

Suicide in Sri Lanka: Reflections and ways forward

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Abstract

In 2022, Sri Lanka had a suicide rate of 15/100,000, well above the global average. The most common method of suicide was by hanging, with pesticides being the second common method. Among males, suicides were greatest among older males, with a significant upward trend in the numbers of suicide by hanging. In contrast, among females, suicide rates were highest among younger females (aged 17-25

years). A myriad of factors, ranging from psychiatric morbidity to the economic downturn and domestic violence, may contribute towards suicide in Sri Lanka. In this context it is important to examine pragmatic and evidence-based strategies for suicide prevention, and some possible strategies are discussed in this article.

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Introduction

During the COVID-19 pandemic, there was concern worldwide that this would be associated with increased rates of suicide. Contrary to expectations, this did not happen. Suicide rates remained relatively constant worldwide during the pandemic (1). But now, the world faces an economic downturn, and Sri Lanka still walks an economic tightrope in the wake of the financial crisis of 2022 – and this quandary rises again: will this impact on our suicide rates in the next few years? What measures, if any, can be taken to reduce this?

Looking back

Significant past evidence on suicide prevention comes from our own part of the world. In 1995 Sri Lanka had a very high rate of suicide – 47/100,000 population, mostly due to death by ingestion of lethal pesticides (2). Subsequent national-level measures to restrict access to these pesticides was associated with a significant fall of suicide rates over the subsequent decades (3). Restriction of access to toxic pesticide restriction continues to be a very important method of suicide prevention in Sri Lanka.

Since 2016, the most common method of suicide in this country, among both males and females, has been by hanging (4). This is partly due to method substitution, but overall rates remain much less than in mid-1990s. However our recent suicide rates (15/100,000 in 2022) is still higher than the global average (4). And means restriction with regards to suicide by hanging is

practically challenging and – many would argue – not feasible in many instances.

Depression, alcohol use disorders, unemployment and suicide

Humans are complex beings, and suicide is a tragedy linked to a complex interplay of factors, both internal and external to the individual. On one hand of those who die by suicide, at least 90% are reported to have a psychiatric disorder (although there has been some debate about a lower prevalence of psychological morbidity with suicides in lower middle income countries (LMICs)) (5, 6). Depression and alcohol use disorders are among the most reported psychiatric disorders associated with suicide, in Sri Lanka and in the world (5, 7-9). Alongside this, suicide (and suicidal behaviour) is also significantly associated with certain psychosocial factors, such as the experience of poverty, loss of employment, domestic violence and trauma (10, 11).

How do we respond to this, in a LMIC such as Sri Lanka, with a limited number of psychiatrists and a financial crisis? It is challenging – there is an urgent need to advocate for pragmatic, cost-effective preventive strategies, while maintaining an evidence-based approach.

Recognizing depression in primary care

Internationally, training general practitioners in the identification and treatment of depression, has been shown to reduce rates of suicide (12,13). This is a

pragmatic option that can, and should, be adopted and evaluated in our local context. Measures to increase training about identification, treatment and appropriate responses to depression and suicide risk, among doctors and healthcare professionals who are not psychiatrists, is likely to be cost-effective and useful, especially at primary care level. Effective methods to teach and deliver this message and use of digital technologies should be considered. Teaching psychiatry as a separate subject to final year medical students should also increase awareness about depression among future general practitioners. But as with all forms of awareness, efficacy relies on regular ‘booster doses’ or re-training across time, to refresh knowledge (13).

With regards to treatment of depression: There is no clear evidence that one antidepressant is more efficacious than the other in the prevention of suicidal behaviour in patients with depression (13, 14). There is evidence to suggest lithium reduces suicidal risk, and more recently ketamine has been found to have short term effect in reducing suicidality (13, 14). Internationally, appropriate use of cognitive behaviour therapy and dialectical behaviour therapy (for borderline personality disorder), has been shown to reduce suicidal behaviour (13).

Minimizing alcohol use disorders

Alcohol and other substance use disorders are another challenging area that contribute to suicide and self-harm behaviour (5). Alcohol use disorders go hand-in-hand with domestic violence, which by itself is associated with increased risk of suicide and self-harm (15). Likewise, drug dependence is also an increasing factor, associated with significant suicide risk.

Brief interventions, aimed at reducing use among people with harmful or hazardous use of alcohol, is a promising strategy that is being explored in recent years, including in LMICs (16). These brief interventions were delivered by trained paraprofessionals in primary care settings, using principles of motivational interviewing, but adapted to the local context (16, 17). A community-based study in the Central Province of Sri Lanka, using culturally suited educational methods (such as street drama and posters) showed that increasing awareness was associated with reduction of alcohol misuse and alcohol related harms (18). From a pragmatic point of view, brief interventions to prevent alcohol misuse appear suited to Sri Lanka and is worth adapting and exploring locally. Parallel to this, there is also an urgent need to advocate at local and national level, for development of residential rehabilitation services for alcohol and drug dependence, and for availability of appropriate medication, throughout the country.

Psychosocial correlates of suicide

Severe economic crises, and unemployment, has been

repeatedly linked to increased risk of suicide (11, 19, 20). This has been described to be more for working-age males, though a recent meta-analysis reports that women are significantly affected by this as well (11, 21). Loss of employment may contribute to suicide risk directly, by increasing risk of impulsive behaviour, or more indirectly by contributing to aspects such as depression, alcohol use disorder, financial and relationship stressors and reduced sense of self-worth (11). Towards the latter part of 2022, Sri Lanka saw an upward trend in suicide by hanging among older males – a very concerning observation, particularly in the context of ongoing economic problems (4). This is a daunting problem, and some preventive measures suggested in the developed world, such as increase of unemployment benefits, may not be practical in our LMIC context. More relevant strategies shown to have some protective effect in this context include, active labour market schemes, increased social cohesion (for example, membership of local social organizations), and reducing alcohol misuse (11). Interesting recent work has emerged recently from Brazil, where conditional cash transfers (cash stipends given to identified socioeconomically deprived families, on condition that they fulfil specified ongoing health or social activities) was associated with reduced rates of suicide (22). None of these measures have been explored in Sri Lanka and data from LMIC in general is scarce. We urgently need more work to understand how the economic downturn interacts with suicide in our context (for instance, the role of aspects such as unemployment, absolute versus relative poverty, debt, inflation and possible protective mechanisms) (19, 23); and we need to strongly advocate with national policy makers and administrators for strategies to fight the risk of increasing suicide rates in the context of unemployment and the economic downturn.

Domestic violence and the vicious cycle with suicide

Domestic violence loops a vicious cycle – it increases the risk of suicide (and self-harm) in victims (often women); exacerbation of domestic violence in the context of partner alcohol misuse, women’s economic dependence, and social restrictions increase vulnerability in the LMIC context (17). Suicide rates for women in Sri Lanka in 2022 was highest in the 17-25 year age group – was this a contributory reason? (4). This could also be part of the complex contributory factors in maternal suicides. Domestic violence is sometimes perceived by healthcare services as a ‘family problem’ or as not being relevant to health; but the close association between violence and psychiatric morbidity, self-harm and suicide requires a healthcare response, even if this is a challenge. A start could be sensitization of medical practitioners about this issue, about how to provide first-line support and refer to supports available, such as the Family Health Bureau (FHB) run Mithuru Piyasa Centres. Development of more support services are needed, and there is also

the need to increase community awareness; particularly regarding the adverse impact on children growing up in a household with domestic violence, which could even be described as a form of ‘unrecognized child abuse’, and which in turn increases the risk of suicide as an adult (24, 25).

Working with the media

Glamourization of suicide in the media, and particularly via online media, is a constant challenge with regards to prevention of suicide and self-harm (26). Many measures have been taken locally, particularly increasing awareness among the media, but this needs to be an ongoing discussion, with involvement of the media themselves (27).

Role of telephone helplines, community follow-up of high-risk patients, and other strategies?

Crisis and telephone hotlines are another important service that clearly provide emotional support to those who are distressed, although direct evidence regarding suicide prevention is still limited (28). The establishment of the nationwide mental health hotline, 1926, and other similar helplines are important steps in this direction and provides ongoing support for those in distress.

What of community follow-up of those who have attempted suicide, or who are at increased risk of suicide? International data suggests that after an index episode of self-harm, brief intermittent community contact (for example in the form of follow-up postcards), may reduce repetition of suicidal behaviour (29, 30). Would similar strategies be relevant to Sri Lanka? Rates of repetition in Sri Lanka (and other developing countries) are lower than that in the West; but nonetheless, those at risk may benefit from similar ‘brief’ follow-up, and it is a cost effective strategy, though we have no local data (31). Gatekeeper training, increasing awareness about mental health issues among young people, and exploring digital technology in suicide prevention are other aspects for further local research (32).

Building resilience

Recent research internationally has also taken a different focus – examining building resilience by exploring resilience factors, and mechanisms, that could help protect against suicide risk, particularly among young people (33). This is a promising area, which again needs more work from Sri Lanka.

Psychological autopsy studies

In recent years, the Ministry of Health of Sri Lanka has taken steps to conduct psychological autopsy studies

following suicide. This was first done with regards to maternal suicides, indicating complex psychosocial stressors and psychiatric morbidity, especially depression, as contributory factors (34). Currently psychological autopsies are being carried out after suicides among young people and have been proposed for other age groups as well. This is a complex task, that needs training, and a sensitive and ethical approach; and if being done, it is imperative that relevant findings be incorporated into appropriate national policy and action, with regards to prevention of suicide.

Conclusions

The field of suicide prevention is full of contradictions. On one hand, some have advocated for a “zero suicide policy”, and some argue that “all such deaths can be prevented.” On the other hand, despite these “gut reactions” and notwithstanding years of research and experience, preventing suicide, anywhere in the world, still remains very much a challenge. There is an urgent need to strongly advocate and work towards prevention of suicide and suicidal behaviour in Sri Lanka, to identify and support vulnerable groups, and to adopt an evidence-based approach. Sri Lanka did this once before in the mid-1990s, and it is timely to work towards it now.

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