

Suicide As An Emergency And Its Prevention Strategies- A Systematic Overview

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Abstract

The current study is aimed at putting the light on the suicide, its prevention strategies and crisis management. Mental health is an indivisible part of public health and significantly affects countries and their human, social and economic capital. Mental health is not merely the absence of mental disorders or symptoms but also a resource supporting overall well-being and productivity. Positive mental health is a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully and can contribute to his or her community. This mental capital is vitally important for the healthy functioning of families, communities and society. Suicide is a complex human behavior with multiple interacting determinants. Clinicians and practitioners often face difficulties in assimilating the evidence base for suicide prevention interventions, evaluating their effectiveness and decoding the best practice elements of each approach. In this article, we do not aim to provide an exhaustive coverage of every approach. Instead, we provide an overview of the following eight major suicide prevention interventions: awareness programs, screening, gatekeeper training, and access to means restriction, follow-up care, hotlines, media strategies, pharmacotherapeutic and psychotherapeutic approaches. Although a number of approaches hold promise, there are difficulties in ascertaining the effective elements under each of them. Innovative research designs are needed to address this knowledge gap as it will facilitate optimal allocation of resources for suicide prevention.

Keyword: Suicide, deliberate self-harm, prevention, Crisis, Mental Healthcare Bill

INTRODUCTION

Suicide in ancient India has largely been influenced by sacrificial motives, for the sake of honor, religious, and sociocultural beliefs apart from psychiatric and other causes. Ramayana and Mahabharata are the twin epics of India and down centuries they have influenced the thoughts, temper, conduct, and culture of our people. From the pages of Ramayana, it is learned that stung by a baseless accusation that he had accepted his wife after her stay in Ravana's abode, Lord Rama unleashed: "I shall abandon my own life; take my life and should be glad to kill you all." Lord Rama's foremost devotee, Hanuman when his initial search for Sita proves futile, for a moment decides to commit suicide. He would rather give up his life than return without clues or news of Sita.¹

In Mahabharata, on hearing the news about the death of his son Abhimanyu in the battle, Arjuna wanted a huge fire to be prepared for him to commit suicide; however, that was prevented by Lord Krishna by reminding Arjuna about his own earlier advice to another old man who tried to commit suicide by falling into fire on the death of his son.¹ Chandra Gupta Maurya in 298 BC together with one of his Jain saints and many other monks went to South India; there he ended his life by deliberate slow starvation in the orthodox Jain manner.² Here, the individual kills himself purely for the sake of sacrifice because even with no particular reason, renunciation in itself is considered praiseworthy. The great Chola king Koperunchola renounced the kingdom in favor of his son and decided to undertake the traditional fast unto death in one of the small islands surrounded by river Cauvery in the vicinity of the sacred Vaishnava shrine in Srirangam. All the elements mentioned by Durkeim probably played a part in this suicide viz., egoistic, altruistic, and anomie.³

Suicide is a major public health problem worldwide with complex multifactorial origins. More than 800,000 lives worldwide are lost to suicide every year, and Asia accounts for more than 60% of such deaths.⁴ India has seen a steady increase in the incidence of suicidal deaths in the last five decades.⁵ The estimated suicide-related death rate in India is 21/100,000, which is nearly twice the global average (11.4/100,000) and translates into more than 230,000 lives lost annually.⁴

Since suicide is the outcome of multiple factors including socioeconomic, cultural, religious, and political; the prevalence, causes, and intervention strategies will vary from region to region. Although these are worrying figures themselves, another equally concerning global phenomenon is the changing demographics associated with the malady. There is a clear shift in the predominance of suicides from the elderly to the younger people all over the world and particularly in India.^{6,7} Suicide is now the leading cause of mortality in India for those in the age group of 15–39 years.⁸ This not only fritters away the advantage of the demographic dividend, provided by the brimming younger population in our country, but also

has massive socioeconomic costs and implications. To tackle such a rapidly growing and multifaceted problem, no single strategy is likely to work best. Instead, a systematic, multipronged, collaborative prevention strategy that addresses population level as well as individual level factors is needed.

In the past decade, much new literature had been added in this area. Robust research designs that evaluate these strategies and best practice elements from each strategy need to be synthesized in order to inform policymaking, deliverables, and action plans. The focus of this review is not to exhaustively cover the evidence base for each suicide prevention approach but to provide an overview of representative studies or, more importantly, systematic reviews that have explored each approach and describe the levels of intervention involved.

MENTAL DISORDERS AND SUICIDE

Mental disorders occupy a premier position in the matrix of causation of suicide. Majority of studies note that around 90% of those who die by suicide have a mental disorder.¹¹ The number of published reports specifically studying the psychiatric diagnoses of people who die by suicide has been relatively small ($n = 15629$). The majority (82.2%) of such reports come from Europe and North America with a mere 1.3% from developing countries.¹⁰ Two case control studies using psychological autopsy technique have been conducted in Chennai¹² and Bangalore in India.⁹ Among those who died by suicide, 88% in Chennai and 43% in Bangalore had a diagnosable mental disorder.

Countless experts have found that affective disorders are the most important diagnosis related to suicide. In India, 25% of completed suicides were found to be due to mood disorders. However, the suicide rate increased to 35% when suicide cases with adjustment disorder with depressed mood were also counted. The crucial and causal role of depression in suicide has limited validity in India. Even those who were depressed, were depressed for a short duration and had only mild to moderate symptomatology. The majority of cases committed suicide during their very first episode of depression and more than 60% of the depressive suicides had only mild to moderate depression.¹² Although social drinking is not a way of life in India, alcoholism plays a significant role in suicide in India. Alcohol dependence and abuse were found in 35% of suicides. Around 30-50% of male suicides were under the influence of alcohol at the time of suicide and many wives have been driven to suicide by their alcoholic husbands. Not only were there a large number of alcoholic suicides but also many had come from alcoholic families and started consumption of alcohol early in life and were heavily dependent.

FACTORS GAINING MOMENTUM IN INFLUENCING SUICIDE IN INDIA

Substances abuse

Although substance abuse has been well documented from the pre-Christian era; their role in suicidal behavior has drawn the attention of the researchers only from the previous century. One of the earliest reports revealed, 10.3% among the male suicides to be under the influence of alcohol and drug abuse.¹³ This observation was strengthened by some of the subsequent studies, although their number was a little less.¹⁴⁻¹⁹ While a few studies have not reported any case of substance abuse in their sample.²⁰ Some recent studies have reported the alarmingly high proportion of such cases. At any rate, such observations have to be interpreted with caution as there is no uniform policy on alcohol or drug use in different States in India.

Many of the substance abusers attempt suicide while under the influence of alcohol. Perhaps, the conflicts regarding various domestic and other problems, feelings of guilt, and death wish come to the fore uninhibited at this stage. That apart, neurobiological changes occurring under intoxication, development of complications such as psychotic disorder, depressive disorder, delirium, and physical illnesses might drive them to this end.

Problems with parents-in-law and spouses

One of the earliest studies on suicide noted domestic problems as an important factor. In the year 1967, when the NCRB first commenced its enumerations, quarrels with parents-in-law and spouses formed 16.3% of all causes, whereas in 2013 this figure has risen to 24%. The problems with parents-in-law and spouses have been the foremost among the causes over several decades. But, more recently there is a spurt in this proportion. The incidence of divorces, separation of the spouses due to interpersonal problems, broken homes, and maladjustment among family members could be cited as some of the important emerging causes.¹³

Maladjustment

Elsewhere, it was reported marital maladjustment as the cause of suicides in 6.3% males and 23% females (total 14%).²¹ Similar was the finding (13.3%) in another study. It is distressing to note that even higher prevalence has been observed by some. On analyzing exclusively the cases of burns, marital problems was observed in 51% of victims.²² While observing that among female suicides, 12.3% were due to alcohol and drug abusing husbands, the behavior problems and symptoms such as delusional jealousy manifested by the alcoholics were noted to be important driving factors. Hence, the need for popularizing family and marital counseling has been advocated.²²

Mental illness

Although there is no perceptible variation in the proportion of medical disorders leading to suicides over the recent years, except perhaps cases of HIV taking the place of sexually transmitted disease cases, an increasing proportion of mental disorders should be a cause for concern. As per the NCBR data, the percentage of suicides due to mental illness in 1999

was 4.8%, whereas this figure has increased to 5.9% in 2013 with a peak of 7.0% in 2010. Not surprisingly, the government enumerators' concept of mental illness reflects the common man's assumption which is usually a psychotic disorder, perhaps including a severe depressive disorder. Hence, the government's figure might be much less. Moreover, it does not include substance abuse, as it has been listed separately.²³

VARIOUS SUICIDE PREVENTION STRATEGIES

➤ Suicide awareness programs

The ideal conditions for an effective awareness program include delivery in a relevant setting, having a multifaceted and comprehensive nature inclusive of community-based strategies, and adopting a universal approach while simultaneously ensuring identification of at-risk groups.^{24,25}

➤ Screening programs for suicide prevention

Modest evidence shows that the screening tools employed can pick up high-risk adults and older adults at risk of suicide among the community.²⁶ Notably, the sensitivity and specificity of the instrument play a key role in risk assessment.²⁷ Contemporary suicide screening programs utilize specialized measures to identify at-risk youth for early referral and intervention.²⁸ The primary care setting and the emergency department (ED) are key areas where suicide screening must be implemented.

➤ Gatekeeper training

Gatekeepers refer to individuals who regularly interact with potentially suicidal persons and are available to recognize the key behavioral clues indicating elevated suicide risk.^{29,30} Potential gatekeepers include teachers, peers, school support staff, and specifically appointed counsellors. All of them have the common advantage of significant face-to-face contact time with large number of people in the community.³¹ Gatekeeper training for students includes elements of informing the suicidal burden, risk factors, warning signs, support system available, signs of depression, communication, and counselling skills to address at-risk population.

➤ Restriction of access drugs

Restriction of access to pesticides, substituting lethal pesticides with less lethal compounds, double-lock boxes, and nonpesticide agricultural movement preventing ready access to dangerous pesticides have been found to be effective. Community locker programs for pesticides where the pesticides are stored in lockers along with community involvement have led to reduced usage of pesticides and decreased suicidal deaths among rural farmers of India.³²

Other methods tried include analgesic withdrawal from dispensaries, restricting sales of barbiturates and caffeine tablets to reduce overdose suicidal attempts, restricting measures on hanging, erection of barriers at jumping hotspots, and restricting access to charcoal.³³

➤ Suicide hotlines/helplines

Before embarking on a discussion about the state of evidence of suicide hotlines, it is necessary to understand what constitutes a hotline for suicide. Most available studies have either assessed hotlines among a group of other interventions for suicide prevention, which makes it difficult to isolate the effect of the hotline, or focused on diverse outcome measures such as acceptability, identification, and referral of people at risk as well as service barriers.³³

➤ Media strategies for suicide prevention

Given the influence of media reporting on public perceptions and attitudes toward suicide, media-based approaches such as responsible reporting represent a population-level strategy for suicide prevention.

The Indian Psychiatric Society (IPS) has brought out a position statement on media coverage of suicides, which emphasizes collaboration between media professionals and medical professionals for better dissemination and impact.

The major recommendations of the IPS position statement are as follows:

- Matter of fact, neutral reporting rather than sensationalism
- Discreet reporting (avoiding front page, small headline and without photographs) devoid of detailed description of the method used
- Sensitive to possible psychological harm on survivors and respecting their privacy
- Exercising restraint when reporting celebrity suicides.

➤ Psychotherapeutic approaches

Psychotherapy is an important and evidence-based treatment modality in the management of suicidality. It has been particularly effective in the adult age group, those with borderline personality disorder (BPD), and those receiving outpatient treatment.

POINTERS FOR SUICIDE-PREVENTION STRATEGIES

Development of strategies for suicide prevention applicable for our Indian culture and to suit the needs of different strata of our society is important. Furthermore, we have to develop programs and policies which can be implemented along with other national health, education, and welfare programs. The following few measures are suggested:

- Opening up of suicide prevention clinics in all the Medical College Hospitals, District Head Quarters Hospitals, and if possible in Taluk Head Quarters, and also in private hospitals. Such measures will at least help to prevent repeat attempts

- Opening up of special clinics such as De-addiction and Marital Counselling Clinics in all the major hospitals, might help to counter the factors arising due to substance abuse and family problems
- Conducting educational programs periodically for the medical officers and paramedical personnel of the above hospitals and also to those in general practice (through Indian Medical Association and other organizations), primary health cares, and rural areas, so that they can be trained for the detection and preliminary management of depression and other psychiatric conditions
- Promotion of consultation-liaison psychiatric services in all the hospitals
- Restricting the access to means of suicide including measures for control of availability of pesticides, medications, etc
- Adequate barriers to deter jumping from high places even when the Government or Private Agencies design such structures
- Opening up of students guidance clinics to be run by visiting psychiatrists not only to improve their psychological well-being, but also to enable them to explore their own potential to engage themselves in today's world with immense avenues, and also conducting guidance sessions for parents in schools and colleges
- Revamping the educational system with an objective to promote holistic development of the child, rather than the undue emphasis on scoring of marks in various subjects
- Opening up of employees guidance clinics in major industries
- Engaging the services of qualified and trained mental health professionals with a psychiatrist at the helm of the team in Women Police Stations and Family Courts since most of the cases of disputes between the spouses, and family problems are dealt with in these centers, where some of them could be solved with psychiatric intervention

CONCLUSION

Suicide is a tragic culmination of the interaction of a wide array of factors including biological, sociocultural, environmental, and psychological causes. Since our country has been plagued by astronomical suicide rate, suitable policies require to be taken to meet the challenges ahead for suicide prevention in India. Although several approaches have shown evidence for suicide prevention, it is likely that a combination of strategies may work better than isolated approaches. Given the low base rate of suicide in the population, challenges exist in evaluating and defining effective outcomes for interventions in suicide prevention. Many of the interventions described are multifaceted, and isolating the effective components in order to delineate the best practice elements in each strategy remains an arduous task. Clearly, more well-designed randomized controlled trials involving at-risk individuals may answer some of these questions. Ecological interventions for suicide prevention may be the next potential game changer for in developing countries.

RELEVANCE FOR CLINICAL PRACTICE

There is an urgent need to develop a national plan for suicide prevention in India. A social and general wellbeing approach recognizes that suicide is preventable, and advances a structure in integrated system of interventions across different levels inside society including the individual, the family, the local area, and the medical services framework. A key step in such a methodology includes adjusting perspectives toward self-destruction by means of instructive efforts and legal levers. The priority areas are reducing the availability of and access to pesticide, reducing alcohol availability and consumption, promoting responsible media reporting of suicide and related issues, promoting and supporting NGOs, improving the capacity of primary care workers and specialist mental health services and providing support to those bereaved by suicide and training gatekeepers like teachers, police officers and practitioners of alternative system of medicine and faith healers. Above all, decriminalising attempted suicide is an urgent need if any suicide prevention strategy is to succeed in the prevailing system in India. This could also be done in collaboration with agencies such as suicide help lines and government, so that we can effectively deal with the changing trends in Indian suicides and face the challenges ahead to create suicide-free India.

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