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ORIGINAL ARTICLE

VICTIM PROFILE OF SUICIDAL DEATHS: A PERSPECTIVE FROM TERTIARY HEALTH CARE CENTRE, MANGALORE, SOUTHERN INDIA

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ABSTRACT: Suicidal deaths in a region reflect the socio-economic status and intellectual health status of that population. Suicidal deaths are preventable health hazards. A six year retrospective research from January 2005 to December 2010 was conducted at A. J. Institute of Medical Sciences and Research Centre, Mangalore, India, one of the leading tertiary health care centre of southern part of Karnataka. Among fifty six suicidal death cases reported during the period from January 2005 to December 2010, thirty six were males and twenty females. Majority of suicidal deaths were found in the age group of 21 to 30years. Maximum numbers of victims (38) were from the rural background. The maximum number of suicidal deaths (60.71%) was among the married persons. The most common mode of committing suicide in our study was Poisoning. Suicidal deaths can be curtailed by the collective efforts of the family members and other social groups and more importantly change in the frame of mind of the people to acclimatize to all the intricate situations in life.
KEYWORDS: Poisoning; Religion; Rural; Suicide.

INTRODUCTION: Suicide is an act or an instance of taking one's own life voluntarily and intentionally especially by a person of years of discretion and of sound mind. Suicide is the one of the preventable public health hazard. The impact of suicide, is felt the world over. World health organization data reveals that globally about 1 million people committed suicide per year.[1] It is estimated that every 40 seconds, someone in the world dies by suicide and every 3 seconds, someone attempts suicide.[2] WHO reports that suicide is one of the top three leading causes of death worldwide for people of ages 15 to 34 year.[3]

Although these estimates are astonishing, it is likely that these are low considering issues of underreporting and differences among these countries in reporting procedures. Many epidemiological studies have described the pattern of suicide at the regional, national and at global levels.[4-9] The present study attempts to gather epidemiological information regarding suicidal deaths reported at A. J. Institute of Medical Sciences and Research Centre, Mangalore, India and to suggest preventive measures to avoid this preventable health hazard.

MATERIAL AND METHODS: The study consists of 56 cases of suicidal deaths reported at A. J. Institute of Medical Sciences and Research Centre, Mangalore, India, which is a tertiary care teaching hospital, situated in southern part of Karnataka. This retrospective study includes all suicidal cases reported during the period from January 2005 to December 2010. The prior permission to access the hospital records were taken from in-charge of medical record department. The data regarding the incidence, age, gender, religion, month of occurrence and mode of committing suicide was collected from the medical records and compiled in a preformed proforma.

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RESULTS AND OBSERVATIONS: Fifty six suicidal cases reported during the period from January 2005 to December 2010. Of these, 36 were males (64.28%) and 20 female victims (35.72%) as shown in Table No. 1. Majority of suicidal deaths were found in the age group of 21 to 30years, followed by the age group of 11 to 20 years, and 31 to 40 years respectively, as depicted in the Table No. 2.

Maximum numbers of victims were from the rural background (38) as depicted in the Table No. 3. Eighty percent of the victims were Hindus, followed by 12.50% Christians and 7.14% Muslims. The maximum number of deaths was among the married persons (34) as compared to unmarried persons (22). The most common mode of committing suicide in our study was Poisoning (64.29%) followed by hanging (17.86%), burns (10.71%) and drowning (7.14%) as shown in Table No. 4.

DISCUSSION: It is estimated that 10-20 million people make an attempt to commit suicide and one million people become successful in it.[10] Suicide is one of the 10 major causes of death in India.[11] India ranks second in number of suicidal death.[12] The economic aspect of suicide not only includes escalating health care costs as the human cost of suicide is often immeasurable.[13, 14] According to people doing research on specific field of suicide and suicidal behaviour society is heading for a dramatic rise in suicide behavior if prophylactic measures do not become an issue of immediate concern especially in the light of increasing concerns that the current economic crises can lead to an increase in global suicide statistics.[15]

Bulk of the suicidal death victims were from male gender which is in agreement with the studies in other parts of the country.[10,16-18] Ours is a male dominated society and males are considered to be the bread winner for the family. Stress of the responsibility may be the factor in males predominating the suicidal deaths. In a study conducted by Sahin at al. it is found that about 75% suicidal victims were females.[19] In Western World it is the females who outnumber males in suicidal attempts.[20] WHO report also confirms the male dominance among suicidal victims in majority of countries except in rural part of China wherein females outnumbered males.[21]

Most of the victims were in the age group of 21-30 years which is in concurrence with other studies.[22] Study conducted by Sahin et al. shows that 77% of suicidal victims were below the age of 24 years and the findings from study conducted by Gouda et al. found that peak incidence of suicidal attempts were between the age of 15 and 29 years.[10,19] However Bansal et al. in their study found that around 28% of attempted suicide cases were in the age group 20 years or less1 and Ramdurg et al. observed mean age of suicide to be 31.5 years.[20]

WHO report showed that age from 15 to 30 is at increased risk of suicide. A study done Africa reveal a cause for concern regarding the suicide rate among individuals aged 15 to 24 years, which is in steady rise over the years.[23] The younger age unfortunately not only a period of preparation for and transformation to adulthood, but has become a period in which adolescents increasingly facing many new challenges which they are not expecting.[24] Exposure to alcohol, drugs, sexually transmitted diseases, and an increasing incidence of teenage depression as well as suicidal behavior have become an obliterating threat to adolescent well-being.[25, 26] Another major challenge adolescents have to face is the tremendous responsibility of living with some hidden ailments like STD's because of risky life style.[26,27]

Maximum number of victims of suicide were from rural background in our study, which is similar to the other studies.[16] This reflects the fact that majority of India resides in rural background. Married people outnumbered unmarried people among suicidal death victims.

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This study is in concurrence with the studies conducted in different part of the India.[22, 28]

This study shows that maximum numbers of victims were Hindus, followed by Muslims and Christians. It is similar to the study conducted by Kadu et al. where 87% were Hindus, 7.6% were Muslims and 5% were Christians.[28] Hindus leading the suicidal death victims may be because of the fact they are the majority population. In this study majority of the subjects were Hindus (86.5%) which was similar to the findings of Gouda et al. (94.6% Hindus and 5.4% Muslims.[10]

The most common mode employed to end the life were poisoning, hanging, burns and drowning in the decreasing order in our study, which is similar to the other studies undertaken in various parts of the nation.[6, 22] In some studies conducted in India suicidal deaths by burns is common one next only to poisoning.[29] Modes adopted to end the life depends upon the circumstances, and ease of availability of the material for suicide.

CONCLUSION: The sad reflection of this precious loss of life in this study necessitates the combined approach of society and all the concerned to counsel and educate the younger generation to overcome the stressful factors in life. The Government welfare agencies along with Private agencies, Non-Government Organizations, and women self-help groups can take a leading step in counseling the vulnerable population at the right time in averting these tragic deaths.

Year	Number of cases	Percentage (%)
Male	36	64.28
Female	20	35.72

Table No. 1: Gender-wise distribution of suicidal deaths (n=56)

Age group in years	No. of cases	Percentage (%)
< 10	3	5.36
11-20	11	19.64
21-30	24	42.86
31-40	10	17.86
41-50	4	7.14
51-60	2	3.57
>61	2	3.57

Table No. 2: Age-wise distribution of suicidal deaths (n=56)

Sex	No. of cases	Percentage (%)
Rural	38	67.86
Urban	18	32.14

Table No. 3: Area of residence (n=56)

Nature of poison	No. of cases	Percentage (%)
Poisoning	36	64.29
Hanging	10	17.86
Burns	6	10.71
Drowning	4	7.14

Table No. 5: Mode of suicidal deaths (n= 56)

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