Suicide prevention: signposts for a new approach

Suicide prevention can be improved by implementing effective interventions, optimising public health strategies and prioritising innovation

Suicide has overtaken motor vehicle accidents as the leading cause of death among young adults aged 15–44 years in Australia. In 2011, 410 Australians aged 25–34 years took their own lives, with a total of 2273 deaths from suicide reported across all age groups.1 In terms of funding allocations, the Australian Government’s investment in the National Suicide Prevention Program (NSPP) more than doubled from $8.6 million in the financial year 2005–06 to $23.8 million in the financial year 2010–11.2 However, it is uncertain whether specific activities funded under this and similar schemes have reduced suicide rates. One study reported that Australia’s efforts to improve youth suicide prevention through locally targeted suicide prevention activities under the National Youth Suicide Prevention Strategy were unsuccessful in the period 1995–2002.3 Recent studies highlighting the limitations of individual risk assessments have contributed to a sense of nihilism. In suicide prevention, there is an acute mismatch between evidence-based interventions and clinical and population-based practice. The evidence of effectiveness is very limited,4 while the need to act is compelling.

Given this picture, a new approach must be considered — one that optimises implementing the few public health interventions that are backed by strong research evidence, as well as testing innovative strategies. The following six recommendations may help focus a new suicide prevention policy.

**Recommendation 1: implement known effective interventions**

A first step in reducing suicide rates is to implement interventions that are known to work. The three public health interventions with the strongest evidence base in reducing suicide are gatekeeper training, reduction in access to means, and good-quality effective mental health care.4 Gatekeeper training involves teaching individuals such as health care professionals, army and air force officers, school staff and youth workers, who are primary points of contact for high-risk populations, to effectively identify, assess and manage risk of suicidality and provide referral to treatment if necessary. Reduction in access to means of suicide includes increased restriction of access to firearms, domestic gas and pesticides, reduced pack size of analgesics and physical barriers at suicide sites. Good-quality mental health care, such as training for general practitioners to identify depression, combined with collaborative care, quality assurance programs and nurse management, is effective in reducing depression. A descriptive, cross-sectional before-and-after analysis of national United Kingdom suicide data from 1997 to 2006 provided evidence supporting the utility of combining various prevention strategies within mental health services.5 In 2005, for example, services that implemented seven to nine out of a total of nine recommendations had suicide rates of 10.50 per 10 000 patients, while services that implemented zero to six recommendations had rates of 13.45 per 10 000 patients.

However, even as a first step in reducing suicide in Australia, the value of these strategies is limited. Most evaluations of community gatekeeper programs report improved knowledge about suicide and increased self-efficacy in gatekeepers (ie, gatekeeper trainees’ self-reported perceptions and appraisal of their own ability, competence and skills to successfully identify and assess suicidal risk and refer to appropriate services if necessary). However, gatekeeper training has established effectiveness for suicidal ideation or suicide attempts only in certain medical or institutional contexts, such primary care or the military.4 Community gatekeeper training, which is currently funded under the NSPP, has not been subject to rigorous empirical tests for core suicide outcomes. Means restriction is influential where access to suicide methods (such as pesticides) is prevalent. However, in Australia, efforts to restrict means are already in place. Improved mental health care will only be effective for those in contact with mental health services, estimated to be less than half of those who attempt suicide,6 and for only one-third (34.9%) of those with any mental disorder over a 12-month period.7 Health reform and investment to increase early access to headspace: the National Youth Mental Health Foundation and e-health services for young people may increase rates of help-seeking. However, effectiveness research is very limited — of the “effective” public health interventions for suicide described above, only gatekeeper training has been subjected to a single randomised controlled trial (RCT).8,9 In contrast, a 2012 paper reported more than 30 RCTs of non-pharmacological interventions to prevent depression,9 and a 2005 retrospective evaluation reviewed 477 RCTs of selective serotonin reuptake inhibitors to explore whether antidepressants increased risk of suicide.10

**Recommendation 2: model for best “bang for buck”**

To gain maximum benefit from the available suicide prevention funds, we need to determine the impact, circumstances and audience of targeted or universal population-based approaches. Targeted approaches aim to lower risk in groups with higher risk of suicide, such as Indigenous youth, lesbian, gay, bisexual and transgender people, and older men,1 or those with higher risk of suicide.
Recommendation 3: evaluate if simpler interventions are as effective as more complex ones

Internationally, the trend is to combine multiple elements into broader programs, such as the European Alliance Against Depression (EAAD), which involves 20 international partners representing 18 European countries, Optimizing Suicide Prevention Programs and their Implementation in Europe (OSPI Europe) and the “Don’t hide it. Talk about it” campaign, undertaken in conjunction with the Choose Life training program in Scotland. For most of these programs, we are unable to determine whether a single element, a combination of elements or the sheer intensity of the cumulative effect of the approach is the key to any potential impact. The downside of complex interventions is that costs rise and translation to practice requires intense effort, so there is urgency about evaluating each of the elements separately.

Recommendation 4: take advantage of opportunities early in the suicide prevention chain

Risk models indicate that suicide risk arises from depression, hopelessness and capability which, in combination with proximal and immediate triggers, lead to suicidal acts. Systematic intervention early in this “chain” is important. If depression is a necessary (albeit not sufficient) condition and prominent risk factor for suicide, intervening early for depression is critical. From a population perspective, schools are an ideal environment in which to deliver interventions that may lower the risk of suicide later. Australian researchers have shown that “upstream” modification of depression and alcohol misuse is achievable. However, these upstream interventions are not systematically implemented. Postvention programs have been newly introduced into high schools to deal with the fallout of an attempted suicide or a suicide, without support from RCTs. These may be useful, although this remains to be seen. The point is that our strategy needs to put more emphasis on prevention in those with risk, where evidence is relatively strong. Put simply, the hospital emergency department should not be the first point of intervention in the suicide prevention chain.

Recommendation 5: offer suicide programs directly through the internet to those at risk and not in contact with mental health services

There is promising evidence that online programs are effective and able to reach many who do not seek traditional health services.

Recommendation 6: develop clear prevention messages and practices to improve suicide literacy

Media guidelines promote responsible professional coverage and caution against the possibility of social contagion. This social transmission of suicidal behaviour through social media needs immediate attention, particularly in young people, given the potential for harm. However, there is recognition that the issue of suicide must be discussed to improve understanding and, hopefully, to lower risk. The National Mental Health Commission recently commissioned research to explore Australians’ attitudes to suicide. The report concluded that since “simple advice can help stem the tide of some diseases”, a public campaign around suicide was warranted. Recent Australian research uncovered similar findings. Literacy levels around suicide are low, and people do not know what constitutes the triggers to suicide, or how to identify suicide risk in their friends and family.

There may be overall harm in shutting down talk about suicide if this strategy inhibits a more integrated community and medical response to identifying those at risk. The information needs of the community need to be mapped out, and tailored messages should be trialled through community and expert consultation. We reiterate that before a campaign around suicide literacy and stigma is launched, the proposed campaign messages and dissemination practices should be tested using controlled experiments to determine if they raise appropriate awareness.

A new suicide prevention strategy

Suicide is a complex behaviour, and likely to have different causes and triggers depending on context and individual characteristics (eg, Indigenous and remote communities, culturally and linguistically diverse groups, people in prisons and those with a psychiatric disorder). However, suicide rates will not lower substantially if we continue a scattergun approach to funding diverse projects, failing to prioritise interventions with proven effectiveness, ignoring the opportunity to optimise a broader population health approach, or failing to fund innovation using new technologies. We must invest in new strategies with demonstrated impact to avoid further loss of life.

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