

Review Article

Breaking the Silence: A Comprehensive Review of Suicide

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Introduction

Suicide is defined as the act of intentionally causing one's own death. Suicide is a significant public health issue, claiming approximately 700,000 lives globally each year, making it a leading cause of death worldwide, particularly among young people and those in vulnerable populations. The World Health Organization (WHO) reports that suicide was the fourth leading cause of death among 15-29-year-olds globally in 2019. Rates of suicide vary widely across different countries and regions, influenced by factors such as socioeconomic conditions, cultural beliefs, and access to mental health care. The highest rates of suicide are found in low- and middle-income countries, where 77% of global suicides occur [1].

Types of Suicidal Behaviours

Suicidal behaviours can manifest in various forms, reflecting the complex psychological, emotional, and environmental factors influencing an individual's state of mind. Understanding

Abstract

Suicide is a complex and multifaceted phenomenon, representing a significant global public health issue worldwide. This review explores the various aspects of suicide, including its definition, prevalence, and contributing factors. Suicide is the fourth leading cause of death among 15-29-year-olds globally, with the highest rates observed in low- and middle-income countries. Suicidal tendencies manifest in diverse forms, ranging from ideation and gestures to chronic suicidality and murder-suicide, each reflecting unique psychological, social, and biological influences. Psychological factors, particularly mental health disorders, play a significant role in suicide risk, while social isolation, economic hardship, and cultural dynamics further exacerbate vulnerability. Biological factors, such as genetic predisposition and neurobiological alterations, also contribute to suicide risk. The review highlights the importance of prevention strategies, including improving access to mental health care, crisis intervention, restricting access to means of suicide, and public awareness campaigns. The societal impact of suicide is profound affecting families, communities, and economies. Comprehensive, multi-faceted approaches are essential to reduce the global suicide rate and mitigate its impact.

Keywords: Suicide; Social isolation; Biological factors; Cultural beliefs; Anxiety disorders

Abbreviations: WHO: World Health Organisation; NSSI: Non-Suicidal Self Injury; DSH: Deliberate Self Harm; GBD: Global Burden of Disease; GWAS: Genome-Wide Association Study; CBT: Cognitive-Behavioral Therapy; DBT: Dialectical Behaviour Therapy; SSRIs: Selective Serotonin Reuptake Inhibitors; PFA: Psychological First Aid

these different types can help in identifying at-risk individuals and providing appropriate interventions.

Suicidal Ideation

Suicidal ideation refers to thoughts about self-harm or ending one's life. These thoughts can range from fleeting considerations to detailed planning. Suicidal ideation is generally categorized into two types:

- **Passive Suicidal Ideation:** Individuals with passive suicidal ideation may wish for death or hope to die but do not actively plan or intend to commit suicide. They might think, "I wish I could just disappear" or "It would be better if I weren't here." Although passive, these thoughts can still be dangerous as they reflect deep distress and a reduced interest in life [2].
- **Active Suicidal Ideation:** In active suicidal ideation, individuals think seriously about ending their life and may de-

velop a plan or consider specific methods to do so. This type of ideation is more severe and is a strong predictor of potential suicide attempts. Active suicidal ideation requires immediate intervention and support [3].

Suicidal Gestures

Suicidal gestures involve non-lethal self-harm behaviors that are not intended to cause death but are often a cry for help or a way to cope with overwhelming emotions. These gestures may include superficial cutting, overdose on non-lethal substances, or other actions that pose some risk but are not likely to result in death. Suicidal gestures can escalate into more serious attempts if the underlying issues are not addressed [4].

Non-suicidal Self Injury (NSSI): Non-suicidal self-injury is defined as any act that self-inflicting injury on one's own body without the lethal intent of suicide [5]. NSSI could happen through various means such as cutting, burning, hitting, slashing etc.

Deliberate Self Harm (DSH): Deliberate Self Harm (DSH) is a term describe any self-directed harmful behaviors (indirect or direct), regardless of their suicidal intent [6]. Notably however, there is some overlap in the way these two terminologies are used among the scientific community adding to the confusion [7].

Suicide Attempts

A suicide attempt is a deliberate action taken with the intent to end one's life but which does not result in death. Suicide attempts can vary in lethality and are often driven by a combination of acute stressors and long-term mental health issues. It is crucial to treat any suicide attempt seriously, as those who attempt suicide are at a significantly higher risk of trying again, often with more lethal means [8].

Chronic Suicidality

Chronic suicidality refers to persistent suicidal thoughts and behaviors over an extended period. Individuals with chronic suicidality may live with ongoing feelings of despair, hopelessness, and a desire to die, often related to long-term mental health conditions such as borderline personality disorder [9]. Chronic suicidality can be particularly challenging to treat because it may become a part of the individual's identity and coping mechanisms.

Impulsive Suicidal Behavior

Impulsive suicidal behavior occurs with little or no premeditation, often in response to an acute stressor or emotional crisis. This type of behavior is typically seen in individuals with impulsive personality traits or those experiencing intense emotional distress. Impulsive suicidal acts are often more difficult to predict, making them particularly dangerous [10].

Suicide Pact

A suicide pact is an agreement between two or more individuals to commit suicide together. Suicide pacts are rare but can occur among individuals who feel isolated or disconnected from society, finding solace in a shared purpose. This type of suicidal behavior often involves intense emotional bonding and mutual reinforcement of suicidal ideation [11].

Altruistic Suicide

Altruistic suicide occurs when individuals believe that their

death will benefit others, such as in cases where they feel like a burden to their family or society. This type of suicide is more common in cultures or situations where the individual's value is closely tied to their perceived usefulness to others [12]. Altruistic suicide is often driven by a distorted sense of responsibility or a desire to protect loved ones from perceived suffering.

Murder-Suicide

Murder-suicide involves an individual taking the life of another person or persons before ending their own life. This type of suicide is often associated with extreme emotional distress, mental illness, or a desire to exert control or exact revenge. It is a complex and tragic form of suicide that leaves lasting trauma for the surviving community [13]. Understanding the different types of suicidal tendencies is essential for providing appropriate care and interventions. Each type reflects unique underlying causes and risk factors, which must be addressed to prevent the tragic loss of life. By recognizing these various manifestations, mental health professionals, caregivers, and society at large can better support those at risk and work towards reducing the incidence of suicide.

Suicide is a complex phenomenon resulting from the interplay of various factors, which can be broadly categorized into psychological, social, and biological influences.

Psychological Factors

Mental health disorders are among the most significant risk factors for suicide. Psychological and psychiatric studies have focused on identifying individual-level risk factors for suicide, particularly mental health disorders. The meta-analysis by Franklin et al. (2017) is one of the most comprehensive studies in this area, synthesizing data from over 50 years of research on suicidal thoughts and behaviors. This meta-analysis confirmed that mental health disorders, including depression, bipolar disorder, schizophrenia, and substance use disorders, are major risk factors for suicide. However, the study also pointed out that the predictive power of these factors is limited, suggesting that other variables, such as life stressors and personality traits, also play a significant role in suicidal behavior [14]. Research on the psychological mechanisms underlying suicide has also been advanced by studies on cognitive and emotional processes. O'Connor and Nock (2014) reviewed evidence on the role of psychological factors such as hopelessness, impulsivity, and problem-solving deficits in suicidal behavior. They found that these cognitive factors are critical in understanding why some individuals with mental health disorders go on to attempt suicide while others do not [15].

Social and Environmental Factors

Social isolation, lack of social support, and experiences of trauma or abuse are significant contributors to suicidal behavior. Economic hardship, unemployment, and relationship breakdowns are also critical stressors that can lead to suicidal thoughts. In addition, exposure to suicide, whether through personal connections or media reporting, can increase the risk of suicide through a phenomenon known as the "Werther effect" or suicide contagion [16]. Epidemiological studies have been fundamental in understanding the distribution and determinants of suicide across different populations. One significant study by Nock et al. (2008) used data from the World Health Organization's World Mental Health Survey Initiative, covering 17 countries, to examine the prevalence and risk factors associated with suicide and suicidal behavior. This study found that the life-

time prevalence of suicidal ideation, plans, and attempts varied widely across countries, with the highest rates observed in low- and middle-income countries. The study also highlighted those mental disorders, particularly mood and anxiety disorders, were strongly associated with suicidal behavior across all regions [2]. Another important epidemiological study is the Global Burden of Disease (GBD) study, which regularly reports on the burden of suicide worldwide. The 2019 GBD study reported that suicide was the 19th leading cause of death globally, accounting for 1.3% of all deaths. The study also highlighted significant regional differences, with the highest suicide rates observed in Eastern Europe and the lowest in the Eastern Mediterranean region [17].

Biological Factors

Genetic predisposition and neurobiological factors also contribute to suicide risk. Studies have shown that a family history of suicide increases an individual's risk, suggesting a heritable component. Additionally, alterations in neurotransmitter systems, particularly serotonin, have been implicated in suicidal behavior [18]. Biological studies have explored the genetic and neurobiological underpinnings of suicide. One landmark study by Mann et al. (2001) investigated the role of the serotonin system in suicide. The study found that individuals who died by suicide had lower levels of serotonin and its metabolite, 5-HIAA, in the brain compared to those who died of other causes. This finding has been supported by subsequent research, which has shown that alterations in the serotonin system may contribute to suicidal behavior, particularly in individuals with depression [19]. Genetic studies have also identified specific genetic markers associated with suicide risk. A genome-wide association study (GWAS) conducted by the Psychiatric Genomics Consortium (2018) identified several genetic variants linked to suicide attempts. The study suggested that these genetic factors may interact with environmental stressors to increase the risk of suicide, highlighting the complex interplay between genetics and environment in suicidal behavior [20].

Cultural Factors

Suicide rates are influenced by a variety of cultural, economic, and political factors. In high-income countries, suicide rates are generally higher among men, while in low- and middle-income countries, the rates are more balanced between genders. In many Asian countries, suicide among women, particularly in rural areas, is a significant concern, often linked to marital conflict, domestic violence, and economic dependency [1]. Cultural and social factors play a significant role in shaping suicide risk, and several studies have focused on these aspects.

A study by Phillips et al. (2002) on suicide in China highlighted the cultural factors that contribute to the high suicide rate among rural women, including societal expectations, family conflicts, and limited access to mental health care. This study emphasized the need for culturally sensitive interventions that address the specific social dynamics contributing to suicide in different populations [21]. In India, Patel et al. (2012) conducted a study on suicide mortality and identified key risk factors, including poverty, lack of social support, and easy access to pesticides, which are commonly used in rural suicides. The study called for targeted interventions that address these socioeconomic factors, such as improving mental health care access in rural areas and regulating the availability of pesticides [22].

Prevention Strategies

Preventing suicide requires a multi-faceted approach that addresses the underlying causes and risk factors at various levels—individual, community, and societal. Intervention and prevention studies have focused on evaluating the effectiveness of various strategies to reduce suicide rates. A key study by Zalsman et al. (2016) conducted a systematic review of suicide prevention strategies, including pharmacological treatments, psychotherapy, and public health interventions. The review found that restricting access to means of suicide, such as firearms and toxic substances, is one of the most effective strategies for reducing suicide rates. It also highlighted the effectiveness of Cognitive-Behavioral Therapy (CBT) and Dialectical Behavior Therapy (DBT) in reducing suicidal ideation and attempts in high-risk individuals [23]. Another important study by Mann et al. (2005) demonstrated the effectiveness of Selective Serotonin Reuptake Inhibitors (SSRIs) in reducing suicide risk in individuals with depression. This study provided evidence that treating underlying mental health disorders can significantly reduce the likelihood of suicide, supporting the integration of mental health care into suicide prevention efforts [10].

Mental Health Care and Treatment

Improving access to mental health care is crucial for suicide prevention. Early identification and treatment of mental health disorders can significantly reduce the risk of suicide. Cognitive-Behavioral Therapy (CBT) and dialectical behavior therapy (DBT) have been shown to be effective in reducing suicidal thoughts and behaviors [9,24].

Crisis Intervention

a) Crisis intervention services, such as suicide hotlines and emergency counseling, provide immediate support to individuals in distress. These services play a critical role in de-escalating crises and connecting individuals to long-term mental health care. Some of the evidence-based strategies to provide crucial support to individuals with imminent risk of suicide include the following: **Psychological First Aid (PFA)**: Originally emerged as an approach to mitigate the debilitating psychological after-effects faced by victims of natural disasters, calamities as well as man-made catastrophes. This approach has been adapted to address victims of suicide as well. PFA can be provided by any trained mental health professionals, emergency responders as well as trained volunteers from the community.

b) **Suicide Gatekeeper training**: This is a training program which equips individuals with the skills to help any individual with suicidal ideations or during an acute crisis especially a suicidal attempt. 'Gatekeepers' are trained to recognise the warning signs of suicide, show empathy, practise active listening skills and refer those in crisis to appropriate mental health professionals. This program can be implemented in schools, colleges, workplaces and institutions and is a highly targeted intervention which is recommended by WHO.

Restricting Access to Means

Limiting access to common means of suicide, such as firearms, pesticides, and certain medications, has been shown to reduce suicide rates. For example, after the implementation of stricter gun control laws in Australia, there was a significant decrease in firearm-related suicides without a corresponding increase in suicides by other means [25].

Public Awareness and Education

Raising awareness about suicide and mental health can reduce stigma and encourage individuals to seek help. Public education campaigns that promote understanding of the signs of suicide and how to respond can empower communities to act before a crisis occurs.

The Impact of Suicide on Society

The impact of suicide extends far beyond the individual, affecting families, communities, and society at large. Survivors of suicide loss—those who have lost a loved one to suicide—often experience profound grief and are at an increased risk of developing mental health disorders themselves. Furthermore, suicide imposes significant economic costs on society, including lost productivity, health care expenses, and the burden on emergency services [26].

Conclusion

Suicide is a preventable tragedy, yet it remains a leading cause of death worldwide. Addressing suicide requires comprehensive strategies that include improving mental health care, crisis intervention, restricting access to means, and raising public awareness. By understanding the complex interplay of factors that contribute to suicide and implementing effective prevention strategies, we can work towards reducing the global suicide rate and alleviating the profound impact of suicide on individuals, families, and communities.

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