Preventing suicide

A global imperative
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Every suicide is a tragedy. It is estimated that over 800,000 people die by suicide and that there are many suicide attempts for each death. The impact on families, friends and communities is devastating and far-reaching, even long after persons dear to them have taken their own lives.

Unfortunately, suicide all too often fails to be prioritized as a major public health problem. Despite an increase in research and knowledge about suicide and its prevention, the taboo and stigma surrounding suicide persist and often people do not seek help or are left alone. And if they do seek help, many health systems and services fail to provide timely and effective help.

Yet, suicides are preventable. This report encourages countries to continue the good work where it is already ongoing and to place suicide prevention high on the agenda, regardless of where a country stands currently in terms of suicide rate or suicide prevention activities. With timely and effective evidence-based interventions, treatment and support, both suicides and suicide attempts can be prevented. The burden of suicide does not weigh solely on the health sector; it has multiple impacts on many sectors and on society as a whole. Thus, to start a successful journey towards the prevention of suicide, countries should employ a multisectoral approach that addresses suicide in a comprehensive manner, bringing together the different sectors and stakeholders most relevant to each context.

In the WHO Mental Health Action Plan 2013-2020, WHO Member States have committed themselves to work towards the global target of reducing the suicide rate in countries by 10% by 2020. WHO’s Mental Health Gap Action Programme, which was launched in 2008, includes suicide as one of the priority conditions and provides evidence-based technical guidance to expand service provision in countries.

It is against this background that I am pleased to present Preventing suicide: a global imperative. This report builds on previous work and contributes two key elements to moving forward: a global knowledge base on suicide and suicide attempts to guide governments, policy-makers and relevant stakeholders, and actionable steps for countries based on their current resources and contexts. In addition, it represents a significant resource for developing a comprehensive multisectoral strategy that can prevent suicide effectively.

Every single life lost to suicide is one too many. The way forward is to act together, and the time to act is now. I call upon all stakeholders to make suicide prevention an imperative.

Dr Margaret Chan
Director-General
World Health Organization
Suicides are preventable. Even so, every 40 seconds a person dies by suicide somewhere in the world and many more attempt suicide. Suicides occur in all regions of the world and throughout the lifespan. Notably, among young people 15-29 years of age, suicide is the second leading cause of death globally.

Suicide impacts on the most vulnerable of the world’s populations and is highly prevalent in already marginalized and discriminated groups of society. It is not just a serious public health problem in developed countries; in fact, most suicides occur in low- and middle-income countries where resources and services, if they do exist, are often scarce and limited for early identification, treatment and support of people in need. These striking facts and the lack of implemented timely interventions make suicide a global public health problem that needs to be tackled imperatively.

This report is the first WHO publication of its kind and brings together what is known in a convenient form so that immediate actions can be taken. The report aims to increase the awareness of the public health significance of suicide and suicide attempts and to make suicide prevention a higher priority on the global public health agenda. It aims to encourage and support countries to develop or strengthen comprehensive suicide prevention strategies in a multisectoral public health approach. For a national suicide prevention strategy, it is essential that governments assume their role of leadership, as they can bring together a multitude of stakeholders who may not otherwise collaborate. Governments are also in a unique position to develop and strengthen surveillance and to provide and disseminate data that are necessary to inform action. This report proposes practical guidance on strategic actions that governments can take on the basis of their resources and existing suicide prevention activities. In particular, there are evidence-based and low-cost interventions that are effective, even in resource-poor settings.

This publication would not have been possible without the significant contributions of experts and partners from all over the world. We would like to thank them for their important work and support.

The report is intended to be a resource that will allow policy-makers and other stakeholders to make suicide prevention an imperative. Only then can countries develop a timely and effective national response and, thus, lift the burden of suffering caused by suicide and suicide attempts from individuals, families, communities and society as a whole.

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Executive summary
Introduction

In May 2013, the Sixty-sixth World Health Assembly adopted the first-ever Mental Health Action Plan of the World Health Organization (WHO). Suicide prevention is an integral part of the plan, with the goal of reducing the rate of suicide in countries by 10% by 2020 (1). There is no single explanation of why people die by suicide. However, many suicides happen impulsively and, in such circumstances, easy access to a means of suicide – such as pesticides or firearms – can make the difference as to whether a person lives or dies.

Social, psychological, cultural and other factors can interact to lead a person to suicidal behaviour, but the stigma attached to mental disorders and suicide means that many people feel unable to seek help. Despite the evidence that many deaths are preventable, suicide is too often a low priority for governments and policy-makers. The objective of this report is to prioritize suicide prevention on the global public health and public policy agendas and to raise awareness of suicide as a public health issue. The report was developed through a global consultative process and is based on systematic reviews of data and evidence together with inputs from partners and stakeholders.

Global epidemiology of suicide and suicide attempts

An estimated 804 000 suicide deaths occurred worldwide in 2012, representing an annual global age-standardized suicide rate of 11.4 per 100 000 population (15.0 for males and 8.0 for females). However, since suicide is a sensitive issue, and even illegal in some countries, it is very likely that it is under-reported. In countries with good vital registration data, suicide may often be misclassified as an accident or another cause of death. Registering a suicide is a complicated procedure involving several different authorities, often including law enforcement. And in countries without reliable registration of deaths, suicides simply die uncounted.

In richer countries, three times as many men die of suicide than women do, but in low- and middle-income countries the male-to-female ratio is much lower at 1.5 men to each woman. Globally, suicides account for 50% of all violent deaths in men and 71% in women. With regard to age, suicide rates are highest in persons aged 70 years or over for both men and women in almost all regions of the world. In some countries, suicide rates are highest among the young, and globally suicide is the second leading cause of death in 15–29-year-olds. The ingestion of pesticide, hanging and firearms are among the most common methods of suicide globally, but many other methods are used with the choice of method often varying according to population group.

For every suicide there are many more people who attempt suicide every year. Significantly, a prior suicide attempt is the single most important risk factor for suicide in the general population. For both suicides and suicide attempts, improved availability and quality of data from vital registration, hospital-based systems and surveys are required for effective suicide prevention.

Restricting access to the means of suicide is a key element of suicide prevention efforts. However, means restriction policies (such as limiting access to pesticides and firearms or putting barriers on bridges) require an understanding of the method preferences of different groups in society and depend on cooperation and collaboration between multiple sectors.
Risk and protective factors, and related interventions

Frequently, several risk factors act cumulatively to increase a person’s vulnerability to suicidal behaviour.

Risk factors associated with the health system and society at large include difficulties in accessing health care and in receiving the care needed, easy availability of the means for suicide, inappropriate media reporting that sensationalizes suicide and increases the risk of “copycat” suicides, and stigma against people who seek help for suicidal behaviours, or for mental health and substance abuse problems.

Risks linked to the community and relationships include war and disaster, stresses of acculturation (such as among indigenous peoples or displaced persons), discrimination, a sense of isolation, abuse, violence and conflictual relationships. And risk factors at the individual level include previous suicide attempts, mental disorders, harmful use of alcohol, financial loss, chronic pain and a family history of suicide.

Strategies to counter these risk factors are of three kinds. “Universal” prevention strategies, which are designed to reach an entire population, may aim to increase access to health care, promote mental health, reduce harmful use of alcohol, limit access to the means for suicide or promote responsible media reporting. “Selective” prevention strategies target vulnerable groups such as persons who have suffered trauma or abuse, those affected by conflict or disaster, refugees and migrants, and persons bereaved by suicide, by training “gatekeepers” who assist the vulnerable and by offering helping services such as helplines. “Indicated” strategies target specific vulnerable individuals with community support, follow-up for those leaving health-care facilities, education and training for health workers, and improved identification and management of mental and substance use disorders.

Prevention can also be strengthened by encouraging protective factors such as strong personal relationships, a personal belief system and positive coping strategies.

The current situation in suicide prevention

Knowledge about suicidal behaviour has increased greatly in recent decades. Research, for instance, has shown the importance of the interplay between biological, psychological, social, environmental and cultural factors in determining suicidal behaviours. At the same time, epidemiology has helped identify many risk and protective factors for suicide both in the general population and in vulnerable groups. Cultural variability in suicide risk has also become apparent, with culture having roles both in increasing risk and also in protection from suicidal behaviour.

In terms of policy, 28 countries today are known to have national suicide prevention strategies, while World Suicide Prevention Day, organized by the International Association for Suicide Prevention, is observed worldwide on 10 September each year. Additionally, many suicide research units have been set up and there are academic courses that focus on suicide and its prevention. To provide practical help, non-specialized health professionals are being used to improve assessment and management of suicidal behaviours, self-help groups of bereaved have been established in many places, and trained volunteers are helping with online and telephone counselling.

In the past half-century, many countries have decriminalized suicide, making it much easier for those with suicidal behaviours to seek help.

Working towards a comprehensive response for suicide prevention

A systematic way of developing a national response to suicide is to create a national suicide prevention strategy. A national strategy indicates a government’s clear commitment to dealing with the issue of suicide. Typical national strategies comprise a range of prevention strategies such as surveillance, means restriction, media guidelines, stigma reduction and raising of public awareness as well as training for health workers, educators, police and other gatekeepers. They also usually include crisis intervention services and postvention.

Key elements in developing a national suicide prevention strategy are to make prevention a multisectoral priority that involves not only the health sector but also education, employment, social welfare, the judiciary and others. The strategy should be tailored to each country’s cultural and social context, establishing best practices and evidence-based interventions in a comprehensive approach. Resources should be allocated for achieving both short-to-medium and long-term objectives, there should be effective planning, and the strategy should be regularly evaluated, with evaluation findings feeding into future planning.

In countries where a fully-developed comprehensive national strategy is not yet in place, this should not be an obstacle to implementing targeted suicide prevention programmes since
these can contribute to a national response. Such targeted programmes aim to identify groups vulnerable to the risk of suicide and improve access to services and resources for those groups.

The way forward for suicide prevention

Ministers of health have an important role in providing leadership and bringing together stakeholders from other sectors in their country. In countries where suicide prevention activities have not yet taken place, the emphasis is on seeking out stakeholders and developing activities where there is greatest need or where resources already exist. It is also important to improve surveillance at this stage. In countries with some existing suicide prevention activities, a situation analysis can show what is already in place and indicate where there are gaps that need to be filled. Countries that already have a relatively comprehensive national response should focus on evaluation and improvement, updating their knowledge with new data and emphasizing effectiveness and efficiency.

While moving forward, two points should be considered. First, suicide prevention activities should be carried out at the same time as data collection. Second, even if it is felt that a country is not yet ready to have a national prevention strategy, the process of consulting stakeholders about a national response often generates interest and creates an environment for change. Through the process of creating the national response, stakeholders become committed, public dialogue on stigma is encouraged, vulnerable groups are identified, research priorities are fixed, and public and media awareness are increased.

Indicators that measure the strategy’s progress can include:

- a percentage reduction in the suicide rate;
- the number of suicide prevention interventions successfully implemented;
- a decrease in the number of hospitalized suicide attempts.

Countries that are guided by the WHO Mental Health Action Plan 2013–2020 (1) can aim for a 10% reduction in the suicide rate. Many countries will want to reduce the suicide rate further. In the long-term, importantly, reducing risk will go only part of the way towards reducing suicide. Furtherance of protective factors will help build for the future – a future in which community organizations provide support and appropriate referrals to those in need of assistance, families and social circles enhance resilience and intervene effectively to help loved ones, and there is a social climate where help-seeking is no longer taboo and public dialogue is encouraged.

Key messages

Suicides take a high toll. Over 800 000 people die due to suicide every year and it is the second leading cause of death in 15-29-year-olds. There are indications that for each adult who died of suicide there may have been more than 20 others attempting suicide.

Suicides are preventable. For national responses to be effective, a comprehensive multisectoral suicide prevention strategy is needed.

Restricting access to the means for suicide works. An effective strategy for preventing suicides and suicide attempts is to restrict access to the most common means, including pesticides, firearms and certain medications.

Health-care services need to incorporate suicide prevention as a core component. Mental disorders and harmful use of alcohol contribute to many suicides around the world. Early identification and effective management are key to ensuring that people receive the care they need.

Communities play a critical role in suicide prevention. They can provide social support to vulnerable individuals and engage in follow-up care, fight stigma and support those bereaved by suicide.
Introduction
Each suicide is a personal tragedy that prematurely takes the life of an individual and has a continuing ripple effect, dramatically affecting the lives of families, friends and communities. Every year, more than 800,000 people die by suicide – one person every 40 seconds. It is a public health issue that affects communities, provinces and entire countries.

Young people are among those most affected; suicide is now the second leading cause of death for those between the ages of 15 and 29 years globally. The numbers differ between countries, but it is the low- and middle-income countries that bear most of the global suicide burden, with an estimated 75% of all suicides occurring in these countries.

In May 2013, the Sixty-sixth World Health Assembly formally adopted the first-ever Mental Health Action Plan of the World Health Organization (WHO). The action plan calls on all WHO Member States to demonstrate their increased commitment to mental health by achieving specific targets. Suicide prevention is an integral component of the Mental Health Action Plan, with the goal of reducing the rate of suicide in countries by 10% by 2020 (1).

What causes suicide? Why do so many people end their lives every year? Is it because of poverty? Unemployment? The breakdown of relationships? Or is it because of depression or other serious mental disorders? Are suicides the result of an impulsive act, or are they due to the disinhibiting effects of alcohol or drugs? There are many such questions but no simple answers. No single factor is sufficient to explain why a person died by suicide: suicidal behaviour is a complex phenomenon that is influenced by several interacting factors – personal, social, psychological, cultural, biological and environmental.

While the link between suicide and mental disorders is well established, broad generalizations of risk factors are counterproductive. Increasing evidence shows that the context is imperative to understanding the risk of suicide. Many suicides occur impulsively in moments of crisis and, in these circumstances, ready access to the means of suicide – such as pesticides or firearms – can determine whether a person lives or dies. Other risk factors for suicide include a breakdown in the ability to deal with acute or chronic life stresses, such as financial problems. In addition, cases of gender-based violence and child abuse are strongly associated with suicidal behaviour. Suicide rates also vary within countries, with higher rates among those who are minorities or experience discrimination.

Stigma, particularly surrounding mental disorders and suicide, means many people are prevented from seeking help. Raising community awareness and breaking down taboos are important for countries making efforts to prevent suicide.

We have solutions to a lot of these issues, and there is a strong enough knowledge base to enable us to act.

**Suicides are preventable**

Suicide prevention efforts require coordination and collaboration among multiple sectors of society, both public and private, including both health and non-health sectors such as education, labour, agriculture, business, justice, law, defence, politics and the media. These efforts must be comprehensive, integrated and synergistic, as no single approach can impact alone on an issue as complex as suicide.

One recognized strategy for the prevention of suicide is the assessment and management of mental disorders, as described in WHO’s Mental Health Gap Action Programme (mhGAP), which identifies evidence-based individual-level strategies, including for the assessment and management of persons who attempted suicide. At the population level, mhGAP advocates restricting access to the means of suicide, developing policies to reduce the harmful use of alcohol through a range of policy options, and encouraging the media to follow responsible reporting practices on suicide.

In addition, prioritizing preventive interventions among vulnerable populations, including those who have previously attempted suicide, have also proved helpful. As a result, “postvention” has been identified as an important component of suicide prevention; bereaved families and friends of people who have died by suicide also require care and support.

Suicide prevention requires a vision, a plan and a set of strategies. These efforts must be informed by data. A guiding conceptual framework must be created in a culturally-specific manner, even though there is no universal set of strategies that will work in each and every country. Sustained leadership is essential since the goals of suicide prevention can be achieved only through sustained effort.

In order to create social change, three important factors are required: knowledge (both scientific and informed by practice), public support (political will), and a social strategy such as a national response to accomplish suicide prevention goals.

**Objectives of the report**

Despite the evidence that many deaths are preventable, often with low-cost interventions, suicide is too often a low
priority for governments and policy-makers worldwide. The
objective of this report is to prioritize suicide prevention on
the global public health and public policy agendas and to
increase overall awareness of suicide as a legitimate public
health issue. Through this report, WHO presents
evidence-based interventions for reducing suicides and calls
on partners to increase their prevention efforts.

The report draws attention to the magnitude of the problem,
describing the status and consequences of both suicide and
suicide attempts worldwide by drawing on all available data.
Specific sections of the report offer practical advice on
public health approaches that countries can adopt to
prevent suicide throughout the life course.

It is envisaged that this report will be a key resource for those
engaged in suicide prevention efforts, including first and
foremost ministries of health, planners and policy-makers,
but also nongovernmental organizations (NGOs),
researchers, health and community workers, the media and
the general public.

Method

This report has been developed through a global
consultative process and is based on systematic reviews of
existing data and evidence as well as inputs from several
different partners and stakeholders, both within and outside
WHO. Sections have been conceptualized and drafted by
leading suicide prevention experts who have drawn on their
collective expertise to paint a global picture of suicide and
create a road map for suicide prevention.

Terminology

It is important to acknowledge that during the process of
putting together this report, much discussion took place with
regard to definitions, with ultimate agreement on the terms
below. This by no means negates the ongoing evolution of
terms in this field and the use of different terms for very good
reasons elsewhere in this sector. It is beyond the scope of
this report to resolve issues of terminology and definitions of
suicidal behaviour conclusively.

For the purpose of this report, suicide is the act of deliberately
killing oneself.

For the purpose of this report, suicide attempt is used to
mean any non-fatal suicidal behaviour and refers to
intentional self-inflicted poisoning, injury or self-harm which
may or may not have a fatal intent or outcome.

It is important to acknowledge the implications and
complexities of including self-harm in the definition of
“suicide attempt”. This means that non-fatal self-harm without
suicidal intent is included under this term, which is
problematic due to the possible variations in related
interventions. However, suicide intent can be difficult to
assess as it may be surrounded by ambivalence or even
concealment.

In addition, cases of deaths as a result of self-harm without
suicidal intent, or suicide attempts with initial suicidal intent
where a person no longer wishes to die but has become
terminal, may be included in data on suicide deaths.
Distinguishing between the two is difficult, so it is not
possible to ascertain what proportions of cases are
attributable to self-harm with or without suicidal intent.

Suicidal behaviour refers to a range of behaviours that
include thinking about suicide (or ideation), planning for
suicide, attempting suicide and suicide itself. The inclusion
of ideation in suicidal behaviour is a complex issue about
which there is meaningful ongoing academic dialogue. The
decision to include ideation in suicidal behaviour was made
for the purpose of simplicity since the diversity of research
sources included in this report are not consistent in their
positions on ideation.

Contents of this report

This report, the first WHO publication of its kind, presents a
comprehensive overview of suicide, suicide attempts and
suicide prevention efforts worldwide, and identifies
evidence-based approaches to policy-making and
programme development on suicide prevention that can be
adapted to different settings. The report reflects the public
health model for suicide prevention (Figure 1). Following
these steps, suicide prevention begins with surveillance to
define the problem and to understand it, followed by the
identification of risk and protective factors (as well as
effective interventions), and culminates in implementation,
which includes evaluation and scale-up of interventions and
leads to revisiting surveillance and the ensuing steps. An
overarching conceptual framework – ideally a comprehen-
sive national strategy – must be created in a culture-specific
manner and informed by data in order to guide development,
implementation and evaluation with vision, political will,
leadership, stakeholder buy-in and, last but not least, funding
for the prevention of suicide.
Despite being a leading cause of death worldwide, suicide has remained a low public health priority. Suicide prevention and research on suicide have not received the financial or human investment they desperately need. It is hoped that this report will serve as a building block for the development and implementation of comprehensive suicide prevention strategies worldwide.
Global epidemiology of suicide and suicide attempts
Myths about suicide

Myth:

People who talk about suicide do not mean to do it.

Fact:

People who talk about suicide may be reaching out for help or support. A significant number of people contemplating suicide are experiencing anxiety, depression and hopelessness and may feel that there is no other option.
The prevalence, characteristics and methods of suicidal behaviour vary widely between different communities, in different demographic groups and over time. Consequently, up-to-date surveillance of suicides and suicide attempts is an essential component of national and local suicide prevention efforts. Suicide is stigmatized (or illegal) in many countries. As a result, obtaining high-quality actionable data about suicidal behaviour is difficult, particularly in countries that do not have good vital registration systems (that register suicide deaths) or good data-collection systems on the provision of hospital services (that register medically treated suicide attempts). Developing and implementing appropriate suicide prevention programmes for a community or country requires both an understanding of the limitations of the available data and a commitment to improving data quality to more accurately reflect the effectiveness of specific interventions.

**Suicide mortality**

The primary data source for this chapter is the WHO Global Health Estimates. The estimates are largely based on the WHO mortality database – a global vital registration and cause-of-death registry that is created from data provided to WHO by Member States (2). A number of statistical modelling techniques are used to arrive at the estimates. The methods of generating these estimates are described in technical documents from the WHO Department of Health Statistics and Information Systems (3). This chapter presents global and regional results. In most cases the reported rates are age-standardized to the age distribution of the WHO World Standard Population, thus allowing for easier comparison across regions and over time. Country-specific estimates of 2012 suicide rates for 172 Member States with populations of 300 000 or greater are presented in Map 1 and Annexes 1 and 2 (rates in countries with smaller populations are unstable).

**Global and regional suicide rates**

As shown in Table 1, there were an estimated 804 000 suicide deaths worldwide in 2012. This indicates an annual global age-standardized suicide rate of 11.4 per 100 000 population (15.0 for males and 8.0 for females).
### Table 1. Estimated numbers and rates of suicide by region and the world, 2012

<table>
<thead>
<tr>
<th>Region</th>
<th>% of global population</th>
<th>Number of suicides, 2012 (thousands)</th>
<th>% of global suicides</th>
<th>Age-standardized* suicide rates (per 100 000), 2012</th>
<th>Male:Female ratio of age-standardized suicide rates, 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global**</td>
<td>100.0%</td>
<td>804</td>
<td>100.0%</td>
<td>11.4</td>
<td>8.0</td>
</tr>
<tr>
<td>All high-income Member States</td>
<td>17.9%</td>
<td>192</td>
<td>23.9%</td>
<td>12.7</td>
<td>5.7</td>
</tr>
<tr>
<td>All low- and middle-income (LMIC) Member States</td>
<td>81.7%</td>
<td>607</td>
<td>75.5%</td>
<td>11.2</td>
<td>8.7</td>
</tr>
<tr>
<td>LMICs in Africa</td>
<td>12.6%</td>
<td>61</td>
<td>7.6%</td>
<td>10.0</td>
<td>5.8</td>
</tr>
<tr>
<td>LMICs in the Americas</td>
<td>8.2%</td>
<td>35</td>
<td>4.3%</td>
<td>6.1</td>
<td>2.7</td>
</tr>
<tr>
<td>LMICs in Eastern Mediterranean</td>
<td>8.0%</td>
<td>30</td>
<td>3.7%</td>
<td>6.4</td>
<td>5.2</td>
</tr>
<tr>
<td>LMICs in Europe</td>
<td>3.8%</td>
<td>35</td>
<td>4.3%</td>
<td>12.0</td>
<td>4.9</td>
</tr>
<tr>
<td>LMICs in South-East Asia</td>
<td>25.9%</td>
<td>314</td>
<td>39.1%</td>
<td>17.7</td>
<td>13.9</td>
</tr>
<tr>
<td>LMICs in Western Pacific</td>
<td>23.1%</td>
<td>131</td>
<td>16.3%</td>
<td>7.5</td>
<td>7.9</td>
</tr>
<tr>
<td>World Bank regions**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-income</td>
<td>18.3%</td>
<td>197</td>
<td>24.5%</td>
<td>12.7</td>
<td>5.7</td>
</tr>
<tr>
<td>Upper-middle-income</td>
<td>34.3%</td>
<td>192</td>
<td>23.8%</td>
<td>7.5</td>
<td>6.5</td>
</tr>
<tr>
<td>Lower-middle-income</td>
<td>35.4%</td>
<td>333</td>
<td>41.4%</td>
<td>14.1</td>
<td>10.4</td>
</tr>
<tr>
<td>Low-income</td>
<td>12.0%</td>
<td>82</td>
<td>10.2%</td>
<td>13.4</td>
<td>10.0</td>
</tr>
</tbody>
</table>

LMICs = Low- and middle-income countries.
* Rates are standardized to the WHO World Standard Population, which adjusts for differences in age structure, facilitating comparisons between regions and over time.
** Includes data for three territories that are not Member States of WHO.