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Suicide Prevention and the QPR Strategy

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Introduction

Globally and nationally, suicide is regarded as a critical public health problem, with an estimated 16 million suicide attempts and 800, 000 suicides per year [1,2]. Every 40 seconds, someone dies by suicide and 1 in 100 deaths is by suicide [1]. For every person who dies by suicide, more than 20 others make a non-fatal attempt [1]. As the second leading cause of death for ages 10-34 and the fourth leading cause for ages 35-54, suicide is a major contributor to premature mortality in the U.S. [2,3]. Both the WHO and CDC are calling for greater public awareness, improved health provider education, and better health care strategies to prevent suicide. Health care providers are critical first responders in suicide prevention.

Studies show that many suicide victims do seek help from health care providers prior to death but are not adequately evaluated. Among patients who had died by suicide, 80 percent had contact with primary care clinicians within one year of their death, and 25 to 30 percent of decedents had contact with psychiatric clinicians within the year of their death [4,5,6]. Suicide decedents often have had contact with a mental health professional within a few months prior to their death [7,8,9].

High Risk Groups

There are certain population groups who are at high-risk for suicide. In terms of gender, males are 4 times more likely to commit suicide than females. Males who express suicidal ideation more often carry out a fatal act compared to females. The highest rates of suicide occur among American Indian/Alaska Native and non-Hispanic White population groups. In 2015, the rates for these groups were 19.9 and 16.9 per 100,000 population, respectively. Other persons predisposed to suicidal ideation are older adults, particularly those with chronic illness, veterans and other military personnel, and youths of the LGBTQ population [2,10].

Older adults engage in suicidal behavior with greater planning and lethality of intent than younger individuals [11]. It is estimated that 10% to 15% of older adults have clinically significant depressive symptoms, without a diagnosis of Major Depressive Disorder (MDD) [12]. Risk factors such as chronic diseases, disability, isolation, and lack of social support are related to depression in older adults [13]. Cognitive impairment often accompanies MDD in older adults which can be mistaken for dementia.

In 2019, the suicide rate in military veterans was 52.3% higher than in non-veteran adults. Younger veterans are more likely to have suicidal ideation and to follow through with a suicide attempt than older veterans [14,15]. Compared to non-veterans, combat veterans have elevated rates of conditions such as PTSD, substance abuse, and chronic pain [16]. It is important to recognize the veterans often have access to firearms, which is a common means of their suicide [17].

During the past decade, suicide attempts and suicide ideation have doubled among pediatric emergency room patients. Major depression may affect up to 12% of youth and has been observed in children as young as three years of age [18]. However, because of symptom variation from the adult diagnosis criteria, depression in children is often left untreated. Young children are less able to verbalize their feelings and thus unable to meet the DSM-5 criteria for MDD. Instead, they often present with more somatic complaints, anxiety, irritability, self-destructive behavior, withdrawal, and diminished social activity [19].

Young adults and adolescents report higher rates of depression than any other group in the US [20]. Depressed teens often present with low self-esteem, impulsivity, anxiety, poor school performance, sleep and appetite disturbances, and substance use disorders. Adolescents with depression are often involved in risk-taking behavior such as substance abuse or self-harm. They are also often exposed to risk factors such as cyberbullying and shaming on social media [18]. Adolescents in the LGBTQ community are particularly at high risk for suicidal ideation and suicidal activity. They have earlier onset of suicidality and faster progression from suicidal ideation to an actual plan than heterosexual adolescents [21,22].

In postpartum women, suicide accounts for between 1.8 to 4.5 maternal deaths per 100,000 births [23]. Depression and suicidal ideation are under-assessed conditions in postpartum women. Numerous studies show that most women who die by suicide after giving birth have coexisting unassessed mental health disorders such as depression or anxiety [24,25]. Many women enduring postpartum depression and suicidal ideation are fearful of being deemed an unfit mother, which discourages them from seeking help [26].

Suicide Risk Factors

A prior history of attempted suicide is the strongest single factor predictive of suicide [1]. One of every 100 suicide attempt survivors will die by suicide within one year of their index attempt, a risk approximately 100 times that of the general population [27]. Major depressive disorder, bipolar disorder, anxiety disorders, alcohol and substance abuse, and schizophrenia are psychiatric diagnoses that are highly correlated with suicide.

The risk of suicide is increased in patients with a family history of suicide. Twin studies have found that genetics contribute to 30 to 50% of the risk for suicide [28].

Often, a combination of circumstances lead individuals to consider suicide. Major risk factors include social isolation; criminal, legal, or financial problems; impulsive or aggressive tendencies; employment loss, major illness; substance use disorder; and mental illness. Interpersonal risk factors include adverse childhood experiences such as child abuse and neglect, bullying, family history of mental health problems or suicide, relationship problems such as a break-up or domestic violence, loss of a loved one, and sexual violence [2].

Precipitating events for persons who take their own lives include the death of a loved one, loss of a job, breakup of a marriage, school or social failure, sexual identity crisis, or trauma. In addition, people may attempt suicide as an alternative to intolerable life circumstances, such as abusive relationships, occupational stresses, and chronic isolation [29]. It is important to note that suicide is generally not caused by one event, but is rather an outcome from many underlying factors that accumulate into feelings of hopelessness.

According to a study by Joiner, et al. [30], four factors are commonly present in persons who attempt suicide (Table 1). Persons without a strong support system of reciprocal, caring relationships are at highest risk. Persons at high risk exhibit behavioral changes, often sudden, which include apathy, withdrawal, thoughts regarding mortality, giving away possessions, depression, mood fluctuation, insomnia, and acute or chronic trauma [31].

Perceive themselves as a burden to others
Lack of a feeling of belonging
Hopelessness
Capability to enact suicide

Table 1: Factors Common to those who Die by Suicide [30].

Suicide Risk and Social Media

As of 2019, 90 percent of those aged 18 to 29 used at least one form of social media regularly. Heightened rates of substance abuse, anxiety, and lack of socialization are associated with frequent use of social media [32]. According to studies by Memom, et al. [33], social media use increases adolescents' exposure to harmful and suicidal behaviors, in a way "normalizing" it for them, which could lead to the increase in suicide and self-harm in those who frequently use social media.

Cyberbullying, in particular, is a behavior observed on social media that affects adolescents. Frequent cyberbullying is associated with higher rates of suicidal ideation and self-harm. Studies show when cyberbullying focuses on race, ethnicity, sexual orientation, or gender identity, those targeted are 7 times more at risk for suicidal ideation, and 8 times more likely to attempt suicide [21].

Prevalent Mental Illness

According to Paris [34], almost all victims of suicide suffer from a mental health disorder. Major Depressive Disorder (MDD) and bipolar disorders I and II are linked to suicides more than any other mental health disorders. Persons affected by bipolar depression are 20 to 30 times more likely to die of suicide than the general population [35]. The depression in MDD and bipolar disorders I and II is characterized by a persistent feeling of sadness or loss of interest in activities that significantly impairs daily functioning. According to the DSM-5, clinical depression is diagnosed when an individual presents with five or more specific symptoms nearly every day for a two-week period (Table 2) [36].

Depressed mood
Anhedonia
Feelings of worthlessness or guilt
Suicidal ideation or attempt
Fatigue or loss of energy
Decreased or increased sleep
Decreased or increased weight or appetite
Decreased ability to think or concentrate
Psychomotor retardation or agitation

Table 2: Symptoms of Major Depression according to DSM-5 [36].

Clinical Assessment of Suicidality

The evaluation of a patient who may be suicidal includes asking the patient directly about their thoughts, plan, method, and intent. The clinician should also consider the patient's accessibility to the means of carrying out the act of suicide [28].

Firearms are the most commonly used method of self-inflicted injury or suicide. The second and third leading methods are suffocation (e.g., hanging, about 25 percent of suicides) and poisoning (e.g., drug overdose; about 15 percent) [28]. More than 20,000 firearm suicides occur each year in the U.S. [37].

Numerous studies corroborate the fact that clinical assessment of a patient to predict if they will attempt or carry out suicide is challenging. Clinical assessments performed by primary care clinicians, emergency department clinicians, and mental health professionals have shown low predictive value [29]. Often depressed patients are not questioned about suicide at all. Litteken and Sale [38] found that many health care providers and laypersons feel uncomfortable about asking persons directly about suicide. There is a common myth that asking about suicide can "plant the seed" in a patient's head about suicide if it is openly discussed [39].

Depression assessment tools have been used in clinical practice, however, they have been criticized as inadequate for suicidal patients and better measures of depression severity [40]. The Columbia-Suicide Severity Rating Scale (C-SSRS) is the "gold standard" used in clinical trials performed by the U.S. Food and Drug Administration. However, it has been widely criticized as labor intensive and insensitive to severity of suicidal risk and not used by most health care providers [41,42].

A Care Plan and the QPR Intervention

The health care provider should have a plan to create a safer environment for the depressed or suicidal patient. This plan includes identifying the warning signs, assessing the patient's coping strategies, and potential means of carrying out suicide. A no-suicide contract between patient and health care provider should be a "first step" initiated where the patient agrees not to harm themselves for a specified time period [43].

QPR is an internationally recognized suicide prevention strategy that stands for Question, Persuade, and Refer. QPR has been likened to CPR in that it is a life-saving intervention [44].

The QPR strategy is designed to equip laypersons and health care providers, with the skills needed to talk directly to suicidal individuals, intervene immediately, and get them the help they need. Q stands for Question. The at-risk person needs to be directly questioned about their intent to take their own life. P stands for Persuade. The health care provider must use their influence to persuade the at-risk person to obtain help. R stands for referral. Immediate action is necessary in terms of referring the person to the proper source, either emergency personnel or a mental health professional. It is recommended that the health care provider remain with the patient and accompany the suicidal person to the resource to ensure transfer to safety [44,45].

Recent studies show that QPR suicide prevention training enhances the ability of persons to intervene effectively with suicidal individuals. Littleken & Sale, 2018, investigated QPR training of 2988 adults in a Youth Suicide Prevention Initiative through SAMHSA that served high risk youths (ages 10-24). The persons trained included laypersons, clergy, health care providers, mental health technicians, and probate officers. The strategy improved ability of QPR trainees to intervene positively and increased the frequency of suicide prevention behaviors over a 2 year period [38]. Hangartner [46] studied approximately 3000 adults who completed QPR training. The study found improved knowledge, sustained confidence and positive attitudes among trainees, and increased the frequency of suicide prevention behaviors.

For the QPR strategy to be effective, the following four elements must be in place [45]:

1. Early recognition of suicide warning signs. The QPR trainee learns to detect distress and early warning signs of suicidal ideation in an at-risk person (Table 3, 4).
2. Early initiation of QPR. The QPR trainee immediately and directly asks the at-risk person exhibiting suicide warning signs to confirm or deny their meaning. The action of questioning opens a potentially life-saving dialogue. This can reduce anxiety and distress, enhance protective factors, and decrease risk factors. Direct questioning regarding suicidal intent communicates hope, decreases isolation, and conveys social and spiritual support for the at-risk person.
3. Early referral. Linking the at-risk person to local resources or calling a toll-free crisis number for evaluation is essential to reducing immediate risk (Table 3, 4). As most people thinking about suicide are suffering from an undiagnosed and/or untreated mental illness or substance abuse disorder, accessible professional services are essential as soon as possible.
4. Early professional assessment and treatment. As with any life-threatening crisis or illness, early detection, assessment, and treatment results in reduced morbidity and mortality.

Someone threatening to hurt or kill themselves
Someone looking for ways to kill themselves: seeking access to pills, weapons or other means
Someone talking or writing about death, dying or suicide

Table 3: Consensus Warning Signs for Suicide that requires Immediate Emergency Action According to QPR Institute, 2017, if any of the following signs are present, it is recommended to take immediate action such as call 911 [45].

According to the QPR Institute, 2017, if any of the following signs are present, a mental health professional should be immediately contacted or that person should call the National Suicide Prevention Lifeline 1-800-273-TALK.

Hopelessness
Rage, anger, seeking revenge
Acting reckless or engaging in risk activities, seemingly without thinking
Feeling trapped, like there's no way out
Increasing alcohol or drug use
Withdrawing from friends, family or society
Anxiety, agitation, unable to sleep or sleeping all the time
Dramatic changes in mood
No reason for living, no sense of purpose in life

Table 4: Consensus Warning Signs for Suicide that requires Intervention by a Mental Health Professional [45].

QPR training is available as an online curriculum divided into tutorial sessions with an expert trainer. It involves a short program of study, learning through role play, case scenarios, gaming, and after completion, a certification examination. QPR training can also be specialized for specific populations like nurses, coaches, caregivers of veterans, and teachers.

It has been suggested that the QPR intervention can serve as a universal intervention in the detection of those not just at risk for suicide, but for those who may need assistance, assessment, and treatment for any number of mental health issues or problems [44].

Conclusion

There has been a steady increase in suicide rates in the U.S. and globally over the past two decades [1,2]. As the second leading cause of death for ages 10-34 and the fourth leading cause for ages 35-54, suicide is a major contributor to premature mortality in the U.S. [2]. Every suicide death is preventable. Numerous studies find that clinical assessment of a patient to predict if they will attempt or carry out suicide is difficult. Health care providers often do not astutely distinguish the at-risk individual. The recognition of suicide as a public health issue has resulted in the need for evidence-based prevention programs. While not all health care providers are expected to provide the services of a specialized mental healthcare professional, each health care provider does have a role in assessing an individual for suicide risk and referring them to appropriate emergency resources.

QPR is an internationally recognized suicide prevention program that stands for Question, Persuade, and Refer. Recommended by the SAMSHA [44], QPR training teaches lay persons and health care providers to recognize and respond effectively to someone exhibiting suicide warning signs and behaviors. It has been suggested that the QPR intervention can serve as a universal intervention in the detection of those not just at risk for suicide, but for those who may need assistance, assessment, and treatment for any number of mental health issues or problems. QPR teaches emergency intervention and has been likened to Cardiopulmonary Resuscitation (CPR) in its purpose to prevent premature death. There is a need for organizational leadership within the healthcare system to provide suicide prevention education and training, similar to the widespread CPR training that has proven effective.

Key Points

Suicide is the second leading cause of death for individuals ranging from age 10 to 34.
There are multiple high risk groups for suicide including males, non-Hispanic White race or American Indian/ Alaska Native race, young adults and adolescents, older adults, postpartum women, people with chronic illness, veterans and other military personnel, and members of the LGBTQ community.
In terms of gender, males are 4 times more likely to commit suicide than females. Males who express suicidal ideation more often carry out a fatal act compared to females.
Risk factors of suicide attempt include prior history of suicide attempts and suicide attempts within family history. Individuals who commit suicide often lack a strong support system. Many have consulted a health care provider in the months before suicide.
The QPR strategy is a suicide prevention strategy and life-saving intervention that stands for Question, Persuade, and Refer. Similar to "CPR" it is meant as an emergency intervention to save lives.
It is a common myth to believe that asking a person about whether or not they are feeling suicidal is going to "plant the seed in someone's head". Depressed persons should be asked if they want to take their life or harm themselves or others, and if they have a plan.
The QPR strategy is most effective with early recognition of suicide warning signs, early initiation of QPR, early referral, and early professional assessment and treatment.

Resources

The new suicide prevention hotline number is 988. The previous phone number (1-800-273-8255) will always remain open for those in emotional distress or suicidal crisis. 988 is easier to remember and more efficiently dialed.

National Suicide Prevention Hotline: 800-273-8255
Ayuda en Español: 888-628-9454
For TTY Usars: 711 then dial 800-273-8255
Crisis Text Line: text 714714

Veterans Crisis Line: text 838255 or dial 800-273-8255 and press 1
Military One Source: 800-342-9647

American Foundation for Suicide Prevention: https://afsp.org/
Know the Signs: https://www.suicideispreventable.org/
Suicide Awareness Voices of Education (SAVE): https://save.org/

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