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Feature

Review of suicide-prevention programs in Queensland: state- and community-level activities

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Abstract

Objective. Information regarding the availability of suicide-prevention programs in Australia is sparse and rather difficult to obtain. This study aimed to report and describe suicide and/or self-harm-prevention programs in Queensland. **Methods.** Programs were classified by type of intervention, predominant type of program, setting of delivery and targeted population-at-risk.

Results. Sixty-six organisations were identified, providing a total of 101 suicide-prevention programs. The majority of programs operated at the prevention or treatment level, with less than half providing continuing (long-term) care. The programs targeted 12 different risk groups and were most frequently delivered within community settings.

Conclusions. The findings show a diverse distribution of activities across the levels of prevention and different risk populations. This survey demonstrates the existence of remarkable gaps in coverage and provision of programs for specific high-risk groups.

What is known about the topic? Although suicide prevention in Australia has recently received considerable attention, there is currently no complete list or register of suicide-prevention programs. This reduces the opportunity for people at risk to access help, as well as agencies to link and build on existing models of service.

What does this paper add? This study is unique in identifying and reviewing suicide-prevention programs that are funded by national or state suicide-prevention strategies, as well as those funded by private and community-based organisations. The identified programs are matched with the actual suicide risk of the targeted subpopulations, indicating a lack or overlap of programs for specific populations.

What are the implications for practitioners? This paper is particularly relevant for policy makers as it identifies potential gaps in the provision of suicide-prevention programs for specific at-risk populations in Queensland. The relevance of the paper for practitioners, however, is in encouraging them to re-examine the provision of their services considering the entire continuum of suicide-prevention activities.

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Introduction

Australia was one of the first countries to develop a national suicide-prevention strategy. Building on the National Youth Suicide Prevention Strategy (NYSPS), the National Suicide Prevention Strategy (NSPS), introduced in 1999, adopted a more whole-of-life-span approach to suicide prevention, and provided a national strategic plan for suicide-prevention initiatives, called the Living is For Everyone (LIFE) Framework. In order to facilitate the continuum of suicide-prevention activities, the LIFE framework adopted a population health approach involving

the following eight stages: universal intervention, selective intervention, indicated intervention, symptom identification, early treatment, standard treatment, longer-term treatment and support, and ongoing care and support.²

Recently, policies and funding for suicide prevention in Australia have received considerable attention. ^{3–6} A Senate report, 'Suicide: the Hidden Toll', outlined 42 recommendations on how best to manage suicide prevention. ⁴ One of these recommendations specifically addressed the issue of identifying and linking agencies and services involved in the care of persons

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at-risk of suicide. A major obstacle in linking the options available to suicidal persons together is the insufficient coordination of suicide-prevention activities. In fact, outside those programs funded under national or state suicide-prevention strategies, there are no registers or even simple lists of prevention programs operating in Australia. For example, a review of 156 local suicide-prevention activities, conducted by Headey and colleagues in 2006, did not include those funded by private and community-based organisations. Clearly, limited information reduces the opportunities for people at risk in accessing available help. In addition, service providers might not be able to plan or link their activities with existing agencies, running the risk of undue duplications and losing the opportunity to maximise their impact.

Thus, the aim of the present study was to identify and describe all programs, services and activities (referred to as 'programs' hereinafter) dealing with the prevention of suicide and/or selfharm currently delivered in Queensland.

Methods

The core activity (suicide and/or self-harm), type of program, level of intervention, target population (i.e. the population a program was delivered to) and setting or context of delivery (e.g. community, workplace) were considered to be the essential descriptors of each activity. Included were programs delivered either in Queensland or nation-wide. In this paper, the prevention of suicide and self-harm will both be included under the umbrella term of 'suicide prevention'.

Recruitment and data collection

The recruitment of participant organisations occurred between January and September 2010. Organisations were identified through various strategies, including Internet searches (using keywords such as 'suicide', 'suicide prevention' and 'self-harm') and contacting government departments, local shires and councils, and Suicide Prevention Australia. A newspaper advertisement was also utilised to capture community-based suicide-prevention programs that may not have been identified by the above search methods. Once identified, organisations were sent an invitation via email, including an information package and a consent form. Up to three reminder emails were sent after the initial invitation. Organisations that returned a signed consent form were sent a questionnaire (as a hardcopy or online) requesting details about their relevant programs.

Review and data analysis

Questionnaires were reviewed and organisations were re-contacted to fill in any missing information. Where an organisation provided more than one type of program (e.g. training but also development of awareness materials), agreement on the predominant type of activity was reached in discussion with the program providers.

The information on the levels of intervention that the organisations provided was grouped into the following: prevention (including universal, selective and indicated prevention); treatment (case identification and early and standard treatment); and continuing care (long-term treatment and support and long-term care; for details on each level, see the LIFE Framework

classification). This type of information was missing for three programs.

Programs were also classified into the following groups by their approach to risk groups: programs provided directly to one or more risk group; programs provided indirectly to one of the risk groups through service providers or other gatekeepers; and programs that targeted risk populations both directly and indirectly. Descriptive analyses were performed with SPSS, version 19 (IMB Corporation, Armonk, NY, USA).

Results

Type of program

Of the 69 organisations that consented to participate, three were excluded as they did not provide information about their programs on time. The total sample thus included 66 organisations, providing 101 separate suicide-prevention programs (for a full list of identified programs see Appendix S1 available online as supplementary material to this paper). The most common were face-to-face counselling and case-management programs (n = 32; 31.7%), followed by training and workshop programs (n = 29; 28.7%). Less frequent were programs involved in the delivery of awareness materials (n = 13; 12.9%), preparation of guidelines or protocols related to suicide prevention (n = 9; 8.9%), provision of web-based information services (n = 10; 9.9%) and telephone support and counselling services (n = 8; 7.9%).

Level of intervention

Regarding the level of intervention, the majority of programs (86.7%) targeted prevention, a smaller percentage (75.5%) treatment and 46.9% continuing care. Programs often involved more than one level of intervention. Fig. 1 provides more detailed information on each of these levels.

Target groups

Programs differed in their approach to groups at risk. Whereas 43 programs (43.6%) were provided directly to one or more risk group, 37 programs (36.6%) were provided indirectly to one of the risk groups through service providers or other gatekeepers (e.g. teachers or community members). In addition, 21 programs (19.8%) combined both approaches and targeted risk populations directly and indirectly (e.g. information booklets, telephone counselling services or training programs for both people at risk and their carers or health professionals).

Table 1 presents programs by target group (separately for service providers or other gatekeepers and people at risk of suicide) and type of program. Programs that were provided indirectly to risk groups were most often designed for general practitioners (GPs) and mental health professionals (29.7%). Furthermore, these programs also targeted family and other carers, school counsellors and teachers, regional communities, and other professionals, such as media professionals, child safety staff and other officers within government departments.

Other programs were provided directly to specific high-risk groups, most commonly people with suicidal behaviours or ideation (47.5%) and people with mental illness (25.7%). The third most frequently targeted risk group was young people (up to 24 years old) (24.8%), followed by those bereaved by the suicide of a close person (20.8%). The risk groups considered in less than

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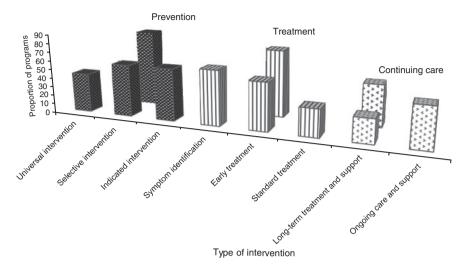


Fig. 1. Suicide-prevention programs by the eight types and three levels of intervention.

five programs were the following: people from culturally and linguistically diverse backgrounds, older people (65+ years), atrisk occupations (ambulance service paramedics and building construction workers), LGBT (lesbian, gay, bisexual and transgendered) individuals, veterans and people with chronic pain.

Setting of program delivery

Programs were delivered across six different settings. Most programs were community based (n = 68; 67.3%), whereas others were designed for a specific setting, such as a clinical setting (n = 25; 24.8%), workplace (n = 14; 13.9%) or school (n = 11; 10.9%). A small proportion of programs was delivered in tertiary institutions (n = 6; 5.9%) and hospital emergency departments (ED; n = 4; 4.0%). Most programs were delivered in more than one setting.

Discussion

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The present study identified 101 suicide-prevention programs currently operating in Queensland, funded either under the NSPS or privately. Most programs provided either a counselling or case-management service, or a training program, and were delivered in a community-based setting. Activities tended to focus on prevention, targeting risk populations either directly or indirectly through various gatekeepers, including service providers.

Whereas the majority of suicide-prevention programs involved either some type of prevention or treatment activity focusing on early identification and treatment of people at risk of suicide, a substantially smaller proportion of programs provided continuing care and support for people with suicidal behaviours, such as follow up of suicidal patients. A more detailed analysis of programs for this high-risk group showed that nearly one-third were provided in a clinical setting (e.g. through GPs and psychologists) or in hospital ED, whereas the remaining programs were provided at the community level. Such a dual focus of intervention for people with suicidal behaviours aligns with existing research showing that, on the one hand, the first point of seeking help for persons who are at very high risk of suicide is often a hospital ED.^{7–9} On the other hand, a population

study in Queensland showed that less than half of suicide attempters sought formal help through hospitals, GPs or counsellors, and the rest did not seek any formal help. ¹⁰ Such a high proportion of non-help seekers among suicide attempters indicates that suicide-prevention activities should be strongly grounded in communities and aim to facilitate help-seeking, destignatise suicidal behaviour and ease access to professional help.

The results also showed that programs most frequently addressed the selective or indicated level of prevention, whereas less than half of them included the universal level. A focus on high-risk groups is consistent with the emphasis of projects funded under the NSPS; these primarily related to young people, Aboriginal and Torres Strait Islander people, and people in rural and remote areas. However, considering that interventions for high-risk groups have so far only rarely been effective, increased attention should be paid to evaluating existing programs. Equally, it seems reasonable to promote further implementation of interventions at the universal level (which reaches a greater number of people), such as restricting access to means (e.g. firearms) or empowering communities while promoting more constructive coping mechanisms and help-seeking behaviours.

Whereas 43 programs targeted risk groups directly, 37 did so in an indirect manner, for example through service providers. Targeting risk populations indirectly, most commonly through GPs and psychiatrists, is important as educating GPs in the recognition and treatment of depression is one of the few initiatives known to reduce suicide rates. ¹³

In addition to programs for health professionals, who constitute the primary group of gatekeepers, a substantial number of programs also targeted so-called 'emergent' gatekeepers, that is, community members or staff who have not been formally trained to intervene with someone at risk of suicide but are likely to come into contact with at-risk individuals. ¹⁶ These programs were directed to school teachers, professionals such as journalists, family members and other carers, and members of specific regional communities. Gatekeeper education is effective in suicide prevention. ¹⁷ Furthermore, education and suicide awareness prevention programs implemented at multiple levels (e.g. in primary care, media, general public) and/or in a multifaceted

Multiple target groups typically applied for one program. CALD, culturally and linguistically diverse; LGBT, lesbian, gay, bisexual or transgender; ATSI, Aboriginal and Torres Strait Islander Table 1. Suicide-prevention programs by target group and main type of program

| Program type | | Programs (| ns targeting service pro | Programs targeting service providers | | | | | ш | rograms t | Programs targeting risk populations | sk popula | tions | | | | |
|--|---------------------------------|------------------------------------|---|--------------------------------------|-----------------------------|--|---|-------------------------|---|----------------------|--------------------------------------|-------------|--|----------------------|-----------------------------|---|----------------------------|
| | Health professionals $(n = 30)$ | Family and other carers $(n = 16)$ | Family Teachers Regional and other $(n=14)$ community and other $(n=15)$ $(n=16)$ | 80 | Other professionals $(n=5)$ | People with suicidal behaviours/ ideation $(n = 48)$ | People with People with suicidal mental behaviours/ illness ideation $(n = 26)$ | Young people $(n = 25)$ | People ATSI bereaved people by suicide $(n=11)$ (n=21) | ATSI people $(n=11)$ | People in rural remote areas $(n=7)$ | Men $(n=5)$ | Men People from ($n=5$) CALD back ground ($n=4$) | Older people $(n=4)$ | At-risk occupations $(n=3)$ | People Other ^A whoare $(n=2)$ LGBT $(n=2)$ | Other ^A $(n=2)$ |
| Counselling/case | 3 | 2 | ı | 1 | 1 | 13 | 6 | 6 | 7 | 4 | 3 | - | 3 | 1 | - | 2 | 1 |
| management service Training/workshop | 14 | ∞ | 7 | 9 | ю | 14 | ∞ | 4 | 9 | 6 | С | 2 | 1 | 2 | 2 | ı | - |
| denvery Development of | S | - | 3 | 4 | I | 7 | 2 | 3 | 6 | 2 | 1 | - | I | 1 | ı | ı | ı |
| Development of | S | - | 2 | 2 | 2 | 7 | I | 3 | 6 | 2 | I | I | I | I | I | I | ı |
| guidelines/protocols Web-based information | 2 | 3 | 2 | I | I | 4 | 5 | S | - | ı | ı | ı | I | I | I | ı | I |
| service Telephone support/ | _ | - | I | I | I | 60 | 2 | 1 | 1 | I | I | - | I | I | I | 1 | 1 |

⁴,Other' included veterans and people with chronic pain.

way (targeting various risk and protective factors for suicide) were considered to have an additional suicide preventative effect, particularly due to the synergy between different interventions. ¹⁸

Consistent with evidence showing that a history of suicidal behaviour is the most important predictor of further suicidal behaviours, the findings showed that most programs were directed to people with suicidal behaviour or ideation. Furthermore, survivors – also at significantly higher risk than the general population – were targeted by one-fifth of programs. A review by Headey *et al.* showed there were five suicide-prevention projects funded under the NSPS for the bereaved; however, this study evidences a marked increase in the sensitivity toward suicide survivors, testified to by the presence of 21 programs in Queensland alone. This indirectly highlights the emotional needs of this high-risk group, and also underscores the need for the provision of effective support systems and interventions.

Another important risk factor for suicidal behaviour is mental illness, with mood disorders being one of the strongest predictors of suicide.²¹ Our findings showed that over one-quarter of programs targeted either people with mental illness or health professionals who provide services to people with mental illness.

The third most frequently targeted risk group was young people (up to 24 years). Compared with the number of programs for older people (65+ years), there were six times more programs for young people. In fact, being either an adolescent or older adult was found to be a risk factor for suicide across various epidemiological studies. ²² Queensland is no exception, with older men aged 75 and over, in the period 2005–07, having an above-average suicide rate. ²³ Corresponding to the higher suicide risk in older men compared with women, three out of four identified programs for people aged 65 and over targeted men.

The review by Headey and colleagues showed that in addition to youth, suicide prevention programs also often targeted Aboriginal and Torres Strait Islander people. ⁵ Indeed, between 1994 and 2007 in Queensland, the suicide rate for Aboriginal and Torres Strait Islander persons was nearly double than that of non-Aboriginal or Torres Strait Islander people. ²⁴ The majority of identified programs for Aboriginal and Torres Strait Islander people provided either a counselling service or training on how to support a community member who may be at risk of suicide.

Although NSPS strongly supports people from rural and remote areas, who have higher suicide rates than people living in urban areas of Queensland, our study found relatively few suicide-prevention programs for this risk group. 11,25 Furthermore, none of these programs specifically targeted farmers, which is concerning, given that the suicide rate among farmers is significantly higher than that of the overall rural population. Acute natural disasters, such as drought or flood, can significantly affect the mental health of farmers who are, therefore, likely to benefit from early intervention, with careful consideration of the stressors peculiar to farming. 28,29

Of the six male-specific programs, three programs targeted older people, two were designed for workers in the construction industry, and one provided a national telephone support service for men in crisis. Considering that men have higher suicide rates than women at all ages in most parts of the world, including Queensland, having only one program specifically for men of all ages (i.e. the telephone crisis line) may very well be

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insufficient.^{23,30,31} This is especially so considering that men are less likely than women to benefit from unisex programs.³²

The two programs that targeted men in the construction industry were developed in response to the significantly higher suicide rates among construction workers compared with working-age Queensland men, overall. Turthermore, one of the two programs specifically targeted young trainees and apprentices, which can be considered as highly appropriate as men, especially young men, were found to have had less contact with both primary and mental health services in the year before suicide. Suicide prevention, in the form of crisis counselling, was offered to another potentially at-risk occupation: Fire and Rescue Services. However, international research conducted on this occupation showed that the suicide risk for fire fighters is actually lower than the general male population.

Only four suicide-prevention programs targeted people from culturally and linguistically diverse backgrounds. Migration has been considered a potential factor of stress, which may trigger mental health problems and suicidal behaviours. The existence of suicide-prevention programs for this population is important, given the substantial diversity of suicide rates by country of birth observed in first-generation migrants in Australia, and particularly in light of the growing number of Australian residents born overseas. ^{37–39} Furthermore, second-generation migrants may be exposed to increased risk of suicide and there are rising concerns for refugees and asylum seekers. ^{40,41}

A very small number of programs targeted LGBT, veterans and people with chronic pain. Although two programs for LGBT were based on counselling and case-management services, no awareness-raising activities were available for this population. Awareness programs may be important to tackle stigma attached to non-heterosexuality, as well as for more accurate reporting of suicide in LGBT individuals, considering the lack of information on the sexual orientation of those who die by suicide, as noted by others. 42

Study limitations

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The present study has some limitations that need to be acknowledged. First, it is possible that the number of identified suicideprevention programs is not the same as the number of actually existing suicide-prevention programs. In addition to the 66 participating organisations, we identified three other organisations dealing with suicide prevention. However, as they were unable to provide details of their activities in due time, they were excluded from the study. There are numerous core government services (including District Mental Health Services and hospital ED) that routinely deal with people with suicidal behaviour. However, these services were considered to be 'general' mental health providers, not specifically designed for suicide prevention, and were not included in the study. Second, in the case of programs providing multiple suicide-prevention activities (e.g. counselling, training programs) only the main type of activity was considered. Third, the present survey failed to gather a reliable dimension of the number of people involved in or touched by any given program. Organisations were hesitant in providing this type of information, and there are obvious difficulties in collecting this type of data. For example, the same person may have used telephone and/or web-based services

several times; similarly, the quantity of printed booklets or brochures does not necessarily equal the number of people accessing these materials. Finally, it was not possible to provide clear information on the exact number of programs funded under the NSPS or funded privately. This is mainly due to the majority of programs having multiple and mixed (governmental and private) sources of funding, and also some programs that were initially funded by the NSPS but then continued to be delivered with the support of private donations.

Conclusion

Current suicide-prevention activities differ across levels of prevention. Activities at the universal level and those considering the continuing care of people with a history of suicidal behaviour are infrequently represented. More effort should be paid to implementing prevention activities in a coordinated way and avoiding undue duplication (given the limited resources available). The overlapping of different programs also poses obvious obstacles to the correct identification of what really works in suicide prevention. In this regard, increased emphasis should be put on the need for carefully evaluating implemented programs. For government-funded activities, evaluation should be compulsory. Ultimately, increased attention should also be dedicated to estimating the size of the population that actually benefits from a specific prevention program.

Competing interests

The authors declare there are no competing interests.

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