



PATTERN OF SUICIDAL DEATHS AT KAMRUP, ASSAM: A RETROSPECTIVE STUDY

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ABSTRACT

Suicide is a major cause of death in today's world. The pattern of suicidal deaths in a particular area points not only to the quality of living but also the social and mental makeup of the population. The present study includes the cases which have been identified as suicidal deaths being brought for medico legal autopsy. Out of 894 cases of suicidal deaths majority of the cases were males belonging to the age group between 21-30 followed by 31-40. Hanging and self burn were the most common methods employed. Most of the victims were of lower socio economic class belonging to rural background. Economic instability and family conflict were the most common cause that led to suicides. Suicidal deaths are preventable by the combined effort of the Government agencies, adaptation of healthy lifestyle, counseling facilities and change in the mindset of the people to adapt to all the difficult situations in life.

KEYWORDS : Suicide, Hanging, Economic instability, Counseling

INTRODUCTION

Suicide is the act of intentionally causing one's own death. Suicide is death resulting directly or indirectly from a positive or negative act of the victim himself, which he knows will produce this result.¹ Around 800,000 to a million people die by suicide every year, making it the 10th leading cause of death worldwide.^(2,3) More than one lakh persons (1,35,445) in the country lost their lives by committing suicide during the year 2012.4 . Suicide and attempted suicide, while previously criminally punishable, is no longer in most Western countries. It remains a criminal offence in our country. With the advent of cut throat competition and mechanized upbringing with less emotional quotient the rate of suicides is on the way up which stands at 11.2 per 100000.⁴

Thus suicide which is very much a byproduct of the advancements of society needs a careful and refined approach so as to study the factors related to it, the causes and if possible to find ways to prevent such a tragedy.

AIMS AND OBJECTIVES

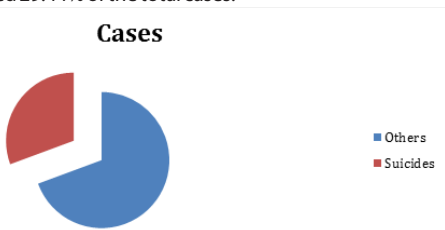
The aim of our study was to ascertain suicidal death patterns in and around Kamrup, Assam and to analyze the data with respect to epidemiological and demographics presentation, methods used for committing suicide and to find out the underlying factors that led to it.

MATERIALS AND METHODS

A retrospective study was conducted on 3036 victims subjected to medico-legal autopsy at mortuary of Department of Forensic Medicine, Gauhati Medical College, Guwahati over a period of one year from January 2016 to December 2016. The study design comprised of thoroughly scrutinized information gathered from autopsy related documents, proforma, history of relatives of the deceased, hospital records, concerned investigating agencies and laboratory report of viscera and their contents, fluids, diseased tissues and organs and other relevant suspicious samples, available in our department. Suicide notes if any were also included.

OBSERVATION AND RESULTS

A total of 3036 autopsies were carried out during the study period out of which 894 cases were opened to be that of suicides which constituted 29.44% of the total cases.



Month wise distribution

The month of October recorded the maximum number of cases with 98 cases followed by January with 86 cases and minimum recorded in February with 54 cases, with an average of 71.83 cases per month.

Month	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Cases	89	57	74	85	79	61	84	64	64	99	64	74

Age and sex

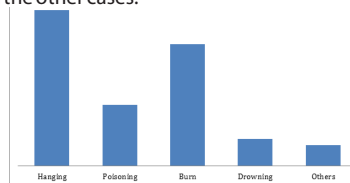
The age group 21-30 years recorded the highest number of cases followed by 31-40 years with males numbering 524 and females 370 with a male female ratio of 1.4:1.

Age	Male	Female
1-10	0	0
11-20	80	49
21-30	196	136
31-40	158	124
41-50	35	29
51-60	31	19
Above 60 years	24	13
Total	524	370

In the age group 21-30 males constituted 38.10% of cases and females 37.43% while in the age group between 31-40 males consisted of 30.56% cases and females 34.08%. Least number of cases was observed in the age group above 60 years in both males and females.

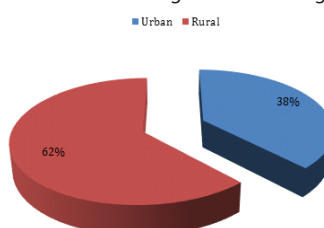
Method of committing suicide

Hanging was the method which accounted for the highest number of cases 362 followed by burn 284 cases and poisoning with 142 cases. Drowning accounted for 60 deaths while others methods such as suicidal cut throat, electrocution, and railway run over etc constituted the other cases.



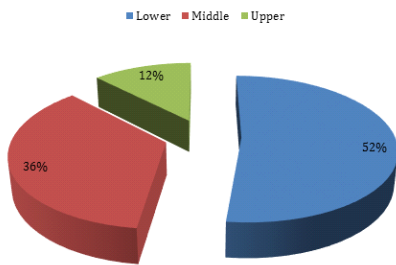
Location

The majority of the victims belonged to rural background



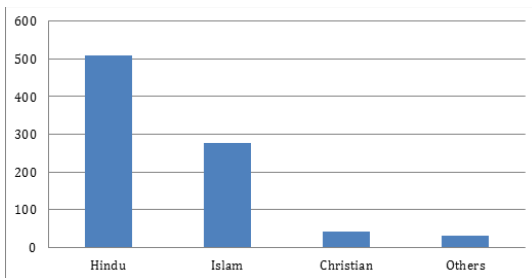
Economical status

The lower class people were the majority of affected victims with 470 cases followed by the middle class 314 cases and last by the upper class people 110 cases.



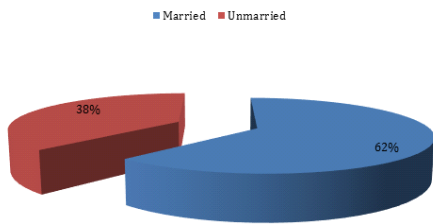
Religion

The highest number of victims belonged to Hindu religion followed by Islam, Christian and other religions comprising cases.



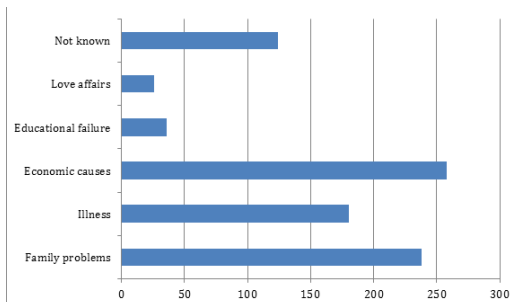
Marital status

Of the 894 cases 552 cases (62%) were married while 342 cases (38%) were unmarried.



Causes of suicide

Economic crisis/poverty was the most common cause involved with 258 cases reporting the same followed by family related conflicts or problems with 238 cases. Illness, both mental and physical was another common cause with 180 cases. Love affairs and educational setbacks were the other causes. In Nearly 124 cases sufficient information regarding the cause could not be elicited.



DISCUSSION

Suicide cases account for nearly 30% of cases undergoing autopsy. This is slightly less to the findings of Santosh CS et al⁹ who found suicides in nearly 44% of cases autopsied. However the relative large numbers of cases brings fore to the fact that suicide is now an inseparable part of medicolegal autopsy.

Most of the victims belong to the age group between 21-30 and 31-40 years which is similar to the studies by Behera A et al¹, Singh H et al⁵, Meera T et al⁶, Sharija S et al⁷ and Vijaykumari N⁸. This can be

explained by the fact this age group is the most active and are entrusted with the responsibilities of the family leading to conflicts and economic distress which forces one to end his or her life.

As in the most studies the highest number of cases were observed in the males but the male to female ratio was comparatively high in the studies conducted by Singh H et al⁵, Meera T et al⁶. the higher incidence of males can be attributed to the demographic distribution in the area and also the financial responsibility heaped solely on the male in our society.

Hanging and self immolation were the most common methods employed for suicide. This is similar to the studies of Meera T et al⁶, Sharija S et al⁷, Vijaykumari N⁸, Arun M et al¹⁰ and Vij K¹¹. However Behera A et al¹, Singh H et al⁵ singled out poisoning as the most common method used. This distribution can be explained by the geographical location of the study area which is not agriculture based and hence comes with less number of agriculture poison use. Hanging is easily managed with use of garments and kerosene being commonly used kitchen oil is also used.

Majority of the cases being of the rural background brings to fore the fact that the study area consists of a lot of migrant population who venture out of their home for better prospects. The failure of such endeavors leads to suicide. This is similar to the findings of Santosh CS et al⁹.

Majority of the victims belonged to lower socioeconomic class. This is similar to the study of Behera A et al¹. This is due to the fact that economic crisis leads to poor quality of life leading to suicide. Also Hindus being the most common religion involved is consistent with the demographic profile of the region. This is similar to the findings of Santosh CS et al⁹.

Majority of the cases were married which is consistent with the age profile in the study. This finding is similar to the studies of Behera A et al¹, Singh H et al⁵, Meera T et al⁶, Sharija S et al⁷, Vijaykumari N⁸ and Santosh CS et al⁹. This is due to more responsibility and increases familial conflict among married people.

Economic causes, poverty and familial conflicts are the leading causes in the studies of Behera A et al¹, Singh H et al⁵, Meera T et al⁶, Sharija S et al⁷ and Vijaykumari N⁸. This is also similar to the NRCB⁴ data. This finding is relevant as economic instability and indebtedness leads to the person being termed a outcast in the society which leads to suicide. Also Meera T et al⁶ mentions illness as another important factor which is also true in our study. The rising economic costs associated with treatment and insufferable misery leads the person to commit such a step.

CONCLUSION

Suicide is an escapist measure taken by a person whose cognitive abilities are completely masked and clouded by confusion and in whom death may appear to be the only immediate certainty upon which he can lay hands on. With the growing menace of this event the challenges lie ahead not only on the individual but also the society as a whole to tackle this problem. A few suggestions are made:-

1. Creation of more employment opportunities for the weaker sections of the society
2. Easy availability of credit services for the poor so that they do not have to depend upon moneylenders for credit.
3. Cooperation between Government and Non Government agencies in implementation and awareness of welfare programmes for the poor.
4. To understand the need for psychiatric help and proper counseling for people showing signs of self harm
5. To reform the education system this puts a heavy price on marks and not on skill of a person.
6. Stringent dowry laws which prevents familial conflict regarding the same.
7. Better and vigilant policy of the Government on the sale and storage of pesticides and agriculture poisons.

Though it is not possible to bring back those lives which often lost in such tragic manner but identifying the underlying factors in the social system which promote suicidal tendencies and improving the mental health of the community can certainly prevents such incidence further. As such a multidisciplinary approach is required to prevent the loss of many valuable lives and the recognition of suicide not as an unfortunate event but as a 'social epidemic'

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