

Suicide: Attempts Methods and Causes in Cases Brought for Autopsy in Bpkihs, Dharan

Pradhan A¹, Tripathi CB², Mandal BK^{3*}, Karn A⁴ and Subedi ND⁵

¹Department of Forensic Medicine and Toxicology, KIST Medical College and Hospital, Lalitpur, Nepal

²Department of Forensic Medicine and Toxicology, Banaras Hindu University, Banaras, India

³Department of Forensic Medicine and Toxicology, Chitwan School of Medical Sciences, Bharatpur, Nepal

⁴Department of Forensic Medicine and Toxicology, Chitwan School of Medical Sciences, Bharatpur, Nepal

⁵B.P. Koirala Institute of Health Sciences, Dharan, Nepal

Abstract

Objective: To identify the intensity of the frequency of suicide in relation with the Medicolegal aspect of the incidence such as method, duration of survival, causes of committing suicide and previous attempts to commit suicide.

Material and Methods: Descriptive study of 100 fatal suspected suicidal cases brought for postmortem examination at BPKIHS, Dharan from January 2007 to April 2008. Pre-tested questionnaire was used to obtain data by direct interview with the visitor of the victim and information available on police record.

Results: Death on spot was (47%) while 41% victims died within 24 hours of incidence, whereas 11% victims survived for 7 days. Suicidal victims (56%) were either discovered dead not hospitalized. Low socioeconomic conditions were most frequent (45%) cause for committing suicide, followed by psychosocial causes (43%), and chronic diseases (12%). Poisoning (53%) and hanging (45%) were the two exclusive methods employed for committing suicide. Most of the victims (83%) made sure shot and successful attempt to commit suicide in their very first attempt while history of previous suicidal attempts was available in 17% of victims.

Conclusion: This study exemplified that most of the victims incorporated such suicidal attempts and method that they made sure that their attempt is successful suicide and the cause to commit is mostly their low socioeconomic condition and psychosocial reasons.

Keywords: Suicide; Medicolegal; Poisoning; Hanging; Socioeconomic

Introduction

Suicide is defined as intentional taking of one's own life. Until the end of the twentieth century, approximately, suicide was considered a criminal act; legal terminology is used, in the Latin phrase *felo-de-se*, which means "a crime against the self" [1]. Suicide is the commonest manner of unnatural death that has been increasing everyday in Nepal.

No systemic study has been done to explore the sociological as well as medico legal aspects of suicide in Nepal. This study may reveal the better understanding of the suicidal behavior, understand the issues related to suicide and eventually provide guidance on suicide prevention.

Material and Methods

This is a descriptive study of 100 fatal suspected suicidal cases brought for postmortem examination at BPKIHS; Dharan from January 2007 to April 2008 was undertaken. Pre-tested questionnaire with variables like time of occurrence, method used, duration of survival after the attempt, causes of committing suicide and previous attempts to commit suicide were included. Data was obtained by direct interview with the visitor of the victim and information available on police record (Table 1). Finally the computation of data was done with the help of Microsoft Excel and SPSS program in tabular forms and observations were recorded, analyzed and discussed.

Observation and Result

The causes of suicide have been categorized in three major groups i.e. 1) Socioeconomic 2) Psychological and 3) Physical. From the observations made on the major causes of suicide it appears that

the most frequent causes for committing suicide belonged to the socioeconomic (45%) group followed by psychosocial causes (43%), and chronic diseases (12%).

It was observed that amongst the socioeconomic group of causes, low socioeconomic causes were the major cause in maximum number of the victims (12 %). Amongst the male victims highest number of victims (12 or 24.48%) harbored from economic causes such as unemployment (3 or 6.12%), debt (3 or 6.12%), loss in business (2 or 4.08%), and sudden termination from job (4 or 8.16%).

| DURATION OF SURVIVAL | Male | | Female | | Total |
|-----------------------|------|-------|--------|-------|---------|
| | No | % | No | % | No/ (%) |
| Death on spot | 22 | 44.90 | 24 | 47.06 | 46 |
| Survival up to 24 hrs | 20 | 40.81 | 21 | 41.18 | 41 |
| Survival up to a week | 6 | 12.24 | 5 | 9.8 | 11 |
| more than a week | 1 | 2.04 | 1 | 1.96 | 2 |
| Total | 49 | 100 | 51 | 100 | 100 |

Table 1: Duration of Survival after their Attempt.

***Corresponding author:** Dr. Mandal BK, Department of Forensic Medicine & Toxicology Chitwan School of Medical Sciences, Bharatpur- 10, Nepal, E-mail: birendra092@yahoo.com

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Chronic disease was another group of causes for committing suicide in both genders, where female victims (7 or 13.73%) were more than male victims (5 or 10.2%).

Discussion

The present study (Table 2), revealed that poisoning (53%) and hanging (45%) were the two exclusive methods applied for committing suicide and hanging were slightly more preferred by females (47%) while poisoning by males (55.1%). In similar studies Nandi et al. [2] studying suicide in west Bengal stated that poisoning and hanging were common methods. According to the study of Bhatia et al. [3] and Agrawal et al. [4] the common methods used were poisoning, hanging, drowning and burning. WHO [5] gave the best evidence for estimating the global burden of suicide deaths from pesticides ingestion from China and South East Asia. In 2001 there were an estimated 5,17,000 suicides in developing countries in these regions and research evidences suggests pesticide ingestion accounted for over 60% of these suicides. Adarsh and Krishan [6] reported that the methods of suicide employed generally reflect the easy availability of methods in the community.

In this study causes of suicide have been categorized in three major groups i.e. out of which the most frequent causes responsible for committing suicide belonged to socioeconomic group (45%) followed by psychological (43%) and physical causes (12%). The socioeconomic status of people of Nepal is awfully poor, since the per capita income is only Rs 470 (NRS). Further, during our period of study the political riots, unlimited bandhs, strikes and incapability to carry on business in such circumstances led to economic crisis among the inhabitants. This economic status led to social predicaments, thus the socioeconomic group of causes of committing suicide were highest. In similar study, Sharma [7] reported a high rate of suicides amongst the unemployed poor (56.1%) followed by the lower middle income group (37.7%). Shah (1973) pointed out that sometimes patients commit suicide with the idea of. It is clear from the report of Brown [8], modern research on the interrelationship of economic disasters is unemployment and suicidal behavior continues to validate. Stack and Hass [9] reported several macro level findings of an inverse relationship between income levels and suicide. Stack's interpretation of this is that money reduces stress, makes life more worth and hence reduces the propensity toward suicide.

In the present study (Table 3), it is observed that most of the victims (83%) made sure shot successful attempt to commit suicide in

| METHOD OF COMMITTING SUICIDE | Male | | Female | | Total |
|------------------------------|------|-------|--------|-------|---------|
| | No | % | No | % | No/ (%) |
| Hanging | 21 | 42.86 | 24 | 47.06 | 45 |
| Poisoning | 27 | 55.10 | 26 | 50.98 | 53 |
| Burning | 1 | 2.04 | 0 | 0.00 | 1 |
| Drowning | 0 | 0 | 1 | 1.96 | 1 |
| Total | 49 | 100 | 51 | 100 | 100 |

Table 2: Method Used for committing Suicide.

| PREVIOUS ATTEMPTS | Male | | Female | | Total |
|-------------------|------|-------|--------|-------|---------|
| | No | % | No | % | No/ (%) |
| Once | 5 | 10.2 | 9 | 17.65 | 14 |
| Twice | 1 | 2.04 | 1 | 1.96 | 2 |
| More than twice | 0 | 0 | 1 | 1.96 | 1 |
| Nil | 43 | 87.76 | 40 | 78.43 | 83 |
| Total | 49 | 100 | 51 | 100 | 100 |

Table 3: Previous Attempts to Commit Suicide.

their very first attempt. However, previous history of suicidal attempts of once, twice or even five times was available in 17% of victims. In series of follow up study, Schneidmans [10] found risk of subsequent successful suicide in 8% of attempters and this rate was 2% in study of Baecheler's [11].

The presence of previous attempts is an alarming sign for the family member to become alert enough to have close watch on these individuals, especially when one could have anticipated such attempt and should try to prevent them. It is also obvious that for an individual who is determined to end his/her life, he/she can always find a way out. The study shows that vulnerability to repetition can be indicated by the presence of psychiatric morbidity, poorer coping style to stress, the nature of suicide attempt and degree of communication of intent.

Conclusion

Therefore on the basis of observations made during the present study of 100 fatal suicidal cases brought to BPKIHS, it may be concluded poor socio-economic condition suicidal tendencies accomplished. Majority victims used hanging followed by consumption of poison as methods of choice for committing suicide. Socioeconomic, psychological and chronic diseases were noted as the frequent causes in descending orders for fatal suicidal behavior of which most of them had the very first sure shot successful attempt to commit suicide, of whom nearly half of victims dying on the spot and more than half of suicidal victims were either discovered dead or could not be hospitalized as they died soon after the incidence. Our present study has brought a new outlook in the society which in turn can help us to bring strategies to prevent the fatal suicidal acts for which some effective measures could be as under:

1. Identifying and reducing availability and access to the means of suicide such as Organophosphorus poisoning and drug overdose, demands strict legal scrutiny in the provisions of these compounds which may in turn limit the availability of common means of attempting suicide.
2. Improving health care services and promoting supportive and rehabilitation functions for persons affected by suicidal behavior.
3. Improving diagnostic procedures and subsequent treatment
4. Supporting media reporting on suicide and attempted suicide.
5. Health care professionals, especially in emergency services, should be trained to identify suicide risk cases and proactively collaborate with mental health services.
6. Legal action against suicide attempters and abettors should be taken.

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