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Causes and Risk Factors of Suicide among Adolescents and Youth in India: A Review

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Abstract

Suicide is at present 3rd leading cause of death among youth and adolescents worldwide. It is a serious health problem among the youth. This not only result in a direct loss of many young lives but also has many disruptive psychosocial and adverse socioeconomic effects .From the perspective of public mental health suicide among youth is the main issue to address. There is a growing recognition that prevention strategies need to be tailored to the region specific demographic of country and to be implemented in a culturally sensitive manner. There has been an increase in the rate of suicide in India over the years and various factors contribute for the suicide .The motives and modes of suicide are also distinct from one region to other region.

Keywords: Suicide,Youth, Adolescents,India ,Psychosocial.

Introduction:

Suicide is among the top three causes of death among youth worldwide. According to the WHO, every year, almost one million people die from suicide and 20 times more people attempt suicide; a global mortality rate of 16 per 100,000, or one death every 40 seconds and one attempt every 3 seconds, on average. Suicide worldwide was estimated to represent 1.8% of the total global burden of disease in 1998. In 2020, this figure is projected to be 2.4% in countries with market and former socialist economies. According to the most recent World Health Organization (WHO) data that was available as of 2011 [1] ,the rates of suicide range from 0.7/100,000 in the Maldives to 63.3/100,000 in Belarus. India ranks 43rd in descending order of rates of suicide with a rate of 10.6/100,000 reported in 2009 (WHO suicide rates).[1] The rates of suicide have greatly increased among youth, and youth are now the group at highest risk in one-third of the developed and developing countries. The emerging phenomenon of “cyber-suicide” in the internet era is a further cause for concern [2] , also because the use of new methods of suicide are associated with epidemic increases in overall suicide rates.[3]. Suicide word , derived from Latin suicidium, is "the act of taking one's own life"[4].Attempted suicide or non-fatal suicidal behavior amounts to self-injury with at least some desire to end one's life that does not result in death.It is the act of intentionally causing one's own death. Mental disorders (including depression, bipolar disorder, schizophrenia, personality disorders, anxiety disorders), physical disorders (such as chronic fatigue syndrome), and substance abuse (including alcoholism and the use of and withdrawal from benzodiazepines) are risk factors responsible for suicide.Some suicides are impulsive acts due to stress (such as from financial or academic difficulties), relationship problems (such as breakups or divorces), or harassment and bullyin [5] Those who have previously attempted suicide are at a higher risk for future attempts.The most commonly adopted method of suicide varies from country to country and is partly related to the availability of effective means.Common methods of suicide include hanging, pesticide poisoning, and firearms [6].

History:

The story of suicide is probably as old as that of man himself. Through the ages, suicide has variously been glorified, romanticized, bemoaned, and even condemned. Be it the tragic Greek heroes Aegeus, Lycurgus, Cato, Socrates, Zeno, Domesthenes or Seneca; or the Roman figures Brutus, Cassius, Mark Anthony or the Egyptian princess, Cleopatra; or Samson, Saul, Abimelech and Achitophel of the Old Testament; or the suicide bombers in the present world, the universality of suicide transcends religion and culture [7].

An understanding of suicide in the Indian context calls for an appreciation of the literary, religious, and cultural ethos of the subcontinent because tradition has rarely permeated the lives of people for as long as it has in India. Ancient Indian texts contain stories of valor in which suicide as a means to avoid shame and disgrace was glorified. Suicide has been mentioned in the great epics of Ramayana and Mahabharata. When Lord Sri Ram died, there was an epidemic of suicide in his kingdom, Ayodhya. The sage Dadhichi sacrificed his life so that the Gods may use his bones in the war against the demons. The Bhagavad Gita condemns suicide for selfish reasons and posits that such a death cannot have "shraddha', the all-important last rites. Brahmanical view had held that those who attempt suicide should fast for a stipulated period. Upanishads, the Holy Scriptures, condemn suicide and state that 'he who takes his own life will enter the sunless areas covered by impenetrable darkness after death'.

However, the Vedas permit suicide for religious reasons and consider that the best sacrifice was that of one's own life. Suicide by starvation, also known as 'sallekhana', was linked to the attainment of 'moksha' (liberation from the cycle of life and death), and is still practiced to this day [8]. Sati, where a woman immolated herself on the pyre of her husband rather than live the life of a widow and Jahuar (Johar), [9].

Suicide is a grave sin and forbidden in Islam. The reason is that God is the Creator of all human life and His divine right in giving and taking life cannot be violated. Human beings have been entrusted their lives by God and are obligated for their care and safe keeping. While God forbids suicide, He also assures His servants that turning to their Creator when misfortune should befall them will bring them out of every misery. In Chapter 4, verse 30, of the Holy Quran, God says:

"And kill not yourselves. Surely, Allah is Merciful to you."

A person that chooses to end his life foregoes his chance to receive the mercy of his Lord because he has died in the act of crime. The Holy Quran reminds us consistently that God has promised great reward for those that bear hardship with patience.

Epidiomology:

According to the World Health Organization (WHO), suicide in 2004 was the 8th leading cause of potential years of life lost worldwide among persons aged 15-44 years.[10] Suicide is the third leading cause of death among those aged 15-44 years, and the second leading cause of death in the 10-24 years age group in some countries; these figures do not include suicide attempts which may be up to 20 times more frequent than completed suicide. The rate of suicide is highest in Eastern European countries such as Belarus, Estonia, Lithuania, and the Russian Federation. High rates of suicide have also been reported in Sri Lanka, based on data from the WHO Regional Office for South-East Asia[11] .

Suicide affects all age groups in the population, but worldwide, rates clearly rise with increasing age. In almost all regions in the world, the highest rates are found among the oldest people aged 80+ (60.1 per 100,000 men and 27.8 per 100,000 women), 70–79 years (42.2 and 18.7 respectively), and 60–69 years (28.2 and 12.4 respectively). In younger people, these figures are much lower: 15.3 and 11.2 per 100,000 males and females aged between 15–29 years and 0.9 and 1.0 per 100,000 for the age category of 5–14 years. In Europe the same tendency is found, with rates decreasing from 53.2 and 14.0 per 100,000 men and women aged 80+ to respectively 19.9 and 4.2 per 100,000 for the age category 15–29 years and 1.0 and 0.4 for the age category of 5–14 years [12]. Notwithstanding the lower suicide rates among the younger age groups, suicide is the second leading cause of death among 15–29 year olds globally [13].

Suicide in India:

The suicide rate in India is comparable to that of Australia and the USA; and the increasing rates during recent decades is consistent with the global trend. Data on suicide in India are available from the National Crime Records Bureau (NCRB; Ministry of Home Affairs). The suicide rates in India rose from 6.3 per 100,000 in 1978 to 8.9 per 100,000 in 1990, an increase of 41.3% during the decade from 1980 to 1990, and a compound growth rate of 4.1% per year.[14] More recent data, however, reveal a different picture. The rate of suicide showed a declining trend from1999 to 2002 and a mixed trend during 2003-2006, followed by an increasing trend from 2006 to 2010.[15] During 2009, the rate was 10.9 per 100,000 population. This represented a 1.7% increase in suicides since 2008. In the most recent NCRB report the rate in 2010 rose to 11.4 per 100,000 population; an increase of 5.9% in the number of suicides.[15]

The NCRB data are based on police records. Sociocultural factors undermine the veracity of these records. Suicide attempt is a punishable offence under the Indian Penal Code (IPC Section 309); this results in under-reporting. Deaths in rural areas are certified by village headmen (“panchyatdars”) though all cases are investigated by the police. The process of registering a death is particularly inefficient in rural areas.[16] Eventually, only about 25% of deaths are registered and only about 10% are medically certified.[17] Death by suicide is frequently reported as due to illness or accident to avoid police investigation. The families of suicide victims usually do not want postmortems because of the fear of mutilation of the body, the time-consuming nature of the process, and the stigma involved. Statistics derived from police records hence under-report suicides.

The suicide rates vary widely across the different states of India, ranging from 0.5/100,000 in Nagaland to 45.9/100,000 in Sikkim against the national average of 11.4/100,000 in 2010.[20] Some studies have estimated the annual suicide rate based on data from smaller samples and using different methods, such as hospital-based samples, longitudinal cohort, emergency service[18] and verbal autopsy.

Risk Factors:

Mental Disorders

Most studies agree that suicide is closely linked to mental disorders .About 90% of people who commit suicide have suffered from at least one mental disorder [19]. Mental disorders are found to contribute between 47 and 74% of suicide risk. Affective disorder is the disorder most frequently found in this context. Criteria for depression were found in 50–65% of suicide cases, more often among females than males. Substance abuse, and more specifically alcohol misuse, is also strongly associated with suicide

risk, especially in older adolescents and males. Among 30–40% of people who die by suicide had personality disorders, such as borderline or antisocial personality disorder. Suicide is often the cause of death in young people with eating disorders, in particular anorexia nervosa, as well as in people with schizophrenia, although schizophrenia as such accounts for very few of all youth suicides [20]. Finally, associations have also been found between suicide and anxiety disorders, but it is difficult to assess the influence of mood and substance abuse disorders that are also often present in these cases. In general, the comorbidity of mental disorders substantially increases suicide risk. Especially important here is the high prevalence of comorbidity between affective and substance abuse disorders.

Previous Suicide Attempts:

Many studies find a strong link between previous suicide attempts, or a history of self-harm, and suicide [21]. About 25–33% of all cases of suicide were preceded by an earlier suicide attempt, a phenomenon that was more prevalent among boys than girls. Research has shown that boys with a previous suicide attempt have a 30-fold increase in suicide risk compared to boys who have not attempted suicide. Girls with previous suicide attempts have a threefold increase in suicide risk. In prospective studies, it was found that 1–6% of people attempting suicide die by suicide in the first year. The risk of suicide is found to be related mainly to the self-inflicting act as such, and less to the degree of suicidal intention of that act.

Family Factors:

One of the most important sources of support with addressing the many challenges of youth is the family context in which young people live or have grown up. Several risk factors concerning family structure and processes have been linked to suicide behavior in numerous studies [22]. It is estimated that in 50% of youth suicide cases, family factors are involved. One important factor is a history of mental disorders among direct family members themselves, especially depression and substance abuse . It is not clear whether these disorders directly influence the suicidal behavior of the child, or rather do so indirectly, through mental disorders evoked in the child as a result of this family context. Researchers also found an augmented presence of suicidal behavior among family members of young people who have committed suicide . There has been a lot of discussion about the mechanisms behind this finding. There may certainly be a kind of imitation behavior in the child, but adoption studies have reported a greater concordance of suicidal behavior with biological relatives than adoptive relatives, which points more toward a genetic explanation . The latter is also in line with the fact that sometimes the suicidal behavior of the parents occurred in the past, without the child's knowledge. Probably genetics and imitation both play a role [23]. Poor communication within the family is also found in many cases of suicide, not only with the child or about the child's problems, but in general between family members. Direct conflicts with parents have a great impact, but so do the absence of communication and neglect of communication needs [24]. Furthermore, violence at home often seems to be found in the background history of young suicide cases, not only specifically against the child, but more as a way of dealing with problems between family members. Parental divorce as such is only weakly associated with suicide of the children involved, and this association is probably confounded by the practical, financial and socio-economic implications of living in a single-parent family or relational background factors related to the divorce [25].

Personality Characteristics:

Suicide is associated with impulsivity. Although we know that a suicidal process can take weeks, months or even years, the fatal transition from suicidal ideation and suicide attempts to an actual completed suicide often occurs suddenly, unexpectedly and impulsively, especially among adolescents. Difficulties in managing the various, often strong and mixed emotions and mood fluctuations accompanying the confrontation with new and ever-changing challenges in different domains is another risk factor for youth suicide, probably partly influenced by bio-neurological factors. Young people who committed suicide were also found to have had poorer problem-solving skills than their peers. Their behavior was characterized by a rather passive attitude, waiting for someone else to solve the problem for them, for simple problems as well as for more complex interpersonal problems. Some researchers indicate defects of memory in this context, with few detailed memories of effective solutions in the past [26]. Others link it to the rigid thinking process often found in these young people. In this way of thinking, also called "dichotomy thinking," people experience events and express their experiences as totally "black" or "white," totally good or totally bad, with little space for nuance and gradation. This also accounts for their self-image. This inability in problem solving and mood regulation often causes insecurity, low self-efficacy and self-esteem, but it can also lead to anger and aggressive behavior, emotional crisis and suicidal crisis, especially in combination with perfectionist personalities [27].

Failure in Education:

Education Low intelligence results in a 2-3-fold increased risk of suicide. Possible explanations are that persons with low intelligence are less able to compete for jobs and therefore acquire lower income and social status. They may also be less efficient in coping with stress. Finally, neurodevelopmental vulnerabilities may increase their risk of a psychiatric disorder.[28]

Level of educational attainment is a surrogate marker of intelligence, though drawing conclusions on this premise is problematic when education is not universally available. The NCRB data reveal that 25.3% of suicide victims were educated up to primary level, 23.7% had a middle-school education, 21.4% were illiterate, and 3.1% were graduates or postgraduates.[29] These percentages, however, may reflect the proportion of persons with different educational attainment in India.

In one study of attempted suicide in India, 55.5% were uneducated. In another study, 54% of suicide attempters had received high school education or higher. Women attempting suicide tended to have a lower educational status compared to men.[30] Again, it is hard to interpret these percentages in the absence of information about the educational attainment of the population from which the samples originated.

Family Structure:

The sociological theory of suicide emphasizes social integration, a theme reflected in John Donne's "No Man is an Island". People who are well integrated with their families and community have a good support system during crises, protecting them against suicide. Risk factors related to the family include parenting style, family history of mental illness and suicide, and physical and sexual abuse in childhood. "Affectionless control", a parenting style characterized by a combination of low levels of emotional warmth and high levels of parental control or overprotection, is associated with a three-fold increase in the risk of suicidal behavior. Suicide attempters with a history of sexual or physical abuse in childhood

show more suicidal behavior and are at a higher risk for mental disturbances in adulthood even after controlling

Loneliness, Alienation, Communication Difficulties:

Several studies have highlighted the significant role of interpersonal risk factors in suicide. People who are able to share their difficulties with family, friends or others benefit in various ways. Communication enhances intimate relations and helps to cope with stress and traumatic events [31] .People who communicate their difficulties to their environment are less likely to kill themselves. On the other hand, when communication fails, the risk for suicide arises. For instance the association between social isolation and suicidal ideation, attempts, and lethal suicidal behavior was found in various samples varying in age, nationality, and clinical severity. Several empirical studies have demonstrated associations between lethal suicidal behavior and various facets of communication difficulties, including loneliness, social withdrawal and isolation, lack of self disclosure, living alone and having few social supports.[32] Thus it appears that difficulties in communication are a meaningful factor influencing suicidal behavior in general and lethal suicide attempts in particular. The well-known interpersonal theory of suicide of Joiner offers some insight to the way mental pain and communication difficulties are factors that work together to motivate a person to engage in suicidal behavior. Joiner (2005) proposed the interpersonal psychological theory of attempted and completed suicide (also known as the "crescendo" model of suicide behavior), which claims that to die by suicide an individual must have both the desire and the capability. This occurs rarely, as few people have the desire, and even fewer the capabilities, to take their own life. The theory further posits that the desire to die by suicide stems from a thwarted sense of belongingness and the feeling of being a burden on others. Mental pain is a concept that entails the feeling of thwarted belongingness and that one's existence burdens the family and friends. This feeling is central to the etiology of suicide. However, the capability to engage in suicidal behavior is separate from the desire to engage in suicidal behavior. The capability to die by suicide is acquired through a process of habituation that allows the individual to overcome the pain and fear associated with suicidal behavior. Pre-existing factors sometimes accelerate the process. According to Joiner (2005), impulsivity is only distally related to suicide: impulsive individuals may be more likely to have experiences that are painful or provocative which, in turn, confer an increased risk of suicidal behavior via habituation. Along the same lines, Witte et al. (2008) [33] proposed that certain behaviors may promote the individual's capability of committing lethal suicide, such as prostitution, drug use, self-mutilation, and violence. With practice and repetition, the fear- and pain-inducing aspects of such provocative behaviors are reduced, and they become rewarding. Those behaviors may be related to other factors mentioned in this review (aggression and impulsivity) and their relation to suicidal behavior. These assumptions may open further research questions about the relationship between impulsivity, aggression, mental pain and communication difficulties and suicidal behavior. If impulsive individuals commit suicide after planning and gradual adaptation to fear and pain, the implications are important on both the theoretical and clinical fronts.

Conclusion:

Suicide is a complex as nd multidimensional phenomena stemming from the interaction of several factors. It remains an important and major cause of death varying in age, nationality and clinical severity .It cuts through nosological boundaries and across psychiatric diagnosis and also characterize non

psychiatric population .Suicidal behaviour remains an important clinical problem and a major cause of death in adolescents and Youth .Youth suicide constitutes a major public mental health problem. Young people and especially adolescents are by nature a vulnerable group for mental health problems. While suicide is relatively rare in children, its prevalence increases significantly throughout adolescence. And although youth suicide rates are slightly decreasing within the European region, it still ranks as a leading cause of death among the young worldwide and, as such, it is responsible for a substantial number of premature deaths and a huge amount of pointless suffering and societal loss. The relationship between impulsivity, aggression, mental pain, communication difficulties and suicidal behaviour continues to intrigue researchers.

The only way forward is to reduce these risk factors and strengthen protective factors as much as possible by providing integrated and multi sector(primary, secondary and tertiary) prevention initiatives. The key prevention strategy can be population based (eg mental health promotion, education, awareness by campaigns as mental resilience.

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