A PUBLIC HEALTH, WHOLE-OF-GOVERNMENT APPROACH TO NATIONAL SUICIDE PREVENTION STRATEGIES

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Many countries have national suicide prevention strategies, all of which aim to reduce suicide and many of which also address self-harm more generally (World Health Organization, 2018). In this editorial, we argue that national strategies could be strengthened through an increased focus on the social determinants associated with suicide and self-harm. We present a public health model that articulates how these social determinants might operate and how they might interact with individual-level risk factors. We then describe how these social determinants might be addressed by a whole-of-government approach involving cross-sectoral action and genuine social participation and empowerment of people with lived experience of suicide and self-harm.

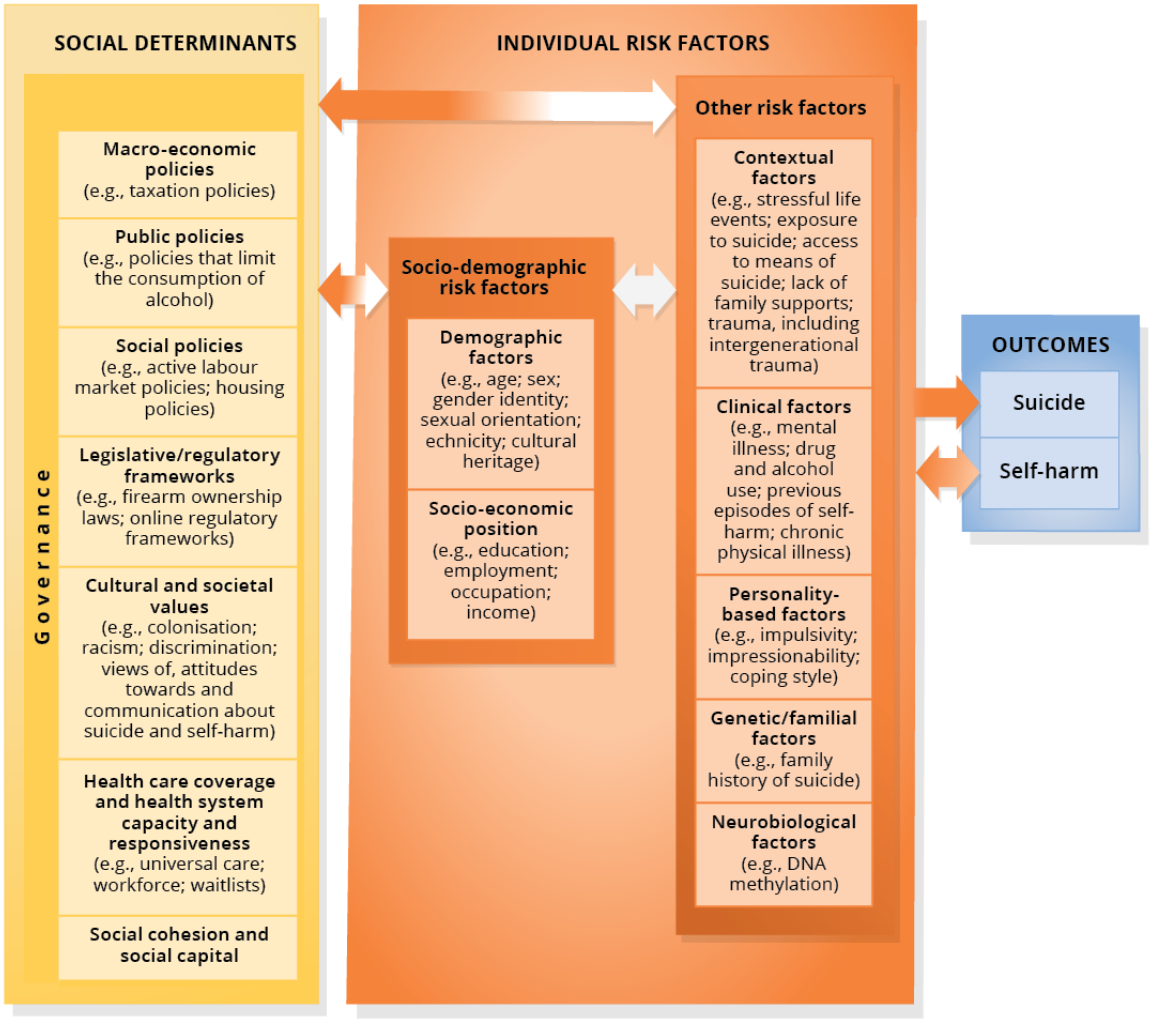
Identifying the social determinants and individual risk factors associated with suicide and self-harm

Figure 1 provides a framework for considering the myriad of social determinants or societal influences that impact on suicide and self-harm, identifying targets for intervention that could be incorporated into national suicide prevention strategies. The model draws on the conceptual framework for action on the social determinants of health that was developed by the World Health Organization (WHO) Commission on Social Determinants of Health (CSDH) (Solar & Irwin, 2010) and on other public health models that take a risk factor-based approach to suicide prevention (Moscicki, 1997; Silverman & Felner, 1995; Silverman & Maris, 1995). It describes a range of social determinants that may play a role in suicide and self-harm by interacting with various individual-level risk factors.

The first panel of the model highlights the kinds of social determinants that are known to have an impact on suicide and self-harm. Many of these are taken directly from the original CSDH framework (Solar & Irwin, 2010). The list is not meant to be exhaustive, but rather to illustrate the range of social determinants. They include **macro-economic policies** (i.e., policies that are concerned with the given society's overall economy, like taxation policies), **public policies** (i.e., policies that relate to broad societal issues, like health care), **social policies** (i.e., policies relating to addressing disadvantage, like social welfare and housing), **legislative/regulatory frameworks** (i.e., laws and other regulatory mechanisms that govern the way individuals and organisations operate),

cultural and societal values (i.e., societally reinforced beliefs and values that influence the way members of the society think and behave), and **health care coverage and health system capacity and responsiveness** (i.e., the ability of the health system to provide acute and ongoing care to members of society), and **social cohesion and social capital** (i.e., the extent to which members of society support each other and share a common purpose). All of these are underpinned by a society's **governance** (i.e., the structures, processes and principles that shape societal decision-making).

Figure 1: Social determinants of suicide and self-harm



Adapted from: Solar and Irwin (2010)

The second panel describes the kinds of individual risk factors with which the above social determinants interact. These include socio-demographic, contextual, clinical, personality-based, genetic/familial and neurobiological factors (Moscicki, 1997). The arrows between the social determinants and individual risk factors are bi-directional because they represent the interaction between the two.

Together, the two panels illustrate the model's breadth. It incorporates the social determinants and individual-level risk factors that sit at the core of a clinical or medical approach, highlighting the importance of health care coverage and health system capacity, and the relevance of clinical factors like mental illness. It extends beyond this to take into account social determinants and individual-level risk factors that relate to wider aspects of people's lives, some of which may have an impact from childhood or even inter-generationally.

In line with the original CSDH framework, which is concerned with social determinants of health and health inequities (Solar & Irwin, 2010), the current model gives some prominence to socio-demographic risk factors, particularly those that are directly related to socio-economic position (e.g., education, employment, occupation and income). It does this because there is strong evidence from multiple studies that low socio-economic position is associated with suicide and self-harm (Iemmi et al., 2016; Knipe et al., 2015) Social determinants are particularly powerful in terms of exacerbating or mitigating this risk. We know, for example, that economic recession is usually associated with elevated rates of suicide and self-harm, and that certain **macro-economic policies** (e.g., taxation policies that widen inequalities) can intensify this, whereas particular **social policies** (e.g., active labour market policies and policies that guarantee a minimum wage) can offset it (Gertner, Rotter, & Shafer, 2019; Stuckler, Basu, Suhrcke, Coutts, & McKee, 2009). The interactions between social determinants and various other socio-demographic risk factors are also prominent in this model, with the relationship between **culture and societal values** and ethnicity and cultural heritage being a key example. This interaction is critical, with, for example, ill-treatment, discrimination and prejudice influencing patterns of suicide in refugees and asylum seekers (Awaad, Dailami, & Noureddine, 2020).

The model also recognises, however, that social determinants can bypass socio-demographic risk and interact with individual risk factors that are not necessarily related to inequities. In doing so, they can have a broader influence on suicide and self-harm across the population. One example is the way in which **legislative/regulatory frameworks** that govern firearm availability interact with contextual factors relating to access to means and personality-based factors such as impulsivity. Multiple studies have shown that use of firearms is a relatively common method of suicide in countries where gun control laws are lax and firearms are readily accessible. Conversely, where gun control legislation is stricter, firearm suicides occur far less frequently (Chen, Wu, Wang, & Yip, 2016; Miller & Azrael, 2016).

As noted, the relationship between social determinants and individual risk factors can be bi-directional. For example, in the absence of comprehensive and effective **public** and **social policies**, people with no job, insecure housing and problematic alcohol use may be placed at risk because they lose hope for their future, see no solution, and experience depression; conversely, people with severe mental illness may find it hard to hold down employment or settle in stable housing. If strong **public** and **social policies** are in place, however, both groups of individuals may benefit from job training opportunities or rent relief and find it easier to find support for their substance use or mental illness. This is not to diminish the impact of living with substance use or mental illness, nor to deny the fact that timely access to high quality treatment is critical.

The **health system** may exert a major direct protective effect on suicide and self-harm for some people. Like the other social determinants in the model, it may interact with the socio-demographic and other individual risk factors in the model, sometimes underpinning them and sometimes intensifying or attenuating them. Societies that offer universal health care coverage may be able to mitigate risk by addressing some of the individual-level clinical risk factors for suicide and self-harm (e.g., by offering accessible, high quality care for those with mental illness (Bolton & Robinson, 2010; Too et al., 2019)). However, universal health care coverage may not be enough if the health system is at capacity, and people are not appropriately referred, have long wait times to get into care, do not receive adequate care, or are unable to access care at all.

Some social determinants may benefit or disadvantage both those with socio-demographic risk factors and the population in general. **Public policies** that limit the consumption of alcohol are a case in point of how benefits can impact both those at risk and the entire population. Alcohol misuse is a key individual-level clinical risk factor for suicide, and although alcohol-related harms occur on a socio-economic gradient, policies that limit alcohol consumption are likely to confer benefits across all socio-economic strata (Rajput, Aziz, & Siddiqui, 2019).

In the model, **social cohesion and social capital** are important social determinants that have a protective effect. The contribution of these constructs to suicide rates has been recognised for over 120 years, well before these specific terms were in use. Durkheim's text, *Le Suicide: Étude de Sociologie (Suicide: A Study in Sociology)* (Durkheim, 1897) drew attention to the fact that markers of societal integration and connectedness in certain European countries (e.g., typical family structure, dominant religion, level of economic stability) were associated with lower suicide rates. More recent studies have shown that social capital, as measured by indicators of social participation, political participation and trust, is inversely associated with suicide rates (Kelly, Davoren, Mhaolain, Breen, & Casey, 2009).

The ultimate outcomes in the model are suicide and self-harm, as represented by the third panel. The interplay between the social determinants and individual-level risk factors in the preceding panels mean that a disproportionate burden of both suicide and self-harm falls on those who are more susceptible to negative effects of the various social determinants. A pernicious feedback loop – represented by the bi-directional arrow – operates here with the effect that some individuals who have self-harmed may find that they are more vulnerable to risk because they are more exposed to harmful social determinants (e.g., facing economic hardship because they are unable to return to the workforce, or bearing the brunt of negative cultural and societal values like stigma and discrimination). They may also be at more direct increased risk by virtue of having already self-harmed (Geulayov et al., 2019). With suicide, because the outcome is fatal, the effect is unidirectional.

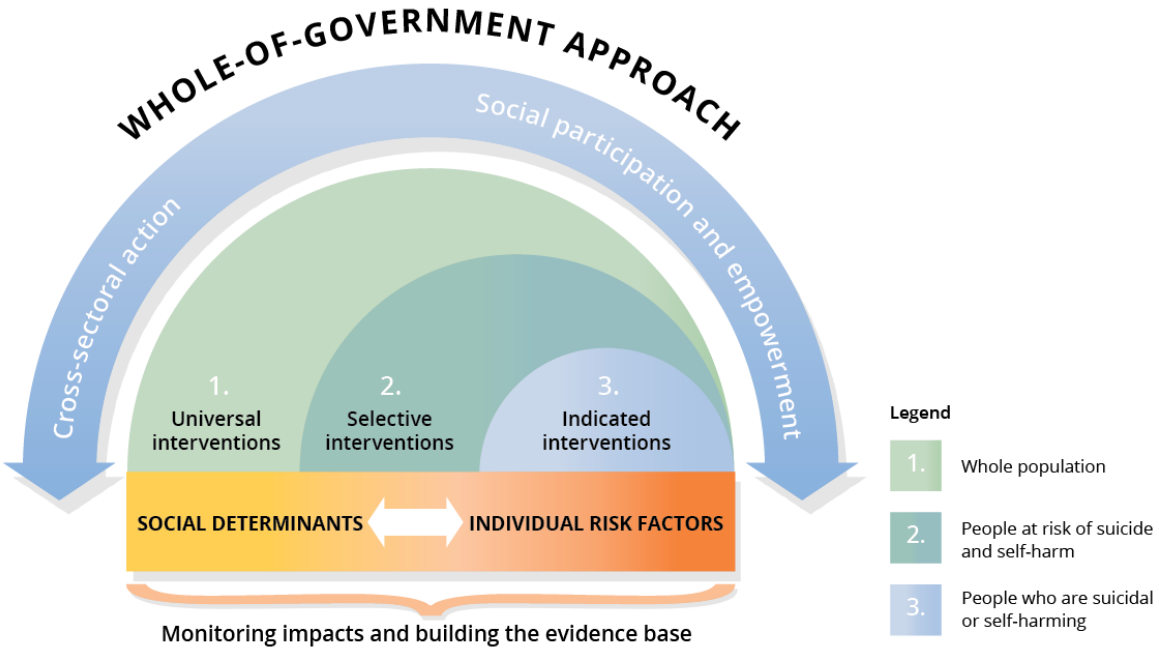
A whole-of-government approach to preventing suicide and self-harm

The public health model recognises the salience of the kind of social determinants and individual-level risk factors identified above and addresses them through prevention activities classified as universal, selective or indicated depending on how their target groups are defined. Universal interventions target the whole population, without necessarily identifying individuals who might be at risk of suicide or self-harm. Selective interventions target individuals who are not yet thinking about suicide or engaging in self-harm, but who exhibit risk factors that predispose them to do so in the future. Indicated interventions are designed for individuals who are already suicidal or self-harming and include a range of solutions typically (although not exclusively) offered in clinical settings. All three types of interventions are designed to minimise or ameliorate risk factors (or bolster protective factors).

The ways in which social determinants influence suicide and self-harm will require us to intensify our focus on universal and selective interventions as we develop national suicide prevention strategies. We should not do this at the expense of indicated interventions for those who are already suicidal or self-harming, because these are critical, but we do need to broaden our thinking in relation to the full range of social determinants. Universal and selective interventions have the potential to benefit the whole population.

Figure 2 presents a hybrid, whole-of-government approach to preventing suicide and self-harm that overlays the CSDH framework on the traditional public health model. The model centres on context-specific strategies for tackling social determinants and their interactions with individual-level risk factors. These strategies take the form of universal, selective, and indicated interventions that involve **cross-sectoral action** that is undertaken not only by the health sector but importantly, also by sectors beyond health. The strategies are informed by and designed to promote **social participation and empowerment**. Like the CSDH framework, this model also emphasises the importance of **monitoring the impacts of policies and other interventions and strengthening the evidence for their effectiveness**. This involves collecting data to determine what interventions are being delivered to whom and what outcomes are being achieved as a result. Further detail is provided below on the **cross-sectoral action** and **social participation and empowerment** that are integral to the whole-of-government approach.

Figure 2: Suicide and self-harm prevention model



Adapted from: Silverman and Felner (1995) and Silverman and Maris (1995)

Cross-sectoral action

As indicated above, health care coverage and health system capacity and responsiveness are important social determinants of suicide and self-harm. They are vital for ensuring that suicidal people can access appropriate services and receive the support they need. However, cross-sectoral action (i.e., interventions that occur outside the health sector but affect health outcomes) must be a key component of any prevention strategy. This cross-sectoral action must involve genuine partnerships from all levels of multiple sectors.

Traditionally, national suicide prevention strategies have not gone far enough in fostering cross-sectoral action. Many national suicide prevention strategies draw on the advice of the WHO and recommend a range of universal, selective and indicated interventions, underpinned by strong, cohesive leadership and, wherever possible, evidence from a range of sources. Platt, Arensman, and Rezaeian (2019) summarised the typical interventions and described these and their underpinnings as the *components* of national strategies. These components are like the tree in Figure 3. The root system represents the underpinnings: oversight and coordination, which are crucial elements of strong leadership and appropriate investment; and surveillance, monitoring and evaluation which contribute to the evidence base. The branches represent the different interventions that are commonly delivered through national strategies.

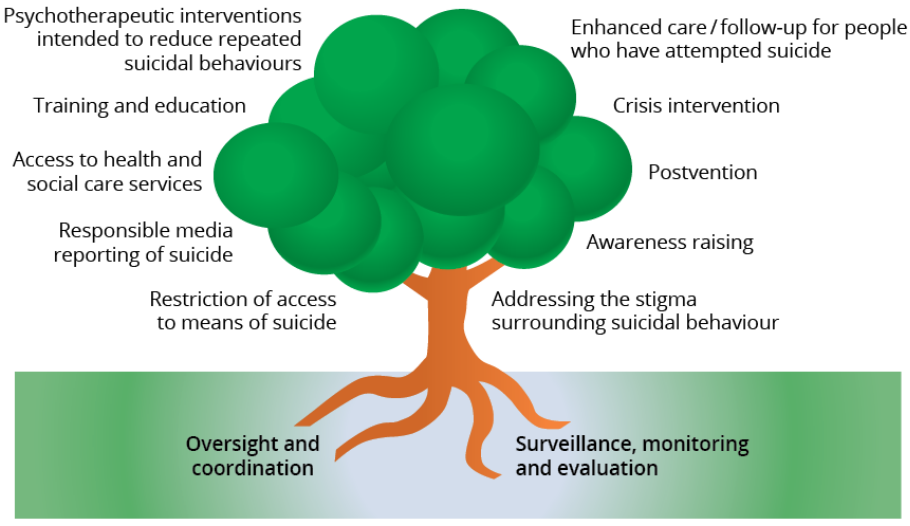
Few would dispute the value of most of the components of national strategies, and some are helpful in addressing the key social determinants of suicide and self-harm. However, national suicide prevention strategies are limited because they are usually signed off by health ministers and the responsibility for their oversight rests with health bureaucrats. A search of relevant national strategies conducted in November 2020 identified 28 current strategies (Schlichthorst et al., 2022) 21 (75%) of which were published by health ministries (Schlichthorst, 2022). Although these health-led strategies often make mention of the role of social determinants, they are light on genuine cross-sectoral collaboration, failing to attach appropriate import to the broader impact that policy decisions in other sectors can have on suicide and self-harm. They acknowledge the inequities created by these decisions but don't address them in a meaningful way. For example, they don't recognise the major influence on suicide and self-harm of far-reaching policies relating

to economic austerity measures. Nor do they recognise the impact of weak regulation of the alcohol and gambling industries, where market decisions are made for commercial gain. These policies can have a major impact on the risk of suicide and self-harm for some of the most vulnerable members of society. Worse, there is an implication that if governments recommend health sector-centric interventions prescribed by typical national suicide prevention strategies then they've "done their bit".

This skewed emphasis flows from policy to practice. This is evident in the list of interventions that comprise the typical components of national strategies in Figure 3. The majority of these are delivered by clinically oriented health and related services and focus on individuals rather than populations (e.g., access to health and social care services, psychotherapeutic interventions designed to reduce repeated suicidal and self-harming behaviours, enhanced care/follow-up for people who have attempted suicide, crisis intervention). These are a critical part of any dedicated effort to reduce suicide and self-harm and, if done well, have the potential to make a real difference for suicidal individuals who make contact with the health system. By themselves, however, indicated interventions are not able to prevent people reaching the point of crisis; on-the-ground action from outside the health system is necessary here.

Even interventions that aren't solely the responsibility of health services tend to be implemented through a healthcare lens. For example, training and education targeting gatekeepers or first responders is often developed and delivered by health professionals, as are programs designed to address the stigma and discrimination surrounding suicide. Health services and individual health professionals have a clear role to play in preventing suicide and self-harm but achieving population-wide prevention requires a more holistic approach and a workforce with broad ranging expertise. It is absolutely appropriate that when someone is in crisis or has self-harmed that clinicians in health services should provide care. However, frontline healthcare staff are often not optimally equipped to help with non-clinical issues (e.g., financial hardship, job losses and relationship break-ups), so clear referral pathways are required to ensure that clinical and non-clinical issues can be addressed at the same time.

Figure 3: Typical components of national suicide prevention strategies



Adapted from: Platt et al. (2019)

There may also be benefits in complementing some of the more clinical interventions with other approaches. There is evidence, for example, that peer workers with lived experience of suicide and self-harm may be well-placed to support those in a suicidal crisis in supportive and/or open environments (Oostermeijer, Morgan, Cheesmond, Green, & Reavley, Submitted).

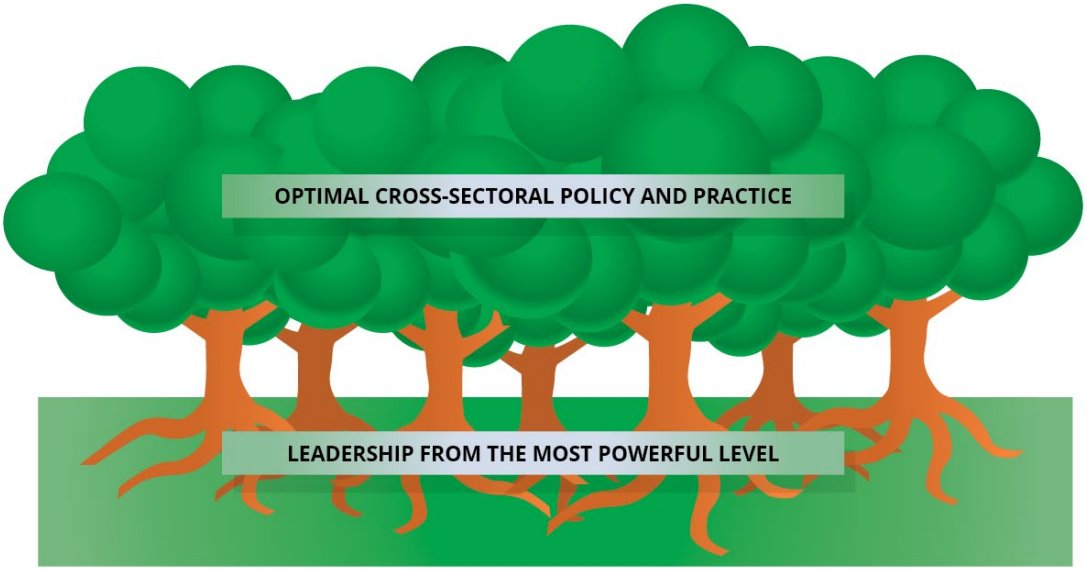
National suicide prevention strategies need to involve a whole-of-government partnership that recognises how policies in a range of sectors can increase or decrease people's risk of suicide and self-harm. This would lead to better, more robust and concerted prevention efforts and signal a greater prioritisation of suicide and self-harm as major targets of societal intervention. As one example, the communications portfolio and online safety regulator might look closely at how their policies and regulations could be modified to improve online safety. This could include approaches that maximise the chances of online conversations about suicide being helpful and unlikely to have adverse impacts. It could also include working with the social media industry to address the ways in which their algorithms operate, in order to maximise the helpful content and minimise the harmful content that people – particularly young people – are exposed to.

There are precedents for this. The "Health in All Policies" approach holds politicians and policy-makers from all sectors accountable for considering the consequences of their decisions on health and wellbeing, with a view to improving population health and reducing health inequities (World Health Organization, 2014). Ideally, national suicide prevention strategies should promote a "Suicide and Self-harm Prevention in All Policies" approach that is led by chief ministers, or by specially appointed ministers with a cross-sectoral remit. This strong leadership is critical and relates to the notion of governance underpinning the kinds of social determinants of suicide and self-harm that are outlined in Figure 1.

The actions that flow from more cross-sectoral suicide prevention strategies need to reflect the urgency of dealing with the social determinants of suicide and self-harm. They should draw on the best available evidence wherever possible, but should not be stalled while we wait for the evidence to accrue. Judicious decisions should be made about investing in innovative solutions that are likely to have a significant impact. Of course, these promising actions should be carefully evaluated to determine whether they do in fact achieve their goals.

In order to significantly reduce rates of suicide and self-harm, we need to move beyond the single health sector tree in Figure 3. We need a forest of trees, like those in Figure 4, that form a multi-sector ecosystem that recognises that preventing suicide and self-harm is "everybody's business". Each tree represents a different sector; health is a key sector but not the only one. The trees are underpinned by a root ball that represents the most powerful leadership, and their branches are intertwined in a way that promotes optimal cross-sectoral policy and practice. Some trees are grafted from others, representing ideal cross-sectoral collaboration. Within sectors, the trees' trunks bring the branches together to ensure that they are not competing for resources. The biodiversity of the forest floor is critical too, representing the many stakeholders who are involved at a grass-roots level and drive bottom-up initiatives that are key to innovation in suicide and self-harm prevention. These stakeholders include but are by no means limited to businesses and community and social organisations. With nutrients and sunlight representing sustainable funding support, the trees form a canopy that provides optimal protection against suicide and self-harm.

Figure 4: A new approach to national suicide prevention strategies



Social participation and empowerment

Social participation is critical for suicide and self-harm prevention. Social participation is based on the notion that all groups in society are empowered to have a significant influence on policy decisions that affect their wellbeing and quality of life. In this this case, people with lived experience of suicide should be empowered to influence decisions that affect their risk of suicide and self-harm. Family members, friends, and others who care about these people should also have a major say in these decisions, as should those who have lost someone to suicide.

A response to suicide and self-harm that fosters social participation and empowerment is vital for two reasons. The first of these is based on a simple human rights argument. Everyone has the right to participate in shaping public and social policies that affect their wellbeing or, in this case, influence their risk of suicide and self-harm. The second reason is that policies that influence suicide and self-harm are likely to be more effective and more sustainable if relevant groups of stakeholders have genuine ownership of them. Solutions are more likely to come from those who are affected by the social determinants of suicide and self-harm, living with them as part of their reality every day.

We have a long way to go in terms of participation and empowerment in suicide and self-harm prevention, although some progress has been made. Increasingly, people with lived experience of suicide and self-harm are being offered a seat at the decision-making table, although not all groups are well-represented (e.g., young people often miss out). Despite this generally positive direction, the decisions that people with lived experience are invited to have input into tend to be quite specific, often relating to the way in which elements of the mental health system might be better reconfigured to support them, or to how specific suicide prevention programs might be designed and delivered. Even when they are involved in higher level policy committees, these committees tend to have the health-centric policy focus described above.

We need to ensure that people who are at heightened risk of suicide and self-harm have a genuine, meaningful influence over policy decisions in the “big-ticket” non-health areas that perpetuate their disproportionate level of risk. Their experiences need to be fully incorporated into agenda-setting across the full gamut of relevant policies. They should be involved in the highest level committees, sit on working groups that draft these policies, and be employed in relevant government departments. They should be recognised as experts; many people with lived

experience of suicide and self-harm are also professionals, and viewing their input as separate to or different from that of other stakeholders creates a false dichotomy.

Conclusions

We have provided a framework for national suicide prevention strategies that is based on addressing the social determinants of suicide and self-harm by emphasising interventions that use policy, legislative/regulatory and systems levers from beyond the health sector. The suggested approach is not designed to replace existing international efforts, but rather to build on them through broader-ranging, longer-term, more visionary solutions that have people with lived experience at their core. There are already many great efforts happening in communities around the world, and national strategies should build on and leverage from these.

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