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Recent Trends of Committing Suicide

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Abstract

Introduction

Suicide is an important issue in the Indian context. Every year, almost one hundred thousand lives are lost to suicide in our country. Suicide constitutes a major public health issue. Suicide is a complex psychosocial behavior. One possible framework for understanding the relationship between suicidal behavior and underlying neurological disorders is the stress diathesis model. The serotonin imbalance is the most persistent neurobiological factor in the development of suicidal behavior.

Material and Method

The present study entitled "Recent trends of committing suicide" in Varanasi region is carried with the help of cases brought for post-mortem examination in the Department of Forensic Medicine, IMS, BHU, Varanasi from 1st March 2019 to 31st October 2021 during this period total 3513 post-mortem were done in the Department of Forensic Medicine IMS, BHU, Varanasi. Out of these 150 cases were taken in this study, which included suspected suicide.

Result and Discussion

In this study entitled "Recent trends of committing suicide" in the Varanasi region, we have considered several observations and their results over the years. A total of 150 cases were taken into consideration from Varanasi and nearby districts. The post-mortem is done in the Department of Forensic Medicine, IMS, BHU during a period of 1st March 2019 to 31st October 2021.

Keywords: Suicide, Psychological Autopsy, NCRB, MHCA

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Introduction

Suicide is an important issue in the Indian context. Every year, almost one hundred thousand lives are lost to suicide in our country. Suicide constitutes a major public health issue. According to National Crime Records Bureau (NCRB) statistics, India exhibited an alarming increase in suicide rates, escalating from 9.9 per lakh population in 2017 to 12.4 per lakh population in 2022. The suicide incidence rates shown exhibit significant variation among states, ranging from 0.6 per 100,000 people in Bihar to 43.1 per 100,000 populations in Sikkim.[1]

In India, the majority percentage of suicides (37.8%) occur among those under the age of (30), resulting in significant social, emotional, and economic burdens on society. The comparable suicide rates of young men and women, along with the constantly narrow male-to-female ratio of 1.4:1, indicate that a greater number of Indian men succumb to suicide than women. Common methods employed for suicide included hanging (38.67%), suspected poisoning (23.33%) and self-immolation (13.33%). Data training concluded in October 2021. It is believed that one in every 60 individuals in our country is impacted by suicide. It encompasses both individuals who have tried suicide and those impacted by the suicide of a close family member or friend. Consequently, suicide constitutes a significant public and mental health issue that necessitates immediate intervention.[2]

While suicide is a very personal and private act, suicidal behavior is influenced by several individual and social factors, including divorce, dowry, love relations, loss of loved ones, breakup, rejections, job loss (especially in the private sector), or failure to marry, illegitimate pregnancies, extramarital affairs, and similar marriage challenges significantly contribute to the incidence of suicide among women in India.

Suicide is a complex psychosocial behavior. One possible framework for understanding the relationship between suicidal behavior and underlying neurological disorders is the stress diathesis model. The serotonin imbalance is the most persistent neurobiological factor in the development of suicidal behavior. Low serotonin levels and serotonin abnormalities are linked to suicide and suicidal behavior. Low levels of 5-hydroxyindoleacetic acid (5-HIAA), a serotonin metabolite, in cerebrospinal fluid (CSF) are linked to suicidal behavior. However, some mood disorders, like bipolar disorder, may be exceptions.

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Suicide and its association with depression

Depression is a significant mood illness characterized by a continual sense of sadness and a reduced interest in activities. It can influence one's cognition, emotions, and the ability to do daily tasks. The huge majority of individuals with depression do not engage in suicidal behavior or succumb to suicide, yet depression is associated with a higher risk of suicide. Researchers believe that approximately 60% of those who succumb to suicide were going through a mood disorder, such as depression or bipolar disorder. To be diagnosed with depression, a person must exhibit symptoms for a minimum of two weeks, nearly every day. To diagnose mania, the individual must exhibit symptoms for a minimum of one week. A depressed mood or a reduced interest or enjoyment in the majority of activities must be one of the symptoms.[3]

Drugs and suicide

Medical practitioners exhibit a disproportionately high incidence of suicide, particularly through self-poisoning with drugs, which is more prevalent among doctors than in the overall population. Barbiturates (phenobarbitone) are the most commonly utilized substances in these cases.[4] In addition, many people who use cannabis regularly exhibit the behavior of Run Amok, in which a person kills a person with whom he may have genuine or imagined hatred first, then kills anyone who gets in his way till the homicidal inclination lasts. Then, he commits suicide or surrenders.[5]

Mental healthcare act (MHCA) and its impact on suicide

The Indian Penal Code (IPC) of the colonial era has long classified attempted suicide as a criminal offense in India, subjecting those in crisis to the possibility of imprisonment or penalties under section 309 of the IPC. Individuals are penalized when they are vulnerable and distressed by the criminalization of attempted suicide. However, the Mental Healthcare Act, 2017 (MHCA) decriminalizes attempted suicide for all practical purposes.

The MHCA provision and section 309 of the IPC continued to be legal provisions, which resulted in significant confusion among relevant stakeholders regarding their interaction in daily clinical practice. Nevertheless, the Bharatiya Nyaya Sanhita 2023 (BNS) Section 124, which has replaced the IPC, brings about a significant change i.e. attempted suicide is no longer criminalized under this new legislation.[3] The evidence regarding the effect of decriminalization on suicide rates is varied. The criminalization of attempted suicide was found to be associated with marginally higher suicide rates in some countries. However, in some countries, the decriminalization of suicide resulted in a decrease in the rate of suicide.

Suicide prevention necessitates the provision of mental health support rather than the imposition of penalties on those who attempt suicide.

Material and Method

The present study entitled Suicides in India in Varanasi Region is carried with the help of cases brought for post-mortem examination in the Department of Forensic Medicine, IMS, BHU, Varanasi from 1st March 2019 to 31st October 2021 during this period total of 3513 post-mortems were done in the Department of Forensic Medicine IMS, BHU, Varanasi. Out of these 150 cases were taken in this study, which included suspected suicide.

Collection of data includes questionnaires scheduled and recorded on performed performance and interview sessions at the time of autopsy with the concerned investigating officer, parents of the victim, other family members and relatives of the victim, neighbo rs and other persons accompanying the deceased.

Data was also collected from police inquests, post-mortem registers and reports, hospital memos in hospitalized cases, death certificates if death is there, etc.

All the collected data has been compiled and statistically analyzed in the form of percentages, pictograms, and pie charts. Based on analysis, results were drawn, discussed and compared with other relevant studies after that summary and conclusion were drawn.

Result

Table 1 shows when age and gender both are taken into consideration then the highest number is 31 to 45 years of males 34 (22.67%) which is followed by 20 to 30 years of females 33 (22%) which is just one highest 31 to 45 years males' group, rest is as shown in the Table 1 and Figure 1.

Table 2 and Figure 2 shows the social/marital status of the victims maximum were married 76(50.67%) followed by Unmarried 59(39.33%) followed by widow/widower 13(8.67%) followed by divorced 02(1.33%).

Table 3 and Figure 3 shows that victims who belong to the nuclear family 79(52.67%) are more than joint family 71(47.33%).

Table 4 and Figure 4 shows that the maximum no. of victims chose to hang 58(38.67%) and the least no. of victims chose railway tract accidents 17(11.33%).

Table 5 and Figure 5 shows the mode of death of the victims maximum died of asphyxia was 73(48.67%) and the least died

Table 1: Age and gender distribution of victims

Age group	*Male*	*Percentage*	*Female*	*Percentage*
< 20 Years	11	7.33%	08	5.33%
20–30 Years	29	19.33%	33	22%
32–35 Years	34	22.67%	14	9.33%
46–60 Years	15	10%	01	.67%
< 60 Years	04	2.67%	01	.67%
Total	93		57	

Table 2: Showing the social status of victims

	No.Of Deceased	*Percentage*	*Males*	*Female*
Unmarried	59	39.33%	43	16
Married	76	50.67%	39	37
Widow/ separated	13	8.67%	10	03
Divorced / separated	02	1.33%	01	01
Total	150		93	57

Table 3: Showing the type of family the victim belongs

Family Type	No. of Deceased	Percentage
Joint	71	47.33%
Nuclear	79	52.67%
Total	150	

Table 4: Shows the Cause/Manner and death of the victim.

Cause of death	*No. of deceased*	*Percentage*	*Males*	*Females*
Hanging	58	38.67%	32	26
Suspected poisoning	35	23.33%	27	08
Burn/self emollition	20	13.33%	02	18
Drowning	13	8.67%	11	02
Fall from height	03	2%	03	00
Firearm injury	04	2.67%	04	00
RTA/Railway track accident	17	11.33%	14	03
Total	150		93	57

Table 5: Shows the mode of death of victims

Mode of death	*No. of deceased*	*Percentage*
Asphyxia	73	48.67%
Coma	38	25.33%
Syncope	09	6%
Unknown (suspected poisoning and others)	30	20%
Total	150	

Table 6: Shows relatives gave the history of whether they attempted suicide earlier or not.

History of the previous attempt	*No. of deceased*	*Percentage*
Yes	15	10%
No	135	90%
Total	150	

Table 7: Shows motives of victims

Motive of suicide	*Male*	*Female*	*Total*
Fight with family/beaten/scolded by parents	08	04	12
Chronic illness and psychiatric illness	03	03	06
Child sex abuse	01	00	01
Dowry related	00	11	11
Drug addiction problem	01	00	01
Failure in exams	06	03	09
Love affair and extramarital	13	03	16
Grieving and frustrated with life	03	00	03
Family tension/ disputed	11	14	25
Financial loss/property related	21	01	22
Loss of job/unemployed	03	00	03
Marriage related	04	09	13
Unknown	22	09	31

Table 8: Showing victims having a history of drug abuse

Drug addiction history	*Male*	*Percentage*	*Female*	*Percentage*	*Total*
Yes	59	39.33%	01	0.66%	60
No	34	22.67%	56	37.33%	90

Table 9: Presence of suicide note

Suicide note	*Number*
Yes	07
No	143

due to unknown reasons 30(20%).

Table 6 and Figure 6 shows relatives gave the history of whether the victim attempted suicide earlier or not for most of them it was their first time 135(90%) followed by those who attempted 15(10%)

Table 7 and Figure 7 shows the motives of victims, the maximum victims' motive could not be determined 31, followed by having family problems 25, followed by financial loss or having property-related disputes 22, and so on.

Table 8 and Figure 8 shows that a maximum of males 59(39.33%), had a drug abuse history than females 01(0.66%). Some drug abuse history was negative in many cases as the history was taken from relatives who sometimes do not know or sometimes hide because of society.

Table 9 and Figure 9 shows that suicide notes were present in 07 victims, while in 143 victims, it was absent or not found as sometimes suicide note is either hidden by family members or destroyed.

Discussion

In this study entitled "Suicides in India" in the Varanasi region, we have considered several observations and their results over

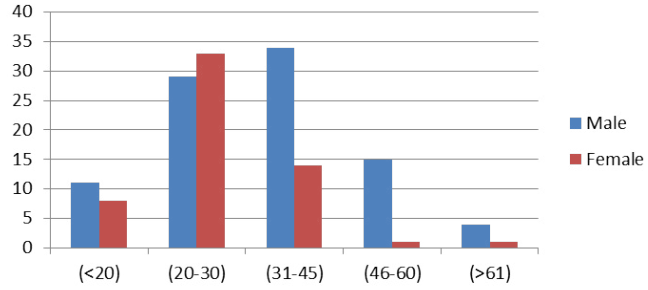

Figure 1: Age and gender-wise distribution
The chart shows the age and sex-wise distribution of the victims of suspected suicide cases. The highest number of deaths was in the 20–30 years age group, i.e., 62 (41.33%) out of 150 cases followed by the 31–45 years age group 48 (32%) then <20 years 19 (12.66%) then 40–60 years 16 (10.67%) followed by >60 years 05 (3.33%).

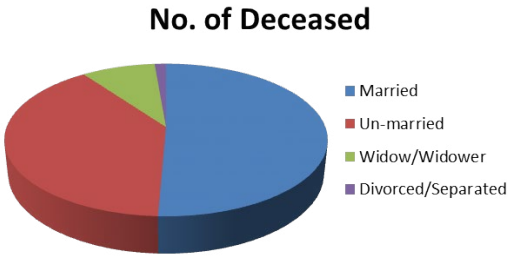

Figure 2: Marital/social status-wise distribution
The chart shows the marital/social status of the victims' maximum were married 76 (50.67%) followed by Un- married 59 (39.33%) followed by widow/ widower 13 (8.67%) followed by divorced 02 (1.33%)

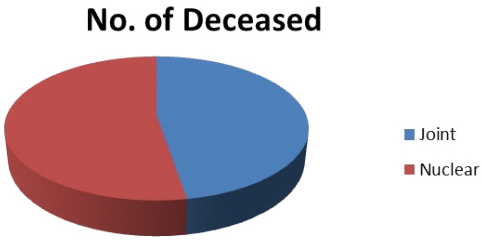

Figure 3: Type of family-wise distribution
The chart shows that victims were from the nuclear family 79 (52.67%) than joint family 71(47.33%).

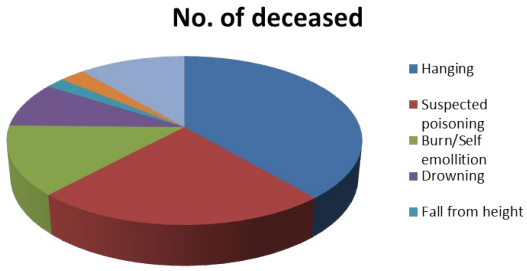

Figure 4: Cause of death (method of suicide) distribution
The chart shows the maximum number of victims chose hanging 58(38.67%) and the least victims chose fall from height 03(3%).

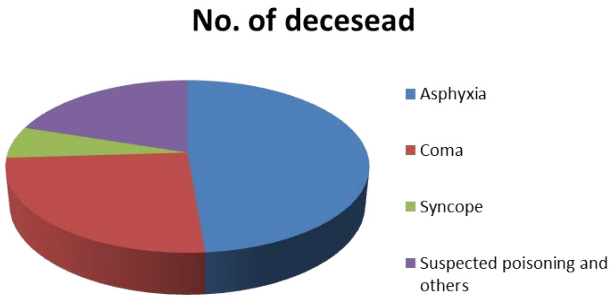

Figure 5: Mode of death-wise distribution
The chart shows the mode of death of the victims in which the maximum died due to asphyxia 73(48.67%) and the least victim died in which the reason was unknown or could not be derived 30(20%).

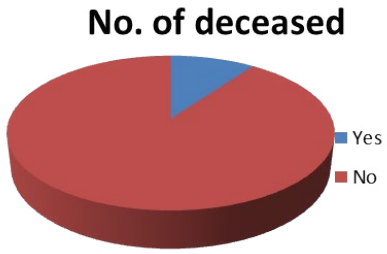

Figure 6: History of previous attempt-wise distribution
The chart shows relatives who gave the history of whether the victims attempted suicide earlier or not most of them it was the victim's first time 135(90%) followed by those who attempted 15(10%).

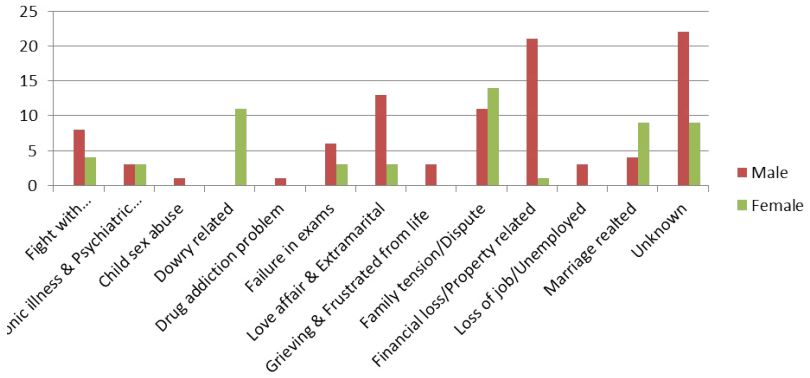

Figure 7: Motive wise distribution
The chart shows the motive of victims, in which maximum victim motive could not be determined 31, followed by family problems 25, financial loss or property dispute 22, love affair 16, marriage related 13, fight with family members 12, dowry related 11, failure in exams 09, chronic illness 06 etc.

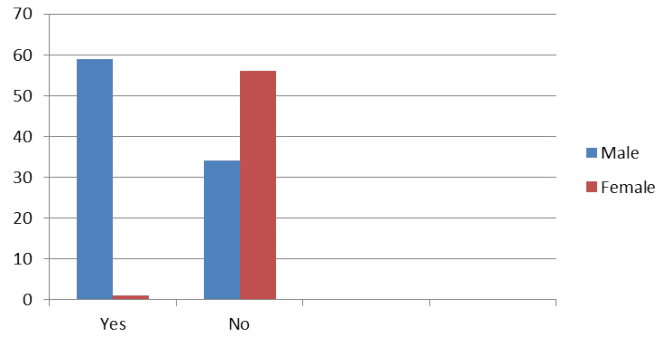

Figure 8: Drug abuse history-wise distribution
The chart shows a maximum of males 59(39.33%) have a drug abuse history, while females 56 (37.33%) were not taking drugs.

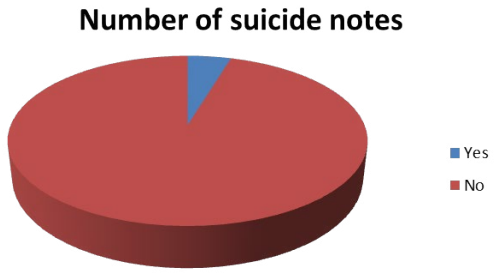

Figure 9: Presence of a suicide note
Chart showing there were 07 suicide notes present with the victim, while with most of them, it was absent, i.e., 143.

the years. A total of 150 cases were taken into consideration from Varanasi and nearby districts. The post-mortem is done in the Department of Forensic Medicine, IMS, BHU, during the period of 1st March 2019 to 31st October 2021.

Conclusion

According to our study and supported by several global writers, the highest rate of suicide occurs in those with a history of previous attempts. The Mental Health Act (MHA 2017) delineates those individuals experiencing significant mental distress, those with a history of drug abuse, victims of child abuse, individuals who have suffered love failures, and those facing marital discord are deemed to be at greater risk of suicide. As per our data age group, 20-30 years have the highest number of victims, which indicates that our younger generation exhibits reduced resilience in managing stressful circumstances and demonstrates a low tolerance for rejection, particularly in response to the word "NO" in various situations. Psychiatric history showed that there is a major need for regular psychological counseling sessions in educational institutions, both nationally and globally. To address this issue, numerous renowned psychologists from various institutes affiliated with BHU, Varanasi, India, are conducting sessions six days a week.

Individuals who attempt suicide exhibit a variety of characteristics. Suicide is a significant and predominantly avoidable public health issue. The early identification and treatment of populations at risk and those with suicide risk factors throughout their lives will be highly beneficial. It is essential to identify groups that have been subjected to traumatic childhood experiences, such as sexual or physical abuse and parental domestic violence. The identification of such persons necessitates a multidisciplinary strategy with active engagement from family members, educators, health experts, and the legal system. Primary prevention measures encompass the promotion of physical and mental health, the implementation of coping mechanisms for stress among adults and individuals experiencing difficulties, and the enhancement of knowledge among parents, educators, and family members. Social programs can be established at the community level.

Furthermore, in the event of any unfortunate occurrence, there should be a provision for conducting a psychological autopsy.

Conflict of Interest

There is no conflict of interest

References

1. National Crime Records Bureau. *Accidental deaths and suicide in India*. Government of India: Ministry of Home Affairs; 2022
2. *Decriminalising attempted suicide in India: the new penal code. Centre for Mental Health Law & Policy*. (2024, 3rd April). Centre for Mental Health Law & Policy. https://cmhlp.org/imho/blog/decriminalising-attempted-suicide-in-india-the-new-penal-code/
3. Boland, R. J., Verduin, M. L., Ruiz, P., & Shah, A. (2022). *Kaplan & Sadock's Synopsis of Psychiatry*.
4. Tripathi, K. (2018). *Essentials of Medical Pharmacology*. Jaypee Brothers Medical Publishers.
5. K S Narayan Murty O P Reddy. Essentials of forensic medicine and toxicology. Jaypee; 2017.
6. Santhosh, C. S., and Nawaz Bande. "Pattern of suicidal deaths at district hospital Davangere a cross-sectional study." *Journal of Indian Academy of Forensic Medicine* 35.3 (2013): 233-235.
7. Baruah, A. M., and R. Chaliha. "Pattern of Suicidal Deaths Brought for Medico Legal Autopsy at Gauhati Medical College: A Retrospective Study." (2014): 86-90.