Suicide burden and prevention in Nepal: the need for a national strategy

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Abstract

Suicide is a major cause of deaths worldwide and is a key public health concern in Nepal. Although routine national data are not collected in Nepal, the available evidence suggests that suicide rates are relatively high, notably for women. In addition, civil conflict and the 2015 earthquake have had significant contributory effects. A range of factors both facilitate suicide attempts and hinder those affected from seeking help, such as the ready availability of toxic pesticides and the widespread, although erroneous, belief that suicide is illegal. Various interventions have been undertaken at different levels in prevention and rehabilitation but a specific long-term national strategy for suicide prevention is lacking. Hence, to address this significant public health problem, a multisectoral platform of stakeholders needs to be established under government leadership, to design and implement innovative and country-contextualized policies and programmes. A bottom-up approach, with active and participatory community engagement from the start of the policy- and strategy-formulation stage, through to the design and implementation of interventions, could potentially build grass-roots public ownership, reduce stigma and ensure a scaleable and sustainable response.

Keywords: legislation, mental health, Nepal, South Asia, suicide prevention

Suicide: a global public health issue

Over 16 000 000 people worldwide attempt suicide every year and about 800 000 people die by suicide.¹ In 2012, suicide accounted for 1.4% of all deaths worldwide, making it the 15th-leading cause of death.¹ Suicide occurs at all stages of the lifespan and was the second-leading cause of death among 15–29 year olds globally in 2012. While 75% of global suicides occurred in low- and middle-income countries,² the South-East Asia Region of the World Health Organization (WHO) accounted for 39% of global suicides but only 26% of the global population.¹ This affects many millions of people with suicide-related bereavement. It is estimated that, by 2020, 1.5 million people will die each year by suicide, and between 15 and 30 million will make a suicide attempt.³ Considering this, the rate of suicide is among the proposed indicators for monitoring the progress of the health-related Sustainable Development Goal 3, to “ensure health lives and promote well-being for all at all ages”,⁴ and suicide prevention is also an integral component of the WHO Mental Health Action Plan 2013–2020, with the target of reducing the rate of suicide in Member States by 10% by 2020.⁵

Suicide in Nepal

Nepal does not have reliable data related to suicide and attempted suicide. The available data are based on police reports or on specific populations, where there is a possibility of gross underestimation. A 2014 scoping review of suicide in South Asia estimated the suicide rate in Nepal at 8.6 (standard deviation = 8.87) per 100 000 population.⁶ In a study done among 206 medical students in Nepal, it was found that suicidal ideation in the past year was present in 10.7% of students and lifetime suicidal ideation was present in 18.4% of students.⁷ A study done in Kaski district, analysing 287 postmortem cases, estimated a suicide rate of 12.4 per 100 000 per year (18.9 for men and 4.8 for women).⁸ Among 100 people aged 65 years and older attending outpatient departments of a teaching hospital, 16 were experiencing suicidal thoughts or feelings, of whom 3 had attempted suicide.⁹ Though Nepal lacks routine national-level data on suicide, WHO has modelled an age-standardized suicide rate for Nepal in 2012, ranking it 7th in the world at 24.9 per 100 000.¹⁰ This reveals that the problem is significant. The effects of conflict exposure during the 1996–2006 Maoist Insurgency in Nepal highlighted the issue of mental health and suicide.¹¹ An assessment of mental health need 4 months after the Nepal earthquake in 2015 reported a 10.9% prevalence of suicidal ideation (n = 513, 15.1% in women and 5.7% in men ), which was higher in the most seriously affected districts (Gorkha: 24.5%, Sindualchowk: 25.1%) than in the capital Kathmandu (8.3%).¹² Previous studies have noted increased suicide rates in earthquake-exposed populations.¹³,¹⁴ Although data are lacking, media and police reports, together with the experience of experts in the field, suggest a similar situation in post-earthquake Nepal.
Suicide among women in Nepal

In the absence of national data, it is difficult to compare and draw a conclusion on gender-specific suicide rates. Overall, suicide among men is believed to be higher than for women, as in other Member States of the WHO South-East Asia Region, with a ratio of 1.5:1.1,2 However, when compared with other countries around the globe, suicide among women in Nepal (20 per 100 000) is higher than in men (3rd-highest in women versus 17th-highest in men).1,2 In a 2008–2009 government survey, suicide (16%) rather than maternal-related issues (12%) was the single leading cause of death among more than 86 000 women of reproductive age in eight districts and of different ethnicities and levels of development.15 Among these young women of reproductive age, suicide appears to be as high as, or even higher than, suicide among men in Nepal and India.16,17 These findings are consistent with other studies in Nepal, where it has been found that being female is a risk factor for developing depression or anxiety disorders.18 Additionally, (mass) conversion disorder – a psychological problem where stress is expressed in physical symptoms – is highly prevalent among young Nepalese girls (less than 30 years) compared to boys.19,20 The higher rate of mental health problems and alarmingly high suicide rate among Nepalese women is not surprising, given the social hardship they face, such as poor empowerment of women, lack of educational opportunities, and cultural norms restricting self-expression, space and choice, etc. Even worse is the prevalence of child marriage among girls in Nepal, where more than half of girls aged under 18 years are married. This places tremendous pressure on these girls, rendering them vulnerable to many mental health problems.21

Risk factors for suicide in Nepal

International literature suggests that the risk of suicide is a result of many interacting individual and sociocultural factors. A history of past suicide attempts, the presence of mental and/or substance-use disorder, impulsivity, financial or social losses, and easy access to lethal means increase the risk of suicide, whereas the presence of increased social support and strong problem-solving skills mitigate the risk of suicide.22 There is limited knowledge of the risk factors for suicide in the Nepalese population. Nonetheless, younger age and the presence of mental disorder, especially depression, are the most consistent risk factors noted in the available literature in Nepal.15,23–26 Other risk factors, such as marriage and relationship issues, interpersonal and family conflicts, family history of attempted suicide, and substance-use disorders, have also been recorded.15,23,26 Contrary to the international literature, being married or being a parent does not appear to be a strong protective factor against suicide for Nepalese women.15 Likewise, poverty and caste status do not appear to have straightforward relationships with suicide risk in Nepal, although suicide accounts for a lower proportion of deaths among Dalits than in some other castes/ethnic groups.15 Most of the studies have found that pesticide ingestion is the commonest method of attempting suicide,15,23,26 which is probably due to easy access, resulting from the common practice of storing pesticides at home for agricultural use. While suicide is the result of many interacting risk factors and protective factors, family, marital and relationship factors are clearly major contributors to suicides among women, as observed in nearly two thirds of cases (65%), with husbands being by far the predominant contributors to suicides (35%), and unhappy marriages being mentioned in nearly a quarter of suicide cases (24%).15

In 2004, the mental, neurological and substance-use disorders like schizophrenia, depression, epilepsy, dementia and alcohol dependence constituted 13% of the global burden of disease, which was higher than for both cardiovascular diseases and cancer.27 Suicide is heavily associated with mental illness, as the prevalence of mental disorders among people with suicidal thoughts and attempts ranges from approximately 50% in community samples up to 90% in clinical samples.28 The presence of a mental disorder is a known risk factor for future suicidal ideation and attempts.29 The risk of suicide increases by several times when more than one mental disorder is present. Mood disorders, particularly major depression and bipolar disorder, are significant predictors of suicide attempts. Interestingly, however, several other disorders have been found to be even stronger predictors of suicide attempts in low- and middle-income countries, including conduct disorder, oppositional defiant disorder, intermittent explosive disorder, harmful use of drugs and alcohol, and post-traumatic stress disorder.28 Recently, suicide has been identified by WHO as a priority condition in the Mental Health Gap Action Programme (mhGAP), the programme to scale up care for mental, neurological and substance-use disorder, particularly in low- and middle-income countries.30

Suicide-prevention initiatives to date

There is a high burden of suicide in Nepal generally, and among women of reproductive age specifically. Suicide is largely preventable and interventions to reduce suicide are available.1 Despite this, the Government of Nepal has not yet elaborated a specific national strategy for suicide prevention. WHO’s mhGAP has identified “restricting access to means of self-harm/suicide”, “developing policies to reduce harmful use of alcohol as a component of suicide prevention”, and “assisting and encouraging the media to follow responsible practices for reporting of suicide” as key elements of an evidence-based population-level strategy to prevent suicide.30 Pesticides, the most common means for suicide attempts in Nepal, are sold freely and stored in households. National and international policies that restrict the sales of toxic pesticides have a major impact on suicides, as evidenced from the experience of Sri Lanka.31 However, there is no policy to regulate the distribution, sale and storage of pesticides in Nepal. Attempts to reduce harmful use of alcohol – another proven strategy for suicide prevention32 – have been partially effective, such as regulating drinking and driving, a ban on advertisement in electronic media, increasing taxation, and controlling illegal production of alcohol. There is no media guideline on reporting deaths by suicide and often there is sensational reporting of such deaths in the national media.

Mental health services are not available at community health facilities and thus are not accessible to the majority of the population.32 Further, most health workers do not have the skills to assess suicidal tendency or mental health issues, owing to inadequate training. Despite the Ministry of Health having had a
mental health policy since 1997, with a vision to integrate mental health services into general health services, and a Multisectoral Action Plan for the Prevention of Non Communicable Diseases (2014–2020), with prioritization of mental health, there is minimal progress in translating these promises into practice. The recent mhGAP-based community mental health programmes – a proven strategy to decrease suicidal tendency – are driven by nongovernmental organizations and limited to parts of a few districts. Suicide-counselling hotlines operated by nongovernmental organizations and private hospitals, and through public–private partnership, have been available in major cities like Kathmandu, Lalitpur, Pokhara and Butwal. However, these potentially useful initiatives have not been scaled up, as coordination among different sectors and community engagement are lacking. Hence, these stand-alone programmes are turning out to be ineffective in bringing about significant change in the burden of suicide. Nonetheless, the emphasis of the Ministry of Health’s standard treatment protocol for primary care providers on the need to screen for suicidal behaviour in every patient presenting with depression, and the inclusion of psychotropic medications in the recently upgraded national essential drug list, are small but much-needed steps in the right direction, indicating the intention of policy-makers to move forward on this critical public health issue.

There is no comprehensive national suicide registry. Based on the current reporting mechanisms, collection and maintenance of data on suicidal deaths falls under many departments: health, administration and police. In the absence of one entity responsible for coordinating the reporting of suicides, all these sectors report suicidal deaths through their own information pathways, and all the data finally reach the Central Bureau of Statistics (CBS). The CBS is thus required to report to WHO. Many barriers and challenges in these reporting pathways have resulted in inaccurate reports. There is no information sharing among these systems and, more surprisingly, the CBS currently does not share the suicide data with WHO. Hagaman et al. recommend a collaborative, multisectoral approach, especially partnerships between law enforcement and the health system, to achieve reliable and accurate surveillance, and, ultimately, effective suicide prevention.

Additionally, suicide and mental health issues are highly stigmatized and misunderstood, not only among people from using the limited existing services but also limiting data collection and reporting. Hagaman et al. report that stigma against suicidal behaviour is prevalent in health-care settings in Nepal. They found that suicides were consistently reported as a “criminal” and “legal” issue by the majority of health informants, contrary to the actual legal provision.

Legal aspects of suicide in Nepal

Legal provision generally aims to promote protection of the people by penalizing the practices and products encouraging or facilitating suicide. Legal provision to restrict the use of alcohol and other illicit drugs, to limit access to the lethal means of suicide, and to criminalize gender-based violence often provides strong protection and support to national suicide-prevention programmes. However, suicide is still illegal in 25 countries; an additional 20 countries follow Islamic or Sharia law, where people who attempt suicide may be punished with jail sentences. Nepal’s country code, the Muluki Ain, which outlines all civil and criminal laws, authorizes procedural investigation of all homicides and suspicious suicides but does not have provision to criminalize or punish people who attempt suicide. This law is well-intentioned with regard to reducing domestic violence, alcoholism, harassment and other behaviours related to abuse and maltreatment.

Although suicide is not illegal in Nepal, misconceptions are widespread. Publications on suicide in Nepal have wrongly stated that suicide is a punishable crime, attempted suicide is illegal and people who attempt suicide are subject to imprisonment, fines or both. These articles range from personal blogs of mental health professionals to newspaper columns, to scientific articles and review articles. The misconception that suicide is illegal and a punishable offence is also widely prevalent among health workers in Nepal, and the desire to avoid legal consequences is a possible reason for underreporting of these cases.

Towards a national suicide-prevention strategy

Suicide is a pressing, yet largely preventable, public health issue in Nepal. Suicide prevention is the responsibility of government and civil society. No reason can justify the lack of a comprehensive national suicide-prevention strategy. Under the leadership of the government in Nepal, a strategy with concrete action plans and interventions has to be developed, with an optimal level of participation by the community and civil society. Specific sociocultural issues have important implications for designing a successful prevention programme, where other sectors (beyond health) responsible for empowerment, education and protection appear to be equally important in preventing suicide.

A system of proper record keeping, in order to develop a database of suicide mortality, is essential to identify the real burden and determinants and distribution of suicide. The current scattered and disconnected data-keeping system needs to be reframed. There must be better communication among the health, administration and police departments for confirmation and completion of records. The capacities of health facilities need to be strengthened and they should be identified as the main channel for the suicide data registry, in coordination with the law-enforcement and administrative mechanisms.

A strong monitoring and evaluation mechanism is essential at every step of programme development and implementation. This will ensure the quality of interventions, track progress in implementation and identify effective programme components. These outputs will help to tailor interventions to the needs of the local community.

However, considering the burden of the problem and the resource gap, the concerted effort required demands substantial additional investment. For low-income countries like Nepal, funding for mental health would have to increase by many times in order to support a basic package of cost-effective interventions. A potential strategy would be integration of suicide-prevention programmes as a part of existing public health programmes like immunization, nutrition, family planning, safe motherhood, or HIV and tuberculosis. For example, routine screening and subsequent help for depression, anxiety and suicidal thoughts, offered to all the women presenting to family-planning or safe-motherhood programmes, could help in mitigating the large
burden of suicide among young women. This integrated approach would not require new human resources or a new structure and could be immensely helpful for reaching out to vulnerable groups.

**Prevention strategies for the general population**

Policies to restrict access to pesticide, to reduce harmful use of alcohol, to assist and encourage the media to follow responsible reporting practices for suicide events, and to integrate mental health services into primary health-care services need to be revised and put into action through strong programmes. A national campaign on stigma and public awareness of mental illness, substance-use disorders and suicide should become an essential part of national mental health programmes to improve service coverage. Active and participatory community engagement, from devising the policy to formulating the strategy and action plan, can potentially build public ownership and help in effective implementation. This is essential for tackling the challenges in implementation, which is often poor in Nepal.

**Prevention strategies targeting vulnerable groups**

Persons suffering from psychological trauma or abuse, young women of reproductive age, women who are victims of gender-based violence, and those who are bereaved by a suicide are vulnerable subgroups for depression and suicidal behaviours. It is therefore crucial to reach out and care for these people. People who come into frequent contact with this population – female community health volunteers, maternal and child health workers, police personnel, teachers, social activists and traditional healers – need to be sensitized and trained on screening high-risk suicidal behaviour and provide basic psychosocial support. These key persons in the community can be an important support for stigma-reduction campaigns and promotion of help-seeking behaviour for those with mental health issues, substance-misuse problems and suicidal ideation. These targeted interventions should be closely linked with health facilities providing basic mental health care, for cross-referral.

**Prevention strategy at the individual level**

From the public health perspective, the association between mental disorders and suicidal behaviour is strong enough to include identification and treatment of mental disorder as a core of the suicide-prevention strategy. As comorbidity with depression, anxiety, substance misuse and personality disorders is high in cases of suicide, it is imperative to have adequate diagnostic procedures and appropriate treatment for the underlying disorders, in order to achieve successful prevention of suicide. The recent attempts to integrate mhGAP-based mental health service into community health facilities should be scaled up nationwide, with concrete action plans. These community mental health programmes will provide not only individual-focused treatment like identification and treatment of mental illnesses and prompt care of patients who attempt suicide, but also public health services for vulnerable groups and survivors, to protect them from further psychological problems and stigma.

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