The World Health Organisation (WHO) estimates that about one million people die by suicide each year. This number exceeds the number of deaths due to war and homicide combined. Over 100,000 people die by suicide in India every year. In the last two decades, the suicide rate has increased from 6.4 in 1982 to 10.5 in 2002. About 40 per cent of suicides in India are committed by persons below the age of 30 yr. Hence, suicide is a major public and mental health problem in India.

Legal and religious prescriptions against suicide began to decline in the later years of 17th century. In place of “possession by spirits”, “unreazoning passion” began to be associated with suicide. Esquirol wrote that “All those who committed suicide are insane”. Bourdin firmly stated that “Suicide is always a disease and always an act of insanity”. Durkheim proposed that suicide was an outcome of social/societal situation. Since then the debate of whether it is the individual psychological vulnerability or the societal environment which causes suicide has divided and dichotomized our thoughts on suicide. Increasingly, it is now recognized that suicide is a multi-dimensional, multi-factorial malaise. However, mental disorders continue to be a vital dimension in suicide.

In spite of the magnitude of the problem, the number of published reports studying specifically the psychiatric diagnoses of people who die by suicide has been relatively small (n = 15629). Most strikingly 82.2 per cent of all cases came from Europe and North America. Merely 1.3 per cent originated from developing countries. Hence generalization or projections from these data is questionable in other cultural settings.

Until recently, most clinical studies on suicide are based on persons who have made non fatal attempts for the simple reason that they were available for interview or on samples of persons who were in some form of mental health treatment. Unfortunately neither of these types of samples is representative of the kinds of persons who die by suicide. Hence population based psychological autopsy studies provide a more comprehensive overview of the variety of people who die by suicide. Unfortunately there are only very few such studies from Asia.

Studies from developed and developing countries reveal that 60-90 per cent of suicidal behaviours are associated with some form of mental illness and/or substance abuse.

The WHO has estimated that 121 million people currently suffer from depression and that depression will become the second most common cause of disability by 2020. Considering the high prevalence of depression and its strong association with suicide, it becomes the most important disorder which needs
to be addressed to reduce mortality and morbidity. The lifetime suicide risk for unipolar depression is estimated to be 15 per cent. In China and India, depression was diagnosed only in 40 and 35 per cent of people who died by suicide respectively. More than 60 per cent had only brief and mild to moderate depression. It can be inferred that the crucial and causal role of depression in suicide has limited validity in Asia. Even those who were depressed had only mild to moderate symptomatology for a brief duration and majority committed suicide during their very first episode.

Bipolar disorder (manic depressive psychosis) is associated with a significant risk of suicide with approximately 10-15 per cent of patients dying by suicide. Around 20-56 per cent have a history of non-fatal self poisoning or self injury. Hawton et al suggested that suicidal behaviours are more common in bipolar II disorder (depression with hypomania but not mania) than bipolar I (depression with mania).

The most common cause of death in those with schizophrenia is suicide. For many years the lifetime risk of suicide in schizophrenia was quoted as 10-15 per cent. A recent systematic review by Palmer et al provides a more accurate estimate of 5.6 per cent (95% CI 3.71-8.5) which is considerably lower than that was formerly thought, with greatest risk in the first few years of illness. Risk factors for suicide among those suffering from schizophrenia include previous suicide attempt, comorbidity with depression and substance abuse, poor compliance and any recent interpersonal or economic loss. Negative symptoms such as blunted affect, diminished drive and social withdrawal may be associated with reduced risk while positive symptoms with increased risk.

The lifetime risk of suicide in alcohol abusers is estimated to be 7 per cent. The associations between alcohol and substance use and abuse and suicidal behaviour are due to several underlying mechanisms. Firstly, it may be a causal factor by increasing an individual’s vulnerability for suicidal behaviour. Depression or depressive state often occurs secondary to abuse. The social disintegrative effects of alcohol or drug abuse, in marital, family and social relationships may cause increased suicidality. Other consequences such as unemployment and physical illness may increase the individual’s vulnerability to suicidal behaviour. Acute intoxication may increase impulsiveness and trigger suicidal acts. Secondly, the co-occurrence of abuse and suicidal behaviour may be due to shared common underlying risk factors like impulsiveness, adverse childhood experiences and family dysfunction. Thirdly, alcohol or other substances are used as a part of the suicidal act to get the courage and/or reduce pain, consciousness and fear. Finally, abuse may cause vulnerability for suicidal behaviour in children or spouse.

Alcohol control measures have an impact on suicidal behaviour. During President Gorbachev’s anti-alcohol campaign, suicide rates decreased by 42 in males and 20 per cent in females but after the campaign the rates increased again. It is estimated that an increase in total consumption of alcohol by one litre/capita in a population tends to be followed by 2-15 per cent increase in suicide rates.

Adjustment disorders, anxiety disorders, somatoform disorders, eating disorders and organic brain syndromes have also been associated with suicide.

Generally, personality disorders are linked to non-fatal suicidal behaviour. Borderline personality disorder and anti-social personality disorder are more closely associated with completed suicide. Personality characteristics like poor problem solving ability, external locus of control, lack of specific memory and impulsivity have been associated with suicidality.
Majority of persons who commit suicide do have a mental disorder, however, most of the people with mental disorders do not commit suicide. The risk factors for suicide which cut across all diagnostic categories are previous suicide attempt, family history of suicide and/or mental illness, increased hopelessness and recent stressful life events.

Another dilemma is due to the fact that mental disorders are often chronic and it is unclear as to at what period in the disease course the person is more vulnerable. In schizophrenics the vulnerable period appears to be at early onset, early relapse and early recovery. In alcoholics, it is after many years of addiction, accompanied by a major interpersonal loss (separation, divorce, rejection) in the preceding month. In depressives the risk is more when they are becoming better, as they then have the energy to execute their suicidal thoughts.

Suicide is closely linked to mental illness and substance abuse and effective treatments exist for both. Research has revealed that lithium in bipolar and clozapine in schizophrenia are associated with reduction of suicide. The debate on antidepressants and suicide is currently inconclusive. Educating the general practitioners on diagnosis and treatment of depression has been shown to reduce suicide rate. A major component in any national suicide prevention policy is effective treatment of mental disorders.

An estimated one in sixty persons is affected (directly or indirectly) by suicide in India. In spite of the enormity of the problem, a national suicide prevention strategy has not been evolved. Attempted suicide continues to be a punishable offense. This results in imprecise data, inadequate and inappropriate treatment. Less than 10 per cent of suicide cases had ever accessed mental health care in India. The challenge in India will be to reduce stigma associated with mental illness and suicide, provide mental health care at the primary level, improve access to mental health services especially in rural and remote areas and provide affordable and appropriate mental health services.

The diagnosis of a mental disorder is not a sufficient explanation for suicide, however mental illness occupies a premier position in the matrix of causation. Undiagnosed, untreated and undertreated mental disorders kill individuals by suicide. Suicide is a preventable outcome in mental illness and requires concerted and committed action by every health professional.

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References

8. Murray CJL, Lopez AD. The global burden of disease: A comprehensive assessment of mortality and disability from
diseases, injuries and risk factors in 1990 and projected to

9. Lester D. Suicidal behaviour in bipolar and unipolar
affective disorder - a meta analysis. *J Affect Disord*

Risk factors for suicide in China: a national case-control

11. Vijayakumar L. Suicide and mental disorders in Asia.

and attempted suicide in bipolar disorder. A systematic

13. Palmar BA, Panbratzy VS, Bostwich JM. The lifetime
risk of suicide in schizophrenia - a re-examination.

14. Inskip HM, Harris EC, Barraclough B. Lifetime risk of
suicide for affective disorder, alcoholism and

15. Rossow I. Substance use and suicidal behaviour -
Prevention and treatment of suicidal behaviour. Hawton

16. Pridemore WA, Spivak AL. Patterns of suicide
mortality in Russia. *Suicide Life Threat Behav* 2003; 33:
132-50.

17. Rossow I. Suicide, violence and child abuse. Review of
the impact of alcohol consumption on social problems.

18. Williams MG, Crane C, Barnhofer T, Duggan D.
Psychology and suicidal behavior: elaborating the
eatrapment model. Prevention and treatment of suicidal
71-89.