# Viewpoint

# Reducing Suicide Rates: Need for Public Health and Population Interventions

**K. S. Jacob**

ABSTRACT

Recent studies from India have challenged the fact that the majority of the people who die by suicide have severe mental illness; they have demonstrated its frequent links to environmental stress, social, cultural, economic, and political correlates. Suicide, a complex phenomenon, is a final common pathway for a variety of causal etiologies. Nevertheless, psychiatry continues to argue for curative solutions based on the reductionistic biomedical model, rather than support public health measures to manage the larger sociocultural, economic, and political context. While psychiatry and curative medicine help many people in distress, specific mental health interventions are unlikely to impact secular trends in the rates of suicide. The reduction of population rates of suicide requires a range of public health measures.

**Key words:** *Deliberate self-harm, India, prevention, suicide*

## INTRODUCTION

Suicide has been recognized as a major public health problem affecting all nations in general and low- and middle-income countries in particular.[1] It has an adverse impact on individuals, families, communities, and on society as a whole.[2] The WHO Mental Health Action Plan 2013 – 2020[3] foregrounds the prevention of suicide and has included indicators that measure progress.

## CORRELATES, FOCUS, AND INADEQUACIES

Research has identified a diverse group of risk factors for suicide. The results have been used to argue for specific preventive strategies. However, part perceptions, which highlight particular correlates, argue for specific solutions while ignoring others, are partial responses to a complex, multidimensional problem. Psychiatry continues to focus on the individual when the need is for a change in contexts, environments, and populations. The issues are briefly highlighted in Table 1.

## NEED FOR A COMPREHENSIVE APPROACH

Suicide, behavior, is a final common pathway for a variety of factors: predisposing, precipitating, and perpetuating causes.[2] Nevertheless, each of the risk factors and

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**Table 1: Isolated research findings, individual treatments, public health strategies**

| Characteristic | Individual treatment | Issues related to public health strategy |
|---|---|---|
| Age: Older individuals have much higher rates of suicide[4] | - | Indian law has shifted the responsibility of support for senior citizens from governments to their children;[5] lack of social security results in isolation and impoverishment[2] |
| Gender: High rates of suicide among young women[6,7] | - | No attempt to address patriarchal cultural and religious biases for the second-class status of girls and women[2] |
| Alcohol use: Higher risk of suicide among people who are dependent on alcohol | Poor and variable response to individual therapy | Lax drink driving laws; governments addicted to revenue from sale of alcohol; poor licensing, sale and taxation policies[8] |
| Suicide among farmers: Higher rates reported | | Economic crisis in agriculture in the neoliberal economy;[2] introduction of cash crops in semi-arid regions, which traditionally employed sustenance farming; variable monsoon, poor irrigation, government apathy, increased costs of cultivation, intensive use of fertilizers, extensive usage of pesticides, low prices for farm produce; significant reduction in farm loans by large banks and the rise of private lenders, who also provide seeds, fertilizers and pesticides, result in debt and death traps[9] |
| Pesticides: Easy availability of lethal pesticides[10] | Individual responsibility with focus on safer storage with double locked box and central storage facility[11] | Extremely lethal pesticides, banned in high-income countries, are sold by multinational corporations in low and middle-income countries to maximize profits;[2] selective approaches like banning of lethal WHO Class I organophosphorus insecticide the use of Class II compounds means continued deaths by pesticide poisoning[11] |
| Resilience and coping with stress: Impulsive attempts secondary to stress | Postattempt individual treatments with focus on medication treatment | Focus on life skill education among adolescents not scaled up to national level:[12] However, changes in curriculum have minimal impact on traditional examination systems, which favor rote learning; society's unrealistic expectations of children makes it extremely difficult for those who do not fit the mold[2] |
| Disease versus distress | Biomedical models of mental illness, with their symptom counts sans context medicalize all personal and social distress. Psychiatric categories questioned from a primary care perspective[13] and a neuroscience framework[14] | The majority of people who kill themselves in India are distressed rather than suffer from severe mental illness.[15] The discounting of contexts results in people with personal, social and economic distress require population and public health strategies: Reduction of poverty, universal health care, gainful employment, social security, prevention of forced migration, ethnic cleansing and war[2] |
| Holistic care and biopsychosocial model | Management of biological, psychological and social causes praised. Reductionist biomedical model, with pharmacological medication practiced[16] | The lack of expertise in social interventions mean public health approaches neglected[2] |
| Help seeking | Individuals in distress seek help from diverse sources of cure and healing; (medical, traditional and faith healers) | Some metropolitan cities also have telephone counseling help lines (e.g., Sneha in Chennai). Despite the fact that such services help many people contemplating suicide, research evidence suggests that suicide rates, which are often stable over time, seem impervious to such interventions[17] |
| Gatekeeper training | People in distress often seek help from their physicians; those who attempt suicide are commonly seen in emergency departments and are admitted to intensive care units | Psychiatric training in India continues to remain mainly on paper.[18] Skill and confidence to recognize and manage suicidal risk is scarce. Similarly, training of gatekeepers (e.g., teachers, prison wardens, traditional healers, priests, etc.,) who can identify vulnerable individuals is nonexistent at national level and limits their impact[2] |
| Legal issues: Suicide attempt, domestic violence, caste-based discrimination | | Decriminalization of attempted suicide still in the process of becoming law. Notwithstanding the fact that domestic violence and discrimination based on caste are common causes of severe mental distress, existing laws to manage these situations are rarely implemented[2] |
| Economic issues: Structural violence | | Nations with economies in transition (e.g., Russia, Ukraine, Estonia, Latvia, Lithuania) seem to have much higher rates of suicide than those with stable markets.[19] Yet, the gross domestic product drives all economic discussion with a complete neglect of the more holistic human development index. The Gini coefficient, which emphasizes inequity within nations, is rarely highlighted. The displacement of people from their ancestral lands for development projects, rural poverty, unemployment and migration to urban areas is indicative of structural violence, which has been normalized in India. Social security nets and universal health care are now seldom part of the dialogue of social justice as capitalism has mesmerized our governments, bureaucracy and upper classes[2] |

*Contd...*

**Table 1: Contd...**

| Characteristic | Individual treatment | Issues related to public health strategy |
|---|---|---|
| Cultural issues: Social acceptance of suicide as option | | Although suicide is stigmatized in Indian culture in general, there is also acceptance of such an option for people in severe distress. Indian movies portray nonfatal suicidal attempts as an indication for true love, which often helps resolve family tensions. The level of acceptance of suicide as an option for individuals to overcome interpersonal, family and financial stress in the general population is high.[20] Subtle cultural sanction is not easy to displace from people's imagination and will require concerted campaigns to change local beliefs[2] |
| Religion and philosophy | | The country's current fascination and embrace of capitalistic systems of thought and economy, which worships material wealth, has also resulted in subtle and not so subtle changes in the population's philosophy and outlook.[2] The emphasis on individualism has also resulted in a reduction in traditional support systems, which increase social isolation. Rapid urbanization and massive migration from rural areas also leaves many without community supports[2] |
| Politics | | The release of the NCRB 2013 statistics and the Union Minister's response fixed the blame on love affairs and impotency.[21] Political responses to suicide are colored by political perspectives, which are often used to shift blame and score political points and rather than seriously engage with issues[2] |
| Media | | The 24×7 news cycle and the focus on television rating points makes issues related to suicide popular with the media. Details of suicide are often emphasized increasing the risk of copycat suicides among the vulnerable. Despite the beneficial impact of restraint, the suggested self-imposed ban on such messaging is often violated in practice[2] |
| Public health approaches | | Many experts have correctly argued that suicide is a major public health problem.[22] However, can they change the sociopolitical reality of the neoliberal agenda, which deemphasizes socialist ideas, reduces social security and privatizes health care?[2] |

NCRB – National Crime Records Bureau; WHO – World Health Organization

condition associated with suicide is neither necessary nor sufficient for suicide. Consequently, there are no single or simple solutions to preventing suicide. While interventions have shown a reduction in method-specific or site-specific rates, there is no firm evidence to suggest an overall reduction in suicide. A national strategy encompassing diverse approaches needs to be in place to achieve any degree of success.[22] Multi-sectoral and comprehensive approaches are required. On the other hand, medicalizing suicide or reducing it to a psychiatric label will prove inadequate for reducing population rates.

## SUICIDE AND PUBLIC HEALTH

The poor health status of populations in the poorest countries is related to chronic poverty working through a lack of basic needs and access to health services, social discrimination, economic insecurity, and political exclusion.[2] Suicide is also associated with many of these sociodemographic, cultural, and economic correlates and demands comprehensive population-based strategies.[22] Many of the risk factors associated with suicide require a social security net provided by the state. Without a social security net many vulnerable individual face significant socioeconomic distress, which can easily propel them toward the option of suicide. The egalitarian society promised in the Indian constitution requires the provision of basic needs such as clean water, nutrition, housing, health care, education, and employment. In addition, it should provide gender justice and protect against social exclusion. Without such public health approaches, suicide prevention would remain on paper with the medical and psychiatric approaches currently advocated completely inadequate for the task of reducing suicide rates. Multidimensional problems like suicide require large-scale public health interventions to reduce suicide rates of populations.[2]

## CONCLUSION

Many risk factors associated with suicide are neither necessary nor sufficient for death making the search for single and direct solutions impossible.[2] Nevertheless, experts tend to identify causal mechanisms operating in a minority of suicides and suggest single and simplistic solutions to manage the complex individual and social phenomenon of suicide. They rarely push for comprehensive national responses. Comprehensive solutions demand a package of macroeconomic policies that reduce the impact of free-markets, schemes which meet basic human needs and rights, psychosocial

interventions that organize local support within communities, an essential pesticide list that excludes lethal compounds, gender justice, universal primary health care, legal and social protection for the vulnerable and increasing awareness and education through mass media.[2]

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## REFERENCES

1. World Health Organization. Preventing Suicide: A Global Imperative. Geneva: World Health Organization; 2014. Available from: http://www.apps.who.int/iris/bitstream/10665/131056/1/9789241564779_eng.pdf?ua = 1. [Last accessed on 2016 May 10].
2. Jacob KS. Suicide in India: Part perceptions, partial insights, and inadequate solutions. Natl Med J India 2016.
3. World Health Organization. Mental Health Action Plan 2013-2020. Geneva: World Health Organization; 2013. Available from: http://wwwapps.who.int/iris/bitstream/10665/89966/1/9789241506021_eng.pdf?ua = 1. [Last accessed on 2016 May 10].
4. Abraham VJ, Abraham S, Jacob KS. Suicide in the elderly in Kaniyambadi block, Tamil Nadu, South India. Int J Geriatr Psychiatry 2005;20:953-5.
5. Government of India. The Maintenance and Welfare of Senior Citizens Act, 2007. New Delhi: Government of India; 2007. Available from: http://www.socialjustice.nic.in/oldageact.php?pageid = 3. [Last accessed on 2015 Sep 29].
6. Patel V, Ramasundarahettige C, Vijayakumar L, Thakur JS, Gajalakshmi V, Gururaj G, *et al.* Suicide mortality in India: A nationally representative survey. Lancet 2012;379:2343-51.
7. Aaron R, Joseph A, Abraham S, Muliyil J, George K, Prasad J, *et al.* Suicides in young people in rural southern India. Lancet 2004;363:1117-8.
8. Jacob KS. Alcohol and public health policies in India. Natl Med J India 2010;23:224-5.
9. Dongre AR, Deshmukh PR. Farmers' suicides in the Vidarbha region of Maharashtra, India: A qualitative exploration of their causes. J Inj Violence Res 2012;4:2-6.
10. Joseph A, Abraham S, Muliyil JP, George K, Prasad J, Minz S, *et al.* Evaluation of suicide rates in rural India using verbal autopsies, 1994-9. BMJ 2003;326:1121-2.
11. Eddleston M, Adhikari S, Egodage S, Ranganath H, Mohamed F, Manuweera G, *et al.* Effects of a provincial ban of two toxic organophosphorus insecticides on pesticide poisoning hospital admissions. Clin Toxicol (Phila) 2012;50:202-9.
12. Jegannathan B, Dahlblom K, Kullgren G. Outcome of a school-based intervention to promote life-skills among young people in Cambodia. Asian J Psychiatr 2014;9:78-84.
13. Jacob KS, Patel V. Classification of mental disorders: A global mental health perspective. Lancet 2014;383:1433-5.
14. Insel TR. The NIMH research domain criteria (RDoC) project: Precision medicine for psychiatry. Am J Psychiatry 2014;171:395-7.
15. Manoranjitham SD, Rajkumar AP, Thangadurai P, Prasad J, Jayakaran R, Jacob KS. Risk factors for suicide in rural south India. Br J Psychiatry 2010;196:26-30.
16. Ghaemi SN. The rise and fall of the biopsychosocial model. Br J Psychiatry 2009;195:3-4.
17. Shaffer D, Pfeffer CR, Gutstein J. Suicide and attempted suicide in children and adolescents. In: Gelder MG, Andreasen NC, Lopez-Ibor JJ, Geddes JR, editors. New Oxford Textbook of Psychiatry. 2nd ed.. Oxford: Oxford University Press; 2009. p. 1702-10.
18. Jacob KS. Psychiatric education for medical students. Natl Med J India 1998;11:287-9.
19. Brainerd E. Economic Reform and Mortality in the Former Soviet Union: A Study of the Suicide Epidemic in the 1990s, IZA Discussion Paper Series, No. 243; 2001.
20. Manoranjitham S, Charles H, Saravanan B, Jayakaran R, Abraham S, Jacob KS. Perceptions about suicide: A qualitative study from southern India. Natl Med J India 2007;20:176-9.
21. Times of India. (2015) Love Affairs, Impotency among Reasons Behind Farmer Suicides, Union Agriculture Minister Says. Times of India; 24 July, 2015. Available from: http://www.timesofindia.indiatimes.com/india/Love-affairs-impotency-among-reasons-behind-farmer-suicides-Union-agriculture-minister-says/articleshow/48203971.cms. [Last accessed on 2015 Sep 29].
22. Manorantjtham S, Abraham S, Jacob KS. Towards a national strategy to reduce suicide in India. Natl Med J India 2005;18:118-22.