Suicidal Ideation Percentage among University Students in Bangladesh

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ABSTRACT: *In recent years suicide among university students is increasing. In this survey, we have got very important data about the level of mental health issues especially the percentage of suicidal ideation among students. A very strong correlation between the gender of the students and the level of mental health issues was found. The age range was narrow so there was no significant correlation with the level of mental health issues. The percentage of suicidal ideation was found 14.5 on average. 12.4% of Male students had suicidal ideation and 17.3% of female students had suicidal ideation. After analyzing suicidal ideation percentage based on the 8 divisions it was found that students whose home district was in Mymensingh, Dhaka, Chittagong had higher suicidal ideation rates 18%, 17.4%, 15.5% respectively. Those students' home districts were in Rajshahi had the lowest percentage of suicidal ideation or higher suicidal chance. These percentages are very high and this is the reason for the higher number of suicide among Bangladeshi university students. The participants were from various Universities and covers various areas fo this the error rate is much lower than the surveys done in the past. This survey was done before the Coronavirus Pandemic.*

KEYWORDS: *Suicidal ideation, Mental health issues, Suicide, Correlation, Gender.*

INTRODUCTION

Near 800 000 individuals kick the bucket by committing suicide consistently, one individual at 40-sec regular intervals, and for every suicide, there are over 20 suicide endeavors. Suicides and self-destruction endeavors have a gradually expanding influence that impacts families, companions, partners, networks, and social orders. Suicide happens all through life. It is the subsequent driving reason for death among 15-29 years old all-inclusive. It happens in all locales of the world. 79% of worldwide suicides occur in low-and center pay nations but suicides are preventable.

Much should be possible to forestall suicide at the individual, network, and national levels (World Health Organisation, 2016).

While the connection between suicide and mental issue (specifically, melancholy and liquor use issue) is settled, numerous suicides happen incautiously in snapshots of emergency. Further hazard factors incorporate the experience of misfortune, dejection, separation, a relationship separation, money-related issues, ceaseless agony and ailment, brutality, misuse, and strife, or other helpful crises. The most grounded chance factor for suicide is a past suicide endeavor. Suicide ideation is viewed as a significant antecedent to later endeavored and finished suicide (Brent, et al. 1993; Gilli-Planas, et al. 2001; Lewinsohn, et al. 1996; Reinherz, et al. 1995).

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In Bangladesh depression among university students are also high because most of them have to left home for studying and face numerous problems (Mamun, et al. 2019) and suicide has a very significant relation to depression. Depression is the leading cause of suicide. In Bangladesh, the suicide rate is very high (Mashreky, et al. 2013).

Suicide among University students high (Parrish, 1957) and Bangladesh is no exception to this Sayyed Mohmud Ullah, 2019. In this study, we tried to find the percentage of students who have suicide ideation.

Suicide among students in Bangladesh is increasing in this study we have tried to figure out the percentage of students who have suicidal thinking. This study will help to find the students percentage who can commit suicide.

CAUSES OF SUICIDE IDEATION: Suicide ideation has been related to poor psychosocial working (Reinherz, et al. 2006), future burdensome issues (Fergusson, et al. 2005), school dropout (Daniel, et al. 2006), unsafe sexual conduct (Burge, et al. 1995), forceful conduct (Garrison, et al. 1993) and grown-up substance use issue (Fergusson, et al. 2005).

The absence of social help from loved ones is a significant connection between suicide ideation for young people, grown-ups, and undergrads. Social separation and detachment, or "fizzled belongingness," maybe basic effects on suicide conduct. Struggle in parent-kid connections and a few other family-level builds are related with suicide ideation.

Another expected contributory factor for suicide ideation among undergrads is full of feeling dysregulation (Plattner, et al. 2007). Full of feeling dysregulation is set apart by a powerlessness to control feelings suitably and defenselessness to peevishness and negative effect.

CONSEQUENCES OF MENTAL HEALTH ISSUE AND SUICIDAL IDEATION:

- Companions, relatives, personnel, and staff might be by and by influenced out of worry for these understudies.

- Discouragement and nervousness can effectively affect connections and work profitability.

- Suicide and suicide ideation can influence the bigger grounds network.

- Grounds feel the weight when understudies with psychological well-being troubles do ineffectively on course work and drop out of school.

- Schools and colleges must be set up to address the mental effect of suicides on different understudies, just as on educators and staff.

- Poor understudy maintenance can mean misfortunes in educational costs, charges, and graduated class gifts (Kessler, et al. 1995).

Uneasiness and misery contrarily impact scholastic advance and support under-accomplishment. Understudies with a significant level of tension score lower on IQ and accomplishment tests than their friends (Andrews, et al. 2004).

Students are the future of a country, one day they will become the leader and contributor to all sectors for development (Woolhouse, et al. 1999). So, it is clear by finding the student's mental condition which will impact them in the future can also give an idea about the fate of a country (Community Colleges, 2013). This study is based on Bangladesh perspective.

METHODS

PROCEDURE AND PARTICIPANTS: This survey was performed in two forms one was paper-based and another one was an online survey by using Google form. Data was collected from various universities from November 22, 2019, to 10 February 2020 in Bangladesh. Dhaka University, Bangladesh University of Engineering and Technology, Bangladesh Agricultural University, Khulna University Of Engineering & Technology, Khulna University, National University, Daffodil International University, Ahsanullah University of Science and Technology, Jashore University of Science and Technology, East-West University, Shaheed Tajuddin Ahmad Medical College, BRAC University, etc from these university data was collected through online by posting the survey link in students groups of respective Universities. The paper-based survey was done in Bangabandhu Sheikh Mujibur Rahman Science & Technology University and in, Bangladesh Agricultural University.

In the form, we collected data about gender, age, educational status, home district, and some symptoms one of them was Self-harming/suicidal thinking.

The sentences were 1. Gloomy attitude, pessimism about the future, feeling of sadness, 2. Feeling sad and in low spirits all the time, and crying a lot, 3. Having no interest in anything, not getting any pleasure out of life, 4. Feeling anxious all the time, 5. Having difficulty concentrating or remembering things, plus difficulty in making decisions, 6. Low self-confidence and self-esteem, withdrawing from family and friends, 7. Being more irritable and impatient than usual, 8. Feeling helpless and hopeless, 9. Feeling guilty, as if everything that goes wrong is their fault, 10. Aggressive/destructive thinking like harming other/killing/crime gestures, 11. Hallucination/Delusions, 12. Lack of energy or feeling tired all the time, 13. Slowness of thought, speech, and activity; apathy; stupor, 14. Restlessness and agitation, 15. Having difficulty sleeping (or sleeping more than usual), 16. Poor appetite, which may lead to weight loss, 17. Smoking and/or drinking more than usual, or using drugs 18. Lack of interest in sex, 19. Unexplained physical aches and pains, 20. Self-harming/suicidal thinking.

We used the total number of marked sentences to find the depression level. For the simplicity, we made four categories

- No issue - If there was two marks or less than two marks

- Mild mental health issue - three to four marked sentences(at least one from each group)

- Significant mental health issue -. more than four marked sentences without the suicidal thinking

- Suicidal Ideation -. The sentence marked with the suicidal thinking (Students also showed multiple other symptoms. They have suicidal ideation when they have significant mental health issues

We were able to collect data from 896 individuals, 672 from the online survey, and 224 from the paper-based survey. Firstly used 640 paper-based survey forms to collect data but able to collect only 224 data, all the expenses were carried by us so we used an online survey to save money. Some forms were missing important information, after discarding those data we got a total of 871 data samples to analyze. 185 of them were first year, 252 of them were the second year, 162 of them were third year, 264 were final year and 8 of them were Masters Student. 502 (57.6%) students were male as shown in Table 1.

STATISTICAL ANALYSIS: IBM SPSS Statistics 23 was used to enter the data.

After entering data in SPSS we got the percentage of, mental health issues among individuals by finding frequencies where variables were Gender and Depression level as shown in Table 2.

After that, we split the data set by gender to find the mental health issues and suicidal ideation percentage separately based on gender as shown in Table 3.

A correlation test was done to see the correlation between Gender and mental health issues and suicidal ideation level among students as shown in Table 4.

From the correlation, it was found that there was a significant relationship between gender and mental health issues and females had a higher mental health issue percentage. Also, females have more suicidal ideation than males. Many studies have proved that females are more vulnerable to suicidal ideation but for a student, these percentages are very high.

Table 1.
Total number of participants in this survey.

Gender	Frequency	Percent (%)	Cumulative Percent (%)
Male	502	57.6	57.6
Female	369	42.4	100
Total	871	100	

Table 2.
Frequency table of Gender and Mental health issues and suicidal ideation.

Mental Health Issue	Frequency of Mental Health Issue	Percent of mental health issue (%)	Valid Percent of mental health issue (%)	Cumulative Percent of mental health issue (%)
No issues	117	13.4	13.4	13.4
Mild issues	284	32.6	32.6	46
Significant issues	344	39.5	39.5	85.5
Suicidal ideation	126	14.5	14.5	100
Total	871	100	100	
From the Frequency table, we got the percentage of the students without mental health issues was 13.4%, with mild mental health issues 32.4%, significant mental health issues 39.4%, and Suicidal ideation 14.5%. These percentages are very unusual in normal conditions				

Table 3.
Frequency table of Gender and Mental health issues and suicidal ideation after data split by gender.

Mental Health Issues	Frequency		Percent (%)		Valid Percent (%)		Cumulative Percent (%)	
	M	F	M	F	M	F	M	F
No issue	79	38	15.7	10.3	15.7	10.3	15.7	10.3
Mild issues	187	97	37.3	26.3	37.3	26.3	53	36.6
Significant issues	174	170	34.7	46.1	34.7	46.1	87.6	82.7
Suicidal Ideation	62	64	12.4	17.3	12.4	17.3	100	100
Total	502	369	100	100	100	100		
In males, the percentages were 15.7% for no mental health issue, 37.3% for mild mental health issues, 34.7% for significant mental health issues, and 12.4% for suicidal ideation. In females 10.3 % had no mental health issue, 26.3% had a mild mental health issue, significant mental health issues 46.1%, and 17.3% had suicidal ideation								

Gender	Correlations	Gender	Mental health issues and suicidal ideation
Gender	Pearson Correlation	1	.148**
	Sig. (2-tailed)	0	0
	N	871	871
Mental health issues and Suicidal ideation	Pearson Correlation	.148**	1
	Sig. (2-tailed)	0	
	N	871	871
**. Correlation is significant at the 0.01 level (2-tailed).(In data 1=male and 2=female was used to input male and female respectively)			

Table 5.
Depression percentage based on Division

Mental health issues	Dhaka	Barisal	Khulna	Mymensingh	Rajshahi	Rangpur	Sylhet	Chittagong
Frequency								
No	31	10	37	11	9	2		17
Mild	82	21	65	14	28	18	6	50
Significant	91	27	86	16	41	20	10	53
Suicidal ideation	43	7	30	9	8	5	2	22
Total	247	65	218	50	86	45	18	142
Percent (%)								
No	12.6	15.4	17	22	10.5	4.4		12
Mild	33.2	32.3	29.8	28	32.6	40	33.3	35.2
Significant	36.8	41.5	39.4	32	47.7	44.4	55.6	37.3
Suicidal ideation	17.4	10.8	13.8	18	9.3	11.1	11.1	15.5
Total	100	100	100	100	100	100	100	100
Students whose home district was in Mymensingh Division has the highest suicidal ideation rate (n=50) 18%. Dhaka division (n=247) has the second-highest suicidal ideation rate, 17.4%, similarly for Chittagong division (n=142) suicidal ideation was 15.5%. The lowest suicidal ideation rate was found among the students whose home district was in the Rajshahi division (n=86) 9.3%.								

Other variables in the data sample were home district, division, age, and present education status.

Participant's age was between 18-25, the correlation test was done to see the Age and suicidal ideation but this range was small so did not find any significant correlation.

From the survey, we also found that some symptoms and feelings were most common among participants. 47.7% students had Gloomy attitude, pessimism about the future, feeling of sadness, 46.7% had difficulty concentrating or remembering things, plus difficulty in making decisions, 33% felt helpless and hopeless, 53.6% had Lack of energy or felt tired all the time, 40.5% had Slowness of thought, speech, and activity; apathy; stupor and 46.6 had difficulty in sleeping (or sleeping more than usual). These symptoms have proved that nowadays students are becoming more unproductive in this productive period. If nearly 50% of students cannot concentrate properly then it is clear, future for both them and the country is uncertain because many bright students don't stay in Bangladesh as shown in Table 5.

RESULTS

After analyzing the data, it was found that male students suffer more from mild mental health issues than female students. Female students have more significant mental health issues and they have higher suicidal ideation.72% males suffer mild to significant mental health issues and for females, the rate is 72.3%. The percentage of suicidal ideation was very high for both male and female students 12.4% and 17.3% respectively and 14.5% in total students. This result was shocking. Those who have significant mental health issues can have suicide ideation in future Home districts may have an impact on the mental health issues and suicidal ideation of the students and further study is needed. From this survey, we have got the suicidal ideation percentage and factors like gender and home district but it is clear how vulnerable university students are in Bangladesh

DISCUSSION

Suicidal ideation percentage among Bangladeshi students is very high, that's why suicide numbers are increasing too. This incident hurts the growth of Bangladesh. Many universities don't have counseling opportunities and most of the sufferers suffer without any kind of help. After watching the percentages should realize the necessity to ensure a better environment for the students So, I hope the authority

will take proper steps to improve the mental health condition of students. If they fail to do something it is guaranteed that Bangladesh will never become an advanced country.

CONCLUSION

Suicide among university students have increased, there is a correlation between gender of the students which is greater in Female students and lesser in male students. Wherein all the consequences and causes of mental health condition and reasons behind their suicidal ideation has been described by using varied methods and statistical representations. There should be counseling centers in every university on for the students who suffer such mental health issues.

LIMITATIONS

Percentage of the mild depression may overlap with the percentage of sadness. The data sample was small though I tried my best to collect as much data. Didn't get any funding for this research. I could collect more data if I got funding.

ETHICS

This data was collected for research purposes only and the participants knew the purpose. Participants identity will remain disclosed forever. I have done this research for the benefit of the people of Bangladesh.

Many others. This Survey will help to solve the suicidal crisis among universities in Bangladesh.

DECLARATIONS

The author declare no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

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