

# Public health strategies to ensure reduction in suicide incidence in middle and low income nations

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## ABSTRACT

Worldwide, the incidence of suicide has increased at an alarming rate and in the year 2012 close to 1 million people died because of suicide. Although, it is a well-acknowledged fact that suicides are completely preventable, the public health authorities have failed to halt the rising trend of the suicide because of the presence of various social and health related factors. As suicide is a complex issue, in the low and middle-income nations, the most cost-effective approach is to ensure the integration of suicide prevention program into the primary health care network. To conclude, suicide is an important public health concern which is definitively preventable. However, the need of the hour is that all the stakeholders should take collective responsibility, and work in collaboration to develop and implement a comprehensive multi-sectoral suicide prevention strategy.

**Key words:** Mental health, suicide, World Health Organization

## Introduction

Worldwide, the incidence of suicide (the act of deliberately killing oneself) has increased at an alarming rate and has acquired the status of a global public health concern.<sup>[1]</sup> The estimates released by the World Health Organization suggest that close to 1 million people died (which was equivalent to one suicide death every 40 s), because of suicide in the year 2012 alone.<sup>[2]</sup> These estimates are approximate figures, as suicide being a sensitive issue, often goes unreported.<sup>[1,2]</sup> Furthermore, suicide has been identified as the second most common cause of death among 15–29 years old age group individuals worldwide, and more than three-fourth of the cases are from low and middle-income nations alone.<sup>[1]</sup> This is quite challenging as they are often

ill-equipped to meet the general and mental health needs of their population.<sup>[3]</sup> In addition, with each suicide, there is a considerable amount of impact on the family members and the society.<sup>[3]</sup> The society has to bear a significant economic cost resulting from the health care services used in cases of suicide and attempted suicide, and because of the lost production from the exit or absence from the workforce.<sup>[3]</sup>

## Potential Risk Factors

A wide range of potential factors like positive history of a prior suicide attempt; presence of a mental disorder, especially depression or substance abuse; life stresses such as financial crisis, failure in relationships, chronic illness; exposure to violence/abuse/disaster; and being from a vulnerable group such as a prisoner, etc., have been linked to the suicide.<sup>[1-3]</sup> The global analysis has revealed that consumption of pesticide (accounted for 30% of the global suicides), followed by hanging and use of firearms are the most frequent mode of committing suicide.<sup>[2]</sup>

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## Identified Challenges

Although, it is a well-acknowledged fact that suicides are completely preventable, the public health authorities have failed to halt the rising trend of the suicide.<sup>[2]</sup> This has been attributed to the presence of stigma in the society, especially with regard to mental illnesses, owing to which a major proportion of people never accesses health centers.<sup>[2]</sup> In addition, poor awareness among the general population and absence of the realization to consider suicide as a serious problem has also been acknowledged as the perpetrating factors for suicide.<sup>[3]</sup> However, it is not always the society which should be held responsible, as in a large proportion of cases, absence of a psychiatrist or counselor or a trained medical professional; and geographical inaccessibility to the health centers, have been identified as the main obstacles, especially in low-resource settings.<sup>[4]</sup> Further, because of absence of a streamlined/universal mechanism to obtain precise estimates for suicide, the actual figures are never obtained and hence in most of the nation, suicide has not been given a status of public health problem.<sup>[1,3]</sup>

## Recommended Public Health Interventions

As suicide is a complex issue, to prevent it, there is an immense need to have a comprehensive approach by ensuring the integration among all the stakeholders (such as policy makers, health professionals, education, law, media, community, etc.).<sup>[2]</sup> In low and middle-income nations, the most cost-effective approach is to ensure the integration of suicide prevention program into the primary health care network.<sup>[4,5]</sup> Ensuring the presence of a psychiatrist in rural and remote health centers can significantly reduce the incidence of suicide, but in cases of shortage of specialists, significant improvement can be obtained by training the paramedical health workers toward the assessment and management of suicidal behaviors.<sup>[4,6]</sup>

Multiple measures can be planned and implemented at different levels to prevent suicide and suicide attempts.<sup>[1-4,7,8]</sup> The first and foremost thing is to strengthen the mental health services, in terms of its reach, human resources, medicines, and range of services.<sup>[1,4]</sup> However, this is indirectly dependent on a holistic policy which can guide program managers to execute their action.<sup>[2,4]</sup> In fact, it is very much important to integrate mental health services with the primary health care services so that better utilization of resources can be achieved, especially in low-resource settings.<sup>[1,4]</sup> At the same time, the media can be involved to create awareness about

suicides, and activities can be even planned to remove the associated stigma.<sup>[1,3]</sup>

Furthermore, the stakeholders such as school teachers (to initiate suicide prevention activities among schools) or medical practitioners (to have a high index of suspicion for suicide among high-risk group people, and provision of follow-up care) or members of community (for provision of social support to vulnerable individuals, follow-up care, and negating stigma), can also be involved in a need-based manner.<sup>[1,3,4,7]</sup> In addition, there is a crucial need to strengthen the monitoring and surveillance activities so that to ensure comprehensive and complete suicide estimates.<sup>[2,4]</sup> Finally, community-based research should be encouraged to obtain an insight into the potential risk factors and determinants, and thus provide evidence to the local program managers to customize the existing strategy depending on the needs of the society.<sup>[1,2,8]</sup> In fact, realizing the public health concern associated with suicides and to achieve the target of a reduction in suicide rates by 10% by the year 2020, the World Health Organization is assisting nations to develop or strengthen comprehensive suicide prevention strategies.<sup>[2,9]</sup>

## Conclusion

To conclude, suicide is an important public health concern which is definitively preventable. However, the need of the hour is that all the stakeholders should take collective responsibility, and work in collaboration to develop and implement a comprehensive multi-sectoral suicide prevention strategy.

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## Conflicts of interest

There are no conflicts of interest.

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