
A Study on Psychological Autopsy of Suicidal Cases of North Bengal Region

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How to cite this article: Vivek Kumar, Saikat Saha, Goutam Kumar et. al. A Study on Psychological Autopsy of Suicidal Cases of North Bengal Region. Indian Journal of Forensic Medicine and Toxicology/Volume 18 No. 3, July- September 2024.

Abstract

There are times when physical evidence found at post-mortem examination does not uncover the cause and mode of death. This is known as equivocal death. The psychological autopsy is an attempt to reconstruct the decedent's life to get a better understanding of his cause of death. It is used to determine the victim's psychological intent, using interviews and examination of documents to reconstruct the behaviour, personality, lifestyle, habits and history of the victim prior to death. Psychological autopsy helps as an investigative instrument which requires an application of abilities, experience, and training to assess a variety of factors including the behaviour, thoughts, feelings, and relationships of an individual who is deceased. There may be situations that the family members of the deceased does not want to reveal the facts about his death. Hence the counselling and interviews of family members, friends, and relatives has to be done with empathy. So the interviewer has to be flexible. The interviewer should establish mutual respect and confidence, with the informant, and ensure confidentiality and anonymity, and also obtain an informed consent before the interview. Hence one should be qualified and skilled to conduct the interview. False information also can be given due to lack of memory or it may be intentional. Suicide note, Personal documents, Medical records, school records, military records, employment records, should be carefully analysed. With the above mentioned information, a psychological autopsy report is produced, the final conclusion depends on the accuracy of the data collected from the interviews, examination of relevant documents and other materials. Therefore the interviewee's probabilities and limitation to science should be noted. Thus the final judgement as to the mode of death is based upon a review of all the known facts and circumstances; including the coroner's report, forensic medical report, police reports, crime scene analyst reports, and the psychological reconstruction ,so that people may learn from the tragedy and, hopefully, be cautious and reduce the chances of similar occurrence in future. Psychological autopsy is most often used in cases of suspected suicide or homicide in an attempt to reconstruct the personal life and character of the deceased, to uncover hidden facts that may help to give family members peace of mind and also plays a role in revealing the manner of death.

Keywords: Psychological autopsy, Suicide, Behaviour, Autopsy.

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Submission date: Mar 11, 2024

Revision date: Apr 9, 2024

Published date:

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Introduction

Psychological autopsy refers to a postmortem examination that seeks to reveal the intention of the deceased through a retrospective evaluation by structured interviews of family and relatives as well as a perusal of relevant records¹. Originally devised for investigating, clarifying, and assisting police inquiries on the mode of death in equivocal deaths² Psychological autopsies have, in recent times, been more commonly used as a research tool for investigating risk factors for suicidal deaths. To a large extent, this has been driven by the accepted "truism" in suicide research that roughly 90% of suicide decedents have one or more diagnosable mental disorders.³ Although many psychological autopsy studies have been published from India, but there has been no attempt to systematically review the available literature. Further, currently accepted psychological interview practices suffer from several limitations. Lack of standardised instruments or methods, informant bias, lack of interviewer training, recall bias and problems with selection of controls are some of the key drawbacks⁴ which have also, predictably, led to questions about the admissibility of psychological autopsy evidence in courts.⁵ The psychological autopsy is a systematic process used in a death investigation to come to an educated conclusion as to the manner of the death when the manner is in question. When a death is due to the actions of the decedent, the manner is typically either suicide (intentional) or accidental (unintentional). While the psychological autopsy can be particularly helpful in cases where the manner of death is equivocal or indeterminate, it can also be used when the cause and manner are not in question. In these cases, the psychological autopsy may provide insight as to why the death occurred – the perfect storm of circumstances. The majority of cases we have researched are at the behest of the surviving families with a need to understand their loved one's death. We have conducted this study to find out the demographic factors involved in suicidal death cases and to access the mental condition of the deceased just before the death.

Material and Method

Following approval of the institutional ethics committee, North Bengal Medical College, close

relatives of all deceased came to the mortuary of Department of Forensic Medicine and Toxicology, NBMCH within the time period of 1st July 2022 to 31st December 2022 with history of suicide were interviewed. Dead bodies in advanced stages of decomposition, unknown dead bodies were excluded from the study. This is a descriptive cross sectional study. The informed consent was obtained from the interviewee & relatives. Total 106 cases were interviewed, data were collected in a pre-structured proforma where history taken about the deceased in respect of educational qualification, economical status, place of living, marital status, presence of love affair, mode and number of previous suicide attempts, family history of suicide, medical and psychiatric disease, loss of job and recent financial losses, any underlying cause present or not. Medical history including mental diseases, name and types of drugs used by the deceased were also collected. Economical status were measured as per Modified Kuppaswami scale⁶. Collected data were analyzed by using Microsoft Excel and latest version of SPSS software.

Result and Discussion

Among the 106 total cases, incidence of suicide was higher (60.38%) in male in comparison to female (39.62%) (Fig 1). Sarkar et al found equal distribution of gender in same institution few years back⁷. Complete opposite result was seen by Chowdhury et al at Sundarban area of West Bengal, where females were dominant in suicidal deaths (67.1%)⁸ Current study reveals suicidal deaths are higher among 20-39 years age group (45.28%), followed by 0-19 years age group (22.64%), 40-59 years age group (21.69%), and lowest in above 60 age group. Study subject with minimum age 13 years and maximum age 88 years are observed in the study. Result is somewhat similar with the study by Chowdhury et al, where median age of suicide for male and female were respectively 24 years and 22 years⁸ The findings are also supported in Pan India scenario, where it was observed that 42% people committed suicide were from age of 15-39 years⁹. Among the total study population, rate of suicide is significantly higher in residents of rural areas (67.63%) whereas only 12.11% people were from urban areas (Fig 2). Similar findings were reported by Kumar et al, in

their study based on Uttar Pradesh, India¹⁰. On the contrary, it was exactly opposite in UK and Ireland¹¹. Educational Attainment is inversely proportional in the current study (Fig 3), where it is lowest among the subjects completed their Graduation or Post Graduation in compare with the subjects attained primary level education, middle school education and without any formal education. Data from National Crime Record Bureau strongly supports this finding¹². MK Shrivastava et al¹³ and KK Kamalijja et al¹⁴ also observed similar findings though later found higher trends in middle school pass. Marriage plays a significant risk factor in current study as most of the subjects (68%) are married. Findings are strongly supported in the studies done in Indian context¹³¹⁵¹⁴ Conflicting result found in the studies conducted in Europe¹⁶. Only 22% of study subjects had a history of psychiatric illness or mental disorder and 56% of them were taking anti psychotic drugs. Findings are conflicting with the data provided by WHO, where 60% of subjects committed suicide were suffering from any mental disorders²¹ Cavangah et al³ EK Moscici et al²² reported more higher rates in Europe and USA. All the previous study^{14,9,23,8,4,3} highlighted lower socioeconomic status, sudden financial loss, loss of job are significant causative factors in suicidal deaths. Current study also strengthen that cause with that of 77% of subjects were from lower socioeconomic status, and 34% were undergone sudden financial loss.

Table 1:

Attributes	Frequency	Percentage
Sex		
Male	64	60.38
Female	42	39.62
Transgender	0	0
Age-		
0-19	24	22.64
20-39	48	45.28
40-59	23	21.69
60 onwards	11	10.37
Source of history -		
Family members	70	66.04
Relatives	34	32.08
Neighbours	2	1.88

Table 2:

Marital status		
Unmarried	34	32.07
Married	72	67.92
Divorce	0	0
Educational status		
Illiterate	24	22.64
Primary school	37	34.9
High school	24	22.64
Higher Secondary school	12	11.3
Graduate	9	8.5
Previous attempt of suicide		
Present	25	23.58
Not present	81	76.42
Family history of suicide		
Present	11	10.37
Not present	95	89.63
History of death of family members:		
Present	28	26.42
Not present	78	73.58

Table 3:

History of mental illness of deceased		
Present	29	27
Not present	77	73
Socio-economic status of survivors		
Unemployed	11	10.4
Low	73	68.86
Middle	19	17.92
Higher middle	2	1.88
Higher	1	0.94

DISTRUBUTION ACCORDING TO HISTORY OF LOSS OF JOB:

- HISTORY OF LOSS OF JOB PRESENT (23.58%)
- HISTORY OF LOSS OF JOB ABSENT (76.42%)

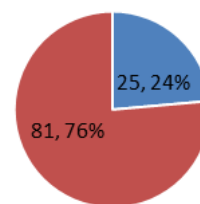


Fig. 1: Distribution according to the history of loss of job:

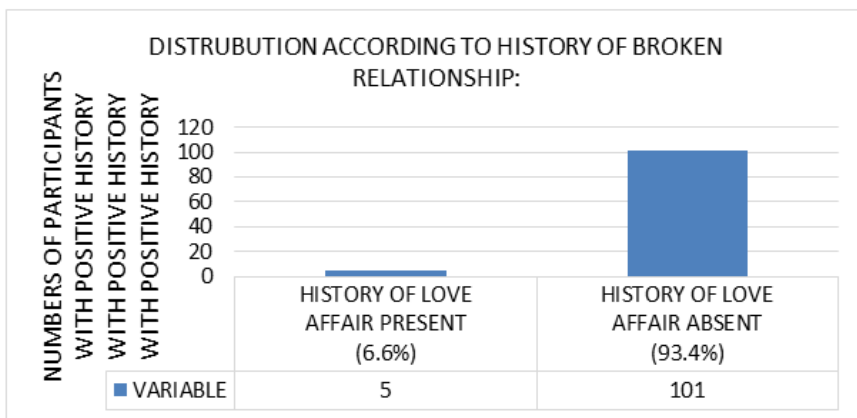


Fig. 2: Distribution according to history of broken relationship

DISTRIBUTION AS PER ANY HISTORY OF FAILURE IN EXAMINATION:

- HISTORY OF RECENT FAILURE IN EXAMINATION PRESENT (8.5%)
- HISTORY OF RECENT FAILURE IN EXAMINATION ABSENT (91.5%)

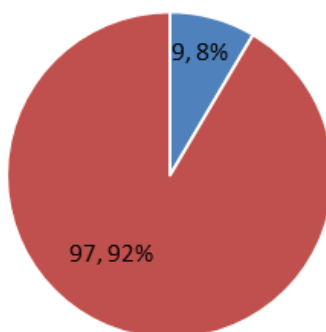


Fig. 3: Distribution as per any history of failure in examination:

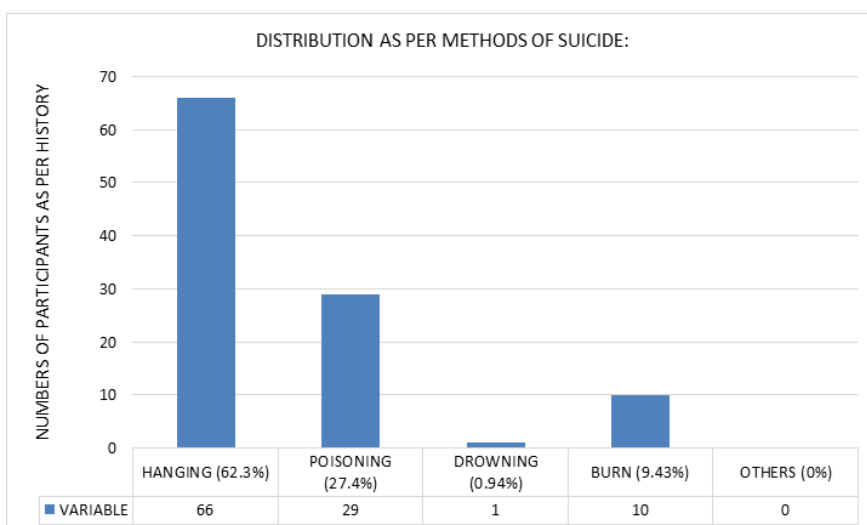


Fig. 4: Distribution as per the method of suicide:

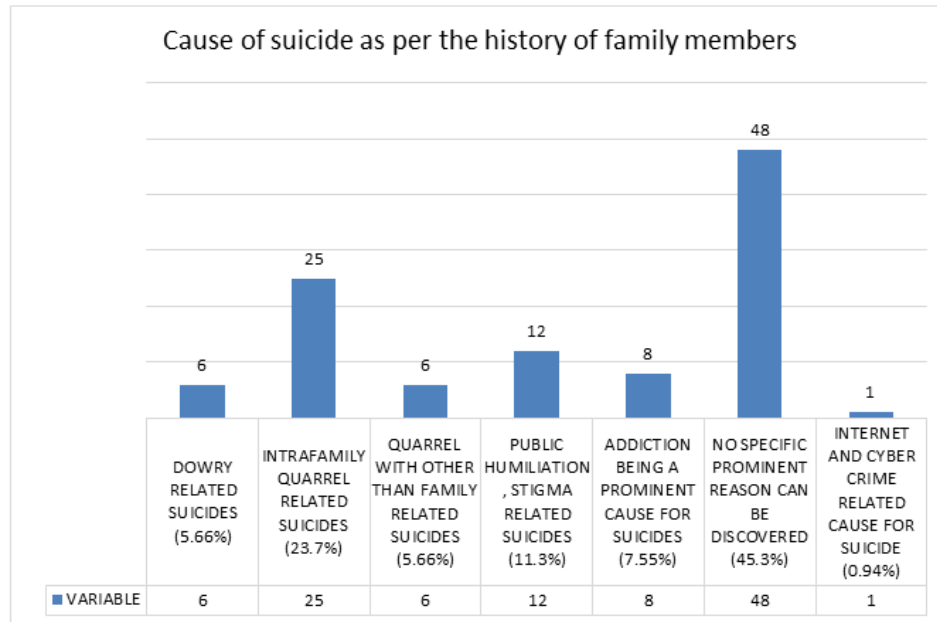


Fig. 5: Distribution as per prominent contributing causes that lead to suicide as per history by family members:

Conclusion

The present study showed that suicidal deaths are commonly seen in cases of unemployed and low income group male gender in the age group 20-40 years of age. Married persons are more prone to commit suicide and in most of the suicidal deaths, previous attempt of suicides were not present. Family history of suicide were found only in about 10% cases & history of death of family members were found in only 26.42% cases. Presence of mental illness is one of the precipitating factor of suicide and in our study was seen in only 27% cases. Few cases were due to loss of job (24%) and history of broken relationship (5%). Hanging followed by poisoning was the most common mode of suicide.

Conflict of interest: No such.

Source of Funding: Nil

Ethical clearance: From the institutional ethics committee, North Bengal Medical College. (Reference No. - IEC/NBMC/M-01/52/2022 Dt. - 15.07.2022)

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