From Grades to Grief: An Inquiry into student suicides and suicides attributed to failure in examination in Maharashtra

Arpita Naik

UGC Senior Research Fellow, Department of Applied Psychology,
University of Mumbai
naikarpita2697@gmail.com

Abstract

Over the past decade, the number of student suicides in India has almost doubled. A majority of these have been reported in the state of Maharashtra, as per the National Crime Records Bureau (NCRB). Alarmingly, Maharashtra has witnessed a 91.5% increase in student suicides from 2012 to 2022. The data indicates that suicides by male students in the state have more than doubled in the period examined. While the specific causes underlying suicides by students have not been reported, the current study uses archival data maintained by the NCRB to examine the trend in suicides attributed to failure in examination in the state of Maharashtra. Within Maharashtra, the NCRB reports cause-wise data for six cities, with Mumbai and Pune reporting higher instances of suicides attributed to failure in examination over the last ten years. Of particular concern is the significant number of suicides among individuals below 18 years of age, owing to examination failure. The paper acknowledges and critically discusses the limitations inherent in the NCRB data, emphasizing the need for cautious interpretation. The paper also looks at current government initiatives to prevent student suicides. The research concludes by suggesting avenues for future investigations, underscoring the importance of addressing the root causes of student suicides and proposing targeted interventions to safeguard the mental well-being of students in Maharashtra.

Keywords:

suicide, failure, students, examination failure, Maharashtra suicide

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The prevalence of student suicides has witnessed a concerning twofold increase over the past decade, prompting a closer examination of the underlying causes. Notably, failure in examinations has emerged as a significant contributor, with over 25 thousand suicides in the nation attributed to this academic stressor in the last ten years (NCRB, 2022). This alarming trend raises critical questions about the multifaceted nature of suicide, extending beyond singular circumstances to encompass intricate interplays of personal and social factors (Department of School Education & Literacy, 2023).

Every instance of suicide, though universal, elicits profound shock and grief, compelling reflection on the intricate motives that drive individuals to such drastic actions. The motives vary widely, encompassing complex psychological factors, and at times, impulsive responses triggered by immediate stressors. Each case underscores compromised mental well-being at the individual level and highlights the inefficacy of existing preventive and well-being-promoting mechanisms in the individual's surroundings (Department of School Education & Literacy, 2023).

In India, the National Crime Records Bureau (NCRB) serves as a crucial source of information, collating data on suicides and accidental deaths. Their annual report titled 'Accidental Deaths and Suicides in India provides insights into the diverse causes, including dowry disputes, divorces, illness, family issues, unemployment, and more. The detailed report encompasses information on suicides related to various social and economic factors, presenting a comprehensive picture that includes details about victims' professional, educational, and social backgrounds. Over the years, the NCRB has refined its definition of suicide, acknowledging its complexity and emphasizing the deliberate and intentional act of ending one's life (NCRB, 2012; NCRB, 2021).

Prior research has drawn attention to the heightened risk of suicidal behaviour among adolescents achieving lower academic grades (Björkenstam et al., 2010). Educational psychologists, in this context, distinguish between mastery-based and performance-based academic achievement goals. A mastery orientation values curiosity, skill development, and the understanding of new material, attributing success and failure to effort and viewing mistakes as integral to the

learning process. Conversely, a performance orientation aims to boost self-worth, attributing success and failure to inherent ability and evaluating competence through social comparisons. This orientation includes both performance-approach and performance-avoidance goals, the latter associated with reduced intrinsic motivation, learned helplessness, and heightened anxiety (Neff et al., 2005). Understanding these psychological dynamics is crucial for developing effective interventions to address the rising trend of student suicides.

The current study aims to identify and highlight the trends and patterns observed in suicides by students and suicides due to failure in examination in the state of Maharashtra using archival data maintained by the NCRB.

Methodology

Materials and Methods

The primary data source for this archival research is online record maintained by the National Crime Records Bureau (NCRB). The NCRB publishes an annual report titled 'Accidental Deaths & Suicides in India (ADSI)' which includes data on mortalities due to accidents and suicides in India. The latest edition of the report was released for the year 2022. The research covers a specified period, typically ranging from 2012 to 2022, capturing trends and patterns in student suicides over the selected duration. Suicide data spanning multiple years was assessed, focusing on the demographic details, causes, and classifications available in the reports.

Data Analysis

Quantitative analysis is conducted to examine trends and patterns in student suicides. Descriptive statistics, including frequencies and percentages, are employed to present an overview of demographic characteristics and suicide causes among students.

Results

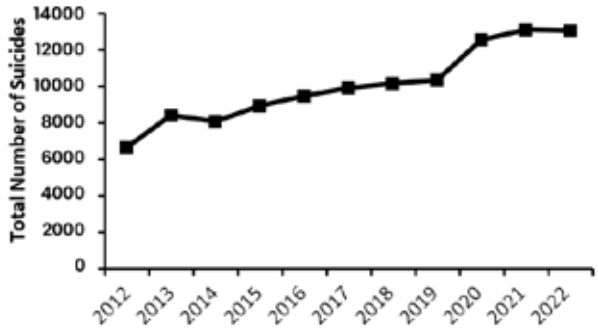
Suicides by students

A total of 1,10,615 student suicides were recorded in the period from 2012 to 2022. Of these, 53.61% of the suicide victims were males while 46.33% were females. The state of Maharashtra accounted for 13.96% of the total suicides by students in India during the period examined. Out of the 15,451 student suicides in Maharashtra, 8293 (53.61%) were committed by males and 7156 were by females (46.25%).

A total of three student suicide victims have been reported as transgender in the ten years examined, amounting to 0.003% of the total victims. The data shows three entries in the transgender category for student suicides in the years 2016, 2019, and 2022. Of these, two cases were reported in Maharashtra in 2016 and 2019.

The total number of suicides by students in the country has increased by 96.03% from 2012 to 2022. In 2012, the total number of student suicide victims was 6654. In 2022, the number increased to 13,044. The cases of student suicide dipped the most in 2012 with a 13.54% decrease in cases compared to 2011. Interestingly, the cases spiked by a drastic 26.59% in the consequent year. This spike is the highest increase in student suicide cases in the decade under examination. Another major spike in cases came in 2020 when the cases rose by 21.2%. In 2022, there is again a slight dip in the cases, when the cases have reduced by 0.34%.

Figure 1

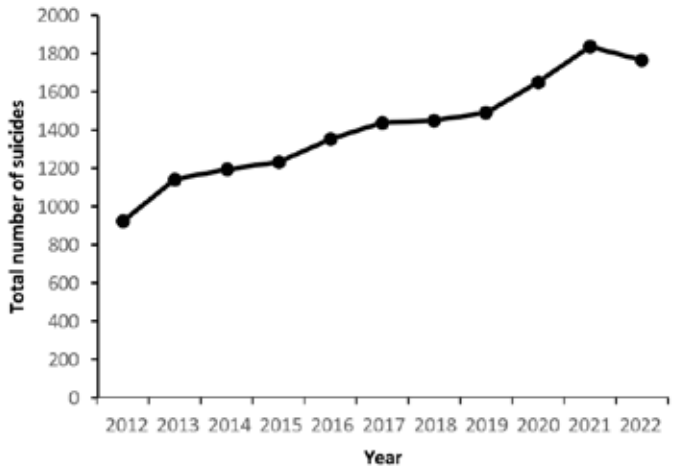


Total number of suicides in India from 2012 to 2022

Note. This figure demonstrates the rise in the total number of suicides in India over the decade. Data sourced from the report on Accidental Deaths & Suicides in India published by the National Crime Records Bureau.

Maharashtra witnessed a 91.53% rise in student suicides in ten years. In 2012, 921 students within the state succumbed to suicide, a figure that surged to 1764 in 2022, comprising 1017 male victims and 747 females. As seen in Figure 2, the number of suicides by students in Maharashtra has gradually increased till 2021 and dipped slightly in 2022. The number increased drastically by 23.89% from 2012 to 2013. In the following years, the numbers rose slowly. However, in 2020 and 2021, the state witnessed a spike in student suicides by 10.83% and 11.29% respectively. Remarkably, the number has dipped for the first time after 2012 in 2022. In 2012, the number had dipped by 6.78% compared to 2011 and it dipped by 3.82% in 2022.

Figure 2



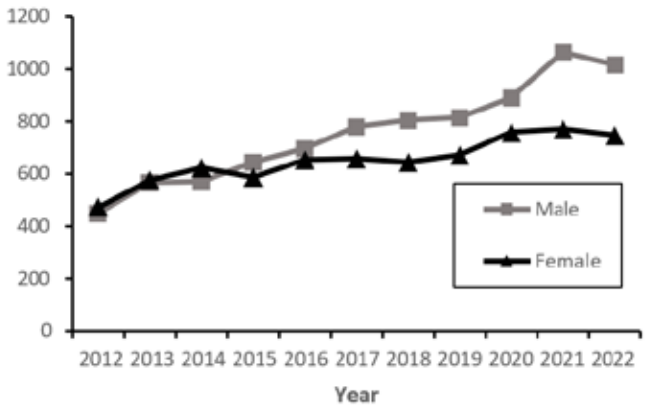
Total number of suicides by students in Maharashtra (2012-2022)

Note. Data sourced from the report on Accidental Deaths & Suicides in India from 2012 to 2022 published by the National Crime Records Bureau (NCRB).

A nationwide analysis reveals a persistent trend of higher incidences of male student suicides compared to their female counterparts. In the state of Maharashtra, the period spanning from 2012 to 2014 witnessed a consistent pattern where suicides among female students surpassed those among their male counterparts. However, a notable shift occurred after 2014, with male student suicides consistently exceeding those of their female counterparts.

Figure 3

Gender-wise Comparison Suicides by Students in Maharashtra (2012-2022)



Note. The figure includes a comparison of suicides by male and female students in the state of Maharashtra. Data sourced from the report on Accidental Deaths & Suicides in India published by the National Crime Records Bureau.

[a] The data for transgender students is not available from 2012 and is thus excluded from this figure.

The NCRB reports data for six mega-cities in Maharashtra, viz. Aurangabad, Mumbai, Nagpur, Nashik, Pune, and Vasai Virar. However, city-wise data for different professions is available only for four years in the period under study from 2012 to 2015. Within Maharashtra, the city of Mumbai has consistently witnessed a higher number of student suicides compared to other cities in the state, followed by Pune and Nagpur. The lowest numbers in the state have been reported in Vasai Virar. Notably, in the cities of Mumbai and Nashik, suicides by female students have been consistently higher than their male counterparts in the data available from 2012 to 2015. In Aurangabad, the incidence of student suicides by males has consistently been higher than by females. In 2012, with the exception of Aurangabad and Pune, all other mega-cities in Maharashtra reported a higher incidence of female student suicides compared to male students.

Table 1

			Year		
City	2012	2013	2014	2015	Grand Total
Aurangabad					
Total (annual)	8	23	15	13	59
Male	6	16	10	8	40

Female	2	7	5	5	19
Transgender	-	-	0	0	0
Mumbai					
Total (annual)	137	181	111	142	571
Male	53	77	39	70	239
Female	84	104	72	72	332
Transgender	-	-	0	0	0
Nagpur					
Total (annual)	66	49	57	56	228
Male	23	21	29	29	102
Female	43	28	28	27	126
Transgender	-	-	0	0	0
Nashik					
Total (annual)	23	32	29	31	115
Male	11	15	14	13	53
Female	12	17	15	18	62

City-wise distribution of student suicides in Maharashtra

Table 1

			Year		
City	2012	2013	2014	2015	Grand Total
Pune					
Total (annual)	46	71	101	100	318
Male	23	30	54	59	166
Female	23	41	47	41	152
Transgender	-	-	0	0	0
Vasai Virar					
Total (annual)	9	4	10	11	34
Male	3	2	2	7	14
Female	6	2	8	4	20
Transgender	-	-	0	0	0

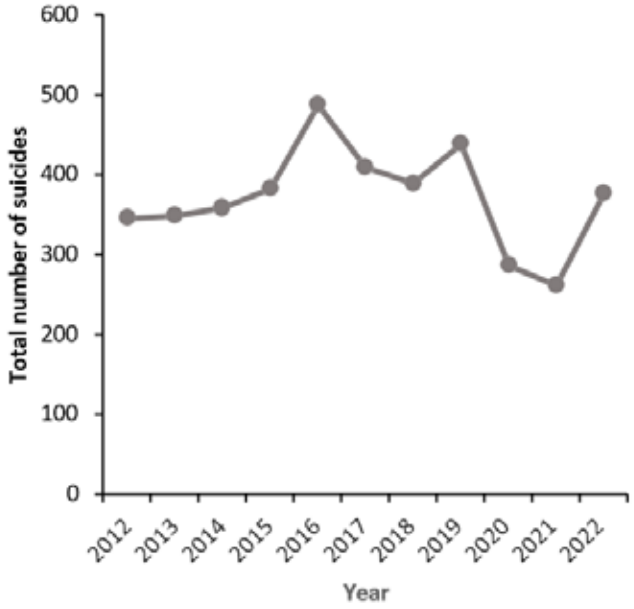
City-wise distribution of student suicides in Maharashtra (continued)

Note. Data sourced from the report on Accidental Deaths & Suicides in India from 2012 to 2022 published by the National Crime Records Bureau.

Suicides attributed to failure in examination

Over the ten years studied, a total of 25,931 deaths in the nation have been attributed to failures in examinations, with a higher incidence among males (n=14,444) compared to females (n=11,487). Remarkably, no instances of suicides under this specific cause have been reported within the transgender category in the nationwide data in the decade. The data depicted in Figure 4 reveals a fluctuating pattern in the number of suicides attributed to examination failure, exhibiting both increases and decreases in consecutive years from 2012 to 2017. Subsequently, the following two years experienced a modest rise in cases, followed by a pronounced decline in 2020 and 2021, with 2020 marking the most substantial decrease in the past decade. In the following year, 2022, there was a 25.22% increase in cases, representing the most significant rise in the decade.

Figure 4



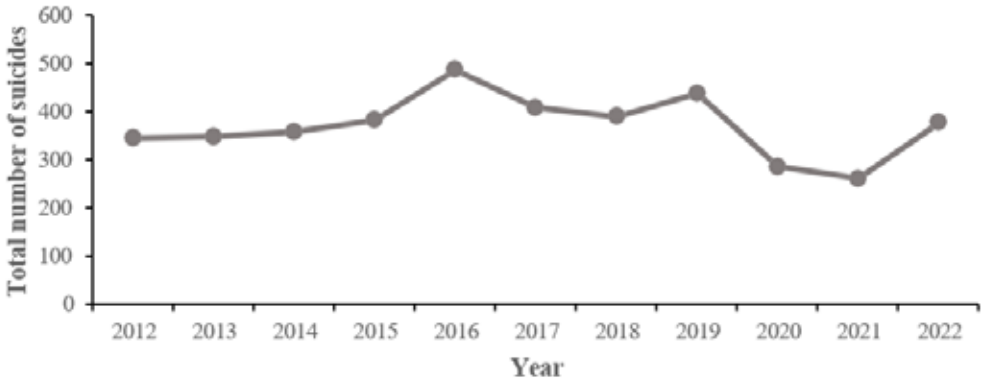
Total number of suicides in India attributed to 'Failure in Examination' (2012-2022)

Note. Data sourced from the report on Accidental Deaths & Suicides in India published by the National Crime Records Bureau.

During the said period, the state of Maharashtra has seen a loss of 4091 lives owing to failure in examination. The total number of suicides due to this cause has been higher among males than females in the state. Only in the years 2012 and 2020, the number of suicides by females has been higher than males under this cause. The pattern of higher incidence of suicides by males under this cause

is also consistently observed in the ten-year data for the six mega-cities of Maharashtra. It is important to note that the suicides among both males and females have increased in 2022 after decreasing for two years. However, the number of suicides among males has increased by an alarming 72.18%, claiming 229 lives in 2022.

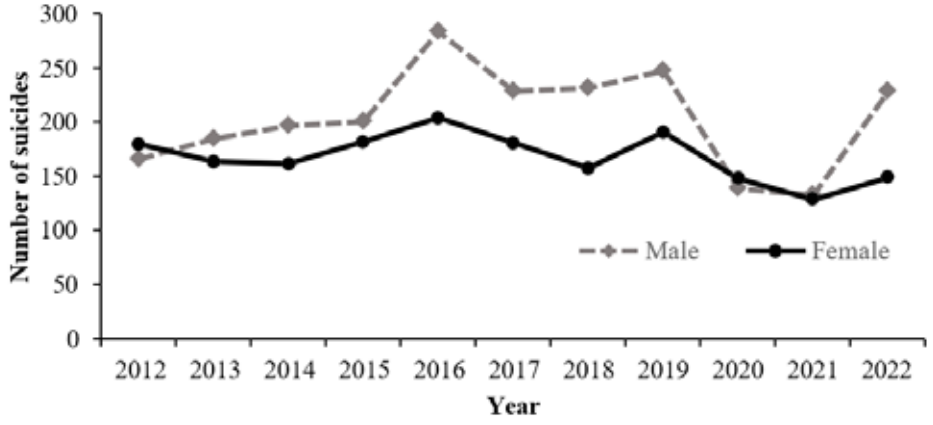
Figure 5



Total number of suicides in Maharashtra attributed to 'Failure in Examination' (2012-2022)

Note. Data sourced from the report on Accidental Deaths & Suicides in India published by the National Crime Records Bureau.

Figure 6



Gender-wise comparison of suicides attributed to failure in examination in Maharashtra from 2012 to 2022

Note. Data sourced from the report on Accidental Deaths & Suicides in India published by the National Crime Records Bureau.

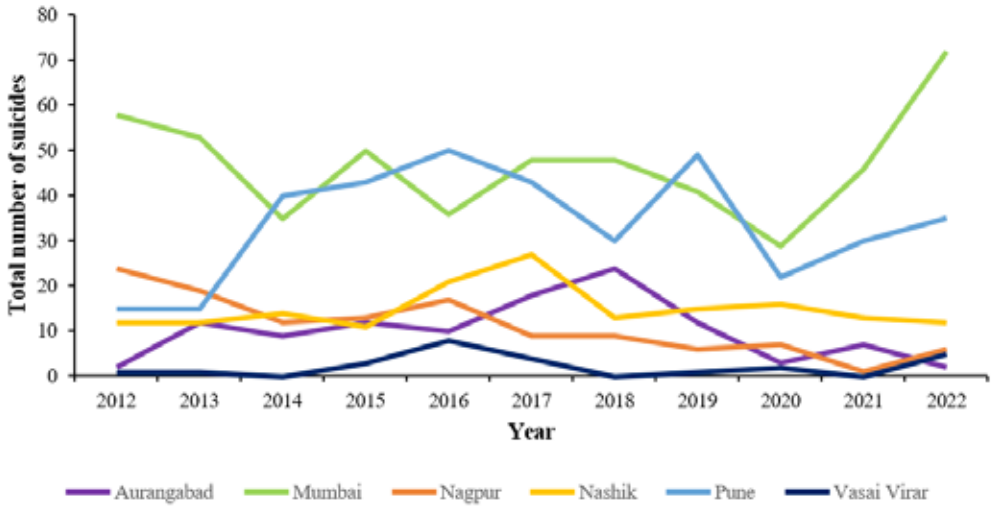
[a] The data for transgender students is not available from 2012 and is thus excluded from this figure.

The most significant increases in the cases have occurred in the years 2016, 2019, and 2022. The number of cases has seen a gradual increase from 2012 to 2016, followed by a marked decrease in 2017 and further in 2018. Similar to the trend observed in the national data, the cases drastically decreased by 34.62% in 2020 and further by 8.71% in 2021, followed by a sharp rise of 44.27% in 2022.

Across the nation, a majority of suicides due to this cause have occurred among individuals below the age of 18 years. In a span of four years, 4,693 individuals under 18 years of age have ended their lives because of examination failure. The next age group with the highest incidence of suicides under this cause is between 18-30 years with 3,581 cases reported since 2019. In the years 2020 and 2022, females have a slightly higher incidence of suicides in the age group below 18 years. In all other age groups and across the four years reported, male suicides have been higher than their female counterparts. Notably, the NCRB report also indicates 4 cases of suicide due to failure in examination in the age group of 60 years and above whereby 3 males and 1 female have committed suicide.

A look at the suicides due to failure in examination across the mega-cities in Maharashtra (see Figure 7) shows that the numbers have been particularly high in Mumbai and Pune over the years. The lowest numbers are seen in the Vasai-Virar region, followed by Aurangabad. Aurangabad exhibited fluctuations over the years, with a notable peak in 2017 and a subsequent decrease in the following years. Nagpur has witnessed a fluctuating pattern, reaching a minimum in 2021, followed by an increase in 2022. The city of Nashik shows variability, with peaks in 2016 and 2017, followed by a decline in subsequent years. Pune demonstrates variability, with a considerable increase in 2014 and fluctuations in the following years. Vasai Virar region exhibits sporadic cases, with notable increases in 2016 and 2022.

Figure 7



Total number of suicides attributed to failure in examination in six cities of Maharashtra from 2012 to 2022

Note. Data sourced from the report on Accidental Deaths & Suicides in India from 2012 to 2022 published by the National Crime Records Bureau.

Discussion

Highlighting the vulnerability of individuals below 18 years to the stress associated with examination failure, it is evident that a majority of suicides occur within this age group. Additionally, the 18-30 age group exhibits a significant number of cases, aligning with previous studies emphasising high suicide incidences among individuals aged 15-29 years (Gururaj & Isaac, 2001).

Despite the prevalence of suicides, the NCRB report does not provide details about the type of examinations associated with these cases. This absence of specificity makes it challenging to determine whether these suicides are linked to school-level exams or other competitive tests. Notably, studies based on media reports suggest a connection between student suicides and the National Eligibility Cum Entrance Test (NEET), a highly competitive examination for medical school admission in India (Kar et al., 2020). There exists significant stress among these students to excel in exams. The struggle to cope with performance expectations, live up to parental expectations, and realise personal aspirations might lead to

psychological strain and, in more severe cases, result in suicidal tendencies (Kar et al., 2020).

Various risk factors contributing to student suicides have been identified in the literature. Psychological distress emerges as a crucial contributor, with studies underlining its significance (Jaisoorya et al., 2017). Additionally, a strong correlation between depression and completed suicide has been established (Björkenstam et al., 2010). Low self-esteem and frequent bullying also correlate with suicide ideation and actions among students (Bhar et al., 2008; Richardson et al., 2005; Mahawan & Arboiz, 2022). Understanding the predictors of suicide within these units can aid in identifying those at risk and implementing appropriate interventions (Allebeck et al., 1988).

Addressing the escalating mental health concerns, the government has implemented initiatives such as the National Mental Health Programme (NMHP) and the District Mental Health Programme (DMHP). These programs endeavour to deliver a range of services, including suicide prevention, life skills training, and counselling in educational institutions such as schools and colleges. Additionally, it seeks to offer mental health services encompassing prevention, promotion, and long-term continuing care at various levels within the district healthcare delivery system. The program also aims to foster community awareness and participation in the effective delivery of mental healthcare services (Ministry of Home Affairs, 2022). A comprehensive National Suicide Prevention Strategy unveiled in 2022 outlines a target of achieving a 10% reduction in suicide mortality rates across India by 2030 (Ministry of Health and Family Welfare, 2023).

To tackle the rising issue of self-harm and suicide among students, the Ministry of Education introduced the UMMEED guidelines. The primary focus of these guidelines is to enhance sensitivity, comprehension, and assistance in instances of distress. A key recommendation involves the formation of a School Wellness Team tasked with identifying students in vulnerable situations, promptly addressing their needs, and offering the necessary support. The guidelines endorse the eradication of detrimental notions, including the comparison of students with their peers, viewing failure as permanent, and exclusively associating success with academic achievements. Additionally, the guidelines

propose tangible measures such as securing vacant classrooms, enhancing lighting in dimly lit corridors, and maintaining well-groomed gardens and outdoor spaces (Department of School Education & Literacy, 2023).

Research underscores the role of self-compassion in helping students cope with academic failure adaptively. It enables individuals to perceive instances of failure objectively, preventing the distortion of perspective caused by excessive self-criticism and isolation (Neff et al., 2005).

While the NCRB data provides several valuable insights regarding student suicides and suicides due to failure in examination, it is crucial to acknowledge the limitations of the available data.

Initially, the NCRB reported data only for males and females. The transgender category has been included in the reports from the year 2014. However, it is possible that the number of suicides by transgender students is either underreported or misclassified as per their biological sex, considering the near-zero entries in the category over ten years. This may lead to an incomplete understanding of the true prevalence of suicides within the transgender population. Unlike the US Center for Disease Control and Prevention (CDC), the NCRB does not provide data on suicidal ideation or attempted suicide currently. The lack of such essential data pieces may hamper a thorough examination of suicide-related trends and patterns across different demographic groups.

Furthermore, an operational definition of a student is not available in the report by NCRB. The reports published after 2015 do not include a profession-wise classification for the mega-cities. Hence, it is difficult to examine the prevalence of suicide cases among students in different cities. This poses a limitation in interpreting and comparing data related to the student population.

Additionally, the NCRB does not provide a categorisation of student suicides based on specific causes. This poses a serious hindrance to understanding what are the factors contributing to the rise in student suicides. It also makes it difficult to design effective interventions to prevent student suicides since there is a lack of clarity about the underlying reasons for the same.

The current archival data by NCRB provides data only for mega-cities in the Indian states. The data for rural areas is not available.

Since the current study relies solely on the data available on the NCRB portal, the limitations of the NCRB data listed above are also applicable to the study. Future research can explore the topic further by using multiple sources of data, including, media reports, or primary data collected from local police records or surveys. A comparative analysis of the prevalence of suicide among students and suicides due to educational failure in different states of India and other countries can also aid in enhancing the collective understanding of this problem. Research can also compare the strategies implemented by different countries to prevent students from committing suicide.

Conclusion

The rising number of student suicides in the country is a topic of grave concern. While a few studies have attempted to capture different aspects of this issue, the numbers emerging in the state of Maharashtra require more attention. The current study is a modest attempt at highlighting the severity of the issue by depicting the alarming speed at which the incidence of suicides has been increasing in the state. The study also tries to highlight the importance of equipping students with the ability to cope with failure so that such preventable tragedies as students ending their lives due to failure in an examination can be reduced.

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