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University student suicides in Türkiye: Insights from two decades of media reports

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Abstract

University student suicides have emerged as a significant societal concern, reflecting challenges inherent in the transition to adulthood and academic pressures. This study aims to analyze two decades of national media coverage on university student suicides in Türkiye, examining demographic trends, suicide methods, and social factors implicated in these tragic incidents. A comprehensive scan of Turkish national media archives from January 1, 2004, to December 31, 2023, identified 213 unique reports of university student suicides. Data extracted included age, sex, year of incident, prior suicide attempts, geographic distribution, housing status, academic major, psychiatric history, social background, suicide method, and presence of suicide notes or social media posts. Statistical analyses utilized *Fisher's* Exact Test and *Pearson's* Chi-square to examine categorical data. Male students accounted for 61.6% (n=125) of reported suicides, with a mean age of 22.2 years (SD=3.05). The most common suicide method was jumping from height, differing by sex, with hanging prevalent among males and jumping more frequent among females. Mobbing emerged as a predominant social stressor implicated in suicide incidents, surpassing other factors reported in the literature. The findings highlight an alarming increase in media-reported university student suicides, predominantly affecting males and characterized by distinct suicide methods. The pervasive impact of mobbing underscores the urgent need for targeted interventions addressing social stressors, alongside comprehensive medical, psychological, social, and economic support systems within academic settings. Efforts should prioritize proactive mental health initiatives, policy reforms, and community-based interventions to mitigate suicide risks among university students.

Keywords: University students, suicide, mobbing, media analysis

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Introduction

According to WHO numbers, more than 700,000 individuals die by suicide each year, making it the fourth leading cause of death among those aged 15 to 29 years [1]. In Türkiye, TurkStat data indicates that the crude suicide rate increased from 1.48 per 100,000 in 2002 to 3.03 per 100,000 in 2022, with the highest prevalence among individuals aged 15 to 29 years, demographic data that includes many higher education students [2]. University students encounter numerous challenges during their educational journey, including loss of social support, loneliness, social isolation, academic pressures, financial difficulties, and housing issues as they adapt to a new environment [3,4]. This transitional period from adolescence to adulthood creates a vulnerability to psychiatric disorders, alcohol and substance use, abuse, and addiction, and suicidal behavior [5,6]. Various studies have reported an increase in suicide risk factors among university students, such as psychological disorders, alcohol and drug use, and social isolation/loneliness, in recent years [7,8]. In Türkiye, the significant increase in the number of immigrant students and the impact of macroeconomic factors have contributed to a rise in the number of students lacking socioeconomic resources to meet basic daily needs, accommodation in particular. This situation has become a stressor for students and has drawn attention from both society and academic circles [9-12]. Over the past century, the incidence of student suicides, the causes behind them, and preventive measures have been extensively discussed in the literature [13-16]. Research on this topic has been growing, driven by the need for researchers to address incidents occurring in their vicinity and due to the frequent media coverage of student suicides [17,18]. Recent studies have also reported an increase in the frequency of suicides among university students [19,20]. In Türkiye, nationwide suicide statistics for university students are not maintained. Recent publications from Türkiye have focused on examining suicide risk factors and perspectives within specific university student samples [21–23]. However, real-time data on university student suicides remain scarce in the literature. This study aims to fill this gap by examining national media reports on university student suicides in Türkiye and discussing the data obtained in light of existing literature. By analyzing media reports from 01/01/2004 to 31/12/2023, this study seeks to uncover trends, contributing factors, and potential preventive measures for university student suicides in Türkiye.

Materials and Methods

This study examined news reports of university student suicides in the national media of Türkiye from 01/01/2004 to 31/12/2023. The data collection was performed using Google News and Inoreader software. After filtering out irrelevant and duplicate reports within the specified time frame, a total of 213 news articles were identified, each reporting a case of university student suicide. In order to be able to compare with national data, data on suicides at the national level, data on crude suicide rates and data on the number of suicides between the ages of 15-29 were obtained from TurkStat death statistics metadata spreadsheets [2]. Data on the total number of university students and the number of students by geographical regions were obtained from the metadata spreadsheets in the Turkish Higher Education Institution statistical database [24]. Since the data used in the study were taken from publicly available online websites, there was no need for ethics committee approval for the study. For each reported case, the following variables were recorded: age, sex, year of suicide, presence of prior suicide attempts, geographic region, employment status, accommodation type, academic major, psychiatric background, social background, suicide method, and the presence of a suicide note or social media post. Frequency and percentage analyses were conducted on these variables to identify trends and patterns. To analyze categorical data regarding psychiatric background, social background, and accommodation, *Fisher's* Exact Test was employed. *Pearson's* Chi-square test was used to examine differences in suicide methods and the presence of suicide notes or social media posts. All statistical analyses were conducted using Jamovi v2.4 [25].

Results

Between 2004 and 2023, a total of 213 news reports about university student suicides were published in the Turkish national media. Information about sex was available for 203 of these cases, revealing that 61.6% (n=125) were male and 38.4% (n=78) were female. The ages of 199 cases ranged from 18 to 35 years, with a mean age of 22.2 years (SD = 3.05). Detailed information on sex, employment, accommodation, major, psychiatric background, social background, suicide method, and the presence of a suicide note or social media post for the cases included in the study is presented in Table 1.

Upon examining the accommodation status of the cases, it was observed that the most common type of accommodation was living in one's own flat, reported in 49 cases. When

Table 1. Frequencies of sex, employment, accommodation, major, psychiatric background, social background, suicide method and presence of suicide note or social media post.

			Number	Percent
Sex		*Male*	125	61.6%
		Female	78	38.4%
		No data	10	0.5%
Employment		*Yes*	6	2.8%
		Not specified	207	97.2%
Accommodation		*Parental house*	30	19.5%
		Own flat	50	32.9%
		Shared flat	23	14.9%
		Foundation/Private dormitory	7	4.5%
		State/University dormitory	44	28.6%
		No data	59	27.7%
Major	**Graduate**	*Social Sciences*	45	25.3%
		Health Sciences	37	20.8%
		Engineering	31	17.4%
		Educational Sciences	19	10.7%
		Arts and Humanities	7	3.9%
		Law	6	3.4%
		Science and Mathematics	3	1.7%
		Philology	2	1.1%
		Others	12	6.7%
	Post-graduate	*MSc*	5	2.8%
		PhD	11	6.2%
Psychiatric Background		*None*	156	73.2%
		Mood disorders	47	22.1%
		Psychotic disorders	2	0.9%
		Drug use	8	3.8%
Social Background		*None*	150	70.4%
		Financial problems	8	3.8%
		Partner/spouse-related problems	10	4.7%
		Mobbing/academic pressure	23	10.8%
		Loss of a relative	1	0.5%
		Parental issues	4	1.9%
		Other	17	8%
Suicide Method		*Jumping from height*	81	40.9%
		Hanging	76	38.4%
		Intoxication	20	10.1%
		Firearm	12	6.1%
		Stab wound	1	0.5%
		*Complex**	1	0.5%
		Other	7	3.5%
		No data	15	7%
Suicide Note/Post		*No/No data*	174	81.7%
		Yes	39	18.3%

* Complex suicide was committed by jumping from height following left wrist incision.

this data was evaluated according to sex, the most common accommodation for male cases was their own flat, whereas for female cases, it was their parental home. The information about psychiatric background, prior suicide attempt, social background, accommodation and presence of suicide note or social media post by sex is shown in Table 2.

The most common method of suicide among university students was observed to be jumping from a height, followed by hanging. Notably, hanging was the predominant method among male students, whereas jumping from an elevated height was more commonly chosen by female students.

The highest number of suicides was recorded between 2014 and 2018. Detailed data on the suicide methods used within five-year intervals are presented in Table 3. The distribution of suicide methods according to sex is illustrated in Figure 1.

Analysis of cases according to geographical regions revealed that the Marmara region had the highest number of reported suicides, while the Southeastern part of country had the fewest. Specifically, the highest number of male suicides occurred in the Marmara region (n=28, 20%), and for female suicides, the Marmara and Aegean regions were the most common (n=16, 20.5%) (Figure 2).

Table 2. Psychiatric background, social background, accommodation, suicide method, presence of suicide notes or social media posts of cases.

		Male	Female	Total	*p*
Psychiatric background	*Mood disorders*	30	17	47	
	Psychotic disorders	0	2	2	0.421*
	Drug use	5	3	8	
Prior suicide attempt		3	2	5	0.942*
Social background	*Financial problems*	4	4	8	
	Partner/spouse-related problems	7	3	10	
	Mobbing/academic pressure	11	12	23	0.077*
	Relative loss	1	0	1	
	Parental issues	0	4	4	
	Other	12	4	16	
Accommodation	*Parental house*	16	13	29	
	Own flat	38	11	49	
	Shared flat	12	10	22	0.037**
	Foundation/private dormitory	4	2	6	
	State/University dormitory	20	23	43	
Suicide note/post	*Yes*	23	14	37	0.935**
	No	102	64	166	

* Fisher's exact test. ** Pearson's Chi-square test.

Table 3. Suicide methods by 5-year intervals.*

Years	Hanging	Jumping from height	Intoxication	Firearm	Other	Stab wound	Complex	Total
2019-2023	25	26	10	2	2	0	0	65
2014-2018	26	33	7	7	4	0	1	78
2009-2013	21	16	3	0	1	1	0	42
2004-2008	4	6	0	3	0	0	0	13
Total	76	81	20	12	7	1	1	198

*p=0.181 (Fisher's exact test)

Table 4 presents data on student suicide rates and total university enrollment by geographic region and year.

Higher education enrollment steadily increased between 2004 and 2021 but relatively declined in 2022 and 2023. Figure 3 illustrates the mean number of university student suicides along with the enrollment across seven geographic regions from 2004 to 2023.

Crude suicide rates among university students

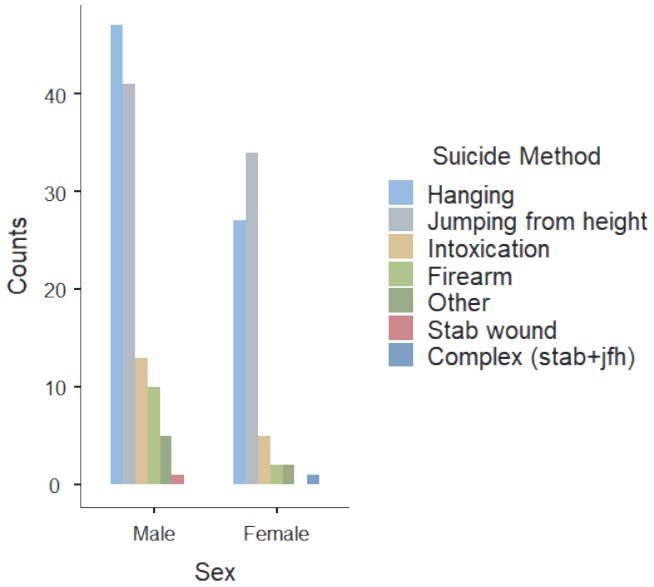

Figure 1. Suicide methods by sex.

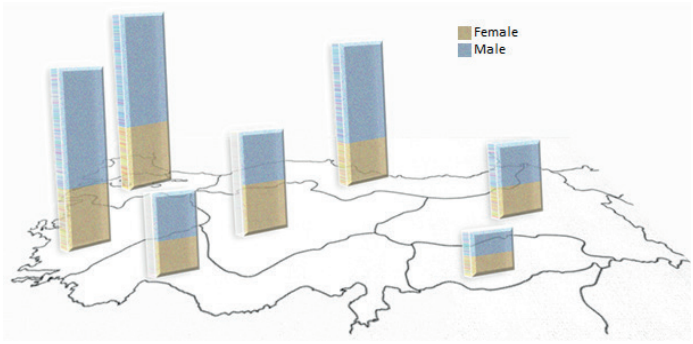

Figure 2. Male and female total suicide numbers illustration according to geographic regions.

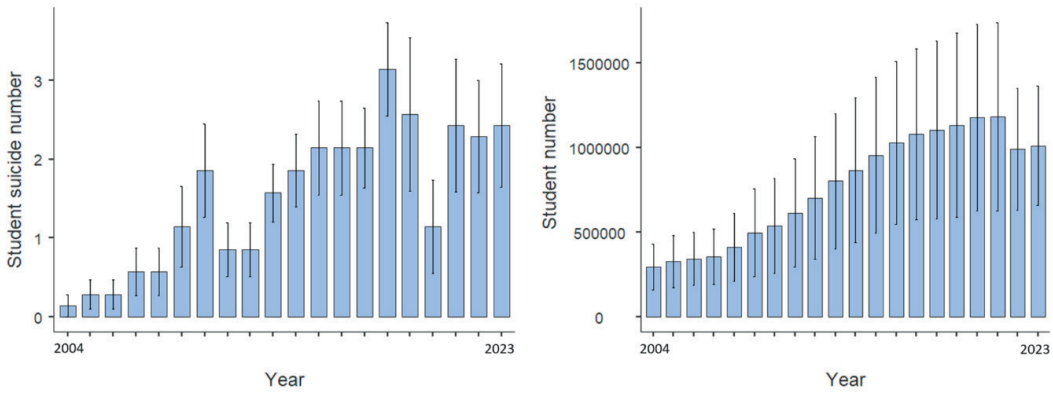

Figure 3. The mean number of university students committed suicide in seven geographical regions (left) and the mean number of university student enrollments in seven geographical regions (right) by years between 2004 and 2023.

Table 4. Suicide and student numbers by years and geographic regions (MM: Marmara region, BS: Black Sea region, EA: East Anatolia region, SE: Southeast Anatolia region, MT: Mediterranean region, A: Aegean region, CA: Central Anatolia region).

Year	MM suicide number	MM student number	BS suicide number	BS student number	EA suicide number	EA student number	SE suicide number	SE student number	MT suicide number	MT student number	A suicide number	A student number	CA suicide number	CA student number	Total suicide number	Total student number
2004	0	411,525	0	118,578	1	100,425	0	36,980	0	129,899	0	198,179	1	1,067,310	2	1,709,159
2005	0	453,503	0	129,728	0	107,702	0	40,500	1	144,607	1	223,602	0	1,199,779	2	1,905,591
2006	0	468,629	1	150,202	0	108,843	0	44,096	0	151,109	0	239,321	1	1,245,130	2	1,973,711
2007	2	492,281	0	158,028	0	108,774	0	45,803	1	157,615	1	246,661	1	1,275,632	5	2,034,302
2008	3	534,767	1	176,999	1	114,464	0	54,264	1	171,363	0	266,626	1	1,558,295	7	2,378,889
2009	1	589,435	1	198,538	2	133,332	0	69,214	0	190,140	3	289,490	4	2,010,094	11	2,923,001
2010	3	623,608	0	222,682	0	152,216	0	82,817	1	203,322	3	298,460	2	2,185,107	9	3,164,253
2011	1	715,841	0	265,493	0	181,301	0	100,376	1	229,933	1	331,944	0	2,478,662	3	3,605,737
2012	2	823,787	1	307,983	2	218,216	3	120,580	0	260,166	2	372,224	2	2,820,984	12	4,123,153
2013	2	975,878	2	369,376	3	271,302	0	145,443	1	295,209	3	428,918	0	3,132,953	11	4,675,342
2014	3	1,074,919	4	392,991	1	345,540	1	155,849	0	311,016	3	439,002	1	3,343,569	13	5,075,044
2015	2	1,223,702	4	439,238	3	411,015	1	173,162	2	347,807	4	481,874	1	3,612,387	17	5,594,911
2016	3	1,368,614	3	481,305	0	495,439	0	176,644	2	385,655	2	507,562	2	3,783,768	12	6,033,476
2017	4	1,428,782	2	498,279	2	561,926	1	180,362	4	399,232	3	518,354	2	3,973,436	18	6,363,376
2018	2	1,468,963	6	481,813	1	616,288	3	177,883	3	381,556	3	485,034	2	4,128,965	20	6,595,772
2019	6	1,555,145	4	465,993	2	657,787	1	179,400	0	369,857	5	478,438	0	4,233,513	18	6,816,302
2020	3	1,730,681	1	467,611	0	723,288	0	183,489	0	372,934	3	480,958	0	4,282,036	7	7,108,939
2021	6	1,734,494	1	452,926	3	773,069	2	186,157	3	364,916	5	465,079	1	4,320,318	21	7,192,797
2022	3	1,915,782	1	479,813	0	740,734	0	205,259	0	387,542	4	489,891	2	2,731,121	10	5,775,179
2023	2	2,009,618	4	497,613	0	817,684	0	217,192	1	393,540	1	499,606	4	2,646,036	12	5,866,878

were calculated annually. The mean rate was 0.189 per 100,000 students (SD = ±0.071), significantly lower than the national mean of 4.198 per 100,000 (SD = 0.344). A detailed comparison of university and national suicide rates is presented in Supplementary Table 1 and Supplementary Figure 1, based on TurkStat death statistics [2].

Supplementary Table 2 and 3 provide detailed annual counts of university student suicides by geographic region.

Discussion

Student suicides not only provoke profound societal indignation due to the loss of young and promising individuals, but they also receive considerable attention in academic literature, reflecting the academic community's inability to remain indifferent to such tragic events. For forensic medicine specialists, the experience of attending autopsies of students, or even encountering their own students on the autopsy table due to suicide, as experienced by one of the authors of this article, can have profoundly negative effects. Despite the absence of comprehensive data on university student suicides in Türkiye, recent media reports indicate an increase in these incidents [26]. To investigate this trend over the past two decades, this study analyzed media reports. A potential explanation for the observed rise is the substantial growth in higher education enrollment. Between 2014 and 2023, the number of university students surged by 5.12 times, from 1,383,232 to 7,081,289 [24]. Examining the geographical distribution of the cases reveals a higher incidence in the western and northern regions of Türkiye, where the student population density is greater, corresponding to the higher concentration of universities and students. Conversely, the number of cases is lower in the eastern and southeastern regions, where the student population is relatively smaller. When Table 4 is examined carefully, we see that this situation is not only valid for the Central Anatolia region. It is seen that the number of students is relatively higher in the Central Anatolia region compared to other regions. The probable reason for this situation is that distance education and national open education programs are mainly offered at universities in this region. Therefore, although the number of students in the region seems high, the majority of these students live in other geographic regions and are likely recorded in news articles as a student suicide from their region of residence. When analyzing the sex distribution of the cases, a predominance of male cases is evident, which aligns with existing literature. It has been consistently reported that males have a higher incidence of suicide in the general population and that this trend extends to university students, increasing their relative risk of suicide [2,27–29]**.** Numerous studies have demonstrated that male sex has been predominant in university student suicides over the years [20,27–30]. Cheng et al. [30] attributed the higher incidence of male suicides among university students to greater financial and social pressures faced by male graduate students. However, in our study, financial problems were not identified as a significant factor in the predominance of male suicides, given that the number of male and female cases citing financial issues was equal. A study dealing with medical student suicides reported in media news in Bangladesh [31] a higher prevalence of female cases, which contradicted the broader literature and was attributed to the higher overall suicide rate among females in the country. However, in a subsequent study from the same research center, encompassing all students and using a similar methodology, the predominance of male suicides was observed, consistent with global trends but not with local literature [32]. Although studies have indicated an increased risk of suicide among university students during the COVID-19 pandemic [33], our study results revealed a decrease in suicides between 2019 and 2023, a period that includes the pandemic, with no significant difference compared to the preceding five years. One possible explanation for this decline could be the shift to remote education during the pandemic. Students who spent extended periods with their families likely benefited from increased social support, which has been shown to reduce the risk of suicide [34]. While our study found that many students lived alone in their own flats, which aligns with this perspective, it also noted that female students

generally lived with their families, contradicting this viewpoint. When evaluating the national suicide statistics and local literature, approximately half of the suicide cases in our country involve individuals living alone [35]. Kaggwa et al. [20] found that suicide is more prevalent among students living alone in Uganda. In contrast, the majority of cases in our study did not live alone, yet there were notable differences in the suicide methods among those who had. It has been reported that the most common method of suicide in our country, for both sexes, is hanging, with jumping from heights being the third most common method [35,36]**.** Similarly, numerous studies from other countries have found that hanging is the most prevalent method of suicide among students [14,20,27,31,32]. In our study, however, jumping from heights emerged as the most common method of suicide, regardless of sex. Among male cases, hanging was the most common method, which is consistent with the literature. This could be related to the high prevalence of men living in their own flats. While hanging was the preferred method among male cases who could complete their act of suicide without being seen or interrupted, jumping from heights was more common among male cases who shared their living environment with others and among female cases, which contradicts the existing literature. It is well-known that individuals who commit suicide seek out a private place to carry out their actions without interruption [20]. This might explain the higher number of men living in their own flats in our study. Suicide by firearms is prominently highlighted in studies conducted in the United States, where access to firearms among students is considered a significant risk factor [14,18]. In our country, however, the relative difficulty and expense of accessing firearms, coupled with restrictions preventing firearms from being carried into places such as universities, hospitals, dormitories, and shopping malls, have relegated firearms to the fourth most common method of suicide. Despite these measures, the finding that 12 cases still involved accessible firearms underscores the ongoing challenge of addressing individual firearm access issues. Emotional distress from various sources can precipitate suicidal behavior, a common risk factor among students [37,38]. Numerous psychological stressors such as mental illnesses, academic pressures, financial difficulties, and interpersonal conflicts have been identified in different studies as contributors to student suicides [20,30–32,34,38]. Consistent with existing literature, mood disorders were documented in 47 cases (22.07%) in our study, prominently featured in news reports as the leading psychiatric factor associated with suicide. Notably, mobbing/academic pressure emerged as the most prevalent social stressor in our findings, in consistency with other studies where academic stressors typically predominate. For instance, a study from Taiwan highlighted pervasive academic stressors among students [38], while Mamun et al.'s study [32] reported academic reasons as the second most common cause of student suicides in Bangladesh, following romantic relationship issues. In our study, mobbing —an often-overlooked aspect of academic life— was implicated more frequently in suicide cases than any other social factor reported in the media. While academic pressure is listed among the factors for suicide in a suicide news article, it can be seen that mobbing is suggested instead of academic pressure in another media outlet's news article about the same suicide case. As a result, no distinction could be made between mobbing and academic pressure, and both were reported in our study as a single component. However, it has been noted that mobbing is not covered in other research in the literature, and the term is used more commonly in our country. This disparity may stem from underreporting or insufficient recognition of mobbing among other academic stressors. Conversely, romantic relationship problems, which typically rank highest in similar studies, were identified as the second most common social factor in our findings [30,32]. However, cultural differences may explain why these issues were reported more frequently among male cases in our study, contrasting with findings from Bangladesh where they are more prevalent among females [32]. In addition, although no statistically significant difference was observed between genders, another important finding in our study was that mobbing and academic pressure were proportionally

higher in female cases. In terms of crude suicide rates, different numbers emerge in different parts of the world. In fact, in the "big ten" study conducted in the USA, the crude suicide rate varied between 3.1 and 16.3 per hundred thousand students at different universities [39]. Some of these rates were determined to be higher than the crude suicide rate of the population, and some were lower. A primary limitation of this study is its reliance on news reports, which may lack comprehensive details for individual cases, potentially leading to information gaps. While studies on medical students often report higher crude suicide rates compared to the general population, variations exist both between countries and across studies [40]. For instance, a British study found student suicide rates to be half the national average [28], contrasting with our findings of rates as low as one-fortieth in some years (Supplementary Table 1 and Supplementary Figure 1). These discrepancies likely stem from methodological challenges. While annual student population data is accessible [24], there is no centralized registry for student suicides. Furthermore, incidents in smaller localities may escape national media coverage, and suicides occurring during holidays or outside student residences might be misclassified. Consequently, the calculated crude suicide rates should be interpreted with caution. The paucity of data on student suicides necessitates the development of robust data collection methodologies to improve accuracy and reliability. It is evident that many student suicides remain unreported, emphasizing the need for a comprehensive recording and tracking system.

Conclusion

Recent years have witnessed a concerning rise in media reports on university student suicides. Our study revealed several critical insights: predominantly, male university students were more vulnerable to suicide, with jumping from height being the most frequent method. Significant sex disparities were observed in suicide methods, and mobbing emerged as the predominant contributing factor. Efforts to mitigate student suicides have long been advocated for the establishment of comprehensive support units within universities, alongside proactive suicide prevention strategies [17,18,34,41]. However, our study underscores the urgent need to prioritize combating mobbing alongside providing robust medical, social, economic, and psychological support. Addressing mobbing as a primary concern can potentially mitigate its devastating impact on student mental health and well-being. In order to tackle related challenges effectively, well-managed efforts are needed across multiple fronts as in society, politics and educational policies, and in academic community. It is imperative for society to foster an environment that promotes mental health awareness and supports vulnerable student populations. Public awareness campaigns should highlight the signs of distress and promote destigmatization of seeking help for mental health issues. Community support networks should be strengthened to provide immediate assistance to students in crisis, emphasizing the importance of early intervention and peer support. Authorities must prioritize mental health as a national health issue. Legislation should be enacted or enhanced to mandate mental health services and suicide prevention programs within educational institutions. Funding allocations should prioritize research into effective prevention strategies and the establishment of comprehensive mental health support systems on campuses. Policies should also address socioeconomic factors contributing to student stress, such as financial insecurity and housing instability. Universities and colleges play a pivotal role in the mental well-being of their students. It is imperative for academic institutions to establish dedicated mental health units staffed with trained professionals. These units should offer accessible and confidential counseling services, crisis intervention, and proactive mental health education programs. Academic policies should be reviewed to reduce academic stressors and create a supportive learning environment that prioritizes student well-being alongside academic achievement. In conclusion, while efforts to combat student suicides have historically focused on reactive measures, such as crisis response and counseling, our study underscores the critical need for proactive, multifaceted approaches. By addressing societal

attitudes, implementing robust policies, and enhancing support within academic settings, we can collectively work towards reducing the incidence of student suicides and fostering a healthier, more resilient student population.

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Conflict of interest

There is no conflict of interest between the authors concerning the materials or methods used in this study or the findings specified in this paper.

References

1. WHO (2024, June 6). Fact Sheets - Suicide; 2023 (Web page). Retrieved from: https://www.who.int/news-room/fact-sheets/detail/suicide. (accessed: 21.09.2024)
2. TurkStat (2024, June 20). Death and Cause of Death Statistics, 2023 (Web page). Retrieved from: https://data.tuik.gov.tr/Bulten/Index?p=Olum-ve-Olum-Nedeni-Istatistikleri-2023-53709. (accessed: 21.09.2024)
3. Oh HY, Marinovich C, Jay S, Zhou S, Kim, JHJ. Abuse and suicide risk among college students in the United States: Findings from the 2019 Healthy Minds Study. J Affect Disord. 2021;282:554-60. doi: 10.1016/j.jad.2020.12.140.
4. Donat A, Bilgic B, Eskiocak A, Kosar D. Problems of university students and suggestions for solutions. J High Educ Sci. 2019;9(3):451. doi: 10.5961/jhes.2019.345.
5. Twenge JM, Cooper AB, Joiner TE, Duffy ME, Binau SG. Age, period, and cohort trends in mood disorder indicators and suicide-related outcomes in a nationally representative dataset, 2005–2017. J Abnorm Psychol. 2019;128(3):185-99. doi: 10.1037/abn0000410.
6. Rowe CA, Walker KL, Britton PC, Hirsch JK. The relationship between negative life events and suicidal behavior. Crisis. 2013;34:233-41. doi: 10.1027/0227-5910/a000173.
7. Eisenberg D. Countering the troubling increase in mental health symptoms among U.S. college students. J Adolesc Heal. 2019;65(5):573-4. doi: 10.1016/j.jadohealth.2019.08.003.
8. Lipson SK, Lattie EG, Eisenberg D. Increased rates of mental health service utilization by U.S. college students: 10-Year population-level trends (2007–2017). Psychiatr Serv. 2019;70(1):60-3. doi: 10.1176/appi.ps.201800332.
9. Savran-Penpecioğlu S. Housing issue of college students: Reinterpreting urban spatial practices through strategies and tactic [in Turkish]. Kent Akad. 2024;17(2):494-513. doi: 10.35674/kent.1412620.
10. Doğan H, Akçalı G. An analysis on socio-economic problems of university students [in Turkish]. J Univ Res. 2021;4(3):309-16. doi: 10.32329/uad.903559.
11. Dere İ, Demirci E. Problems of migrant students in education in Türkiye [in Turkish]. Humanitas. 2023;11(INCSOS VIII):108-35. doi: 10.20304/humanitas.1239654.
12. Karadirek G, Kara MA. The effect of national and organizational culture on sociocultural and academic adaptation of foreign nationality students [in Turkish]. AEUSBED. 2021;7(3):1046-65. doi: 10.31592/aeusbed.808620.
13. Carpenter RG. Statistical analysis of suicide and other mortality rates of students. J Epidemiol Community Heal. 1959;13(4):163-74. doi: 10.1136/jech.13.4.163.
14. Schwartz AJ. Rate, relative risk, and method of suicide by students at 4-year colleges and universities in the United States, 2004-2005 through 2008-2009. Suicide Life-Threatening Behav. 2011;41(4):353-71. doi: 10.1111/j.1943-278X.2011.00034.x.
15. Schwartz AJ. Four eras of study of college student suicide in the United States: 1920-2004. J Am Coll Heal. 2006;54(6):353-66. doi: 10.3200/JACH.54.6.353-366.
16. Westefeld JS, Furr SR. Suicide and depression among college students. Prof Psychol Res Pract. 1987;18(2):119-23. doi: 10.1037/0735-7028.18.2.119.
17. Haas AP, Hendin H, Mann JJ. Suicide in college students. Am Behav Sci. 2003;46(9):1224-40. doi: 10.1177/0002764202250666.
18. Schwartz LJ, Friedman HA. College student suicide. J College Stud Psychother. 2009;23(2):78-102. doi: 10.1080/87568220902743058.
19. Fuse-Nagase Y, Marutani T, Tachikawa H, Iwami T, Yamamoto Y, Moriyama T, et al. Increase in

suicide rates among undergraduate students in Japanese National Universities during the COVID-19 pandemic. Psychiatry Clin Neurosci. 2021;75(11):351-2. doi: 10.1111/pcn.13293.

20. Kaggwa MM, Muwanguzi M, Nduhuura E, Kajjimu J, Arinaitwe I, Kule M, et al. Suicide among Ugandan university students: Evidence from media reports for 2010–2020. BJPsych Int. 2021;18(3):63-7. doi: 10.1192/bji.2021.13.
21. Emir Öksüz E, Bilge F. Examining the suicide probability among university students. Educ Sci. 2014;39(171):407-20.
22. Öztürk A. Evaluation Of suicide knowledge level and stigma attitudes towards people who committed suicide in university students. J Psychiatr Nurs. 2018;9(2). doi: 10.14744/phd.2018.49389.
23. Arslantaş H, Adana F, Harlak H, Eskin M. Suicidal behaviour attitudes among nursing and midwifery students [in Turkish]. Yeni Symposium. 2019;57(2):6-12 doi: 10.5455/NYS.20190215102533.
24. YÖK (2024, May 8). Yükseköğretim İstatistikleri (Web page). Retrieved from: https://istatistik.yok.gov.tr/ (accessed: 29.09.2024)
25. The jamovi project, Jamovi (Version 2.4) 2023.
26. ANKA (2024, May 8). Üniversite Öğrencisi İntiharları TBMM Gündeminde (Web page). Retrieved from: https://www.cumhuriyet.com.tr/siyaset/universite-ogrencisi-intiharlari-tbmm-gundeminde-2133251 (accessed: 21.09.2024)
27. Collins IP, Paykel ES. Suicide amongst Cambridge University students 1970-1996. Soc Psychiatr Epidemiol. 2000;35:128-32. doi: 10.1007/s001270050195.
28. Gunnell D, Caul S, Appleby L, John A, Hawton K. The incidence of suicide in university students in England and Wales 2000/2001–2016/2017: Record Linkage Study. J Affect Disord. 2020;261:113-20. doi: 10.1016/j.jad.2019.09.079.
29. Schwartz AJ. College student suicide in the United States: 1990-1991 through 2003-2004. J Am Coll Heal. 2006;54(6):341-52. doi: 10.3200/JACH.54.6.341-352.
30. Cheng Y, Zhang XM, Ye SY, Jin HM, Yang XH. Suicide in Chinese graduate students: A review from 2000 to 2019. Front Psychiatry 2020;11:579475. doi: 10.3389/fpsyt.2020.579745.
31. Mamun MA, Misti JM, Griffiths MD. Suicide of Bangladeshi medical students: Risk factor trends based on Bangladeshi press reports. Asian J Psychiatr. 2020;48:101905. doi: 10.1016/j.ajp.2019.101905.
32. Mamun MA, Siddique AB, Sikder MT, Griffiths MD. Student suicide risk and gender: A retrospective study from Bangladeshi press reports. Int J Ment Health Addict. 2022;20:1438-45. doi: 10.1007/s11469-020-00267-3.
33. Brailovskaia J, Teismann T, Friedrich S, Schneider S, Margraf J. Suicide ideation during the COVID-19 outbreak in German university students: Comparison with pre-COVID-19 rates. J Affect Disord Reports. 2021;6:100228. doi: 10.1016/j.jadr.2021.100228.
34. Chu H, Yang Y, Zhou J, Wang W, Qiu X, Yang X, et al. Social support and suicide risk among Chinese university students: A mental health perspective. Front Public Heal. 2021;9:566993. doi: 10.3389/fpubh.2021.566993.
35. Yıldırım E, Öztürk M. The crude incidence rate of suicide and related factors in Turkey between 2009 and 2018 [in Turkish]. J DEU Med. 2021;35(1):23-32. doi: 10.5505/deutfd.2021.52385.
36. Demircan T, Karbeyaz K. Psychological autopsy in comleted suicide case [in Turkish]. Osmangazi J Med. 2021;44(4):593-600, doi: 10.20515/otd.1022534.
37. Owusu-Ansah FE, Addae AA, Peasah BO, Oppong-Asante K, Osafo J. Suicide among university Ssudents: Prevalence, risks and protective factors. Heal Psychol Behav Med. 2020;8(1):220-33. doi: 10.1080/21642850.2020.1766978.
38. Anny Chen LY, Wu CY, Lee MB, Yang LT. Suicide and associated psychosocial correlates among university students in Taiwan: A mixed-methods study. J Formos Med Assoc. 2020;119(5):957-67. doi: 10.1016/j.jfma.2020.01.012.
39. Silverman MM, Meyer PM, Sloane F, Raffel M, Pratt DM. The big ten student suicide study: A 10-year study of suicides on midwestern university campuses. Suicide life. Threat Behav. 1997;27(3):285-303. doi: 10.1111/j.1943-278x.1997.tb00411.x.
40. Blacker CJ, Lewis CP, Swintak CC, Bostwick JM, Rackley SJ. Medical student suicide rates: A systematic review of the historical and international literature. Acad Med. 2019;94(2):274-80. doi: 10.1097/ACM.0000000000002430.
41. Allie SLN, Bantjes J, Andriessen K. Suicide postvention for staff and students on university campuses: A scoping review. BMJ Open. 2023;13(6):068730. doi: 10.1136/bmjopen-2022-068730.