



“ANALYTICAL STUDY OF SUICIDAL DEATH CASES WITH SPECIAL REFERENCE TO AGE, SEX, METHOD AND MOTIVE”

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ABSTRACT

INTRODUCTION: Suicides are a major public health problem causing significant morbidity and mortality throughout the world. The cause for increased suicidal deaths may be due to rapid globalization, stressful lifestyle, decreased social sentiments etc. Pattern of suicides in a region depends upon various factors, ranging from previous history & easy availability to the least painful method of death. The present study is to determine the burden of mortality with regard to suicides, to determine the causative factors of suicides in our tribal and hilly region.

METHODS: A study was conducted on all cases of alleged suicidal deaths autopsied at R. N. T. Medical College, Udaipur during a period from 1st January 2021 to 31st December 2021. The main objective is to find the cause behind suicidal deaths.

RESULTS: Among 1100 cases autopsied during the study period, 256 (23.27%) cases of alleged suicidal deaths were present. Out of these the peak occurrence was in the age group of 20- 29 years (33.20%), male predominance was seen (65.23%), and among the known cause behind the suicides, Debts/property loss (11.72%) and mental illness (11.72%) was the most common motive. Poisoning (50%) was the most preferred method adopted for suicide.

CONCLUSION: The younger generation especially males in rural areas are at severe risk of being a victim of suicide. The incidence of suicides being a preventable cause of death, its morbidity and mortality can be reduced by planning and implementation of effective prevention strategies.

KEYWORDS : Suicide, Poisoning, Debt, Mental illness, Autopsy.

INTRODUCTION:

Suicide is a serious global public health issue. It is among the top twenty leading causes of death worldwide by world health organization (WHO). Close to 800000 people die by suicide every year globally.^[1] The word “Suicide” is derived from latin word 'Suicidium' which means act of taking one's own life.^[2] Suicide rate of India is 10.4 per one lac people by national crime record bureau (2019).^[3]

Global suicide rate was 10.5 per 100000 population for 2016. Globally suicide rate was 1.8 times higher in males than in females. Suicide is the second leading cause of the death among 15 to 29 years and 30 to 44 years age group, topped only by road injuries. (W.H.O.- 2019)^[1].

Suicide is a multidimensional and complex event so a multidisciplinary approach is needed which should include psychologists, psychiatrist, toxicologists, physiologists. Hence this study was planned with a purpose to find out motive and manner behind the suicide, so that a sound prevention program could be suggested, planned, and implemented for reducing the incidence of suicides.

MATERIALS AND METHODS :-

This study is carried out in the Department of Forensic Medicine and Toxicology, R.N.T. Medical College, Udaipur from January 2021 to December 2021, including all autopsy cases with history of suicide. Study has started after the clearance of Institutional Ethical Committee. Data has been collected after receiving consent by close relatives and attendants of deceased in preformed proforma. Various particulars such as age, sex, method, occupation, religion and motive behind the suicide noted.

RESULTS:-

During the study period, 1100 bodies were autopsied in which 256 cases (23.27%) were suicidal cases in which majority of the cases were of male individuals 167 (65.23%), whereas the females formed the minority 89 (34.77%) with male : female = 1.8 : 1. (Table – 1 and 2)

Table 1 : Total Autopsied cases versus alleged Suicidal deaths

Total No. of autopsied cases	Total No. of suicidal deaths	Percentage
1100	256	23.27%

Table – 2 Showing the distribution of suicidal deaths according to sex of the deceased

Sex of the Deceased	No. cases	Percentage
Male	167	65.23%
Female	89	34.77%
Total	256	100%

Of these victims highest numbers of suicide committed by the age group of 20 – 29 years followed by the 30 – 39 years. No child under the age of 10 years committed suicide and only 4 persons above the 70 years old age committed suicide. (Table – 3)

Table – 3 : Distribution of suicidal deaths according to age

Age in years	No. of suicides	Percentage
0-9	00	-----
10-19	37	14.45%
20-29	85	33.20%
30-39	63	24.61%
40-49	35	13.67%
50-59	19	7.42%
60-69	13	5.08%
> 70	04	1.56%
Total	256	100%

In this study the most commonly adopted method for suicide was found to be poisoning (50%) and the second highest was hanging (38.28%) followed by drowning (5.86%). Suicide by burning also seen in 3.52% cases. (Table – 4)

Table – 4 : Distribution of suicidal deaths according to method

Method adopted	No. of cases	Percentage
Hanging	98	38.28%
Poisoning	128	50%
Burns	9	3.52%
Drowning	15	5.86%
Railway	04	0.78%
Total	256	100%

Just like there is always a reason for every action done similarly suicides also has a definite reason. The whole episode of suicide which is mainly driven by this motive though remains a hidden truth it can

always be revealed from detailed analysis of the past history of the victim. In our study the major motive behind committing suicide was found to be Debts/Property loss/sudden change in financial status (11.72%) and mental illness (11.72%) of the individual. Though family problems/ family disputes and drunkard were also the major concerns for the victim of suicides, a major percentage of cause behind suicide remained a mystery (43.36%). (Table – 5).

Table No. 5 : Showing the distribution of the motive behind suicide

Motive behind Suicide	No. of cases	Percentage%
Debts/Property Loss	30	11.72
Not known	111	43.36
Studies/Exam failure	9	3.52
Family problems/Parents Scolded	24	9.37
Unemployment/Low quality of life	7	2.73
Chronic disease	7	2.73
Drunkard/Drug abuse	17	6.64
Dowry Dispute	1	0.39
Love failure	6	2.34
Extra Marital Affair	3	1.17
Mental illness	30	11.72
No parents	1	0.39
Sudden loss in Family	6	2.34
Divorced	3	1.17
All girl child	1	0.39
Total	256	100

DISCUSSION:

In the present study conducted for a period of 1 year from January 2021 to December 2021, among the 1100 autopsied cases a total of 256 cases of suicidal deaths were studied. The aim of this study was to know the pattern and method adopted for suicide and the motive behind the act of suicide in our tribal and hilly area of southern Rajasthan (Udaipur).

Of these victims of suicidal deaths highest no. of suicide was observed in the age group of 20 – 29 years (33.20%), similar pattern was observed at NCRB 2020 report where the age group is 15- 29 years accounts for largest proportion (34.4%) of suicides.^[4] The studies conducted by Shetty AK^[5] and Sukhadeve R et al^[6] shows similar results.

Our observation that male commits suicide more than female was similar to study conducted by Vijay Kumar et al^[7] and Kumar S et al^[8]. The study conducted by Naveen N et al^[9] shows the female dominance, which is against the result of this study. According to NCRB 2020, The overall male : female ratio of suicide victims was 70.9 : 29.1, which is almost similar to this study .(male : female = 65.23 : 34.77).

We can see the methods of suicide is changing from time to time and may from region to region. In this study most commonly adopted method for suicide was found to be poisoning (50%) followed by hanging (38.28%). Since combinedly they form more than 85% in our study we can quote that poisoning and hanging are the popular choice of method of suicide in our study area. Data of NCRB 2009^[10] shows the results similar to this study in which poisoning was the most common method for suicide followed by hanging. Also the study conducted by Pawale DA et al^[11] and Chandegara P^[12] shows the similar result. However the study conducted by Badiye A et al^[13] shows the hanging as most common adopted method for suicide.

One of the main objectives behind any study of suicides in a particular region will always be attributed to the motive behind the suicide. If this motive of many recorded cases comes under a common umbrella it sends a warning tone for the changes to be brought about in that surrounding area where the completed suicides happen. In our study there were many motives behind the recorded suicidal deaths, however in majority of the cases the cause behind the suicide was unknown but among the known cause behind the suicides, Debts/property loss (11.72%), mental illness (11.72%) and Family problems (9.37%), were the most common motive for the committing suicide. NCRB 2020 data shows the similar results to our study. The study conducted by Shetty AK^[5] and Baruah AM^[14] shows similar results to our study. Although study conducted by Naveen N et al^[9] shows unemployment as major cause behind the suicide, which is differ from this study.

CONCLUSION:-

Among 1100 autopsies conducted during the study period of 1 year, 256 cases were of alleged suicidal deaths amounting for 23.27% of all

the medico legal autopsies done in our study area, Udaipur.

Adults constituted the bulk of the cases with the age groups (Young) of 20-29 forming the clear majority with 33.20%. Males formed the predominance (65.23%) of the study with the mortality ratio of 1.87 : 1 for male : female. The literates, Labours & Housewives formed the majority of the victims, with respect to the education status and occupation of the deceased contributing 69.92% and 23.05% & 19.53% respectively. The common method adopted for Suicide was found to be Poisoning (50%) and Hanging (38.28%) in this part of the region and the main motive behind committing suicide was found to be debts/Property loss/Sudden change in financial state of the deceased, amounting to 11.72% of the cases and mental illness 11.72% in our study.

The increasing evidence of suicidal menace and death is creating a greater challenge for psychologist, forensic - personnel, social workers to identify the underlying factors in the social system which promotes suicidal death and improvement in the mental health of the community which in turn surely prevents such incidences further. Suicide affects mainly youth who are capable of work, which causes a big loss to the community, especially during this period of covid-19 pandemic.. This study will helps to determine which factors can be modified to help prevent suicidal death and what interventions are taken which are appropriate for a specific group of people.

This type of study has not been conducted in this tribal and hilly area of Southern Rajasthan in previous several years, So I have decide to conduct this study to know the profile of suicidal death cases in this region.

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