

Causes and Risk Factors of Suicide: An Updates

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ABSTRACT

Background: Suicide is the concluding result of complex interactions of biological, genetic, psychological, sociological and environmental factors. **Aim:** The review analysis aims was to investigate and explore about Causes and Risk Factors of suicide. **Methods:** For this, literature has been looked for manually as well as through electronic resources like PubMed, Google Scholar, JSTOR, and ResearchGate. **Conclusion:** There are so many factors that influence the occurrence of suicide like geographic regions, cultures, socio economic factors, family structure and environment, parenting styles age, gender, education residence, migration, disaster intelligence, mental illness, disabilities, chronic physical illness, temperature impact, media influences etc. Risk Factors of suicide are varying from one society to another.

Key words: Suicide, Physical Illness, Mental Illness, Socio- occupational Functioning, Parenting Style.

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INTRODUCTION

Suicide is the concluding result of complex interactions of biological, genetic, psychological, sociological and environmental factors. Risk Factors of suicide vary from one society to another. Committing suicides are depending upon social, cultural, political and economic features of the particular society. There are mainly three factors widely responsible to lead to suicide attempts (i) background factors (ii) psychological distress; and (iii) intervening factors. The most common pattern was the occurrence of an interpersonal stressor, which produce distorted cognitions, overwhelming emotions, impulsivity etc. Baldessarini has mentioned about factors contributing to suicide risk was social and geographic isolation, low access to sources of support/ clinical care, unemployment, poverty, demoralization and opioid abuse have been identified as important risk factors (Baldessarini, 2019). Arunpongpaissal mentioned that successful suicide included “male sex, older age, using highly lethal methods, and no prior psychiatric treatment, while predictors of attempted suicide included female sex; adolescent or adult; and mental, alcohol, or substance-related disorders” (Arunpongpaissal et al 2023). Schmidtke et al mentioned about risk factors associated with suicide (including suicidal attempts) was young age (15-24 years), female gender, low educational attainment, unemployment, living alone, and history of socioeconomic deprivation (Schmidtke et al 1996). It has also seen that family problems were

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the most common reason for suicide from 2014 to 2020. Women in India have twice the suicide death rate (SDR) compared with the global average for women. The higher SDR between women currently married and never married (Dandona et al 2023). Research in suicidology has focused on identifying the major risk factors for suicide to implement increasingly effective preventive strategies and treatments. The most established risk factors in the literature include past suicide attempts (Bostwick et al., 2016), psychiatric disorders (Moitra et al., 2021), adverse childhood experiences (Sahle et al., 2022), lack of social support (Sahle et al., 2022), and impulsive or aggressive tendencies (Gvion and Apter, 2011).

Table -1 Risk factor of suicide in India (more or less similar findings)

Khan et al 2024(in the year 2019)		NCRB data 2022	
Domains	percentage	Domains	Percentage
Family problems	32.4%	family Problems (other than marriage related problems)'	31.75
Illness	17.1%	illness'	18.4%
Marriage related issues	5.5%	marriage related problems	4.8%

Khan et al also mentioned about some other factors contributing to suicide in India [In year 2019] were Drug abuse/alcohol addiction (5.6%) , Love affairs (4.5%), Bankruptcy or indebtedness (4.2%), Failure in examination (2.0%), Unemployment (2.0%), Professional/career problem (1.2%), Property dispute (1.1%), Death of dear person ((0.9%),), Poverty (0.8%), Suspected/illicit relation (0.5%), Fall in social reputation (0.4%), Impotency/infertility (0.3%), Other causes (11.1%) (Khan et al 2024). Risk factors for suicide in youth include interpersonal conflict and financial problems (Kar 2010) as well as female gender and exposure to abuse or violence (Pillai, et al 2008).

Factors were responsible for suicide can be grouped into the following headings-

[i]Age: Suicide rates were commonly highest among

older adult males while rates among young people have been also increasing. Young adults are a particularly vulnerable group and currently show the highest rates (6% of all deaths among young people) of suicide the world over. (Patton et al 2009). Youth is a period of heightened risk of suicide (Vijayakumar 2005) and suicide is a leading cause of death among young people in India. (Aaron et al 2004). An Indian study also indicated that young adults are at increased risk [with ages 20-24 years followed by 25-29 years showing the highest rates of suicide in a psychological autopsy study] while in another study 15-39 age group people identified as the most vulnerable.(Vijayakumar & Rajkumar,1999).Two-thirds of women who completed suicide were <25 years (Banerjee et al 1990, Nandi et al 1979). Suicidal ideation was also more common in the 16-45 years age group (Unni & Mani 1996). So, it is difficult to say about whom are the more vulnerable group for suicide.

Table 2 -Age related risk of suicide

Gururaj & Isaac,2001		NCRB 2009	
Age	Per Lakh	Age	Per Lakh
15-29	38	15-29	34.5
30-34	34	30-44	34.2
45-59	18		
Above 60	7		

Table 3-Elderly and Suicide

Authors(year)	Findings
Crepet et al 1991, Adamek ME,Adamek & Kaplan,1996	There is a global trend toward increased suicide in late life (mainly in the men).
Rao & Madhavan,1983	Five year study of 6312 suicide attempters, only 0.75% were above the age of 60 years
Shukla et al 1990	Low prevalence of suicide among the elderly in India: Reason- aged are well-integrated and respected in the family; children take responsibility for their care and life expectancy in the elderly is lower in India than elsewhere
Rao & Madhavan,1983	The ratio of completed suicide to attempted suicide in India is about 1:7 in the elderly, which is double the ratio of 1:15 in lower age groups
Rao,1991)	Studies from the west implicate social isolation as a risk factor for suicide among the elderly while in India ‘family and social integration’ were the real determinants of risk.
Purcell et al 2012	Studies from the west appear to support above mentioned Rao (1991) study.
Garnett et al 2023	The largest percent increase in suicide rates between 2001and 2021 occurred among men ages 55–64 and among women ages 65–74.

[ii] **Gender:** Some Indian studies have found a higher incidence of suicide in men than in women (Gururaj & Isaac,2001), others have found the contrary (Banerjee et al 1990). Women appeared to be vulnerable, partly due to prevailing socio-cultural norms in the community (Balaji et al 2023). Among young people, suicidal behavior was found to be associated with female gender, not attending school or college, independent decision making, premarital sex, physical abuse at home, lifetime experience of sexual abuse, and probable common mental

Disorders. Factors associated with gender disadvantage increased vulnerability, particularly in rural women (Pillai et al 2009). In Kerala state, men outnumber women (74% vs. 26%). While the majority of the male victims were self-employed, most of the female victims were home makers. (G, R.B.,2010). In India, these differences can be explained by India’s social changes. More people now live in nuclear families and there’s strong cultural pressure on men to meet a “male stereotype” — which many struggle to achieve.

Table -4. Gender and risk of suicide

Age(years)	Findings
Wang et al (2023)	Early life physical and sexual abuse could be associated with a greater risk of adult premature mortality.
Phillips et al (2004)	Attempted suicide is common in women and completed suicide is common in men. In Chinese women, the suicide rate is approximately twice that of women elsewhere.
Latha Bhat (1996)	Male: female ratio ranging from 1.13:1 (Das et al 2008) to 1.63:1
Suresh K PN,2004	Attempted suicide was as high as 1.2 times higher in women relative to men
Manoranjitham (2010)	Male-to-female ratio was 1.5:1
Yadav (2023)	The SDR among currently married men (24.3) was three times that of currently married women (8.4). Increases in suicide mortality were found in married and never married men, and the increase was remarkably
Mayer & Ziaian,2002	In young men and women in 1991-1997, the ratio was 1.3, contrasting with the male
Gururaj et al 2004).	The reasons for greater female suicide completion in India may be sociocultural. The common practice of arranged marriages in India result in social and family pressure for the woman to stay married even in an abusive relationship; this may increase the risk of suicide in women.
Kumar,2004	Stresses related to dowry demands may drive young brides to suicide
Desjarlais,1995	The male: female suicide ratio is 3.8, 3.9, 4.1, and 3.4 in Australia, Canada, the the United States, and the UK, respectively
Lester,1997	Suicide rate is lower in Asian countries (Compare to Austalia, UK, US, Canada)
NCRB (2009)	The male: female suicide ratio was 1.78 in India in 2008 and 2009. In children up to age 14 years, the ratio was 1.04; (NCRB,2009)

[iii]**Occupation/ socio occupation status:** There are some occupation likes veterinarians, pharmacists, chemists, dentists; medical practitioners and farmer have a higher risk of suicide. These professions have access to lethal, high work pressure, social isolation and financial difficulties and that might be contributing factors for commit suicide. Pradhan et al found that low socioeconomic conditions were most frequent (45%) cause for committing suicide, followed by psychosocial causes (43%), and chronic diseases (12%). Poisoning (53%) and hanging (45%) were the two exclusive methods employed for committing suicide. (Pradhan et al 2012).

Most of the women who completed suicide (54%) were house wives. (Parkar et al 2006. Suicides among children (i.e., under 14 years of age), 38% were working as daily wage laborers, domestic servants or errand boys (Sathyavathi et al 1975).Regarding socio-economic status of the country 84% of global suicides occur in low and middle-income countries (LMICs); India and China alone account for 49% of global suicides (Phillips & Cheng,2012). Psychological autopsy of suicides found 55% were unemployed and a further 40% were semiskilled workers (Chavan et al 2008). The NCRB data shows that housewives account for 18.6% of total persons committing suicides and for 52.8% of the total female victims.

[iv]**Unemployment:** Unemployment may drive up the suicide risk through factors such as poverty, social deprivation, domestic difficulties, and hopelessness. Furthermore, persons with psychiatric disorders are at higher risk of suicide and are also more likely to be unemployed; this may be a double whammy. (WHO,2000). The association between unemployment and suicide may also be more significant for young adults. In India, in one study of suicide attempters, 46% were unemployed (Srivastava et al 2004). In another study, >50% of patients were employed, 12% were unemployed and some were either students or housewives (Latha et al 1996).

[v]**Marital status:** Durkheim's said that divorced, widowed and single people of a higher risk of suicide. Persons living alone are at particular risk (Schmidtke et al 1999). Young widowers were at highest risk. Lower rates of suicide among married compared to unmarried women may be explained by sociological theories based on marital status integration and social integration (Cutright et al 2007). But WHO mentioned that marriage is not a

strong protective factor for suicide attempts in developing countries (WHO,2002). In 2009, 70.4% of all suicide victims in India were married and 21.9% were unmarried. Divorcees and individuals who were separated accounted for about 3.4%, while widows and widowers comprised 4.3% of the total suicide victims (NCRB,2009). In a study higher attempted suicides among unmarried persons ,while others show a higher rate among those who are married (Sarkar et al 2006, Narang et al 2000,Sharma 2006, Srivastava et al 2004, Latha et al 1996).Among attempters, men were more likely to be single and women, married. (Srivastava & Kumar,2005). In a general hospital study, no suicide attempter was separated or living alone.families (Latha et al 1996). Widowed, separated and divorced individuals were commoner among cases of completed suicide (Vijayakumar & Rajkumar,1999).Whom are more prone for committing suicide either married or unmarried to say very difficult. The quality of marital relationship, emotional warmth, extended family support and ability to handle stresses related to marriage and child rearing are more important than marital status for this committing suicide.

[vi]**Residence:** In some countries suicides are more frequent in urban areas, whereas in others they occur more frequently in rural areas. In India there are increased suicide rates among rural people. But, in the city of Chandigarh, 70% of the identified suicide decedents were from an urban background, 10% were from rural areas and 20% from suburban areas (Chavan et al 2008). Migration from rural to an urban area or to a different region or country is more vulnerable to suicidal behavior. It is associated with poverty, poor housing and lack of social support. A study mentioned that 57% of the identified suicide decedents had migrated from other parts of India and abroad. One study reported that 50% of suicide decedents were from rural areas, (Mohanty et al 2007) and another reported a rural-to-urban ratio of suicide decedents of 1.4:1. (Sharma et al 2003).so it's difficult to say about whom (rural/urban) are more prone to commit suicide. The suicide rate is generally reported to be higher in urban areas because of a variety of stressors related to living and working in cities, including overcrowding and social isolation. In India, during the year 2000, though the suicide rate for the country was 10.8, the rate in urban areas was slightly lower at 9.94 (NCRB,2000). There has since been an increase in urban suicide rates to 11.4% in 2005, around 13% in 2006 and 2007, and 12.1% to 12.5% in 2008 and 2009 (NCRB,2007). Suicide and attempted suicide were more common in persons living in urban area (Khan et al 2005).

[vii]Life stressors and Interpersonal problem: Stressful life events that may be, interpersonal problems, separation from family and friends, job loss, retirement or financial difficulties, rapid political and economic changes. Attempted suicide with interpersonal conflict, financial stressors, and educational burden being the most common triggers has been found (Srivastava et al 2004, Khan et al 2005, Sharma, 1998). 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 for other contributory factors (Van et al 1993). With respect to suicide deaths, significant attention has focused on the role of waning economic opportunity for some and increased social isolation in producing these patterns (Case & Deaton, 2021a; Phillips, 2014). Studies which measured stressful life events found that approximately 90% of suicide attempters reported negative life events (Latha et al 1996) and about 35% experienced stressful life events in the previous 6 months (Srivastava et al 2004). Rich and Bonner (1987) found in a stress-vulnerability model that negative life events and stress accounted for 30% of the variance in suicidal ideation. In India, marital conflict is the commonest cause of suicide among women, while interpersonal conflict is the commonest cause among men. (NCRB,2010,Banerjee et al 1990).High rate of suicide associated with sexual abuse and illegitimate pregnancy seen in this country (rarely seen in the west). (NCRB,2010). Most suicides (16.67%) have been caused by frustration/mental illness, followed by several other causes of suicide such as family problems (13.81%), love affairs (10.00%), poverty (9.05%), harassment (8.57%) and sexual harassment (7.62%) (Patel,2024). Psychosocial stress and social isolation are risk factors for suicide in rural south India (Manoranjanjitham et al 2010).

[viii]Suicide and Physical Illness: An association between physical health and suicide attempt was attenuated by adjustment for socioeconomic status suggesting it is poverty more than physical health status that is predictive of suicidal behaviour (Christiansen and Stenager, 2012) There is strong association between physical health like “high blood pressure, heart attack/stroke, chronic headache, chronic pain, migraine, back pain, respiratory conditions, epilepsy, cancer, heart disease or attack, stroke, HIV/AIDS, sleep disorders, insomnia, traumatic brain injury, coronary heart disease, congestive heart failure, neurological conditions, diabetes, osteoporosis, chronic pulmonary disorder, incontinence, renal failure or disease, hearing or

vision impairment, congestive heart failure, congestive heart failure, chronic obstructive pulmonary disorder, asthma, cerebral infarction and diabetes, chronic ischaemia, gastrointestinal, sensory impairment, chronic fatigue syndrome/myalgic encephalomyelitis, ehlers-Danlos syndrome, fibromyalgia, chronic Lyme disease, postural orthostatic tachycardia syndrome, restless leg syndrome, liver disease, male genital disorders, arthritis/arthrosis, malignant diseases, Huntington’s disease, stage kidney disease” and suicide. Understanding these associations may help to develop suicide prevention strategies.

[ix]Education: The suicide rate for those with a high school education or less appears to be particularly sensitive to increases in the minimum wage, especially during periods of high unemployment (Kaufman et al., 2020). 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 (NCRB,2009). A study of attempted suicide (India) found 55.5% were uneducated (Srivastava et al 2004). In another study, 54% of suicide attempters had received high school education or higher (Latha et al ,2004). Women attempting suicide tended to have a lower educational status compared to men (Sudhir et al 2006).

[x] Family structure/Parenting style: The sociological theory of suicide emphasizes social integration, (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 (Martin & Waite,1994). A study on burns victims found that being in a joint family was a risk factor for dowry deaths (Gupta & Srivastava,1998).India has witnessed a change in family structure during recent decades, with more people moving out of joint and extended families into nuclear family structures. The majority of suicide attempters were from nuclear families, (Srivastava et al 2004, Latha et al 1996) while earlier study shows that more suicide attempters come from joint families (Adityanjee et al 1996) and family and marital conflict was a major reason for suicide (Kar et al 2010).

[xi] **Natural disaster and suicide:** On suicide mortality, there was variability in the suicidogenic impact of earthquakes depending on location, age, sex and time elapsed since the event. Exposure to droughts, hurricanes, floods, and tsunamis links to increased risk of suicidal ideation and non-fatal attempts (Tiago et al 2025).

[xii] **Neurodevelopmental Disorders/low intelligence and Suicide:** 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 (Gunnell et al 2005).

These disorders typically manifest early in development, often before the child starts school, and are characterized by developmental deficits that produce impairments of personal, social, academic or occupational functioning.

Table -5 Neurodevelopmental Disorders and Suicide

Disorders	Authors	Year	Findings
[I]Intellectual disability (ID)	Davidson et al	2008	IDs are more likely to be exposed to risk factors for suicide, such as mental health issues, higher unemployment, lower education, and previous self-harm or suicide attempts.
	Kaminer et al	1987	The presence of IDs could act as a protective factor against suicide, maybe due to the lack of cognitive sophistication to conceptualize, plan, or carry out suicide.
	Merrick et al	2005	
	Kirkcaldy et al	2006	
	Ludi et al	2012	There are no suicide screening tools designed especially for young people with intellectual disabilities
[II]Autism Spectrum Disorder (ASD)	Chen et al	2020	The suicide risk associated with ASD is 5-10-times greater than typically developing children and adults.
	Richa et al	2014	
	Mouridsen et al,	2008	Higher mortality rate found among ASD, some even double. Self-injurious behavior, suicidal thoughts, and suicide attempts are also described common.
	Culpin et al,	2018	
	Blanchard et al,	2021	

[III]Attention deficit hyperactivity disorder (ADHD)	Fulle et al	2022	The rate of suicide attempts seems to be higher in females (ratio: 1:4) than in males (ratio 1:7), with females presenting a higher prevalence of associated mood disorders.
	Barbaresi et al	2013	Association between ADHD and suicide remains uncertain, with contrasting findings in the literature. While some studies have reported a significant correlation between ADHD and suicidal ideations, attempts, or completed suicides.
[IV]Communication disorders	Hardan & Sahl	1999	no statistically significant correlation with suicidal ideation/attempts was demonstrated
	Van et al	2018	This is associated with higher depressive symptoms compared to the general pediatric population. That may be Cause of SSB.
[V]Specific learning disorder (SLD)	Alexander	2012	SLD have been seen to be at risk of developing behavioural and psychological problems, negative emotional coping strategies with the development of self-harm behaviour's and suicide attempts
	Xiao et al	2023	
[VI]Motor disorders	Arciniegas & Anderson	2002	Social isolation, family history of autoimmune diseases, substance use, and an unhealthy lifestyle has been considered as conditions linked to suicidality.
	Klomek et al	2010	Bullying and peer victimization are strong risk factors for later suicidality.

[xiii]**Suicide and Mental Disorders:** Suicide attempts have been associated with a history of psychiatric disorders (Parker et al, 2008; Sarkar et al 2006) and 37% of the suicides had at least one Axis I diagnosis(Manoranjitham,2010). Risk of suicide is particularly high among patients diagnosed with bipolar disorder or severe depression, especially when associated with mixed features or agitation, or with co-occurring substance abuse.(Baldessarini,2019)

Table 6- Suicide and Mental Disorders

Disorders	Authors	Year	Findings
Substance use Disorders [SUD]	Miller et al	1991	50% of all suicides are associated with alcohol and drug dependence.
	Leire et al	2024	There is need to assess suicidal behavior with standardized criteria in order to develop tailored SUD treatment.
Schizophrenia	Gupta et al	1998	Suicide attempts in patients with schizophrenia vary between from 18% to 55%.
	Cohen et al	1994	
	Yang et al	2025	Prevalence of suicidal ideation among chronic Schizophrenia was 21.18%. and was markedly elevated in the young group compared to the elderly group.
	Natalie et al	2022	Poisoning was the most common means among men and women with schizophrenia, while firearms accounted for over half of all suicides in the general U.S. population.
Major Depressive Disorder[MDD]	Ponsoni et al	2018	MDD and suicide attempts (SA) and/or ideation (SI) or suicidal behaviour has been well documented and suicide risk rates are also found to be equivalent around 15 percent. Suicide behaviour is highly prevalent amongst patients with MDD.
	De Berardis et al	2018	
	Pfeiffer,2009	2009	.Epidemiological studies reported that MDD subjects with comorbid anxiety disorders were main predictors of suicidal attempt.
			It has been well recognized that the association between MDD and anxiety disorders appear to have more a synergic role in increasing suicidal risk (Abreu et al 2018).
	Marzuk et al	2005	Impaired cognitive control abilities have been correlated as well with high suicide rate amongst MDD people. MDD subjects suicide attempters, showed significantly higher scores on harm avoidance (i.e., a tendency to respond intensely to signals or aversive stimuli) and significantly lower scores in self-directedness, cooperativeness and persistence when compared to the non-suicidal group.
	Paulus et al	2015	
Obsessive Compulsive Disorder(OCD)	Rudd et al	1993	6.7% of suicidal patients received a diagnosis of OCD. Uncomplicated OCD increased the risk of suicide attempts to 3.2 times compared to healthy respondents. Even after the removal of those with major depression or agoraphobia, the odds ratio for suicide attempts in comorbid OCD was 3.7%.

	Dhyani et al	2013	Suicide in OCD may be comparable like psychiatric disorders such as schizophrenia and depression.
	Chaudhary et al	2016	OCD is associated with high risk not only depression but also of suicidal behavior
Post-traumatic stress disorder [PTSD]	Hirvikoski et al	2016	Suicide is also a leading cause of mortality in PTSD and risk factor for subsequent suicidal ideation and attempt.
	Bentley et al		
	Stanley et al	2019	
	Krysinska et al	2010	PTSD has been linked to death by suicide
	Gradus et al	2010	It has found that the odds of death by suicide was 5.3 times higher in those with a diagnosis of PTSD compared with those without, after controlling for psychiatric and other demographic variables.
	Gradus et al 2015		Another study found that suicide rates were 13 times greater in those diagnosed with PTSD, adjusting for confounders as above.
	Atwoli et al	2015	Gender differences in the association between PTSD and death by suicide might be expected because women are at increased risk of PTSD.
	Ditlevsen et al	2012	
	Värnik 2012	2012	but in non-clinical populations are less likely to die by suicide than men in many high income countries.
	Ilgen et al	2010	A study reported that suicide rates associated with PTSD were greater for women than men.
Bipolar disorder (BD):	Chandna, et al	2023	High rate of comorbid mood and anxiety disorders, substantial disability, poor treatment-seeking behavior, and significant suicidal risk among individuals with PTSD.
	Rahat et al	2013	A strong association between PTSD and attempted suicide and suicidal ideation was also found, with a consistently strong association among those with co-morbid psychiatric conditions and non -clinical cohorts.
Bipolar disorder (BD):	Yuan et al	1996	Lifetime suicide attempt rates in BD were reported to be 29.2% and in unipolar disorders to be 15.9% .
	Jamison	2000	At least 25% to 50% of patients with bipolar disorder also attempt suicide at least once

	Isometsä	2020	BD are at significantly high risk of self harm and suicide. The lifetime prevalence of SA in BD was 29.2%, compared to 4.9% in non-BD controls and 5.6% in MDD.
	Cai, et al	2021	
	Isometsä	2020	8% of the individuals with a diagnosis of BD died by suicide.
	Hu et al	2023	Male patients with bipolar illness had a statistically significant higher prevalence of suicide deaths compared to female patients (0.7% and 0.3%, respectively)
Personality disorder(PD)	Paris	2011	Borderline (BPD) and antisocial personality disorders (ASPD) are particularly associated with suicide risk and self-injurious behaviours. Suicidal ideation and self-injurious behaviours are key features of BPD with an estimated 65–80% of patients with BPD engaging in NSSI. It is estimated that around 5% of those with ASPD will die by suicide. There is less research carried out having a PD and suicidality.
	Brickman et al 2014,	2014	One clinical study of 394 patients with BPD recorded suicide attempts in 75% of their sample, and as many as 9% will die by suicide.
	Goodman et al 2017).	2017	

The socio-cultural stigma and negative attitudes towards seeking help and institutional support are major challenges in suicide prevention in India. Such a scenario further makes it nonconductive to take necessary steps and measures to minimize the incidences of suicide (Gaiha et al 2020)

[xiv]**Media and Suicide:** In South-East Asia, the majority of the suicide stories reported by the media are found to be sensational, provocative, and deviating from the norms recommended by national and international guidelines (Arafat et al 2020). Evidence supports that sensational media reporting invokes the risk of imitative suicide (suicide contagion) very often (Hagihara et al 2014). A horrific and sensational act of self-immolation was done by a student in the Balasore district of Odisha (an eastern coastal state of India) as a protest a university teacher for alleged sexual harassment. In the subsequent three weeks, several other incidents of death due to self-immolation and threat of suicide by self-immolation have been reported from Odisha state (by the national and local media). To prevent suicide contagion, the media must avoid emphasizing the demographic details, such as age and gender of

the deceased and the nature of stressors. There is a need to conduct an interim audit of the published media reports against the media reporting guidelines, and provide timely feedback to the media administration to improve the quality of media reporting on suicide. It has been reported that dramatic portrayal of suicide facilitates suicide contagion (Werther effect), whereas sensible reporting of suicide helps in suicide prevention (Papageno effect) ([Domaradzki, 2021). Suicide contagion by use of hydrogen sulfide gas in Japan spread like a chain reaction in 2008 (Morii et al .2010, Ruder et al 2015). Such, horrific chains need to be prevented and media plays a key role in such prevention. Implementation of localized translation and distribution of guidelines can be carried out by the state's information department in collaboration with journalist associations. This may include organizing sensitization workshops specifically designed for reporters who work in vernacular languages to enhance their understanding and reporting skills (kar et al 2026).

Students: Suicides among students could be related to academic failure and failure to meet the expectations

of family members (Kumar & Patel, 2024). Academic issues, mental health problems, financial problems, online gaming, and problems at the level of institution (bullying, caste discrimination, ragging, and harassment), which could explain rising suicides among students (Maji et al 2023).

[xv] **Temperatures and suicide** : Higher temperatures can impact the old, infirm, poor who cannot afford remedial measures, employees involved in hard physical labor, women, etc., more than others. Increased temperature can lead to drought, which in turn can lead to unemployment, agrarian distress, leading to migration, stress, and suicide (Poduri, 2024). The neurotransmitter, Serotonin, may be a common factor involved in both suicide and temperature. Increasing temperatures might impact delicate body chemical, neurological, and endocrinal balance and cause drastic effects on the human mind leading to suicide in the vulnerable.

Rambotti (2020) showed that the Supplemental Nutrition Assistance Program (SNAP) was associated with lower overall and male suicide rates between 2000 and 2015 while Gertner et al. (2019) found a negative association between minimum wages and suicide rates across states over time. A broad review (Kim, 2018) suggests that social protection policies play some role in moderating the negative effect of the economic environment on suicide.

There were several factors associated with suicide attempts. Balaji, et al explained about individual and social factors: [a] individual-level- depressive or anxiety symptoms over the last two weeks, previous suicide attempt, impulsivity, and low SES; alcohol use was significant only for males. [b] social factors : lack of exposure to suicide-related information in the last month, lack of social interactions over the last 12 months, and presence of interpersonal negative life events involving partners or family in the last 12 months were associated with suicide attempts (Balaji, et al 2026). Commonest reason for attempting suicide was verbal abuse, most often by parents (31.9%). Other precipitating factors were physical abuse, illness, marital conflict, family related problem, etc. (Purushothaman et al 2019). Suicide is not an important health problem but is big social problem. Unfortunately, this issue receives little attention from Indian policy makers. This neglect of the issue is reinforced by cultural influences, religious sanctions, stigmatization of the mentally ill, competing political imperatives, and socio-economic factors (Vijayakumar, 2008).

Conclusion

There are so many factors that influence the occurrence of suicide like geographic regions, cultures, socio economic factors, family structure and environment, parenting styles, age, gender, education residence, migration, disaster intelligence, mental illness, disabilities, chronic physical illness, temperature impact, media influences etc. It difficult to say about what factor is more responsible for the suicide. It is varying from culture to culture as well as socio-geographic regions. There is country specific analyses are needed to develop targeted suicide prevention efforts

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