

Suicide : Risk Factors, Preventive Approaches and the Role of Health Professionals : A Comprehensive Review

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Abstract

Introduction : Suicide accounts for around 800,000 fatalities worldwide each year, making it a serious public health issue. It has significant social, psychological, and financial repercussions and impacts people of all ages and socioeconomic situations. The main risk factors for suicide are examined in this overview, including biological predispositions, sociocultural pressures, and psychological illnesses. It also looks at preventive strategies such legislative frameworks, counseling interventions, early detection, and community awareness campaigns. The importance of health professionals in preventing suicide is emphasized, with a focus on their roles in screening, crisis response, psychological support, and advocacy. Reducing the global suicide burden requires bolstering public health initiatives and interdisciplinary cooperation.

Keywords : Suicide, Risk Factors, Prevention, Mental Health, Health Professionals, Public Health

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Introduction

Suicide is one of the leading causes of premature mortality worldwide, particularly among young adults and adolescents¹. The World Health Organization (WHO) reports that suicide accounts for 1.3% of global deaths annually². It is often the result of complex interactions between biological, psychological, social, and cultural factors³. Unlike many other causes of death, suicide is largely preventable if timely and appropriate measures are implemented⁴.

Understanding risk factors and prevention strategies is essential to inform effective public health interventions and clinical practices⁵. Moreover, health professionals, particularly those in primary care and mental health services, play a crucial role in the identification and management of individuals at risk⁶. This review aims to comprehensively analyze risk factors, prevention approaches, and the vital role of health professionals in suicide prevention.

Risk Factors for Suicide

Suicide does not result from a single cause but from a combination of interacting risk factors.

1. **Psychiatric Disorders** : Mental illnesses such as depression, bipolar disorder, schizophrenia, and substance use disorders are strongly associated with suicide?. Up to 90% of suicide cases are linked to psychiatric conditions.
2. **Psychosocial Stressors** : Experiences of trauma, interpersonal conflicts, unemployment, financial hardship, and social isolation contribute significantly to suicidal ideation and attempts?.
3. **Biological Factors** : Genetic predisposition, altered serotonin levels, and neurobiological dysfunctions have been identified as biological correlates of suicide?.
4. **Cultural and Environmental Influences** : Cultural attitudes towards suicide, stigma around mental illness, and easy access to means of suicide (pesticides, firearms, drugs) increase risk^{1?}.
5. **Vulnerable Populations** : Adolescents, elderly individuals, marginalized communities, and persons with chronic illnesses represent high-risk groups¹¹.

Preventive Approaches

Suicide prevention requires comprehensive, multi-layered strategies.

1. **Early Identification and Intervention** : Screening for depression and suicidal ideation in primary health care settings allows timely intervention¹².
2. **Psychological Support** : Cognitive-behavioral therapy (CBT), dialectical behavior therapy (DBT), and crisis counseling have shown effectiveness in reducing suicidal behavior?.
3. **Community Awareness and Education** : Public education campaigns help reduce stigma, encourage help-seeking behavior, and improve mental health literacy?.
4. **Restricting Access to Means** : Legislation and policy interventions to control access to lethal means, such as pesticides and firearms, have been effective?.
5. **Support Systems** : Strengthening family support, peer groups, and community-based programs enhances protective factors against suicide^{1?}.

Role of Health Professionals

Health professionals are at the frontline of suicide prevention.

1. **Screening and Assessment** : Nurses, physicians, and mental health workers should routinely assess for risk factors such as depression, substance abuse, and suicidal ideation¹¹.
2. **Crisis Intervention** : Immediate management of suicidal patients, including safety planning, hospitalization (if necessary), and counseling, is critical?.
3. **Long-term Management** : Ensuring continuity of care through regular follow-ups, psychotherapy, and pharmacological treatment improves outcomes?.
4. **Advocacy and Training** : Health professionals advocate for mental health resources, policy reforms, and participate in public education campaigns².
5. **Multidisciplinary Collaboration** : Effective suicide prevention requires collaboration between healthcare workers, educators, policymakers, and community organizations³.

Conclusions

Suicide remains a pressing global health challenge, but it is preventable with the right strategies. Understanding the interplay of risk factors, implementing evidence-based prevention approaches, and strengthening the role of health professionals can significantly reduce suicide rates. A multidisciplinary, community-oriented, and proactive approach is essential to address this complex issue.

Recommendations

1. **Strengthening Mental Health Education**
 - ✓ Integrate structured mental health and suicide prevention education into school and college curricula to build awareness from an early age.
2. **Capacity Building of Health Professionals**
 - ✓ Provide regular training for nurses, doctors, counselors, and community health workers in early identification, counseling, and crisis intervention for individuals at risk of suicide.
3. **Improved Access to Mental Health Services**
 - ✓ Expand community-based mental health services and helplines, ensuring accessibility in rural and underserved areas.
4. **Policy and Legal Support**
 - ✓ Governments should strengthen suicide prevention policies, promote mental health laws, and ensure

proper implementation of the National Mental Health Programme and related initiatives.

5. Community Engagement

- v Mobilize families, schools, religious groups, and local organizations to reduce stigma, promote open discussions about mental health, and create supportive environments.

6. Use of Technology

- v Develop mobile applications, online counseling platforms, and AI-driven suicide risk detection tools to provide timely intervention.

7. Restricting Access to Means of Suicide

- v Enforce regulations to limit access to pesticides, firearms, and other commonly used means of suicide.

8. Research and Surveillance

- v Encourage further research on region-specific suicide risk factors, effectiveness of interventions, and cultural influences. Establish suicide registries to track trends and outcomes.

9. Postvention Strategies

- v Provide psychological support and counseling for families and peers affected by suicide to reduce the risk of complicated grief and secondary suicides.

10. Holistic Approach

- v Adopt a multi-sectoral approach involving health, education, labor, media, and law enforcement sectors to address suicide as a public health priority.

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