

Difficulties in preventing suicidal behaviours in spite of existing evidence-based preventive methods – An overview

Danuta Wasserman

Summary

Suicide prevention is an important issue. Every year almost 800,000 people die by suicide worldwide, while alarmingly, many more individuals attempt to take their own life. However, despite the existence of evidence-based suicide preventive strategies, suicidal behaviours remain difficult to prevent. This overview will address some of the obstacles that arise in preventing suicide.

suicide, attempted suicide, suicidal thoughts, preventive methods

INTRODUCTION

Suicide is a global phenomenon occurring in all regions of the world, with almost 800 000 people dying by suicide each year, while at least ten times more attempt to take their own life. It is a leading cause of death among adolescents and young adults aged 15 – 29 years [1].

Throughout history, suicide has been not only a controversial but also a commonly forbidden topic [2,3]. Today, whilst this perspective has dramatically shifted and there is a far greater understanding of its underlying causes, there still remain certain concerns around discussing suicide, due to the fear of inducing suicidal behaviours. This prejudice exists in various social groups, not only amongst the lay public but

also professionals, researchers, and ethics committees, which has created a barrier in implementing practical suicide prevention activities at all levels of influence, thus hindering the reduction of suicide attempts and completed suicides. However, there is evidence that supports the notion that talking about suicide does not increase its rates; in fact, it can even decrease suicidal behaviours [4,5,6].

Development of the suicidal process

Suicide does not occur at random, but rather is considered an ongoing process; from suicidal thoughts, to suicide attempts and in some cases a completed suicide. The ‘stress-diathesis model’ suggests that suicidal people have a certain level of genetic predisposition toward suicidal ideation, which interacts with the environmental factors and influences the likelihood of suicide throughout the lifetime [7,8].

During the development of the suicidal process, suicidal communication is usually ex-

Danuta Wasserman: Professor of Psychiatry and Suicidology, Head and Founder of National Centre for Suicide Research and Prevention of Mental Ill-Health (NASP) at Karolinska Institutet, Stockholm, Sweden, Director for the WHO Collaborating Centre for Research, Methods Development and Training in Suicide Prevention

Correspondence address: Danuta.Wasserman@ki.se

pressed either verbally or non-verbally, both in direct and indirect forms. The suicidal process can be affected by both an individual's ability to express their suicidal thoughts, as well as the capability of others to recognize and respond to the suicidal person's communication. The reaction of others, i.e. family and significant others, but also professionals, can be expressed in both a verbal and non-verbal manner, which can vary from empathy, through anxiety, silence, to ambivalence and sometimes even aggression. Therefore, depending on its form, the response of others can act as either a protective or a risk factor which may accelerate the suicidal process. For example, an aggressive response may constitute turning one's back on the suicidal person, or verbally expressing extreme frustration. This sort of reaction, as well as silence or ambivalence, may greatly hinder suicide preventive activities. The suicidal process can also be accelerated or delayed by the suicidal person's own ambivalence concerning whether they want to live or die, or to seek or not to seek help, followed by anxiety, impulsivity, and aggressivity [8,9,10].

Additionally, the presence of risk and absence of protective factors play a determining role in whether suicidal people are able to retain control in their life, and whether it results in suicidal ideation, suicide attempt, or ultimately, suicide. Protective factors may include connectedness to one's family and friends, cultural factors or religious beliefs, life skills, a sense of purpose and self-belief, to name but a few. Risk factors can be absence of above mentioned protective factors, as well as substance misuse, negative and traumatic life events, mental disorders, family history of suicidal behaviours and prior suicide attempts [8,11].

Suicide prevention strategies

The World Health Organisation [WHO] introduced a socio-ecological model for suicide prevention, published in the World Suicide Report 'Preventing suicide: a global imperative' [11]. The framework, which includes societal, community, interpersonal, and individual levels, intends to guide and assist countries in strengthening their suicide prevention efforts. This model stimulates the use of: universal, selective and indicated prevention strategies.

Universal prevention strategies target the whole population with the aim of improving public awareness and health care systems, access to such support, and the living conditions within society in general. Selective prevention strategies focus on certain at-risk groups within a population, who might not exhibit suicidal behaviours but have an increased risk. Indicated prevention strategies focus on individuals who are particularly vulnerable, as they have shown signs of suicidal behaviour, or attempted suicide.

The universal strategies focus predominantly on suicide prevention at the societal level, which also influences the community, interpersonal and individual levels. Within the universal intervention the key areas of interest are improving mental health policies, access to health care, and policies for reducing substance abuse, as well as restricting access to lethal means of suicide, creating sensible media reporting guidelines and raising awareness around substance abuse disorders, mental health and suicide. Some of the risk factors for suicide at the societal level may include: economic/social inequalities, absence of national prevention programmes, natural disasters, inappropriate media reporting, stigma related to help-seeking behaviour, access to lethal means of suicide, and inability to access appropriate health care.

The selective strategies primarily target suicide prevention at the community and interpersonal level, but to some degree also influence the individual and societal levels. They focus mainly on gatekeeper training, crisis helplines and interventions for at-risk groups. Some of the risk factors for suicide at the community level are absence of local prevention and rehabilitation programmes, war, disaster and conflict, pressures of displacement or poor social assimilation, discrimination, substandard living conditions, and trauma or abuse. In turn, some of the risk factors for suicide at the interpersonal level are social isolation, relationship conflict or discord with family or friends, lack of social network and relationships, loneliness, and being a member of social minority groups such as immigrants, refugees or the LGBTQ+ community.

Lastly, there are the strategies targeting suicide prevention at the individual level. The main goals of such interventions are adequate assessment, treatment and rehabilitation of suicidal persons with history of suicide attempts, mental disorders,

substance use disorders, chronic pain and somatic disorders, as well as counteracting feelings of hopelessness due to unfavourable life events, such as job loss, death of a loved one, or financial loss.

For the above mentioned reasons, suicide prevention efforts need to be approached from a wide-ranging multi-sectoral stance, to not only consider the numerous factors and pathways that lead to suicide but to also address different risk groups and populations and the context in which they exist.

Evidence-based suicide prevention methods

An integral part of reducing suicidal behaviours is through the implementation of evidence-based methods, especially within national suicide prevention programmes.

An international panel of experts conducted a systematic review of research published between 1966 and June 2005 to identify the most effective suicide prevention methods and determine interventions that require further investigation [12]. Ten years later, another group of experts re-examined the updated evidence for suicide prevention methods by analysing studies published between January 2005 and December 2014 [13]. Both reviews demonstrated that physician education, restriction of access to lethal means of suicide, pharmacological and psychological treatment and school-based prevention programmes are the most effective evidence-based suicide prevention methods.

The European Psychiatric Association [EPA] also provides guidance on both suicide treatment and prevention methods, particularly highlighting clinical treatment options that can decrease suicidal behaviours amongst people with psychiatric disorders [14].

Presented below is a short description of evidence-based suicide preventive methods within the health care and public health care sectors.

Health care sector

Physician education

Increased education among general practitioners improves early recognition, enhances treatment of depression and reduces suicide.

Treatment

Treatment of Major Depressive Disorder (MDD), other depressive states, substance abuse, as well as psychoses is an essential strategy in decreasing suicidal behaviours. Pharmacotherapy treatments, including adequate antidepressant prescriptions and the use of lithium for people with mood disorders were found to be effective in reducing suicide. Clozapine reduces suicide risk in psychosis and is recommended by the Food and Drug Administration (FDA). Additionally, other antipsychotics and anticonvulsant mood stabilisers have protective effects. Data also supports the use of psychotherapeutic treatments, such as cognitive behavioural therapy (CBT) and dialectical behaviour therapy (DBT) for suicide prevention. Other forms of psychological treatment, such as individual, interpersonal, group and other forms of psychotherapy are also advantageous; however, more studies are needed. The best treatment option for suicide prevention is a combination of both psychopharmacological and psychotherapeutic interventions.

Chain of care and follow-up

A continuous chain of care is an essential part of treatment for suicidal persons; ensuring that all those involved with an individual who has attempted suicide collaborate to provide the best follow-up care may decrease the chance of new suicidal acts.

In addition, a randomised controlled trial in culturally different sites demonstrated that brief interventions with an extensive follow-up up to 18 months after a suicide attempt showed significant results in reducing death from suicide in comparison with the Treatment-As-Usual (TAU) group [15].

Public health sector

Means of suicide restriction

The evidence for restricting access to lethal means of suicide, which hinders impulsive suicidal acts, is strong and should therefore be a method included in all national suicide prevention programmes. This includes restricting access to firearms, which is the most common

lethal method in many countries, as well as barbiturates and pesticides. Moreover, a reduction in suicides has been found to result from altering the packages of analgesics, placing physical barriers in suicide hotspots, and introducing catalytic converters in vehicles.

Alcohol restriction also has significant effects in decreasing suicide [16,17].

School-based prevention programmes

Evidence has been found to support the efficacy of school-based prevention programmes for decreasing suicidal behaviours.

The Youth Aware of Mental health (YAM) intervention significantly reduced suicidal ideation and suicide attempts, in comparison to the control group within the big European study on approximately 11,100 school pupils [18]. Studies of school-based programmes from the United States of America report similar results [19,20]

OTHER METHODS

Other methods like media education, public screening for depression, gatekeeper education, telephone and internet interventions, and general public awareness campaigns have shown promising developments but still require further research in terms of their efficacy.

DISCUSSION

Awareness

First and foremost, whilst there is a greater understanding of suicide today, in some parts of the world it is still considered a taboo topic, which undoubtedly negatively influences suicide prevention efforts in those areas.

Talking about suicide is not something to be feared; it will not increase suicidal behaviour, but rather reduce it and create an environment necessary for suicide prevention efforts. Yet, there is still some reluctance in discussing suicide, even within societies where the topic is more accepted. It is this lack of awareness which continues to act as a significant barrier in both suicide research and suicide prevention.

Recognition of suicidal communication

Suicidal communication, or lack thereof, as well as the reactions of others, can considerably affect the suicidal process. As a result, suicide preventive methods may not always be as effective. For example, it is difficult to implement the necessary treatments or interventions for a suicidal individual if they are unable to verbally express their suicidal intentions and if their communication is misinterpreted by significant others and professionals. The same applies for non-verbal forms of suicidal communication.

In particular, the lack of communication is significant amongst males, as they are less likely than females to report symptoms of depression or thoughts of suicide [21].

Even if suicidal ideation is communicated and understood, the reactions of others, whether that is ambivalence, aggression, silence or anxiety, influence suicide prevention. Significant others and professionals, due to their own countertransference feelings and reactions, may not give sufficient support and treatment to help the suicidal individual [22]. The suicidal person may also sense these negative reactions from others, whether they are verbalised or not, possibly leading to their own increased feelings of anxiousness, ambivalence or aggression.

Furthermore, regardless of whether they are conscious or unconscious, countertransference reactions from the therapist within therapeutic settings can further impede suicide prevention efforts by resulting in a lack of adequate treatment [22].

Consequently, it is crucial to develop a deeper understanding of suicidal communication and the different forms in which it can be expressed, as well as the influence different reactions to it can impose, on all social levels. This will hopefully increase detection of suicidal ideation and behaviours, and subsequently, implementation of suicide prevention methods to decrease suicide.

Framework of suicide prevention

The framework introduced by WHO [11] provides a guideline for preventing suicide, which can theoretically be implemented at all levels of society within each nation. However, the extent to which this is done throughout the world is not sufficient. As mentioned, there are still plac-

es where suicide is considered a taboo or forbidden topic, so the necessary suicide prevention methods are potentially not implemented. Additionally, preventive methods can be costly, so this could be a barrier for some of the economically challenged nations. With that being said, implementing strategies that have the potential to save lives is a cost-worthy cause, and should remain a priority for all countries.

Suicide rarely occurs spontaneously, it is rather an end result of a process influenced by many factors, but it can be prevented. There are almost always alternatives to suicide, even when the situation is perceived to be impossible to withstand by the suicidal person. Life can be demanding, and sometimes suicide appears as the only possible escape, but if a person's suicidal thoughts are brought into light, they can be discussed and taken care of in the treatment process. Psychiatric disorders can be treated, loneliness can change, different losses can be managed and serious somatic pain can be relieved. The basic issue in the treatment of suicidal patients is to address the existential question about the meaning of life and how to cope with the different life challenges, which we all encounter. Each society must fulfil their responsibility by providing supportive preventive and care structures for suicidal patients and their families.

CONCLUSION

Despite the existing evidence about effective prevention methods, there are still many obstacles in preventing suicide. Nonetheless, these are obstacles which can be overcome. A continued effort needs to be made to ensure that evidence-based suicide prevention methods are implemented on all levels of society, particularly by healthcare professionals and policymakers alike.

Acknowledgements

I would like to dedicate this text to the late Professor Julian Aleksandrowicz at the Faculty of Medicine at the Jagiellonian University in Krakow, who stimulated my interest to join a research club for medical students and to investigate psychological processes and psychotherapy in patients suffering from severe somatic diseases.

REFERENCES

1. World Health Organisation. Preventing suicide: A global imperative. WHO press; 2014. 89 p.
2. Alvarez A. The savage god: a study of suicide. New York: W. W. Norton; 1990. p. 320
3. Part 1; Suicide in a Religious and Cross-cultural Perspective. In: Wasserman D, Wasserman C, editors. Oxford Textbook of Suicidology and Suicide Prevention: A Global Perspective. 1st edition. United Kingdom: Oxford University Press; 2009. p. 3-84.
4. Gould MS, Marrocco FA, Kleinman M, Thomas JG, Mostkoff K, Cote J, et al. Evaluating Iatrogenic Risk of Youth Suicide Screening Programs: A Randomized Controlled Trial. JAMA. 2005; 13(6): 1635.
5. Dazzi T, Gribble R, Wessely S, Fear N. Does asking about suicide and related behaviours induce suicidal ideation? What is the evidence? Psychol Med. 2014; 44(16): 3361-3363.
6. Blades C, Stritzke W, Page A, Brown J. The benefits and risks of asking research participants about suicide: A meta-analysis of the impact of exposure to suicide-related content. Clin Psychol Rev. 2018;64:1-12.
7. Mann JJ, Waternaux C, Haas GL, Malone KM. Toward a Clinical Model of Suicidal Behavior in Psychiatric Patients. Am J Psychiatry. 1999; 156(2):181-189.
8. Wasserman D. The suicidal process. In: Wasserman D, editor. Suicide an unnecessary death. 2nd edition. United Kingdom; Oxford University Press; 2016. p. 27-37.
9. Wolk-Wasserman D. Suicidal communication of persons attempting suicide and responses of significant others. Acta Psychiatrica Scand. 1986;73:481-499.
10. Wasserman D. Passive euthanasia in response to attempted suicide: one form of aggressiveness by relatives. Acta Psychiatr Scand. 1989;79:460-467.
11. Wasserman D. Review of health and risk-behaviours, mental health problems and suicidal behaviours in young Europeans on the basis of the results from the EU-funded Saving and Empowering Young Lives in Europe (SEYLE) study. Psychiatr. Pol. 2016; 50(6): 1093-1107.
12. Mann JJ, Apter A, Bertolote J, Beautrais A, Currier D, Haas A, et al. Suicide prevention strategies: a systematic review. JAMA. 2005;294(16):2064-2074..
13. Zalsman G, Hawton K, Wasserman D, van Heeringen K, Arensman E, Sarchiapone M, et al. Suicide prevention strategies revisited: 10-year systematic review. Lancet Psychiatry. 2016; 3(7) :646-659.
14. Wasserman D, Rihmer Z, Rujescu D, Sarchiapone M, Sokolowski M, Titelman D, et al. The European Psychiatric Association [EPA] guidance on suicide treatment and prevention. Eur Psychiatry. 2012;27:129-141.
15. Fleischmann A, Bertolote JM, Wasserman D, De Leo D, Bolhari J, Botega NJ, et al. Effectiveness of brief intervention and contact for suicide attempters: a randomized controlled trial in five countries. Bull World Health Organ. 2008; 86(9):703-709.

16. Wasserman D, Värnik A, Dankowicz M, Eklund G. Suicide-preventive effects of perestroika in the former USSR: the role of alcohol restriction. *Acta Psychiatr Scand Suppl.* 1998;394:1-44.
17. Lester D. The association between alcohol consumption and suicide and homicide rates: a study of 13 nations. *Alcohol Alcohol.* 1995;30:465-468.
18. Wasserman D, Hoven CW, Wasserman C, Wall M, Eisenberg R, Hadlaczky G, et al. School-based suicide prevention programmes: the SEYLE cluster-randomised, controlled trial. *Lancet.* 2015;385(9977):1536-1544.
19. Aseltine RH, DeMartino R. An outcome evaluation of the SOS suicide prevention program. *Am J Public Health.* 2004;94:446-451.
20. Wilcox HC, Kellam SG, Brown CH, Poduska JM, Ialongo NS, Wang Wei, et al. The impact of two universal randomized first – and second-grade classroom interventions on young adult suicide ideation and attempts. *Drug Alcohol Depend.* 2008;95(1):60-73.
21. Wolfgang R, Rihmer Z. Suicide in men: suicide prevention for the male person. In: Wasserman D, Wasserman C, editors. *Oxford Textbook of Suicidology and Suicide Prevention: A Global Perspective.* 1st edition. United Kingdom: Oxford University Press; 2009. p. 249-255.
22. Goldblatt MJ, Maltzberger JT. Countertransference in the treatment of suicidal patients. In: Wasserman D, Wasserman C, editors. *Oxford Textbook of Suicidology and Suicide Prevention: A Global Perspective.* 1st edition. United Kingdom: Oxford University Press; 2009. p. 389-393.