A Public Health Approach to Suicide Prevention 6

Preventing suicide: a call to action

Keith Hawton, Jane Pirkis

The public health approach to suicide prevention requires us to move away from thinking about suicide as a purely clinical problem and to pay heed to the array of social determinants (such as financial hardship or domestic violence and abuse) that might lead people to consider suicide as an option. Clinical factors are important, and, indeed, clinical or indicated interventions are entirely appropriate for people who have reached a point of crisis and should be a mainstay of national suicide prevention strategies. However, our Series stresses the need for selective and universal interventions that tackle the pervasive problem of suicide in a more upstream way, preventing people reaching a crisis point. Many social determinants can best be addressed by sectors outside health, so we are calling for a whole-of-government commitment to suicide prevention. We make recommendations for actions in the areas of policy, practice, research, and advocacy. People with lived experience of suicide should have genuine involvement in all of these actions.

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This is the sixth in a Series of six papers on a public health approach to suicide prevention. All papers in the Series are available at www.thelancet.com/series/suicide-prevention

Centre for Suicide Research, Department of Psychiatry, University of Oxford, Oxford, UK (Prof K Hawton FMedSci); **Centre for Mental Health and Community Wellbeing, Melbourne School of Population and Global Health, University of Melbourne, Melbourne, VIC, Australia** (Prof J Pirkis PhD)

Correspondence to:
Prof Keith Hawton, Centre for Suicide Research, Department of Psychiatry, University of Oxford, Oxford OX3 7JX, UK
keith.hawton@psych.ox.ac.uk

Introduction

The *Comprehensive Mental Health Action Plan,* initially released by WHO in 2013 and updated in 2021, sets a target of a 30% reduction in the suicide rate internationally by 2030.[1] Figure 1 indicates how the annual figures are tracking against that target.[2] In 2013, the age-adjusted global suicide rate was 10·0 per 100 000 population, and by 2019, the year for which the most recent international data are available, the figure was 9·0 per 100 000 (a 10% decrease), which seems promising. However, the trend line suggests that the reduction might be levelling off. In addition, the aggregate figures mask between-country and between-region inequalities. Low-income and-middle-income countries (LMICs), which account for 77% of the world's suicides,[3] have not fared as well as high-income countries (HICs) in reducing suicide, with factors such as access to means,[4] poverty,[5] alcohol use,[6] and domestic violence and abuse[7] being implicated. Suicide rates have also varied over time according to region, with a notable outlier being the Americas. The suicide rate in that region has not reduced, potentially due—at least in part—to a failure to address gun ownership in the USA.[8] In this Series, we have argued that the only way we will make substantial inroads into the major problem of suicide is by reorienting suicide prevention activities through a public health approach.

Series overview

We are not the first to have presented a public health model for suicide prevention. For example, Potter and colleagues discussed suicide prevention in the context of public health in 1995.[9] However, our Series advances thinking in this area. It places greater emphasis on the social determinants of suicide and on the whole-of-government approach necessary to address them, taking stock of efforts that have been made to date and providing guidance as to how these efforts might be progressed. The public health approach, as we have articulated it, represents a step change in the way decision makers should think about suicide and its prevention. In the past, the emphasis has been on clinical solutions, delivered by psychiatrists, psychologists, social workers, mental health nurses, and other professionals who make up the mental health workforce. Suicidal thoughts and behaviours have been predominantly regarded as symptoms of mental illnesses that should be treated with pharmacological or psychological therapies. We are not denying the importance of these clinical strategies, and absolutely agree that they are crucial for people who present to services in a suicidal crisis. However, we contend that they will inevitably only reach those who are already at the point of crisis. A more comprehensive public health approach is required to prevent those who might be at risk of suicide because of their circumstances from reaching this point.

The public health approach and clinical approach are not mutually exclusive; indeed, the public health

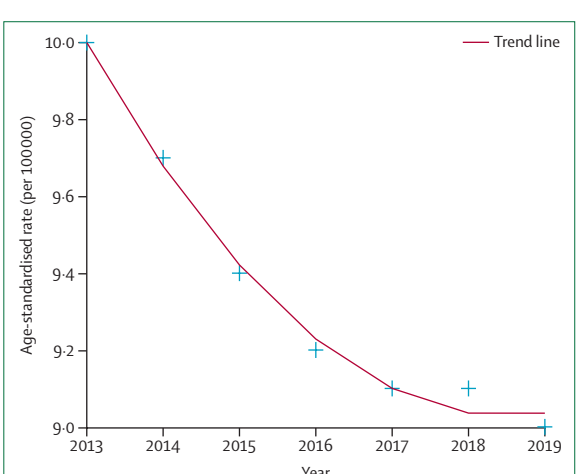


Figure 1: **Age-standardised global suicide rates, 2013–19**
Data sourced from the WHO Global Health Observatory.[2] Trend line estimated from fitting a linear regression model to the age-standardised rates (blue crosses) with fractional polynomial terms for time.

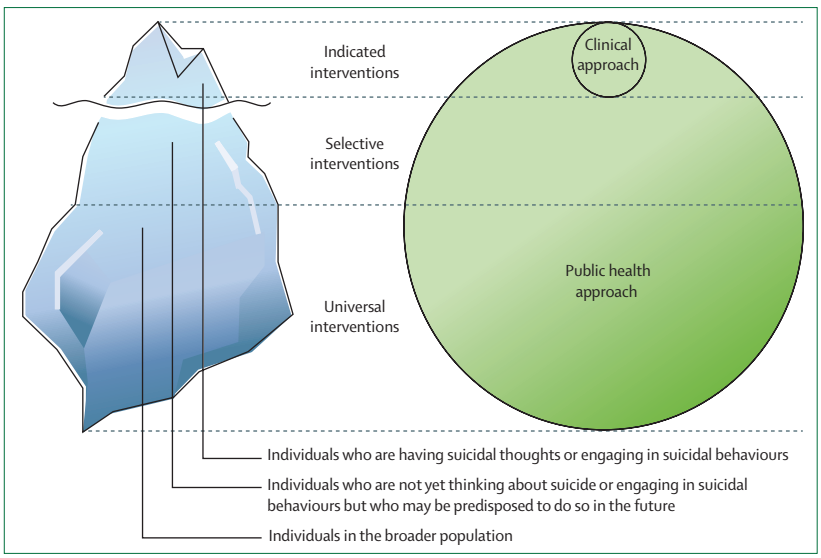


Figure 2: **The iceberg analogy underpinning the public health approach**

approach incorporates the clinical approach (figure 2). The iceberg analogy shown in figure 2 illustrates that the proportion of people above the surface with suicidal thoughts and behaviours is relatively small compared with the proportion below the surface who might be at future risk due to life adversities. The clinical approach is absolutely warranted for the former group. Numerous studies have shown that there is a relationship between mental illness and suicide,[10] although it appears that this association might not be as strong in LMICs as the association observed in HICs.[11] In public health terms, the interventions encompassed by the clinical approach would be called indicated interventions on the basis that they target individuals who are already having suicidal thoughts or engaging in suicidal behaviours. Selective interventions and universal interventions target the much larger, below-the-surface groups—ie, those who are not yet thinking about suicide or engaging in suicidal behaviour but who might be predisposed to do so in the future (selective interventions) and those in the broader population (universal interventions).

This *Lancet Public Health* Series suggests that policy makers need to look beyond clinical or indicated interventions and place greater emphasis on selective and universal interventions. These interventions can address some of the key social determinants of suicide, such as financial hardship (addressed in the third paper in this Series[12]) and alcohol use, gambling, domestic violence and abuse, and bereavement by suicide (addressed in the fifth paper in this Series[13]). We have also shown that selective and universal interventions can reduce physical access to means of suicide (addressed in the second paper in this Series[14]) and the cognitive availability of suicide (ie, awareness of suicide as an option and knowledge of potential suicide methods, addressed in the fourth paper in this Series[15]). Using effective interventions to address these root causes of suicide at a population level is imperative, and it is essential that we deploy such interventions before suicidal crises emerge. In fact, for people who are in a suicidal crisis, it is crucial to ensure that clinical approaches that focus on individuals' mental health are complemented by strategies that address the context in which they live. Table 1 provides examples of some of the most promising interventions identified in the Series.[16–20]

We have not covered interventions for every risk factor for suicide in this Series. Two examples that are garnering increasing interest are loneliness and climate change. Loneliness is a major risk factor for suicide,[21] and broad interventions (eg, ones that are designed to improve community connectedness) could reduce this risk.[22] There is also some evidence of the effects of climate change (eg, extreme weather events) on mental health, eco-anxiety, and suicide.[23] Interventions that address climate change directly (eg, via emission reduction targets) will undoubtedly be helpful here, but engagement in collective environmental activism has also been shown to buffer climate change anxiety.[24]

Two additional points should be emphasised. The first is that the kinds of societal risk factors that we have described play out differently across the life course. Johns and colleagues[25] discuss societal risk factors in terms of key developmental periods (adolescence, early adulthood, middle adulthood, and later adulthood) and common life transitions (eg, social relationships, health, employment, and school). Particular risk factors will be more salient at different intersections between these developmental periods and life transitions (eg, loneliness might come to the fore as a person enters later adulthood). Considering suicide from a life course perspective has the advantage of highlighting pathways and mechanisms that contribute to suicide risk and identifying points of engagement that might be optimal for reducing this risk.[25,26]

The second point is that there are considerable inequities in the risk conferred by many of the factors we have covered in the Series, meaning that some groups are disproportionately affected by suicide. For example, people who are already socioeconomically disadvantaged are likely to be most affected by the increases in suicides that are typically observed during economic recessions, particularly when particular macroeconomic policies (eg, austerity policies and interest rate rises) are implemented.[27–29]

Current limitations to implementing a public health approach

In this Series, we have attempted to cover the five activities that are typically regarded as the steps in any public health approach. Step one is to define and quantify the problem (in this case, suicide); step two is to identify the factors that heighten risk for the problem; step three is to propose ways to prevent or ameliorate the problem,

	Example	Paper in Series
Restricting access to pesticides	When highly hazardous pesticides were introduced in Sri Lanka in the 1960s, the suicide rate rose from 5 per 100 000 population to a peak of 57 per 100 000 in 1995;[3] the Registrar of Pesticides banned the two most toxic pesticides in 1984, a further five in 1995, one in 1998, and three in 2008; these actions saw a decrease in suicides to 17 per 100 000 population; this legislative action was estimated to have saved 93 000 lives by 2017[16]	Paper 2[14]
Legislative restrictions on the supply of alcohol	Legislation introduced in Alaska in 1981 allowed Alaska Native communities to choose between total prohibition of sale and importation of alcohol (dry law), prohibition (or substantial restriction) of sale but importation for personal use permitted (damp law), or no prohibition on sale or importation (wet law); introduction of the damp law resulted in a decrease in suicides; communities that introduced damp laws saw declines in the Alaska Native suicide rate from 120·3 per 100 000 population to 64·8 per 100 000 between 1980 and 1993; no equivalent drop was seen in communities that introduced dry laws or retained wet laws[17]	Paper 5[13]
Mitigating the suicide risk associated with poverty	The Bolsa Familia conditional cash transfer programme was introduced in Brazil in 2004 to relieve poverty and provide access to various services (eg, health services and job skills training); the effect of the programme on suicide was examined in a study that followed beneficiaries for 12 years and compared them with non-beneficiaries with similar profiles; the suicide rate for beneficiaries was 5·4 per 100 000 population, whereas the suicide rate for non-beneficiaries was 10·7 per 100 000 (incidence rate ratio 0·44, 95% CI 0·42–0·45), providing strong evidence that the programme was protective against suicide[18]	Paper 3[12]
Media guidelines on responsible reporting of suicide	In Hong Kong, student suicides rose between 2006 and 2016, with a worrying surge at the end of the period; concerns that at least some of the increase might have been fuelled by sensationalist reporting of the deaths led local suicide prevention experts to work closely with media professionals to tone down the reporting and introduce more preventive elements; the greater emphasis on preventive information appeared to coincide with a drop in student suicides[19]	Paper 4[15]
Suicide prevention media campaigns	In the USA, the song *1–800–273–8255* by hip-hop artist Logic provides an example of an accidental media campaign that encouraged help-seeking; released in April, 2017, the song tells the story of a young man who prepares to take his own life but then calls the number for Lifeline; Logic performed the song at the MTV Video Music Awards in August, 2017, and at the Grammy Awards in January, 2018; in the combined 34-day period after the release of the song and the performance at the two awards ceremonies, calls to Lifeline were 6·9% higher than expected, and suicides nationally were 5·5% lower than expected[20]	Paper 4[15]

Table 1: **Examples of successful interventions highlighted in the Series**

based on epidemiological evidence; step four is to implement effective strategies at scale; and step five is to evaluate the success of these strategies.[30]

The first and second steps involve surveillance and descriptive and analytical epidemiology. Although we have presented global figures on rates of and risk factors for suicide, there are notable limitations. The WHO data previously drew on estimates from 183 WHO member states, just over 60 (33%) of which had data from high-quality systems.[3] There is a need to improve the recording of vital registration data in many countries.[31] However, even in countries with vital registration data that are of good quality, there is often a 1-year or 2-year lag in reporting of suicide figures because it takes time for coroners or medical examiners to conclude their investigations. The scarcity of timely data is problematic and has led institutions with an interest in suicide prevention to develop real-time (or close to real-time) suicide registers that are more fit for purpose.[32] These resources can help detect very recent effects of societal and other events, such as COVID-19.[33,34] They can also assist with the identification of unusual or concerning patterns of suicide (eg, suicide clusters, including those that might involve people in geographically disparate locations, or sudden increases in the use of particular suicide methods). There have also been efforts to link suicide data from official statistics and real-time suicide registers to other datasets to facilitate studies of the relationship between major societal-level risk factors and suicide.[35]

The third and fourth steps of this public health approach rely on the first two steps, taking the definitional and epidemiological information from these previous steps to develop the most appropriate interventions that target population-based risk factors (step three) and do so at scale (step four). In addition to this information, steps three and four rely on political will and stakeholder commitment and support. For this reason, some of the interventions that might be very effective have not been rolled out, and others that have much less likelihood of making a difference have. We highlighted this problem in the fourth paper in this Series,[15] noting that the alcohol and gambling industries actively block attempts to introduce supply-side interventions that have been shown to be successful (eg, external regulation of alcohol sales or gambling opportunities) and instead favour interventions that rely on individuals moderating their own behaviour (eg, limiting drinking or gambling to specific circumstances).

Step five is the essential part of building the evidence base; methodologically rigorous evaluations are necessary to identify what works (and what does not work) in suicide prevention. However, evaluation of suicide prevention initiatives is difficult for several reasons. The first reason relates to data availability and quality. Where high-quality suicide data do not exist, it is hard to assess whether a given intervention reduces suicides. Even where these data do exist, a second challenge arises. Despite being a major public health problem with a resounding ripple effect for communities, suicide is—fortunately—a rare event. Thus, evaluations are rarely sufficiently powered to assess whether a particular intervention has had an effect on suicides. A third challenge is that many of the universal interventions (and some of the selective interventions) that are likely to have the greatest benefits in suicide prevention will inevitably be evaluated in studies with ecological designs. Unlike many indicated interventions, large-scale changes in macroeconomic, public,

	Responsibility
Policy	
Develop and implement national suicide prevention strategies that are signed off by prime ministers or their equivalent and delivered via partnerships between the health sector and sectors responsible for macroeconomic, social, and public policies that are likely to have an influence on suicide (eg, finance, welfare, education, employment, housing, communication, climate, and environment)	Whole of government
Implement a Suicide Prevention in All Policies approach that holds government departments accountable for considering the effect of their policies on suicide and its prevention	Whole of government
Establish interdepartmental policy working groups to coordinate activities and monitor current and emerging issues relevant to suicide and its prevention	Whole of government
Provide appropriate resourcing for suicide prevention activities and programmes that are likely to yield substantial benefits across the population; these activities should include but not be limited to restricting access to means, media campaigns, guidelines for responsible media reporting of suicide and safe online discussion of suicide, gatekeeper training, services for people experiencing problematic alcohol use, gambling, or domestic violence and abuse, support for people who have been bereaved by suicide, mental health services, and crisis helplines	Departments of health
Ensure that macroeconomic policies do not exacerbate financial hardship for those who might be at heightened risk of suicide (eg, avoid regressive taxation policies and austerity measures)	Departments of finance and treasury
Implement social policies that provide appropriate supports and safety nets for people who are socioeconomically disadvantaged	Departments of social security, welfare, education, employment, and training
Implement public policies and legislative or regulatory frameworks that place limits on industries whose products can heighten the risk of suicide (eg, the alcohol, gambling, firearm, pesticide, and social media industries)	Departments of health, agriculture, and communication; Auditor General
Support LMICs to bolster their suicide prevention efforts by actively directing foreign aid to support a comprehensive, coordinated approach to suicide prevention in these countries (noting that the approach within each country should be locally driven and that what works in HICs might not be directly transferrable to LMICs)	Departments of foreign affairs and finance
Practice	
Create and distribute media campaigns that promote help-seeking among individuals at risk of suicide and raise awareness about suicide and its prevention among the general population	Community-based suicide prevention organisations in collaboration with campaign developers and relevant target audiences
Provide gatekeeper training to all professionals whose roles mean that they have contact with people who might be or might become suicidal (eg, educators, welfare workers, drug and alcohol workers, financial counsellors, and bereavement counsellors)	Community-based suicide prevention organisations in collaboration with relevant target audiences
Develop and disseminate evidence-based best practice guidelines, tailoring them to specific audiences (eg, guidelines for educators on preventing and containing suicide clusters, guidelines for media professionals on responsible reporting and portrayal of suicide, and guidelines for young people about communicating safely online about suicide)	Community-based suicide prevention organisations in collaboration with relevant target audiences
Provide best-practice care and support to individuals in a suicidal crisis, including asking about and responding to relevant proximal and distal risk factors (eg, access to means, financial hardship, alcohol use, gambling, domestic violence and abuse, and suicide bereavement)	Mental health services and crisis helplines
Ask people presenting to relevant services whether they are experiencing suicidal thoughts, and, if so, refer them to appropriate supports	Welfare services, financial counselling services, drug and alcohol services, gambling support services, domestic violence and abuse services, and suicide bereavement services
Foster community connectedness to mitigate the suicide risk associated with loneliness	Welfare services and community-based organisations
Research and evaluation	
Provide funding to strengthen research and evaluation efforts in suicide prevention	Government departments, philanthropic organisations, and academic granting bodies
Improve the collection, availability, and timeliness of suicide data, to accurately assess the magnitude of the problem and facilitate evaluation of the effect of suicide prevention initiatives	Researchers, policy makers, coroners or medical examiners, and police
Improve the quality and quantity of evaluations to strengthen the evidence around what works (and does not work) in suicide prevention	Researchers and evaluators in collaboration with those who fund, deliver, and receive interventions
Advocacy	
Ensure that suicide prevention is prominent on political agendas within countries and globally, especially in LMICs	All stakeholders
Ensure that people with lived experience of suicide are front and centre of all of the above policy, practice, and research and evaluation actions	All stakeholders

HICs=high-income countries. LMICs=low-income and middle-income countries.

Table 2: **Call to action**

and social policies are not usually amenable to evaluation by randomised controlled trials because they are almost always rolled out to the population at large. Because evidence from randomised controlled trials is often regarded as the gold standard, the suicide prevention community has to make a particularly strong case for the effectiveness of universal and selective interventions.

Call to action

Although there remains a lot to learn about how to deliver the most effective public health approach to

suicide prevention, the public health approach is the way forward. Because the social determinants and other contextual factors that influence suicide rates are pervasive and many of them are the responsibility of sectors outside health, a successful public health approach requires a whole-of-government commitment to suicide prevention. In fact, the approach goes further, recognising that a range of other stakeholders also need to be involved in suicide prevention.[36] These stakeholders include policy makers, legislators, and regulators from sectors outside health who might not normally see themselves having a role in suicide prevention, as well as those in the health sector who already have some responsibility for suicide prevention activities.

One key group of stakeholders is people with lived experience of suicide. Their insights and input are crucial for shaping the best possible public health approach. It has become increasingly common for people with lived experience to be involved in policy making, but greater efforts are required to ensure that their input is valued to the same extent as that of those with professional expertise.[37] It is now also more common for people with lived experience to be involved in shaping suicide prevention research, but, again, care needs to be taken to ensure that their participation is not tokenistic.[36] Consensus recommendations for the meaningful involvement of people with lived experience in suicide prevention research have been developed.[38]

Our call to action (table 2) outlines what needs to be done. It recognises the roles and responsibilities of various stakeholders and is organised around four core action areas of policy, practice, research, and advocacy. People with lived experience of suicide must be encouraged and empowered to participate in the development and implementations of each of these actions.

We have deliberately not prioritised the list of actions because the precedence they are given and the order in which they are implemented will depend on a range of local factors, including government, industry, and community support and the likely effectiveness of different actions in different contexts. Some actions might be achieved relatively quickly, cheaply, and easily, whereas others might require greater resourcing and longer-term investment of effort. There are various priority-setting frameworks that have been applied to cross-sectoral initiatives that might be helpful for determining the priority that should be given to various actions.[39] WHO's approach to suicide prevention, known as LIVE LIFE, also provides guidance with respect to implementing suicide prevention activities through cross-sectoral collaboration.[40]

Conclusion

Widespread adoption of a public health approach to suicide prevention is crucial for ensuring that the overall decreases in suicide rates that are being seen globally continue on a downward trajectory and occur across countries and regions. Suicide is a societal issue that requires a societal response; preventing suicide is everybody's business. Garnering cross-sectoral commitment from all levels of government and meaningfully involving all stakeholders at every step on the journey will be transformative.

Contributors

KH and JP took joint responsibility for conceptualising the content of the article. KH took lead responsibility for preparing the first draft of the manuscript. JP contributed to subsequent drafts. KH and JP then further reviewed and edited the manuscript.

Declaration of interests

KH is a member of the National Suicide Prevention Strategy for England Advisory Group. JP holds a National Health and Medical Research Council Investigator Grant (1173126), which provides salary support and research costs. She is also scientific adviser to Australia's National Suicide Prevention Office, which is developing the new National Suicide Prevention Strategy.

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