

Analytical Study of Suicidal Deaths in Female Reproductive Age Groups, Based on Autopsies Conducted in GGH, Mortuary

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ABSTRACT

Suicidal death is nothing but ending one's own life, which is the most daunting human tragedies and a serious public health problem. As for NCRB the suicide rate has increased from 6.2% (2020) to 7.2% (2021). This study takes 100 cases retrospectively for the duration of 6 months. All suicidal deaths postmortem examinations are done in the reproductive age group females from April 2022 to September 2022. Those deaths occurred on the spot, or in the GGH Guntur, while undergoing treatment. The distribution of cases based on age, geographical area, marital status, educational status, place of occurrence, history of previous attempt of suicide, hormonal status in female, case of death and motive behind the suicide. Majority of cases belong to age group 19-29 years and 58% of urban population committed suicide with common motive behind the suicide is failure in exam. Preferred method for death is ingestion of poison which is seen in 46% of cases. Victims with changes in hormonal status like in menstruation are considerable in number. Family history of committing suicides or history of suicides in the neighbors have provoked some people. Counselling of such identified group of people at various levels will help the needy victims and decrease the suicide incidence.

Keywords: female, reproductive age, suicide, urban, poison, motive.

INTRODUCTION

Death is inevitable event in human being; however, everyone dies naturally after certain age, but unfortunately life may end unnaturally at any time due to accident, homicide or by committing suicide. Suicidal death is nothing but ending one's own life, which is the most daunting human tragedies and a serious public health problem. As for NCRB the suicide rate has increased from 6.2% (2020) to 7.2% (2021) which involves

various methods like ingestion of poison, hanging (self suspension¹), drowning and fall from height. Hanging is Every year number of suicidal deaths brought for post-mortem examination to GGH, Mortuary Guntur. A comprehensive review of the roots of problems can help us to draw various strategies to prevent suicides. Thus, it can be seen that primary prevention of suicide cannot be realistically planned given the present state of our knowledge.

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MATERIAL AND METHODS

All suicidal deaths postmortem examinations are done in the reproductive age group females from April 2022 to September 2022. Those deaths occurred on the spot, or in the GGH Guntur, while undergoing treatment. All the Postmortem examinations are attended, reports are collected from the department, Hospital records are collected for the admitted cases. Suicidal notes, history from the relatives of the deceased inquest report, report of Scene of Offence is also considered. Information regarding the present problem is gathered from several sources and all the collected information is analyzed and compared with available sources and the following conclusions were drawn.

RESULTS AND DISCUSSION

1. AGE:

The study population was divided into 3 age groups as shown in Table 1 i.e., 12-18, 19-29, 30-45. The most number of cases belongs age group 19-29 i.e., 62 cases (62%), Followed by 30-45 age group which recorded 30 cases and 8 cases (8%) belongs to age group 12-18 years. In this study, age group of 19-29 years were occupied the major part of deaths i.e., 62% which is followed by 30-45 years age group i.e., 30% deaths and least number of deaths are seen in 12- 18 (8%) years age group. Which is correlate with the study conducted by Girish Gutte⁶ et al i.e. (53%). According to National Crime Records Bureau report of 2021 in total age group 18 to below 30 years are 34.5 % (Table 1).

Table 1: Distribution according to age group

Age group	No. of Autopsy	Percentage
12 yrs-18 yrs	30	30%
19 yrs-29 yrs	62	62%
30 yrs to 45 yrs	8	8%
Total	100	100%

2. GEOGRAPHICAL AREA:

Major portion of the Study Group belong to urban with 58 cases (58%), Followed by semiurban i.e., 22 cases (22%), with nearly equal from rural i.e., 20 cases (20%). It is observed predominantly population belongs to urban areas 58 % , semi urban 22% , whereas rural areas 20 % .Our study population mostly belongs to urban and semi urban area.

3. MARITAL STATUS:

Based on marital status, more Suicides are seen in Married i.e. 74 deaths (74%) when compared with Unmarried i.e. 20 deaths (20%), followed by Divorced i.e. 12 deaths (12%). suicide rates are high in married (74 %) compared to unmarried (20 %), divorced (12%). As per National Crime Records Bureau, 2021 statistics the suicide rate are in the following order, married (66.9%), followed by unmarried (24 %), divorced (1.5%).

4. EDUCATIONAL STATUS

In present study Graduates have high rates of Suicides i.e. 72 deaths (72%), followed by persons finished secondary Education i.e. 14 deaths (14%) followed by Illiterate i.e. 8 death (8%) , and least at primary School level i.e. 6 death (6%). In this study, suicides are observed highly in graduates (72 %), intermediate level (14 %), illiterates (8 %) and least number of cases observed in primary school level (6 %). According to the NCRB, 2021 statistics the suicide rate are in the following order, high rate in secondary education (24 %) , middle level (19.1%), primary education (15,8 %), illiterates (11 %) .

5. PLACE OF OCCURRENCE :

Observations from this maximum number of suicides occurred in their house 86 deaths (86%) remaining committed suicides in open fields i.e., 14 deaths (14%). In our observation ,majority people i.e., 86 % committed suicide in their houses and only 14 % in open fields.

6. HISTORY OF PREVIOUS ATTEMPTS OF SUICIDE

In this study population, most of the people did not have any history of previous suicide attempts i.e. 76 deaths (76 %). Those with previous attempts on self-account for i.e., 22 deaths (22%), least among previous history in family i.e. 2 deaths (2%). (Table 2)

In this study, we have observed least percentage of the people have the history of the previous attempts in self (22 %) in family (2 %), highest percentage (76 %) of with no previous history. Occurrence of suicidal deaths among the family members or the neighbours has provoked some of the people. (Table 2)

7. HORMONAL STATUS IN FEMALE:

Reference from above data suicidal deaths occurred in non-pregnant group i.e., 60 deaths (60%) followed by who were menstruating i.e. 36 deaths (36%) and least among pregnant women i.e., 4 deaths (4%). During this study from **Table 3**, it is observed that 36% of the females are in menstruation phase and 4 % pregnant while committing suicide. It is closely related to study done by Leenaar AA² et.al. in which They observed of women who died by suicide were menstruating at that time. Pal PB, Karmarkar R³ .et.al also mentioned in their

Table 2: Distribution based on history of previous suicide attempts

Previous attempts history	No. of Autopsy	Percentage
No history	76	76%
Self	22	22%
Family	2	2%
Neighbours	0	0%
Total	100	100%

Table 3: Distribution based on history of hormonal status in females

Hormonal status	No. of Autopsy	Percentage
Pregnant	4	4%
Non pregnant	60	60%
Menstruating	36	36%
Total	100	100%

study that the endometrium of most female subjects of child bearing age were seen to be in secretory phase while committing suicide (Table 3).

8. CAUSE OF DEATH

In the present study the leading cause of death is poisoning i.e. 46 cases (46%) followed by Hanging i.e. 38 deaths (38%), Burns and Drowning each 6 deaths (6%), railway injuries and fall from height each 2 deaths (2%).

Regarding cause of death, female died due to poisoning (46 %) , hanging (38%), suicidal burns and drowning (6%) , suicides at railway track and self fall from height (2%). Among the cases of poisoning pesticides (86.9%) and corrosive (8.7%) , piosion not detected (4.4%). piosion not detected due to more time gap between consumption and death (Table 4). According to NCRB 2021 statistics hanging (57%), poisoning (25.1%), drowning (5.1%). As per study conducted by Singh rajendra⁵ et al ., means adopted for suicide as follows poisoning (43.83%), burns (28.77%), hanging (19.18%), drowning (4.10%), railway injuries (4.10 %) (Table 4)

9. MOTIVE BEHIND THE SUICIDE:

In the present study the leading motive behind Suicides are Failure in studies and family problems each i.e. 24 deaths (24%). The other motives with decreasing order of frequency are Love failure, financial problems each 12 deaths (12%), dowry problems and illness each 6 deaths (6%), agricultural crop failure and others contribute with each 4 deaths (4%). From **Table 5**, the common motive observed

Table 4: Distribution according to cause of death

Cause of death	No. of Autopsy	Percentage
Poisoning	46	46%
Burns	6	6%
Hanging	38	38%
Drowning	6	6%
Railway injuries	2	2%
Fall from height	2	2%
Total	100	100%

Table 5: Distribution according to motive behind the suicide

Motive	No. of Autopsy	Percentage
Dowry problems	6	6%
Love failure	12	12%
Punishment from parents	8	8%
Failure in studies	24	24%
Family problems	24	24%
Financial burdens	12	12%
Agricultural crop failure	4	4%
Illness	6	6%
Others	4	4%
Total	100	100%

behind the suicide is the failure in the exam (24%) and family problems (24%), failure in love and financial burdens (12%), punishment from parents (8%), illness (6%), dowry problems (6%), agriculture failure (4%) and others (4%). According to NCRB 2021 statistics, family problems (33.2%), illness (18.6%) are the leading causes of death. Alcohol addiction (6.4%), marriage related problems (4.8%), love failures (4.4%).

CONCLUSIONS

After analyzing 100 cases of suicidal deaths brought GGH mortuary, Guntur highest number female deaths observed in 19-29 age group. victim females belong to urban and semi urban region with education graduate and above are more in victims. More incidents occur in their houses. Failure of exams and family problems are more common motives behind the suicide. Victims with changes in hormonal status like in menstruation are considerable in number. Family history of committing suicides or history of suicides in the neighbors have provoked some people. Poisoning followed by hanging are the most common methods adopted by victims. The lives of this age group are very precious for

the future development and prosperity of the country.

The suicide is a momentary decision which is taken for some insult happening to the body, mind and reputation. In most cases the suicide is not a wish to die but a cry for help identification of high-risk age groups for suicides, by close observation made by the parents, teachers, neighbors, social workers and doctors. Counselling of such identified group of people at various levels will help the needy victims and decrease the suicide incidence.

Conflict of interest statement: None.

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Ethical consideration: This study is approved by Institutional Ethics Committee of Guntur Medical College, Guntur, vide reference no. GMC/IEC/014/2022, Dated 29-09-2022.

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