

Vol-8, Issue-6 | November- December 2022

DOI: 10.53339/aimdr.2022.8.6.19

Page no- 154-160 | Section- Research Article (Forensic Medicine)

Psychological Attributes and Socio-Demographic Profile of Completed Suicidal Victims: A Single Center Study in Bangladesh

Sunanda Biswas^{1*}

¹Assistant Professor, Department of Forensic Medicine, Diabetic Association Medical College, Faridpur, (Former Post Graduate Student Sher-E-Bangla Medical College, Barisal), Bangladesh

Email: biswas.sunanda9@gmail.com Orcid ID: 0000-0002-3355-0215

*Corresponding author

Abstract

Background: Suicide is the self-inflicted human act of intentional cessation of one's own life. Different psychological attributes like anxiety disorder, major depression, adjustment disorder, bipolar disorder, alcohol use disorder, and even schizophrenia are considered some major risk factors for suicide. It is said that previous history of suicidal attempts is associated with an increased risk for future suicide. Prior concepts regarding the psychological attributes and sociodemographic characteristics of completely suicidal victims may be helpful in preventing suicidal occurrences. The aim of the study was to evaluate the psychological attributes and socio-demographic characteristics of completely suicidal victims. Material & Methods: This observational study was conducted in the Department of Forensic Medicine, Sher-E-Bangla Medical College, Barisal, Bangladesh during the period from July 2017 to June 2019. A total 87 completed suicidal cases were included as study subjects. Besides forensic investigation report related more data were collected from the concerned police departments. As per the exclusion criteria of this study, when refusal was encountered or the family of a suicide victim could not be traced, those cases were rejected. Data were analyzed regarding suicide and its relationship with various socio- demographic variables, significant family history, and mental illness. Results: In this study, among a total of 87 victims, 45% were male and 55% were female. The mean ±SD age of the victims was 23.56±11.51 years. The majority of the victims were married which was 48%. The majority of our victims (76%) had achieved a primary or above level of education and 79% lived with someone whereas only 21% lived lonely. The majority of the victims were unemployed (51%). In this study, 48%, 36%, and 16% of victims were from lower-, middle- and upper-class families respectively. The majority of the victims were with major depression which was in 59% an7% of victims were with alcohol use disorder which was also noticeable. Besides these adjustment disorder (13%), schizophrenia (10%), anxiety disorder (9%), and bipolar disorder (6%) were found in some cases. In total 7 cases were found without any psychological attribute. Conclusion: Females are dominating in number among completed suicidal victims. As per the findings of this study we can conclude that younger people are vulnerable to the suicidal incidence in Bangladesh. The frequency of suicidal incidence among married people is alarming. Government as well as socio-economic policymakers should take necessary steps to ensure proper treatment for depressive patients as well as to control alcohol addiction among the younger population.

Received: 28 July 2022 Revised: 11 September 2022 Accepted: 25 September 2022 Published: 22 October 2022

Keywords:- Psychological, Attributes, Socio-demographic, Profile, Completed suicidal victim.



Vol-8, Issue-6 | November- December 2022

DOI: 10.53339/aimdr.2022.8.6.19

Page no- 154-160 | Section- Research Article (Forensic Medicine)

INTRODUCTION

Suicide is the self-inflicted human act of intentional cessation of one's own life. Different psychological attributes like anxiety disorder, major depression, adjustment disorder, bipolar disorder, alcohol use disorder, and even schizophrenia are considered some major risk factors for suicide. According to the WHO (World Health Organization), every year all over the world, over eight hundred thousand people commit suicide.[1] In Asian countries, there are growing concerns about the recent increasing rates of middle-aged suicide.[2] From Western evidence, we know that correlates of suicidal behaviors vary across the lifespan.[3] It is necessary to understand the risk factors for suicide in order to design suicide prevention strategies.[4] In a study,[5] it was reported that suicidal acts are associated with diagnosable psychiatric disorders and may be triggered by cult behavior, acute stress, shame, or various other reasons. Litman et al. were the pioneers in using the psychological autopsy as a process to study the correlation of completed suicide. [6] It has been studied that, diagnoses obtained from the psychological autopsy are valid, reliable, and unaffected by bereavement and the acceptance rate was high (77.1%). The highest suicide rate in the world has been found among women in the South Indian region in the 15-19 years age group.[8] The number of cases of suicides is on the rise and it is an issue of major concern for those people who come to face the brunt of the problem and the psychiatrists.[5] Effective suicidal prevention includes 'stopping the access to the common methods of suicide', "effective treatment of psychological disorders as well as substance abuse"; improving the socioeconomic status and give emphasis on health education by using mass media. [9] Restricting access to the methods of suicide is regarded as a very important tool in preventing suicide. [10] Government should concentrate on the most common method preferred by different age groups in any society to prevent suicide. [11]

MATERIAL AND METHODS

This observational study was conducted in the Department of Forensic Medicine, Sher-E-Bangla Medical College, Barisal, Bangladesh during the period from July 2017 to June 2019. A totalof 87 completed suicidal cases were included in this study. The victim's family selection was a purposive sampling method.

Selection Criteria

The families of the suicide victim were visited by the interviewer within 30 days after the suicide. The number of family members present during the interviews was recorded. The victim's mother and/or spouse were considered the key informant for interviewing. The average time taken for a single interview was in the range of 3 to 4 hours.

RESULTS



Figure 1: Showed the gender percentage of the victims(N=87)



E-ISSN: 2395-2822 | P-ISSN: 2395-2814 Vol-8, Issue-6 | November- December 2022

DOI: 10.53339/aimdr.2022.8.6.19

Page no- 154-160 | Section- Research Article (Forensic Medicine)



Figure 2: Showed the marital status percentage of the victims(N=87)

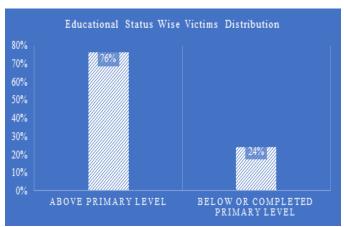


Figure 3: Showed the educational status percentage of the victims (N=87)

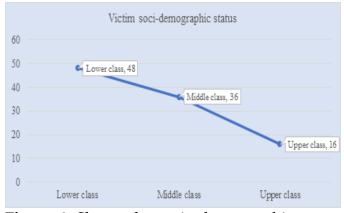


Figure 4: Shows the socio-demographic status percentage of the victims(N=87)

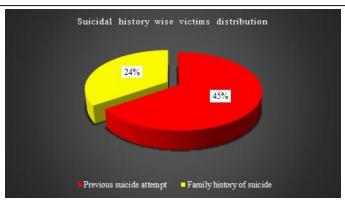


Figure 5: Showed the suicidal status percentage of the victims(n=50)

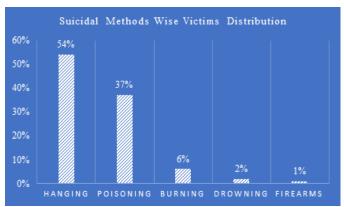


Figure 6: Showed the suicidal methods percentage of the victims(N=87)

In this study, among the total of 87 completed suicidalidal victims, 45% were male whereas 55% were female. So female victims were dominating in number. The mean ±SD age of the victims was 23.56±11.51 years. The majority of the victims were married which was 48%. Then 36% of victims were unmarried and the rest 16% of victims were separated. The majority of our victims (76%) had achieved a primary or above level of education and 79% lived with someone. Only 21% of our victims lived lonely. The majority of the victims were unemployed which was 51%. Besides this, 41% of victims were full-time employed and only 8%



Vol-8, Issue-6 | November- December 2022

DOI: 10.53339/aimdr.2022.8.6.19

Page no- 154-160 | Section- Research Article (Forensic Medicine)

were economically inactive. In this study, 48%, 36%, and 16% of victims were from lower-, middle- and upper-class families respectively. Among all the victims, 45% had taken suicide attempts previously and 24% had a family history of suicide. In this study, 54% of victims took 'hanging' and 37% took 'poisoning' as the method of their suicide which were noticeable. Moreover, burning, drowning, and firearms were the method of suicide for 6%, 2%, and 1% of victims respectively. In this study, in

analyzing the psychological attributes of victims we observed that the majority of them were major depression which was 59% and 47% of victims were with alcohol use disorder which was also noticeable. Besides these adjustment disorder (13%), schizophrenia (10%), anxiety disorder (9%), and bipolar disorder (6%) were found in some cases. In total 7 cases were found without any psychological attribute.

Table 1: Socio-demographic status of victims (N=87)

Variables	n	%
Gender distribution		
Male	39	45%
Female	48	55%
Marital Status		
Married	42	48%
Unmarried	31	36%
Separated	14	16%
Educational status		
Above primary level	66	76%
Below or completed primary level	21	24%
Living Arrangement		
Lived with someone	69	79%
Living alone	18	21%
Employment status		
Unemployed	44	51%
Full-time employed	36	41%
Economically inactive	7	8%
Family socio-demographic status		
Lower class	42	48%
Middle class	31	36%
Upper class	14	16%
Suicidal history	·	
Previous suicide attempt	39	45%
Family history of suicide	21	24%



Annals of International Medical and Dental Research

E-ISSN: 2395-2822 | P-ISSN: 2395-2814 Vol-8, Issue-6 | November- December 2022

DOI: 10.53339/aimdr.2022.8.6.19

Page no- 154-160 | Section- Research Article (Forensic Medicine)

Table 2: Distribution of suicidal methods among victims (N=87)

Methods of suicide	n	%
Hanging	47	54%
Poisoning	32	37%
Burning	5	6%
Drowning	2	2%
Firearms	1	1%

Table 3: Psychological attributes of victims (N=87)

Psychological attributes	n	%
Major depression	51	59%
Alcohol use disorder	41	47%
Adjustment disorder	11	13%
Schizophrenia	9	10%
Anxiety disorder	8	9%
Bipolar disorder	5	6%
No illness	7	8%

DISCUSSION

This study aimed to evaluate the psychological attributes socio-demographic and characteristics of completely suicidal victims. In this study, among a total of 87 victims, 45% were male whereas 55% were female. So female victims were dominating in number. The mean ±SD age of the victims was 23.56±11.51 years. Vijayakumar (1999), [9] in her study reported that most of the suicides in the age group 20-29 years, and Conwel (1996), [10] also reported that, the rate was high in young to middle age. The mean age of suicide victims in our study is also comparable to that reported earlier by Baxter and Appleby (1999).[12,13,14] The majority of our victims were married which was 48%. Then 36% of victims were unmarried and the rest 16% of victims were separated. The findings were similar to some earlier studies by Appleby and Castle.[15,16] Another study in Egypt showed that the majority of suicidal attempts were between the ages of 20-35 years. [17] In France, the second leading cause of death was found suicide for ages between 15 to 24 years.[18] In a study it was shown that there was an increase in the number of suicide from nine cases in Babylon during the year of 2015 to 25 cases, in 2019, probably this may be due to the increasing trend of depression among people, which occur as a result of their economic, social and political problems including the political un stability, absence of work and love problems.[19] In this study, in analyzing the psychological attributes of victims we observed that the majority of them were major depression which was 59% and 47% of victims were with alcohol use disorder which was also noticeable. Besides these adjustment disorder (13%), schizophrenia (10%), anxiety disorder (9%), and bipolar disorder (6%) were found in some cases. In total 7 cases were found without any psychological attribute. Mode disorders were observed as the most prevalent disorders among the cases (50.6%), which was in the mid-range (29%-88%) reported in other



Vol-8, Issue-6 | November- December 2022

DOI: 10.53339/aimdr.2022.8.6.19

Page no- 154-160 | Section- Research Article (Forensic Medicine)

psychological autopsy studies.[20] It is noteworthy that, apart from psychiatric illness, the severity of depressive symptoms was found to be a significant risk factor for attempting suicide in the binary logistic regression analysis.[19] Phillips and colleagues suggested that suicide prevention in people with different types of mental illnesses could focus on the management of their depressive symptoms.[21] Increasing public awareness of the treatment of psychiatric illnesses related to suicide. especially depression, and enhancing the training of health professionals to detect depressive symptoms should be concomitantly implemented to decrease suicidal incidence.[22] In another study, social support was found to have a significant independent protective effect on suicide.[23]

Limitations of the Study

This was a single centered study with a limited sample size, so the results of the study may not

REFERENCES

- 1. Kalmár S. The possibilities of suicide prevention in adolescents. A holistic approach to protective and risk factors. Neuropsychopharmacol Hung. 2013;15(1):27-39
- 2. Yip PS, Liu KY, Law CK, Law YW. Social and economic burden of suicides in Hong Kong SAR: a year of life lost perspective. Crisis. 2005;26(4):156DOI: 10.1027/0227-5910.26.4.156.
- 3. Mann JJ, Apter A, Bertolote J, Beautrais A, Currier D, Haas A, et al. Suicide prevention strategies: a systematic review. JAMA. 2005;294(16):2064-74. doi: 10.1001/jama.294.16.2064.
- 4. Wong PW, Chan WS, Chen EY, Chan SS, Law YW, Yip PS. Suicide among adults aged 30-49: a psychological autopsy study in Hong Kong. BMC Public Health. 2008;8:14DOI: 10.1186/1471-2458-8-147.

reflect the exact picture of the country. Recall & collect information biasness could not be excluded. Social barriers of information collection about suicidal victim & authentic sources information collection were the limitation of this study.

CONCLUSIONS

Females are dominating in number among complete suicidal victims. As per the findings of this study we can conclude that younger people are vulnerable to the suicidal incidence in Bangladesh. The frequency of suicidal incidence among married people is alarming. The government, as well as socio-economic policymakers, should take necessary steps to ensure proper treatment for depressive patients as well as to control alcohol addiction among the younger population. For getting more specific findings we would like to recommend for conducting similar studies with larger sized samples in several places.

- 5. Srivastava A. Psychological attributes and sociodemographic profile of hundred completed suicide victims in the state of Goa, India. Indian J Psychiatry. 2013;55(3):268-72. DOI: 10.4103/0019-5545.117147.
- 6. Litman RE, Curphey Schneidmannan ES. Investigations of equivocal suicide. J Am Med Assoc 1963; 184:924-9.
- 7. Kelly TM, Mann JJ. Validity of DSM-III-R diagnosis by psychological autopsy: a comparison with cliniciantemortemtem diagnosis. Acta Psychiatr Scand. 1996;94(5):337-43. DOI: 10.1111/j.1600-0447.1996.tb09869.x.
- 8. Bhattacharya S. Indian teens have the world's highest suicide rate. Lancet. 2004; 363:1117-8.
- 9. Conwel Y, Duberstein PR, Cox C, Herrmann JH, Forbes NT, Caine ED. Relationship of age and axis I diagnosis in victims of completed suicide: A



Vol-8, Issue-6 | November- December 2022

DOI: 10.53339/aimdr.2022.8.6.19

Page no- 154-160 | Section- Research Article (Forensic Medicine)

- psychological autopsy study. Am J Psychiatry. 1996;153:1001-8.
- 10. Baxter D, Appleby L. Case register study of suicide risk in mental disorders. Br J Psychiatry. 1999;175:322-DOI: 10.1192/bjp.175.4.322.
- 11. Nordentoft M. Prevention of suicide and attempted suicide in Denmark. Epidemiological studies of suicide and intervention studies in selected risk groups. Dan Med Bull. 2007;54(4):306-69.
- 12. World Medical Association. World Medical Association Declaration of Helsinki: ethical principles for medical research involving human subjects. JAMA. 2013;310(20):2191-4. DOI: 10.1001/jama.2013.281053.
- 13. Marovic Curticin V. Impact of the European General Data Protection Regulation (GDPR) on Health Data Management in a European Union Candidate Country: A Case Study of Serbia. JMIR Med Inform. 2020;8(4):e1460DOIdoi: 10.2196/14604.
- 14. Vijayakumar L, Rajkumar S. Are risk factors for suicide universal? A case-control study in India. Acta Psychiatr Scand. 1999;99(6):407-11. DOI: 10.1111/j.1600-0447.1999.tb00985.x.
- 15. Appleby L, Cooper J, Amos T, Faragher B. Psychological autopsy study of suicides by people aged under 35. Br J Psychiatry. 1999;175:168-7DOI: 10.1192/bjp.175.2.168.
- 16. Castle K, Duberstein PR, Meldrum S, Conner KR, Conwell Y. Risk factors for suicide in blacks and whites: an analysis of data from the 1993 National Mortality Followback Survey. Am J Psychiatry. 2004;161(3):452-8. DOI: 10.1176/apps161.3.452.
- 17. Kasemy ZA, Sharif AF, Amin SA, Fayed MM, Desouky DE, Salama AA, et al. Trend and epidemiology of suicide attempts by self-poisoning

- among Egyptians. PLoS One. 2022;17(6):e0270026DOI: 10.1371/journal.pone.0270026.
- 18. Kasemy ZA, Sharif AF, Amin SA, Fayed MM, Desouky DE, Salama AA, et al. Trend and epidemiology of suicide attempts by self-poisoning among Egyptians. PLoS One. 2022;17(6):e0270026DOIoi: 10.1371/journal.pone.0270026.
- 19. Haghparast-Bidgoli H, Rinaldi G, Shahnavazi H, Bouraghi H, Kiadaliri AA. Socio-demographic economics factors associated with suicide mortality in Iran, 2001-2010: application of a decomposition model. Int J Equity Health. 2018;17(1):77DOI: 10.1186/s12939-018-0794-0.
- 20. Cavanagh JT, Carson AJ, Sharpe M, Lawrie SM. Psychological autopsy studies of suicide: a systematic review. Psychol Med. 2003;33(3):395-405. doi: 10.1017/s0033291702006943.
- 21. Phillips MR, Yang G, Zhang Y, Wang L, Ji H, Zhou M. Risk factors for suicide in China: a national case-control psychological autopsy study. Lancet. 2002;360(9347):1728-36DOIoi: 10.1016/S0140-6736(02)11681-3.
- 22. Lee S, Tsang A, Kwok K. Twelve-month prevalence, correlates, and treatment preference of adults with DSM-IV major depressive episode in Hong Kong. J Affect Disord. 2007;98(1-2):129-36. DOI: 10.1016/j.jad.2006.07.009.
- 23. Chen EY, Chan WS, Wong PW, Chan SS, Chan CL, Law YW, et al. Suicide in Hong Kong: a case-control psychological autopsy study. Psychol Med. 2006;36(6):815-25. doi: 10.1017/S0033291706007240.

Source of Support: Nil, Conflict of Interest: None declared