Original Research Article

Profile of alleged suicidal deaths autopsied at Belgaum institute of medical sciences, Belagavi

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Abstract

Background: The present cross-sectional study was conducted at a tertiary care center, Belgaum for a period of 13 months from December 2013 to December 2014. The aim of this study was to know the pattern of suicides with respect to age, sex, domicile pattern and method adopted for suicide. A total of 842 autopsies were conducted during the study period of which 182 cases were of alleged suicidal deaths amounting for 21.61% of the mortality burden of all the medico legal autopsies done in our study area, Belagavi.
Key words: Autopsy, mortality, pattern, suicide.

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INTRODUCTION

By doing suicide, you don't just 'die' and become 'free' ... actually you 'run away' from the battlefield. – Shreemad Bhagvad Gita. Suicide is derived from the Latin word "sui" and "caedere" meaning "to kill oneself". If successful, it is a fatal act that represents the persons' wish to die. Suicide is a type of deliberate self-harm (DSH) and is defined as a human act of self-intentioned and self-inflicted cessation i.e. death, which ends with a fatal outcome.[1] The psychological state and social wellbeing of the individual, which often is considered the least important entity at the community level, are the major contributors for the rise in suicides at an alarming rate. These factors combined with mental and physical stress due to the massive globalization has made this preventable cause of death pose a major challenge in controlling the same. Improved surveillance and monitoring of suicides and suicide attempts is required for effective suicide prevention strategies.

MATERIALS AND METHODS

A cross sectional study from December 2013 to December 2014 was carried out at Belgaum Institute of Medical Sciences, Belagavi. Information about the victims of alleged suicide brought for autopsy, were obtained from hospital case records, police records and by direct interrogation with the, next of kin, friends and other relatives accompanying the victims. The socio demographic profile of the victim along with the reason which led to the act of suicide are noted for each case in a separate proforma after taking informed written consent.

a) **Inclusion Criteria**: All cases of suicidal deaths, confirming the manner of death as per the police inquest, information from relatives and Postmortem findings autopsied at Belgaum Institute of Medical Sciences, Belagavi.
b) **Exclusion Criteria:** All cases other than suicidal deaths and unknown cases autopsied at Belgaum Institute of Medical Sciences, Belagavi.

The data thus collected was analyzed, conclusions drawn, and various factors related to the distribution of suicidal deaths were interpreted in percentages.

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OBSERVATION AND RESULTS

During the study period from December 2013 to December 2014 a total of 842 cases were autopsied at Belgaum Institute of Medical Sciences, Belagavi of which 182 cases of suicidal deaths were studied. The burden of mortality of suicidal deaths from all the autopsied cases stood at 21.61%.(Table1). The study showed that majority of the cases were of male individual's i.e.117 (64.29%) whereas the female formed the minority i.e. 65(35.71%) individuals. The calculated ratio in our study was male: female is 1.8: 1 (Table 2). The age groups of the deceased individuals reported during the course of study showed the victims in age groups of 20-29 years to be the highest in number i.e. 77 cases (42.31 %) followed by age groups 30-39 years and 10-19 years with 36 (19.78 %) and 25 (13.74 %) cases respectively (Table 3). The pattern of suicidal victims was mostly of rural background while the urban population formed a minority of the victims. There were 103 victims i.e. (56.59%) from rural areas and 79 victims i.e. (43.41%) from urban areas (Table 4). Our studies showed that only 14.84% of victims were illiterates whereas the literates formed the chunk of the victims at 85.16% (Table 5). The "brought dead" cases of 101 (55.5%) victims formed most suicidal deaths than the admitted cases. The methods adopted for suicides with respect to a place always vary. In our study the most commonly adopted method for suicide was found to be hanging (42.31%) and the second highest being poisoning (40.11%) followed by burns(13.18%). Drowning and railway death formed a meager portion of our study with 3.85% and 0.55 % respectively (Table 6).

Table 1

Total No. Of Autopsied Cases	Total No. of Suicidal deaths among autopsied cases	Percentage
842	182	21.61 %

Table 2

Sex of the deceased	No. cases	Percentage
Male	117	64.29%
Female	65	35.71%
Total	**182**	**100**

Table 3

Age in years	No. of suicides	Percentage
10-19	25	13.74 %
20-29	77	42.31 %
30-39	36	19.78 %
40-49	22	12.09 %
50-59	09	4.94 %
60-69	08	4.39 %
70-79	04	2.20 %
> 80	01	0.54 %
Total	**182**	**100**

Table 4

Area	No. of suicidal Cases	Percentage
Rural	103	56.59%
Urban	79	43.41%
Total	**182**	**100%**

Table 5

EDUCATION STATUS	No. OF CASES OF SUICIDES	PERCENTAGE
Illiterate	27	14.84%
Primary	30	16.48%
Middle	9	4.94%
Secondary	55	30.22%
PUC	31	17.03%
Graduation/diploma	29	15.94%
PG	01	0.55%
Total	**182**	**100**

Table 6

Method adopted	No. of cases	Percentage
Hanging	77	42.31%
Poisoning	73	40.11%
Burns	24	13.18%
Drowning	07	3.85%
Railway	01	0.55%
Total	**182**	**100**

DISCUSSION

In our study male individuals formed the majority in the overall list comprising of 64.29% of the suicide burden whereas the females formed a minority consisting of 35.71%. The results obtained were similar to most studies however studies conducted by Athani Praveen *et al.* [2] and Naveen N *et al.* [3] were different where the female individuals formed a majority. In the study it was observed that majority of the cases (42.31%) were in the third decade of life i.e in the age group of 20- 29 years. This is the similar scenario in most of the studies compared; however, some studies by Athani Praveen *et al.* [2], Vendhan Gajalakshmi *et al.* [4], K. Sauvaget *et al.* [5] differ from our study where the majority of the cases were from second decade of life. India being a major agricultural country and most of the population being distributed in the rural areas the prediction of maximum number of suicides being in rural areas occurred in our study. This was the similar scenario in comparison with most of the other studies. However, the lesser studies in urban areas may also be a causative factor for lesser burden of suicides in the urban areas as compared to the rural population. The increase incidence of suicide among literates might be attributed to increase stress levels due to work pressure, Debts and financial constraints and more over pressure by the education imparted for literacy itself. Though the suicides recorded were of autopsied cases, some of the victims were fortunate enough to survive for an initial period of time before succumbing to their original decision to end their

lives. There were 81(44.5%) such cases which were admitted to the hospital before losing their battle with life. However, there were 101 brought dead cases to the hospital which formed majority of suicidal deaths. This may be attributed to the methods involved which some of them have a very less chance of reviving once attempted suicide. No significant co relation could be drawn from this data. Though suicides were there from centuries together, the methods adopted for suicides with respect to a place always vary. In our study the most adopted method for suicide was found to be hanging (42.31%) and the second highest being poisoning (40.11%) followed by burns (13.18%). Drowning and railway death formed a meager portion of our study with 3.85% and 0.55 % respectively. Most studies compared showed hanging and poisoning being the commonest methods adopted for suicides.

CONCLUSION

Suicides have always had a significant burden of mortality to the society, especially on the younger generation and productive population groups. This scenario has always been on the rise over a period. According to WHO statistics, in the last 45 years the suicide rates around the world have increased by 60%. It is predicted that by the end of 2020 the rate of death due to suicides will increase to one every 20 seconds[6]. A total of 1,34,516 suicides were reported in our country during 2018 showed an increase of 3.6% in comparison to 2017 and the rate of suicides has increased by 0.3%. [7] Suicide is a complex issue and therefore suicide prevention efforts require coordination and collaboration among multiple sectors of society, including the health sector and other sectors such as education, labor, agriculture, business, justice, law, defense, politics, and the media. These efforts must be comprehensive and integrated as no single approach alone can make an impact on an issue as complex as suicide. The prevention of suicide has not been adequately addressed due to a lack of awareness of suicide as a major public health problem and the taboo in many societies to openly discuss it. Till date, only a few countries have included suicide prevention among their health priorities and only 28 countries report having a national suicide prevention strategy. The world suicide prevention day 2019 stresses the acute need for prevention by its theme “working together to prevent suicide”. Raising community awareness and breaking down the taboo is important for the country to make progress in preventing suicide.

REFERENCES

1. Niraj Ahuja. A Short textbook of Psychiatry 6th ed.New Delhi;Jaypee Publishers.2006: 236
2. Athani P *et al.*. A Prospective Study of Pattern of Suicidal Deaths among Children in Bangalore During the Period 2007-2009. Indian Journal of Forensic Medicine and Toxicology; Jan-Jun2013; 7(1):144
3. Naveen N, Madhuvardhana T, Arun M, Balakrishna Rao A J, Kagne R N. Profile of suicidal poisoning in Puducherry area: International Journal of Recent Trends in Science February 2015; 14(1): 76-79
4. Vendhan Gajalakshmi and Richard Peto. Suicide rates in rural Tamil Nadu, South India:Verbal autopsy of 39 000 deaths in 1997–98; International Journal of Epidemiology 2007; 36:203–207
5. Sauvaget K, Ramadas, J. M, Fayette G, Thomas S, Thara, R. Sankaranarayanan .Completed Suicide In Adults Of Rural Kerala: Rates And Determinants. The National Medical Journal Of India 2009; 22(5): 228-233
6. Suiside data [Internet]. Mental health. [cited 2020Feb26]. Available from https://www.who.int/mental_health/prevention/suicide/suicideprevent/en
7. NCRB Accidental deaths and Suicides in India 2018 http://ncrb.gov.in accessed on 2020Feb26.
8. Suicide data [Internet]. Mental health. [cited 2020Feb26]. Available from: https://www.who.int/mental_health/prevention/suicide/suicideprevent/en/

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