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A cross-sectional study to assess the cause of present suicide attempt and socio-demographic profile among the suicide attemptees in a tertiary care centre, Bengaluru

Abstract

Context: A high suicide rate is an index of social disorganization. In India, it is the second leading cause of death among 15-29 years age group. Young age, female sex, poor education, unemployment and socio economic deprivation are some of the potential risk factors.

Aim: To assess the cause of present suicide intent and socio-demographic profile in patients with attempted suicide in a tertiary care centre.

Settings and design: Study setting in tertiary care centre, Bengaluru and a Cross-sectional study design.

Methods and material: A Cross Sectional Study was conducted among 476 suicide attempted patients by Convenient sampling from January 2016 to May 2017. Data was collected by using a pretested, semi-structured questionnaire.

Statistical analysis: Descriptive statistics and inferential statistics if required.

Results: Mean age of study participants was 30.65±0.75 years. Most of the suicide victims (82.97%) were from nuclear families.24.57%of study participants had family history of suicide.49.66% of them had a suicidal intent during the past 12 months and only 26.89% of them sought professional help.

Conclusion: Suicides and attempted suicides are slowly but steadily assuming the levels of a public health problem caused by multiple factors. Hence there is a need to address the risk factors for suicide attempts and preventing them by taking proper measures at individual, family and societal level.

Keywords: suicide, professional help, suicide intent, socio-demographic factors, risk factors

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Introduction

Suicide is a serious public health problem. Suicide is the act of deliberately killing oneself. Suicide attempt is defined as a behavior of having strong urge to end one's life.[1] A prior suicide attempt is the single most important risk factor for suicide in the general population.[2] Suicide is the second leading cause of death among 15–29-year-old. 78% of global suicides occur in low- and middle-income countries.[3] Suicides have been increasing at an alarming rate in South East Asian countries especially India. Annual Incidence rate of suicide is about 36 per lac population in India.[4] Nearly 70% of suicides in our country have been reported in the age group of 15-34 years.[5] The story of suicide is probably as old as that of man himself. It has been glorified, romanticized, grieved and even condemned.[6] In Hinduism-The Bhagavad-Gita, Vedas and Upanishads, the Holy Scriptures - condemn suicide '*he who takes his own life will enter the sunless areas covered by impenetrable darkness after death*'. Essential elements of the history include the past medical and psychiatric history, home and social life activities, and medications.[7] Factors such as psychiatric disorders, previous suicide attempts, family history of suicide, history of being sexually abused, serious physical illness, prior outpatient psychiatric treatment or psychiatric hospital admission within the past year, recent stressful interpersonal, legal, financial, or work-related life events, and impulsive or aggressive tendencies may therefore help risk-stratify patients.[8-11] WHO response: WHO recognizes suicide as a public health priority. The first WHO World Suicide Report "**Preventing suicide: a global imperative**" published in 2014, aims to increase the awareness of the public health significance of suicide and suicide attempts and to make suicide prevention a high priority on the global public health agenda. In the WHO Mental Health Action Plan 2013-2020, WHO Member States have committed themselves to working towards the global target of reducing the suicide rate in countries by 10% by 2020.[12] Mental health care bill was passed by parliament on 27th March, 2017 stated that suicide act should be decriminalized. A person who attempts suicide should be presumed to have severe stress and shall not be punished.[13] Hence this study is proposed to assess the cause of present suicide attempt and socio-demographic profile of suicide attempted individuals in a tertiary care centre.

Objectives

I. To assess the cause of present suicide attempt in patients with attempted suicide in a tertiary care centre.

II. To determine the socio-demographic profile in patients with attempted suicide of the same.

Material and methods

Sample size estimation: Based on a previous study by of Gowda. N[14] major risk factor for suicidal attempts was family problems (p=27.2%) with allowable error of 15%, sample size is calculated to be 476 using the formula $4pq/d^2$. Data collection was started after obtaining Ethical clearance. Permission was obtained from the Dean, Medical superintendent of Victoria hospital for conducting the study. Informed consent for the study was obtained. Patients admitted with history of suicide attempts were filed as MLC in casualty, once they become stable, they were shifted to Medicine C Block of Victoria Hospital. Such cases were taken up for study and data regarding socio demographic profile and cause of present intent of suicide were collected by interview method using a semi-structured questionnaire until sample size of 476 is achieved during the period from January 2016 to May 2017.Confidentiality was maintained. Data was entered in SPSS V.23 and analyzed using descriptive statistics.

Statistical analysis: Results are presented in terms of frequencies and percentages. Chi square test was applied to find the association between variables. P value < 0.05 is considered to be significant. Charts, tables and graphs are added wherever necessary.

Results

Mean age of the study subjects was 30.65±0.75 years. Among the study subjects, 275 (57.78%) were males and 395 (82.98%) of them were Hindu by religion.328 (68.9%) of the study subjects were literates and 382 (80.25%) were employed. Most of the study subjects 392 (82.77%) belonged to nuclear family and 207 (43.48%) of the study subjects were unmarried and 31(6.51%) of them were divorced/ separated. 246 (51.68%) belonged to upper middle class as depicted in Table 1. Among the study subjects, 166(34.87%) attempted suicide when someone was near to them and 243(51.05%) of them did not actively prepare for the attempt. Only 72(15.12%)of them wrote a death note prior attempting suicide.253(53.15%) of them contacted someone for help but they did not notify and 130(27.31%) of them did not contact anyone for help after the attempt. 105(22.05%) of study subjects did not communicate with anyone about their intent of suicide and 63(13.23%) of them attempted suicide in order to get attention and 291(61.13%) of them wanted to escape from the situation and hence they attempted suicide. Among the study subjects, 364(76.47%) of them were non-alcoholic and 412 (86.55%) of them did not take any drug prior attempting suicide. 56(11.76%) of alcoholics took intentionally to facilitate the attempt and only 14(2.94%) of them took drug intentionally before the attempt in order to facilitate the act as mentioned in Table 2. 256(53.78%) of study subjects thought death was probable after the attempt and 152(31.93%) of them thought death was certain as depicted in Figure 1. 244(51.26%) of the study subjects told they had a dual attitude towards living/dying after the suicide attempt.71(14.91%) of them did not want to die and 161(33.82%) of them wanted to die after the suicide attempt as depicted in Figure 2. 228(47.89%) of the study subjects accepts both attempt and failure. 85(17.86%) of them feels foolish after attempting suicide and 163(34.24%) of them regrets failure of attempt as depicted in Figure 3.

Table 1 Distribution of Socio-demographic factors

	Socio-demographic factors	Frequency (N=476) and %
	16-30 years	319(67%)
Age-group	31-45 years	112(23.5%)
	46-60 years	30(6.3%)
	61-75 years	15(3.2%)
	Total	476(100%)
	Male	275(57.78%)
Sex	Female	201(42.22%)
	Hindu	395(82.89%)
Religion	Muslim	74(15.54%)
	Christian	07(1.47%)
	Urban	318(66.81%)
Locality	Rural	158(33.19%)
	Literate	328(68.90%)
Education	Illiterate	148(31.90%)
	Student	44(9.24%)
	Employed	382(80.25%)
Occupation	Unemployed	20(4.2%)
	Retired	30(6.3%)
	Nuclear family	394(82.77%)
	Joint family	59(12.39%)

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Table Continued...

	Socio-demographic factors	Frequency (N=476) and %
Type of family	Three generation family	23(4.83%)
	Unmarried	207(43.48%)
	Married	192(40.33%)
Marital status	Divorced/separated	31(6.51%)
	Widow/widower	46(9.66%)
	Upper class	115(24.15%)
	Upper middle class	246(51.68%)
	Middle class	103(21.63%)
Socio-economic class of study participants	Lower middle class	07(1.47%)
	Lower class	05(1.05%)

Table 2 Distribution of factors to assess the cause of present suicide attempt

Factors to assess the cause for present Suicide attempt		Frequency (N=476) and %
Isolation during the attempt	Someone present	166(34.87%)
	Visual/Vocal contact	215(45.16%)
	No one near by	95(19.95%)
Active preparation for suicide attempt	None	243(51.05%)
	Minimal	179(37.60%)
	Extensive	54(11.34%)
Death note prior attempting	Absence of note	222(46.62%)
	Thought about but torn up	182(38.23%)
	Presence of note	72(15.12%)
Seeking help during/after the attempt	Potential helper	93(19.54%)
	Contacted	253(53.15%)
	Didn't contact	130(27.31%)
Overt communication of intent	None	105(22.05%)
	Equivocal	261(54.83%)
	Unequivocal	110(23.12%)
Alleged purpose of attempt	To get attention	63(13.23%)
	To escape	291(61.13%)
	Both	122(25.63%)

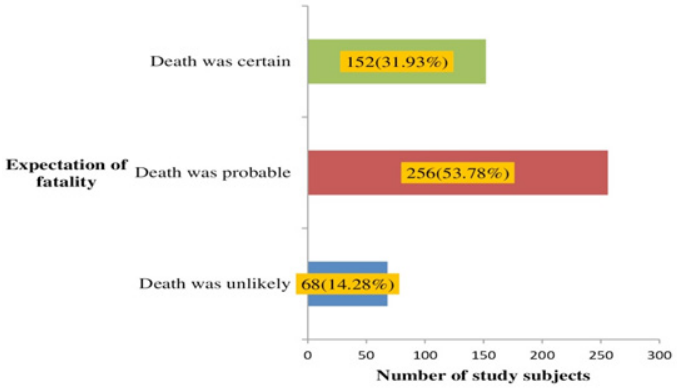

Figure 1 Expectation of fatality by the study subjects after the attempt.

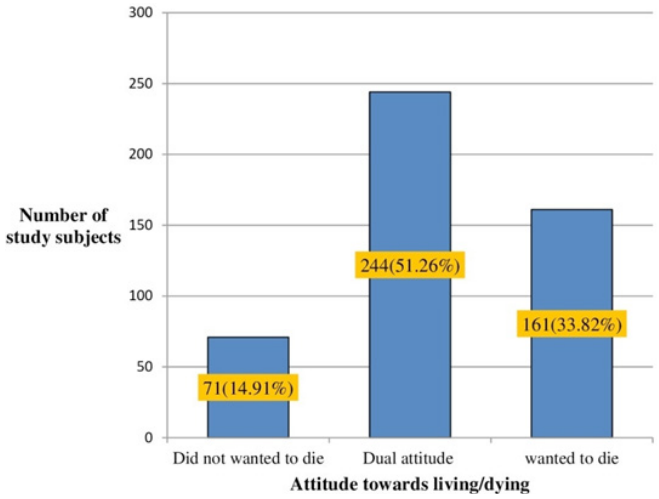

Figure 2 Attitude towards living/dying by study subjects.

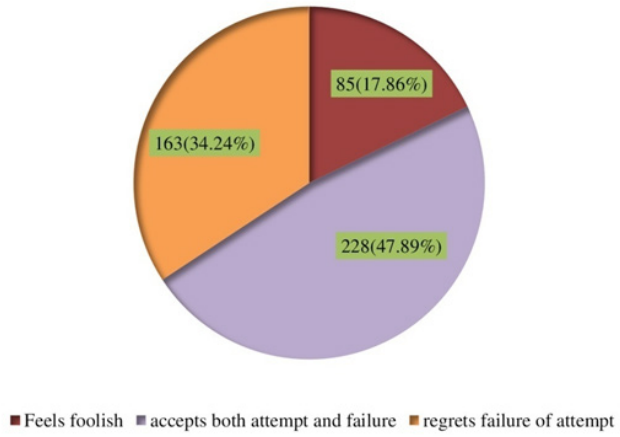

Figure 3 Reaction to attempt by Study subjects.

Discussion

Suicides and attempted suicides are slowly but steadily assuming the levels of a public health problem caused by multiple factors. In our study ,mean age of study participants was 30.65±0.75 years. Most of the suicide victims (82.97%) were from nuclear families.24.57%of study participants had family history of suicide.49.66% of them had a suicidal intent during the past 12 months and only 26.89% of them sought professional help. Mean age group of study participants was 30.65±0.75 years. A study conducted by Ramdurg et al.[15] showed that the mean age group was 31.5 yrs. Gowda N et al.[14] also concluded that mean age group of study participants was 30.41 years. Nilamadhab et al.[16] also said that mean age group affected was 31.6±3.5 years. Males (57.78%) are most commonly affected than females (42.22%) in our study. Study by Ramdurg et al.[15] showed that 56% of males and 44% of females were affected. If we see marital status of study participants, Unmarried people (43.8%) are at a little higher risk of developing suicidal behavior than married people (40.33%) this may be due to the most common affected age group in our study. In contradictory to the above findings, Ramdurg et al.[15] said that married people (59%) were at higher risk of attempting suicide than unmarried. Gowda N et al.[14] also concluded that 62.4% of study participants were married and 33.9% were unmarried.

Family structure and family environment plays an important role in the mental status of an individual. Nuclear families (82.77%) are the most commonly affected than other type of families. This is because nuclear families are bound to higher level of stress and there is no support from elders to cope up with stress. There are no helping shoulders for such families. Ramdurg et al [15] concluded that 41% of suicide victims belonged to nuclear families. But Nilamadhab et al.[16] predicted that extended families are at a higher risk of developing suicidal behavior than nuclear families. 54% of our study participants sought medical care after the attempt. Some of the study participants refused to seek medical care because they thought death was possible from the attempt. 34.24% of our study subjects regrets failure of attempt because they wanted to end their life at any cost. But in contrary some of the suicide victims also felt foolish after attempting suicide.

Conclusion

Suicides are hidden and unrecognized epidemic in the indian region affecting predominantly younger age group. This can be addressed by regular screening for mental health at primary health care level and regular counselling sessions.Family problems including marital disharmony accounted for the most common life events that provoked suicidal attempt among the study subjects. Hence there is a urgent need to address the risk factors and frame policies with proper interventions that should be accessible to all to lead a mentally healthy and peaceful life.

Limitations

I. It was a cross-sectional study where generalizibility of the results is not possible.

II. As i twas a hospital-based study, there is a selection bias that could be eliminated by community-based study

III. Revealing of information related to suicide attempt was an uneasy task. Some of the participants refused to share their feelings or ideas related to their suicidal behavior despite of repeated visits and assuring that their information is kept confident.

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Conflicts of interest

None.

References

1. WHO. *Health topic suicide*. 2014.
2. WHO. *Fact Sheets on Suicide*. 2015.
3. WHO. *Statistics of Suicide*. 2016.
4. WHO. *Prevention of Suicide: A global imperative*. 2017.
5. Centre for Disease Control. *Global scenario of Suicide*. 2017.
6. Kaplan. *Textbook of Concise Clinical Psychiatry*. 3rd edition; volume 1; 2016. p. 232–235.
7. *Kaplan and Sadock's Synopsis of Psychiatry*. 8th edition; Volume 1; 2015. p. 355–340.
8. WHO. *Age standardized death rates of Suicide*. 2014.

9. NCRB. *Rates of suicide in India*. 2013.
10. *Indian scenario of Suicide*.2017.
11. J Kishore. *National health programs of India*. 11thedition. Century Publishers; 2014.
12. Cole DA. Psychopathology of adolescent suicide: hopelessness, coping belief, and depression. Journal of Abnormal Psychology. 1988;98:248–255.
13. *Mental Health care Bill*. 2017.
14. Gowda N, Rao S. Factors Related to Attempted Suicide in Davanagere. *Indian Journal of Community Medicine*. 2008;33(1):1–70.
15. Ramdurg S, Goyal S, Goyal P, et al. Sociodemographicprofile, Clinical factors, and mode of attempt in Suicide attempts in Consultation liaison psychiatry in a tertiary care centre. *Industrial Psychiatry Journal*. 2011;20(1):1–16.
16. Kar N. Profile of risk factors associated with suicide attempts: A study from Orissa, India. *Indian Journal of Psychiatry*. 2010; 52(1):48–56.

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