

# A Public Health Approach to Suicide Prevention 1



## Preventing suicide: a public health approach to a global problem

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Suicide is prevalent in all countries and is largely preventable. The causes of suicide are multiple and varied. Social determinants of suicide are crucial, but to date these have received insufficient policy attention. This paper, which is the first in a Series on taking a public health approach to suicide prevention, argues for a major change in the way we think about suicide and its prevention. This Series paper presents a public health model that emphasises the broad social determinants of suicide and describes a framework through which these might be addressed. We argue for a policy reset that would take national suicide prevention strategies to the next level. Such policies would become whole-of-government endeavours that tackle major social determinants of suicide at their source. We also argue that high-quality data and methodologically rigorous evaluation are integral to this public health approach.

### Introduction

Suicide is a major international problem. According to WHO, 703 000 lives were lost to suicide in 2019<sup>1</sup>—ie, 1925 per day, or one every 45 seconds. Over three-quarters (77%) of these suicides occurred in low-income and middle-income countries (LMICs).<sup>1</sup> These figures are likely to underestimate the real situation. Only 60 (33%) of the 183 WHO member states included in the above estimates provided data from high-quality systems. Figures for most of the remainder—largely LMICs—came from modelling exercises.

WHO's *Comprehensive Mental Health Action Plan 2013–2030* includes a target of reducing the global suicide rate by one-third between 2013 and 2030.<sup>2</sup> The suicide rate is also included in the UN's Sustainable Development Goals as an indicator for target 3.4 of reducing premature mortality from non-communicable diseases by one-third by 2030.<sup>3</sup> There have been declines in suicide rates in a number of countries over the last two decades,<sup>1</sup> but we need to maintain the momentum if a decrease of one-third is to be achieved.

In this *Lancet Public Health* Series, we contend that a major change in how we perceive suicide is required for the reduction in the global suicide rate to continue. Although we recognise that preventing an individual dying by suicide might rely on interventions delivered through the mental health sector, in this Series we view suicide and its prevention through a public health lens. We use this approach for two reasons. The first is, as per Rose's Paradox,<sup>4</sup> the greatest reductions in suicide are most likely to be achieved through public health measures that target the whole population rather than individuals who are thought to be at particularly heightened risk. The second, related, reason is that there will never be enough adequately trained mental health professionals to deliver one-on-one treatment to suicidal individuals, even in circumstances where the load might be eased by expanded scopes of practice for different professional groups, shared care arrangements, and

digital interventions. In this first paper in the Series, we set the scene by outlining how the public health approach should be applied to reducing suicide, providing some historical context, presenting a model that describes—in public health terms—how suicide arises and might be prevented, and commenting on how the public health approach must be underpinned by good data and rigorous evaluation. Throughout the Series, we use the term risk factor in the epidemiological sense, not in a clinical way. The public health approach is about favourably shifting risk at a population level rather than trying to predict individuals' risk.

We hope that the Series will be of interest to varied audiences, including those responsible for public health policy and programmes, who might be delivering public health responses to suicide prevention but are unfamiliar with the best approaches. More broadly, we hope that the Series will give policy makers, legislators, and regulators from sectors outside health an appreciation of the role they can have in suicide prevention by addressing the social determinants of suicide. Contributory factors and preventive approaches are changing (eg, exposure to suicide-related content via social media has increased, but the online environment has also created new prevention opportunities<sup>5</sup>). It is, therefore, timely to provide such a Series for those in the suicide prevention field, allowing them to reflect on the current status of efforts to reduce suicide and what might need to be done differently going forward.

### Suicide as a public health problem: the role of social determinants

The public health approach recognises that individuals do not exist in a vacuum and that their health is influenced by multiple contextual factors. These factors include social determinants, defined by the Commission on Social Determinants of Health as “the circumstances in which people grow, live, work, and age, and the systems put in place to deal with illness...these conditions

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in which people live and die are, in turn, shaped by political, social, and economic forces".<sup>6</sup> Key among these social determinants are commercial determinants, which are "the systems, practices, and pathways through which commercial actors drive health and equity",<sup>7</sup> and in this context include examples such as the firearm, pesticide, alcohol, and gambling industries. Braveman and Gottlieb have described social determinants as the "causes of the causes",<sup>8</sup> reflecting their direct impact on individual-level factors that jeopardise people's health. Importantly, social determinants not only influence health outcomes but also inequities in these outcomes.

Historically, consideration has been given to the social determinants of suicide. Best known is the work of the French sociologist Durkheim, who, in 1897, showed the relationship between religion and suicide in Europe, whereby Protestant provinces had higher suicide rates than Catholic provinces.<sup>9</sup> In 2008, Goldney and colleagues reviewed reports that were published before Durkheim's and noted that some earlier authors had also considered social factors.<sup>10</sup> For example, in 1790, Moore wrote about gambling and suicide;<sup>11</sup> in 1846, Marx (citing Peuchet) referred to suicide being a deficient organisation of our society;<sup>12</sup> in 1840, Winslow commented that "[the institution] of marriage is to a certain extent preventive of suicide";<sup>13</sup> and in 1885, Westcott noted that suicide "involves matters which are intimately connected with our social organisation".<sup>14</sup> A seminal work by Morselli in 1879 considered social influences among other factors implicated in suicide.<sup>15</sup> However, many other authors came down firmly on the side of the medical model. Notably, in 1807, Callisen described suicide as an illness,<sup>16</sup> in 1828, Burrows referred to it as a feature of melancholia,<sup>17</sup> and in 1892, Savage, despite noting that suicide can occur with "no other signs of insanity", emphasised the clinical management of suicidal individuals.<sup>18</sup>

Today, most suicide prevention experts would agree that both social factors and mental illness are important, but insufficient attention has been given to the former.<sup>19</sup> Suicide-related research has tended to focus on mental illness as a major contributory factor; a 2017 meta-analysis indicated that almost 25% of the effect sizes in the longitudinal studies published on suicide-related risk factors between 1985 and 2014 (mostly from high-income countries [HICs]) were concerned with internalising psychopathology (eg, mood disorders) and fewer than 10% related to social factors (eg, stressful life events).<sup>20</sup> Similarly, a review of 272 suicide prevention articles published between 1982 and 2021 (again, mostly from HICs) showed that 60% were classified by Scopus as general internal medicine.<sup>21</sup> We are not suggesting that mental illness is not important, but the weight that is given to it might be overemphasised, particularly in LMICs.<sup>22</sup> Additionally, although some suicide prevention policy documents refer to the social determinants of suicide, they more commonly emphasise clinical

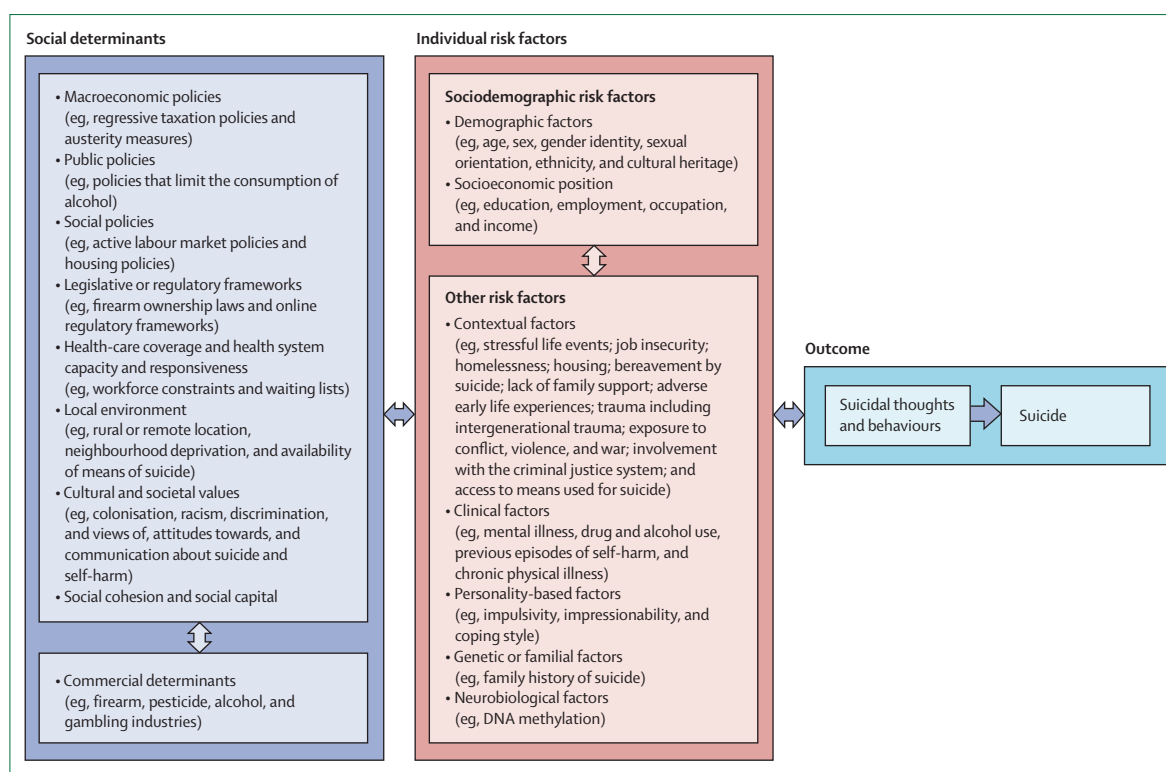
solutions; thus, the typical components of national suicide prevention strategies are generally implemented via a health-care response,<sup>23,24</sup> despite the fact that people with lived experience of suicide emphasise the importance of social determinants.<sup>25</sup>

### A public health model of suicide and suicide prevention

Figure 1 presents a public health model showing how suicide might arise, modified from one we developed previously,<sup>23</sup> paying particular attention to the social determinants of suicide. Our model is informed by the conceptual framework for action developed by the WHO Commission on Social Determinants of Health.<sup>26</sup> We also drew on a model of the commercial determinants of health developed by Gilmore and colleagues<sup>7</sup> and other public health models that take a risk factor-based approach to suicide prevention.<sup>27–32</sup>

Our model recognises the crucial role of the social determinants of suicide. These are the macroeconomic, public, and social policies and regulatory or legislative frameworks that govern the way we live, the capacity of the health system to meet our needs, the cultural and societal values that shape our perspectives, and the degree of social cohesion and social capital present in our society. These social determinants are underpinned by the structures, processes and principles that influence societal decision making. They have a direct or indirect impact on key individual-level risk factors for suicide, including sociodemographic factors (eg, age, sex, education, employment, and income) and contextual factors (eg, stressful life events, bereavement by suicide, and access to the means used for suicide). Social determinants also interact with clinical risk factors (eg, mental illness and drug and alcohol use) and other characteristics that are intrinsic to individuals, including personality-based, genetic or familial, and neurobiological factors. The relationship between social determinants and clinical risk factors is particularly important; the public health approach does not negate the significance of clinical risk factors, but it provides a framework for understanding how these factors might arise or be exacerbated.<sup>23</sup>

Our model explicitly highlights the commercial determinants of suicide. Some commercial actors, such as the firearm and pesticide industries, sell products that are used as methods of suicide. Others, such as the alcohol and gambling industries, promote products or services that heighten suicide risk. These commercial entities dominate the public discourse about these products and services, often normalising or glamourising their use through aggressive marketing tactics and deliberately creating ignorance or doubt about the harms they cause.<sup>33</sup> These industries can also influence decision-making processes to ensure that their products remain easily available, often lobbying hard to ensure that the rules within which they operate are favourable for them.



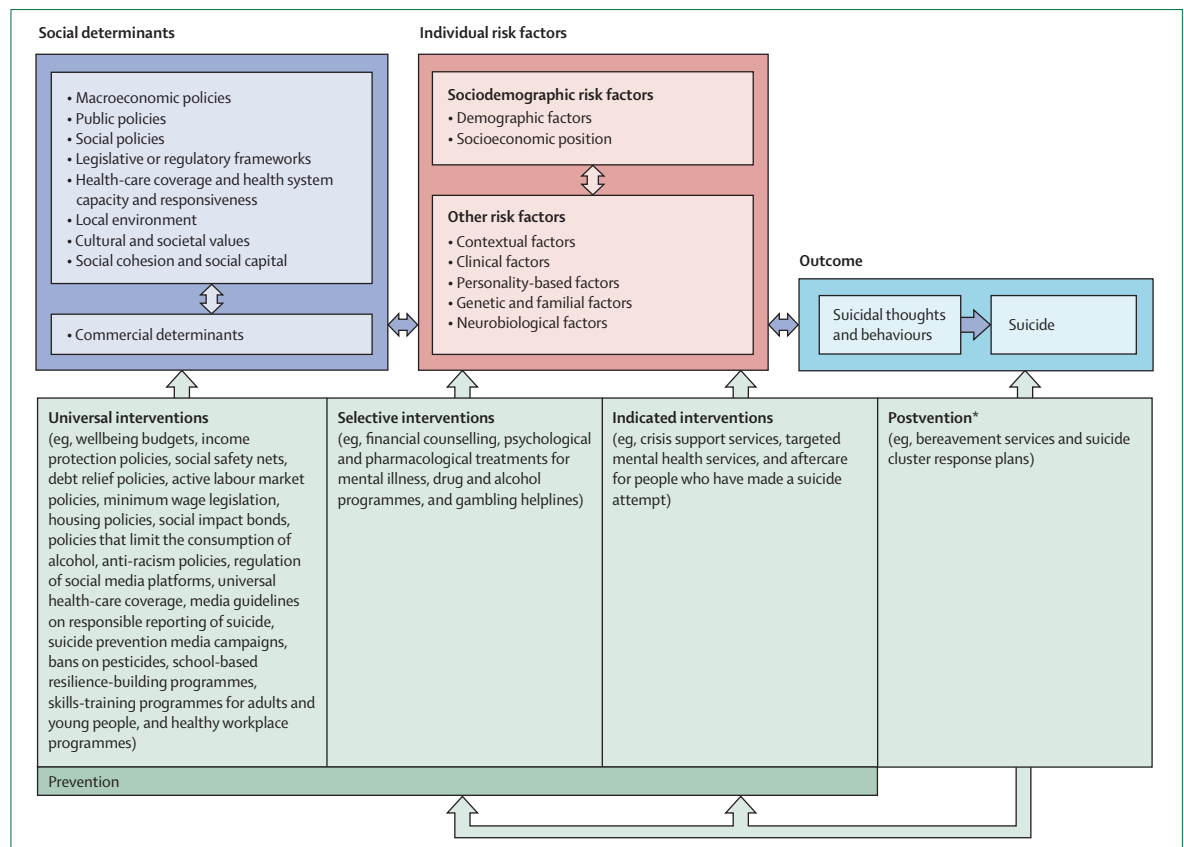
**Figure 1: A public health model showing how suicide arises**  
Adapted from Pirakis and colleagues<sup>23</sup> with permission.

The social and commercial determinants that are embodied in our model affect overall suicide rates. They also create inequities that result in particular groups being disproportionately affected by suicide because of the specific way that such determinants interact with some sociodemographic risk factors, particularly those relating to socioeconomic position. Socioeconomic position incorporates indicators of economic status (eg, income level), social status (eg, education) and prestige (eg, occupation).<sup>34</sup> Multiple reviews have shown that low socioeconomic position is associated with suicide,<sup>35,36</sup> including in LMICs.<sup>37,38</sup> Key social determinants heighten this risk. For example, suicide rates have been shown to increase during economic recessions, and this increase can be exacerbated by some macroeconomic policies (eg, austerity policies and interest rate rises).<sup>39–42</sup> People in low socioeconomic positions are most likely to suffer as a result of these policies, which will often have consequences for other individual-level risk factors (eg, increasing the likelihood of stressful life events, such as not being able to meet mortgage or rent payments).

Figure 2 takes the model one step further and reinforces a key feature of the public health approach, which is that this approach is designed to simultaneously reach both those at the highest risk and those who are further back on the risk continuum, to reduce suicide at a population level. More specifically,

our model suggests that social determinants and individual-level risk factors could be addressed through universal, selective, and indicated preventive interventions and postvention activities. Universal interventions target the whole population, without specifically identifying individuals who might be at risk of suicide. Selective interventions target individuals who are not yet thinking about suicide or engaging in self-harm but who might be predisposed to do so in the future because they have particular risk factors. In our model, universal interventions and selective interventions are typically designed to address social determinants and individual-level risk factors, respectively. Indicated interventions are aimed at individuals who are already having suicidal thoughts or engaging in suicidal behaviours, who might be identified (eg, by their presenting to clinical services). Postvention is the commonly used term for the response offered to individuals and communities in the aftermath of a suicide; postvention can also be thought of as a selective or indicated intervention because those who have been bereaved by suicide are themselves at increased risk of suicide.<sup>43</sup>

To date, the policy emphasis in most countries has predominantly been on indicated interventions (and to a lesser extent postvention activities), followed by selective interventions. Universal interventions have generally had a lesser policy emphasis, potentially because their



**Figure 2: Preventing suicide under the public health model**

Adapted from Pirkis and colleagues<sup>23</sup> with permission. \*The response offered to individuals and communities in the aftermath of a suicide.

impacts take longer to accrue and are harder to show. Establishing the appropriate dose of universal interventions, and, often, what they might cost, is also more difficult. All of these factors make universal interventions less appealing to governments than other options; thus, most interventions address individual-level risk factors rather than the broader social determinants of suicide. We need to develop and deploy a range of ambitious universal interventions to address the pervasive social determinants of suicide. Taking this approach does not mean that we should relax our efforts when it comes to indicated interventions; good-quality care is critical for those who are already in a suicidal crisis. However, universal interventions that prevent people reaching a crisis point could be transformative.

Because the social determinants of suicide are pervasive, the kinds of universal interventions that are needed to address them will often require not only thinking big but also thinking creatively. For example, using broad-ranging policy and regulatory levers that might not normally be thought of as suicide prevention activities is likely to yield substantial benefits. This approach might include so-called wellbeing budgets (which, unlike standard budgets that typically emphasise financial metrics such as economic growth and fiscal

responsibility, begin with a focus on ways in which public spending can enhance people's lives), policies that buffer financial hardship (eg, by offering income protection, social safety nets, or debt relief),<sup>45,44</sup> active labour market policies, minimum wage legislation, and housing policies (panel 1).<sup>45,46</sup> Interventions might involve partnerships with private sector partners (eg, social impact bonds, in which investors provide capital to service providers to offer particular programmes—usually in the employment or welfare sectors—and get a return on their investment if the programmes achieve particular predetermined outcomes).<sup>47</sup> Policies that have an impact on cultural and societal values (eg, by eliminating racism)<sup>48</sup> and that strengthen the health system (eg, by guaranteeing universal health-care coverage) might also be included. It is also important to include policies that address the commercial determinants of suicide by deterring the use of products or services that serve to heighten suicide risk (eg, by limiting the consumption of alcohol or availability of gambling), and restricting access to means used for suicide (eg, bans on highly toxic pesticides and restrictions on gun ownership). The sorts of interventions described here should be rolled out in a considered way and their benefits and costs carefully

evaluated; doing so will allow us to strengthen the evidence base and inform policy makers about the interventions most likely to be cost-effective. These sorts of interventions might be more difficult to implement in LMICs due to higher levels of poverty, unemployment, and homelessness.<sup>37</sup>

These novel interventions should be coupled with other more tried-and-tested universal interventions that are commonly recommended in national suicide prevention strategies (eg, restricting access to means used for suicide in other ways, such as installing barriers on bridges, encouraging responsible media reporting of suicide, and suicide prevention media campaigns or other forms of public messaging). Other universal interventions designed to mitigate suicide risk across the lifespan (eg, parenting programmes, school-based resilience programmes, skills-training programmes for adults and young people, and healthy workplace programmes) should also be considered. These universal interventions should be delivered in combination with well-regarded selective and indicated interventions and postvention activities.

### A policy reset

Although there is increasing recognition of the crucial influence of the social determinants of suicide, this recognition has not played out in policy. One of the reasons for this lag in policy might be that national suicide prevention strategies are usually driven by departments of health and signed off by health ministers, as was the case in three-quarters of the national strategies we identified in 2020.<sup>49</sup> As a consequence, the activities that these strategies promote are usually ones over which the health sector (particularly the mental health sector) has control.

The situation might be exacerbated in LMICs. Suicide continues to be criminalised in greater numbers of LMICs than HICs (suicide remains a criminal act in 14% of LMICs, compared with 5% of HICs).<sup>50</sup> Even in countries where suicide has been decriminalised, legislative changes might not have translated to changes in the way suicide is dealt with on the ground. In these countries, suicide tends to be considered in a medico-legal context and is largely rooted in the mental health sector. Less attention is given to the more upstream social factors that lead to suicide (panel 2).<sup>51–53</sup>

Moving suicide prevention beyond mental health alone will require a policy reset involving genuine whole-of-government commitment. National suicide prevention strategies need to reflect the impact on suicide of policies that sit outside the health sector as well as within it. This approach would allow us to expand the reach and effectiveness of our prevention efforts and would send an important message that preventing suicide is a high priority. National suicide prevention strategies should promote a Suicide Prevention in All Policies approach, akin to the Health in All Policies approach, which holds

#### Panel 1: Cash transfer programmes and suicide

Programma Bolsa Familia in Brazil and Program Keluarga Harapan in Indonesia are conditional cash transfer programmes that are designed to mitigate the effects of poverty for households. Using ecological study designs that considered programme roll-out and suicides over time, Alves and colleagues<sup>45</sup> and Christian and colleagues<sup>46</sup> found that areas with high coverage of each programme showed considerable reductions in suicide rates. More specifically, Alves and colleagues observed a 4.8% reduction in suicide rates in areas of Brazil that had high Programa Bolsa Familia coverage for 3 or more years. Christian and colleagues observed an 18% reduction in Indonesian suicide rates associated with Program Keluarga Harapan, and their ecological findings were corroborated by a randomised controlled trial.<sup>46</sup>

#### Panel 2: Contextualising suicide as a mental health problem in low-income and middle-income countries

India and Malaysia provide two examples of low-income and middle-income countries where suicide tends to be contextualised as a problem requiring intervention solely within the mental health system. India released a national suicide prevention strategy in 2022,<sup>51</sup> situating most of its proposed actions within the mental health programme, despite Indian police data showing that factors such as age, gender, education, employment, and stressful life events have an important role in suicides.<sup>52</sup> When Malaysia decriminalised suicide in 2023, mental health advocates welcomed the move as a “significant shift in the country’s approach to mental health”.<sup>53</sup> The fact that countries such as India and Malaysia have national suicide prevention strategies and are decriminalising suicide is positive, but expanding the way suicide is viewed, beyond mental health, will create more opportunities for prevention, particularly universal prevention.

politicians and policy makers from all sectors accountable for decisions that affect health and health inequities.<sup>54</sup> For such an approach to work, national suicide prevention strategies should be signed off by prime ministers or their equivalent or by specially appointed ministers with cross-sectoral responsibility. Such ministers might have responsibility for suicide prevention alone or might oversee all prevention activities, recognising that many of the social determinants and individual-level risk factors that influence other health and societal issues overlap with those pertaining to suicide.

We need to go one step further and ensure that relevant community, non-government, and commercial sectors are involved in suicide prevention, transforming a whole-of-government approach to a whole-of-society approach. This change is important because the recipients of suicide prevention efforts need to be involved in their development



### Panel 3: The Scottish national suicide prevention strategy

The new Scottish suicide prevention strategy, *Creating Hope Together*, was launched in 2022 and covers a 10-year period.<sup>55</sup> Suicide rates had been rising in Scotland, so it was important to learn from and revise the previous strategy. The new strategy lists as its first priority “build[ing] a whole of government and society approach to address the social determinants which have the greatest link to suicide risk”. The strategy has an explicit emphasis on addressing the upstream causes of suicide, targeting poverty, debt, addictions, homelessness, trauma, and social isolation. The strategy is driven by the Scottish Government and the Convention of Scottish Local Authorities, who have committed to preventing suicide at national and local levels and will create a Delivery Collective to lead the roll-out of the strategy. This body will include senior national and local leaders in suicide prevention, representatives from the non-government sector, emergency responders, and representatives from the private sector. These partners will not only bring health and mental health perspectives to the table but will also bring the perspectives of sectors representing socioeconomically disadvantaged and otherwise marginalised groups. The Delivery Collective will also harness the expertise of groups of academics, people with lived experience of suicide, and young people. The Delivery Collective will be formally connected into wider Scottish governance structures to maximise strategic connections and ensure that suicide prevention becomes everybody’s business.

and delivery, which requires strong partnerships. Broad involvement is also important because of the wide range of players in various sectors and industries whose actions can influence suicide and its prevention.

We also need to recognise that suicide prevention policies and activities require a long-term commitment. The effects of social determinants are often entrenched and cannot be reversed quickly. Strong coordination and appropriate resourcing are required for suicide prevention efforts to be delivered in a systematic and equitable way. Governments need to go beyond implementing short-term policies and to recognise that the necessary change will take time. Efforts should also be made to maximise efficiencies; key government departments that are responsible for relevant policies are often quite siloed, whereas policies and funding could be braided to more efficiently tackle the social determinants of suicide. There are some recent examples of broad, socially oriented policies, including the new Scottish suicide prevention strategy, *Creating Hope Together*, which makes a 10-year commitment to reducing suicides (panel 3).<sup>55</sup>

### High-quality data as the foundation

To work optimally, the public health approach relies on access to accurate and timely suicide data.<sup>23</sup> Access to

such data is necessary for understanding the magnitude of the problem, identifying the groups who might benefit most from interventions, and evaluating interventions. In suicide prevention, problems arise because of the nature and quality of suicide data. Official suicide data generally come from vital registration systems designed to capture numbers and causes of death. We have already noted the poor-quality data systems from two-thirds of the countries in the most recent WHO report; additionally, the data in this report were at least 2 years old.<sup>1</sup> These lags are typical because the data rely on lengthy investigations by coroners, medical examiners, or other authorities. A final issue with official suicide data is that they are often quite basic, and it is usually only possible to disaggregate them by age, sex, and (sometimes) method of suicide and region.

In the last few decades, suicide prevention experts have addressed these data issues by creating real-time surveillance systems or registers to capture data on suicides.<sup>56–58</sup> These systems provide data that are more timely than official statistics because they record suspected or probable suicides using information that is collected early in a given investigation, often by police. There is usually strong concordance between these data and the official figures that become available much later.<sup>59</sup> Many of these systems also collect more detailed information on individuals who die by suicide and the circumstances surrounding their deaths. These features make real-time surveillance systems better for quickly capturing data on the extent and nature of the problem and evaluating the success of suicide prevention activities overall and for particular groups. Some of these registers have expanded over time (eg, the National Violent Death Reporting System began in six US states in 2002 and by 2018 had national coverage and included the District of Columbia as well as Puerto Rico).<sup>60</sup> Those wishing to establish registers might want to draw on the experience of others (eg, by engaging with police, coroners, medical examiners, or other data custodians and ensuring that they have a stake in the system, to maximise data quality).<sup>58</sup> The advantages and disadvantages of different models should also be considered (eg, whether integrating suicide registers with other surveillance systems might make them more sustainable and attractive to governments). Novel approaches (eg, using machine learning and multiple real-time data sources to predict suicide rates<sup>61</sup>) could also be considered, although these still rely on adequate data.

Overcoming problems relating to the timeliness and specificity of suicide data through real-time registers still leaves the issue that suicide, despite being a major public health problem, has a low base rate. Thus, it is difficult, even with well-established suicide registers, to provide disaggregated data (eg, presenting data for particular subgroups). Multicountry (or multiregion) efforts that can provide detailed, nuanced suicide statistics are

needed. We showed the potential for pooling resources in this way during the COVID-19 pandemic, bringing together real-time data on 800 000 suicides from 59 registers in 33 countries to show that, in the majority of these countries, suicide numbers were no greater than expected during the pandemic, based on previous trends.<sup>62</sup>

### Rigorous evaluation

There are challenges to evaluating suicide prevention activities delivered through a public health approach, particularly universal interventions.<sup>63,64</sup> The first challenge is study design. Although many indicated interventions and even some selective ones might be amenable to evaluation by gold-standard randomised controlled trials involving individual randomisation, it will almost never be possible to evaluate universal interventions in this way. For these interventions, the strongest possible alternative designs should be used. Sometimes it will be possible to use stepped-wedge cluster randomised controlled trial designs or data linkage studies that can mimic randomised controlled trials (eg, by using propensity score matching). More often, it will only be possible to use basic before-and-after designs, but these should ideally be refined to control for underlying trends and allow for comparisons over time or between countries or regions where interventions have and have not been implemented. Drawing lessons from allied fields (eg, data science<sup>65</sup>) will allow us to strengthen our evaluation methods.

A second challenge is choosing the appropriate outcome. As noted, suicide is (fortunately) a rare outcome. Therefore, local evaluations are often not powered to detect reductions in suicide. Other more distal outcomes are often used, such as changes in suicidal thinking or suicide attempts. This approach is particularly common with indicated and selective interventions, which are often tested in small-scale studies with short follow-up periods, but also occurs with universal interventions. Using these alternative outcomes is entirely reasonable, especially if the programme logic of the given intervention is well articulated (ie, these distal outcomes are shown to increase the risk of suicide) and there is good reason to suppose that if reductions in these distal outcomes are achieved, suicides could ultimately be reduced. For example, although numerous studies have shown that guidelines improve media reporting of suicide, only a few have shown that they have an effect on suicides.<sup>66</sup> However, media guidelines remain well regarded as an intervention because of the strong relationship between irresponsible reporting and suicide shown in multiple studies (albeit mostly in HICs).<sup>67</sup> If media guidelines can improve reporting, they are likely to have at least some influence on suicides.<sup>68</sup> In addition, reducing some of the more distal outcomes (eg, suicidal thinking and suicide attempts) is an important goal because these outcomes are more

prevalent than suicide, have considerable negative effects for individuals and populations, and are, arguably, often more amenable to intervention. Some of these outcomes might also be more readily captured via routine sources (eg, emergency department presentations for suicide attempts).<sup>69</sup>

A third challenge is that even when interventions show promise in contained evaluations, it is not clear whether they will be generalisable. Here, we can learn from implementation science.<sup>70</sup> Implementation scientists have honed the craft of understanding evidence–practice gaps and exploring barriers and enablers to practice change. Suicide prevention would benefit from evaluations that use hybrid effectiveness–implementation designs that simultaneously consider whether an intervention reduces suicidal thoughts and behaviours and is delivered as intended; conducting such evaluations would expand the evidence on interventions that could prevent suicide at scale.<sup>70</sup> This approach might be particularly important in the case of evaluations of interventions designed to address some of the major social determinants of suicide where there are likely to be major barriers to implementation (eg, opposition from the industries responsible for some of the key commercial determinants of suicide).

### Conclusions

Tackling suicide from a public health perspective is crucial. Arguably, it is now more important than ever to address the social determinants of suicide, particularly those that affect people's socioeconomic position, because of the cost-of-living crisis.<sup>71</sup> There is consensus among economists that the world is entering into a new economic recession,<sup>72</sup> so we need to think critically about the broad, pervasive social determinants of suicide and how these arise, are perpetuated, and can be countered. Given that more than three-quarters of all suicides occur in LMICs, we need to make sure that our recommended actions are potentially applicable in these countries. This applicability is key to ensure that we assist in addressing existing inequities and do not inadvertently create further inequities.

The public health model we have presented here underpins the rest of this Series. The second and third papers in the Series address two key strategies in the public health approach to suicide prevention: restricting access to means used for suicide (in the second paper<sup>73</sup>) and designing policies to counter the suicide risk associated with financial downturns (in the third paper<sup>74</sup>). The fourth paper<sup>75</sup> considers how suicide risk might be transmitted at a societal or population level and how this risk might be mitigated, focusing particularly on reporting of suicide in traditional media, discussion of suicide on social media, public health messaging about suicide, suicide clusters and contagion, and suicide prevention in schools and other educational settings. The fifth paper<sup>76</sup> considers four key individual risk factors for

suicide that interact in complex ways with social determinants: gambling, alcohol use, interpersonal violence and abuse, and bereavement by suicide. The sixth paper in the Series<sup>77</sup> is a call to action to decision makers to join forces in a whole-of-government, whole-of-society offensive on suicide.

#### Contributors

JP and KH took joint responsibility for conceptualising the content of the report. JP took lead responsibility for preparing the first draft of the manuscript. KH, RD, MS, and MK contributed to subsequent drafts. JP and KH further reviewed and edited the manuscript.

#### Declaration of interests

JP holds a National Health and Medical Research Council Investigator grant (number 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. MS has received payment for expert testimony not related to any of the topics covered in this manuscript and has participated on advisory boards not related to any of the topics covered in this manuscript. KH is a member of the National Suicide Prevention Strategy for England Advisory Group. RD and MK declare no competing interests.

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