric symptoms are assessed to be stable enough to allow for reduction of level of care.
- The patient has the capacity and willingness to follow the personalized safety plan (including having available support system resources).

ADDITIONAL OPTIONS FOR CONTINUITY OF CARE

It is important to ensure that the patient has follow-up contact even after discharge to another provider. At the point of discharge, information should be provided on crisis options (referred to as "crisis cards") and free, universally available help, such as hotlines. There is evidence that follow-up outreach in the form of letters or postcards expressing care and concern and continuing for up to three years may be helpful in suicide prevention [75]. These letters should generally be non-demanding, allowing the opportunity but not the requirement for patients to respond.

Alternatively, patients may be followed-up with phone calls from a mental health professional or suicide crisis volunteer [75]. If phone follow-up is preferred, calls should be made weekly or biweekly, in some cases supplemented with a home visit, and should continue for a period of three to six months.

In many cases, partnering with a community crisis center can be helpful [66]. Crisis call centers are a crucial resource in linking patients to services and providing emotional support. According to the Suicide Prevention Lifeline, crisis center follow-up before a service appointment is associated with improved motivation, a reduction in barriers to accessing services, improved adherence to medication, reduced symptoms of depression, and higher attendance rates [64].

SAFETY PLANNING

The VA recommends establishing an individualized safety plan for all persons who are at high acute risk for suicide as part of discharge planning, regardless of inpatient or outpatient status [79]. The safety plan is designed to empower the patient, manage the suicidal crisis, and engage other resources. Safety should also be discussed with patients at intermediate and low risk, with appropriate patient education and a copy of a safety plan handout [79].

Stressful events, challenging life situations, mental/substance use disorders, and other factors can precipitate a crisis of suicidal thoughts and behaviors leading directly to self-injury. Advance anticipation of challenging situations and envisioning how one can identify and break a cycle of suicidal crises can reduce risk of self-injury and enhance a patient's sense of self-efficacy. Open dialogue between patients and clinicians to establish a therapeutic alliance and develop strategies and skills supporting the patient's ability to avoid acting on thoughts of suicide (including minimizing access to lethal means) is an essential component of suicide prevention in clinical settings. Putting this thinking-through process in writing for the anticipation of a suicidal crisis and how to manage it constitutes a patient's safety (action) plan [79].

Safety planning is a provider-patient collaborative process—not a "no harm" contract. The safety planning process results in a written plan that assists the patient with restricting access to means for completing suicide, problem-solving and coping strategies, enhancing social supports and identifying a network of emergency contacts including family members and friends, and ways to enhance motivation. These plans are tailored to the patient by assisting with identifying his or her specific warning signs and past effective coping strategies [79].

The safety plan should include the following elements, as appropriate:

- Early identification of warning signs or stressors
- Enhancing coping strategies (e.g., to distract and support)
- Utilizing social support contacts (discuss with whom to share the plan)
- Contact information about access to professional help
- Minimizing access to lethal means (e.g., weapons and ammunition or large quantities of medication)

The safety plan should be reviewed and updated by the healthcare team working with the patient as needed and shared with family and other supportive third parties if the patient consents. Safety plans should be updated to remain relevant during changes in clinical state and transitions of care [79].

Providers should document the safety plan or reasons for not completing such a plan in the medical record. In addition, patients should receive a copy of the plan [79].

Limiting Access to Lethal Means

Restricting at-risk patients from access to lethal means is considered an essential part of suicide prevention and safety planning. Methods of ensuring persons with suicidal intent do not have access to lethal means include restriction of access to firearms and ammunition, safer prescribing and dispensing of medications to prevent intentional overdoses, and modifying the environment of care in clinical settings to prevent fatal hangings [79]. For military service members, concerns about firearms should include privately owned guns and ammunition. It is also important to educate caregivers, family members, and/or other supportive third parties regarding the potential dangers of lethal means and how to keep these items or substances from the patient.

Storing firearms away from suicidal individuals can reduce gun deaths [79]. It must be stressed that the firearms are still the property of the individual, and they are not "giving them away." Options for safe storage of firearms include removing ammunition from an individual's possession, asking a friend or relative to take possession of firearms, disassembling firearms and storing various parts in different locations, storing firearms at a storage unit or gun locker at a shooting range, storing firearms at a gun shop or pawn shop, asking law enforcement to take possession of firearms, or storing personal firearms at military unit arms rooms [79]. The least restrictive and most acceptable means of removing easy accesses to lethal means should be employed in order to assure an individual welcomes the intervention. It is important to avoid implying that an individual is incapable of firearm possession or that they are unfit in a legal sense.

CONSIDERATIONS FOR VETERANS

With military service members, the command element should also be involved in education, safety planning, treatment planning, and implementation of duty limitations. Additional areas to address are the patient's medical and other specific needs. These may be psychosocial, socioeconomic, or spiritual in nature [79].

The VA/DoD has made the following recommendations when creating a treatment plan for veterans and active service members [79]:

- Providers should take reasonable steps to limit the disclosure of protected health information to the minimum necessary to accomplish the intended purpose.
- Providers should involve command in the treatment plan of service members at high acute risk for suicide to assist in the recovery and the reintegration of the patient to the unit. For service members at other risk levels, the provider should evaluate the risk and benefit of involving command and follow service department policies, procedures, and local regulations.
- When performing a medical profile, the provider should discuss with command the medical recommendation and the impact on the service member's limitations to duty and fitness for continued service.
- Providers should discuss with service members the benefit of having command involved in their plan and assure them their rights to protected health information, with some exceptions, regarding to the risk for suicide.
- As required by pertinent military regulations, communicate to the service member's chain of command regarding suicidal ideation along with any recommended restrictions to duty, health and welfare inspection, security clearance, deployment, and firearms access. Consider redeployment to home station any service member deployed to a hazardous or isolated area.

- Service members at high acute risk for suicide who meet criteria for hospitalization and require continuous (24-hour) direct supervision should be hospitalized in almost all instances. If not, the rationale should specifically state why this was not the preferred action, with appropriate documentation.
- During operational deployment conditions or other extreme situations during which hospitalization or evacuation is not possible, "unit watch" may be considered as appropriate in lieu of a high level care setting (hospitalization), and service department policies, procedures, and local regulations should be followed.
- Because of the high risk of suicide during the period of transition, providers should pay particular attention to ensure follow-up, referral, and continuity of care during the transition of service members at risk for suicide to a new duty station or after separation from a unit or from military service.

CONSIDERATIONS FOR HEALTHCARE PROFESSIONALS

Although confidentiality is crucial when caring for any patient, this is heightened for healthcare providers who would potentially be seeking assessment and treatment in their workplace. All healthcare providers should be offered the opportunity for anonymous screening for depression and suicide. The healer education assessment and referral (HEAR) screening program is a sustainable suicide prevention program that uses an anonymous method to provide screening for untreated depression or suicide [119; 121]. The American Foundation for Suicide Prevention also provides services specifically for healthcare providers, accessible at https://afsp.org/suicide-prevention-for-healthcare-professionals.

SUICIDE PREVENTION

Understanding the interactive relationship between risk and protective factors in suicidal behavior and how this interaction can be modified forms the basis of suicide prevention [5; 106]. The characteristics shared by effective suicide prevention programs include clear identification of the intended population, definition of desired outcomes, use of interventions known to effect a particular outcome, and use of community coordination and organization to achieve an objective. Prevention efforts are based on a clear plan with goals, objectives, and implementation steps [5; 45].

HISTORY OF SUICIDE PREVENTION IN THE UNITED STATES

In the United States, large-scale suicide prevention efforts began in 1958. Funding from the U.S. Public Health Service established the first suicide prevention center in Los Angeles, and other crisis intervention centers replicating this model were opened across the country [5]. The risk factor approach to suicide prevention was first implemented in 1966, and the American Association of Suicidology and the American Foundation for Suicide Prevention were established over the next two decades. Their activities included increasing the scientific understanding of suicide as the basis for effective prevention activities [5]. In 1983, the CDC established a violence prevention division that alerted the public to the disturbing increase in youth suicide rates.

In 1996, survivors of suicide loss mobilized to form the Suicide Prevention Advocacy Network USA (SPAN USA) and launched a campaign to advocate for the development of a national suicide prevention strategy [107]. In 2009, SPAN USA merged with the American Foundation for Suicide Prevention to raise awareness, fund research, and provide resources and aid to those affected by suicide [48].

The National Strategy for Suicide Prevention (NSSP) was released by the Surgeon General of the United States in 2001 and updated in 2012. The NSSP describes a series of goals and objectives designed to reduce the incidence of suicide behaviors in the United States [46]. Although activity in the field of suicide prevention has increased exponentially since publication of the NSSP, the overall rate of suicide since 2000 continues to increase [1].

SUICIDE PREVENTION THAT TARGETS AT-RISK POPULATIONS

College Students

Colleges and universities are increasingly challenged to identify and manage mental health and substance use problems in students. Because the risk and protective factors for suicide among young adults include substance abuse and interpersonal violence, suicide prevention may best be integrated within broader prevention efforts [5; 108; 109].

Inmates in Jails and Correctional Settings

As discussed, jails and juvenile justice facilities have exceptionally high suicide rates. The highest rates of jail suicide occur within the first 24 to 48 hours of arrest, suggesting an important role of medical assessment of substance abuse and suicide proneness at intake. Comprehensive prevention programs targeting inmate suicide include training, screening, effective communication methods, intervention, use of reporting protocols, and mortality review [5; 110].

Elderly Persons

Almost 70% of elderly patients who take their own lives see their primary care physician within a few months of their death [111; 112]. This represents an absolutely vital, yet narrow, window for accurate screening and assessment of suicide risk [2]. Unfortunately, healthcare and mental health professionals are not immune from harboring the stereotypes of the elderly often found among society in general. These can include attitudes that a depressive response to interpersonal loss, physical limitation, or changing societal role is an inevitable and even normal aspect of aging [111; 113; 114]. Suicidal thoughts may even be considered age-appropriate in the elderly [112]. When held by patients and family members, these erroneous beliefs can lead to underreporting of symptoms and lack of effort on the part of family members to seek care for patients [114]. When held by clinicians, these beliefs can result in delayed or missed diagnoses, less effective treatment, or suicide in the elderly patient.

Because the elderly have the highest overall suicide rate of all age groups, organizations with special access to older persons have an important role in suicide prevention. State aging networks exist in every state, and these networks develop and fund a variety of in-home and community-based services. States organize the provision of such services through area agencies on aging, which coordinate a broad range of services for older people [5].

Patients with Bipolar Disorder

Although 20% of patients with bipolar disorder have their first episode during adolescence, diagnosis is often delayed for years, which can result in problems such as substance abuse and suicidal behaviors. Thus, early recognition and aggressive treatment may prevent years of needless suffering and death by suicide. In particular, lithium is effective in preventing suicidal behavior in patients with bipolar disorder. Maintaining treatment is essential in preventing suicide, and the suicide rate in the first year of discontinuation of lithium treatment is 20 times higher than during lithium treatment [103].

Patients with Schizophrenia

Approximately 0.9% of people in the United States are living with schizophrenia or a related disorder [49]. One study of patients with schizophrenia showed a lifetime prevalence of suicide attempt of 39.2%, versus 2.8% of nonafflicted individuals; furthermore, about 5% of patients with schizophrenia will eventually die by suicide [50; 90]. Depression is the most important risk factor for suicide in

patients with schizophrenia; only 4% of patients with schizophrenia who exhibit suicidal behavior do so in response to instructions from "command" voices. Clozapine is effective in reducing suicide and attempted suicide in patients with schizophrenia, and effective suicide prevention involves the early recognition and prompt treatment of schizophrenia and all comorbid conditions [2].

Military Veterans

Assessment of suicide risk and protective factors in military personnel is vital, particularly at times of transition (e.g., deployment, separation from service/unit). It is important to include life planning, referral information, and resources for patients who experience suicidal ideation, and there are military-specific resources available for current or former members of the military. The Veterans Crisis Line, https://www.veteranscrisisline.net or 988, is free to all active service members, including members of the National Guard and Reserve, and veterans, even if they are not registered with the VA or enrolled in VA health care [81].

STIGMA AND SUICIDE

The stigma of mental illness and substance abuse, both of which are closely linked to suicide, prevents many persons from seeking help out of a fear of prejudice and discrimination [88]. People who have a substance use disorder face additional stigma because many people believe that abuse and addiction are moral failings and that individuals are fully capable of controlling these behaviors if they want to [5; 80]. The stigma of suicide, while deterring some from attempting suicide, is also a barrier to treatment for many persons who have suicidal thoughts or have attempted suicide. Family members of suicide attempters often hide the behavior from friends and relatives, because they may believe that it reflects badly on their own relationship with the suicide attempter or that suicidal behavior itself is shameful or sinful. Persons who attempt suicide may have many of these same feelings [5].

On a systems level, the stigma surrounding mental illness, substance use disorders, and suicide has contributed to inadequate funding for preventive services and inadequate insurance reimbursement for treatments. Substance use and mental health conditions, including those associated with suicide, will remain undertreated and services tailored to persons in crisis will remain limited as long as stigma persists, resulting in an unnecessarily high rate of suicidal behavior and suicide [5]. Additionally, the stigma associated with mental illness and substance abuse has led to separate systems for physical health and mental health care, a consequence being that preventive and treatment services for mental illness and substance abuse are much less available than for other health problems. This separation has also led to bureaucratic and institutional barriers between the two systems that impede and complicate access to care and service implementation [5].

SUICIDE SURVIVORS: TREATMENT AND RESOURCES

Family members and friends affected by the death of a loved one through suicide are referred to as "suicide survivors." Conservative estimates suggesting a ratio of six survivors for every suicide deaths indicate that an estimated 6 million Americans became suicide survivors in the past 25 years; however, as noted, many more individuals are affected by a single suicide [4; 13; 14].

The death of a loved one by suicide can be shocking, painful, and unexpected for survivors. The ensuing grief can be intense, complex, chronic, and nonlinear. Working through grief is a highly individual and unique process that survivors experience in their own way and at their own pace. Grief does not always move in a forward direction, and there is no timeframe for grief. Survivors should not expect their lives to return to their previous state and should strive to adjust to life without their loved one. The initial emotional response may be overwhelming, and crying is a natural reaction and an expression of sadness following the loss of a loved one [13].

Survivors often struggle with trying to comprehend why the suicide occurred and how they could have intervened. Feelings of guilt are likely when the survivor believes he or she could have prevented the suicide. The survivor may even experience relief at times, especially if the loved one had a psychiatric illness. The stigma and shame that surround suicide may cause difficulty among the family members and friends of survivors in knowing what to say and how to support the survivor and might prevent the survivor from reaching out for help. Ongoing support remains important to maintain family and other relationships during the grieving process [13].

Many survivors find that the best help comes from attending a support group for survivors of suicide in which they can openly share their own story and their feelings with fellow survivors without pressure or fear of judgment and shame. Support groups can be a helpful source of guidance, understanding, and support through the healing process [13]. The American Foundation for Suicide Prevention maintains an international directory of suicide bereavement support groups on their website, https://afsp.org.

CONCLUSION

Suicide is a major preventable public health problem and a significant cause of mortality. This course has reviewed the major aspects of suicide assessment, management, and prevention, with a special focus on military veterans. Primary care contact may represent the last opportunity for intervention in the severely depressed suicidal patient, making the thorough comprehension of identification and treatment of depression and suicide risk imperative.

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Adelson SL, American Academy of Child and Adolescent Psychiatry Committee on Quality Issues. Practice parameter on gay, lesbian, or bisexual sexual orientation, gender nonconformity, and gender discordance in children and adolescents. *J Am Acad Child Adolesc Psychiatry*. 2012;51(9):957-974. Available at https://jaacap.org/article/S0890-8567(12)00500-X/fulltext. Last accessed March 24, 2023.

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