ORIGINAL RESEARCH

An Analytical Study on Suicidal Deaths in Females in Warangal Area

B R Chandra Hasini[1]

ABSTRACT

Introduction: Suicide is one of the leading causes of mortality, in nearly every country in the world. Depression, bipolar disorder, schizophrenia, anxiety disorders are known to be some of the causes apart from low socio-economic levels of the victims, illiteracy, social and sexual abuse, marital discord etc.

Materials and Methods: 400 females who were confirmed as death by suicide, were subjected to Post mortem examination and registered in the police stations coming under our jurisdiction. All deaths which occurred on spot or while undergoing treatment were selected. Inquest, first information report, statement by relatives, panchanama, of scene of offence, collected from Police ad post mortem report from Forensic department were taken including the investigations, X-rays,and CT scanning reports where necessary.

Results: The predominant age group was 21-30 years which saw 176 cases. Most of the victims were from rural background (49%), from low economic status (76%) and most of these females were illiterate (64.5%). Most of the women were married (57.35%) and the most common mode of death was by poisoning (41.25%) followed burns (32%). Husband was the first person to discover the body in most of the cases (38.75%) as many of the deaths occurred in the in laws house(60%).

Conclusion: As depression is the main cause for suicides, society needs to be education to recognize he symptoms of the high risk group so as to prevent such unnatural deaths.

Keywords: Suicides, females, post mortem reports, low socioeconomic status

How to cite this article: B R Chandra Hasini. An analytical study on suicidal deaths in females in warangal area. International Journal of Contemporary Medical Research 2015;2(4):1080-1084

[1]Assistant Professor, Department of forensic Medicine, Kakatiya Medical College,Warangal

Corresponding author: B R Chandra Hasini, Assistant Professor, Department of forensic Medicine, Kakatiya Medical College, Warangal

Source of Support: Nil

Conflict of Interest: None

INTRODUCTION

Life is the most valuable thing in the world. Taking the life of a human is supposed to be the highest sin of all. Hence, morally all p00eople are bound to preserve and safeguard life. The term suicide is used to denote self harm and deliberate termination of one's life. This could be due committed out of constricted thinking, severe anguish, and acute depression and disorder.Depression, bipolar disorder, schizophrenia, anxiety disorders are known to be some of the causes for it.[2]

800,000 people die due to suicides every year. The rate of suicide is increasing by 60% in the past 50 years. It is the eight leading cause of death and second leadingcause among the age group 15- 29 years. While the number of attempted suicides is known to exceed that of completed suicides, it is difficult to determine exactly how many attempts do occur. The World Health Organization recently estimated as many as 20 attempts for every suicide death.[1]

The true magnitude of suicide as a public health problem is not clear in India. In the last two decades, official figures of suicide rate in India have increased from 7.9 to 10.3 per 100,000. There is a wide variation in the suicide rates within the country. The southern states of Kerala, Karnataka, Andhra Pradesh and Tamil Nadu have a suicide rate of > 15 while in the Northern States of Punjab, Uttar Pradesh, Bihar and Jammu and Kashmir, the suicide rate is < 3. This variable pattern has been stable for the last twenty years. Higher literacy, a better reporting system, lower external aggression, higher socioeconomic status and higher expectations are the possible explanations for the higher suicide rates in the southern states[3]

Gender seems to play an important factor in the incidences of suicides, where males seem to have a preponderance over females. There may be different risk factors for this, and the male suicides are more violent than females. Some occupations have higher rates of suicides because of factors like low socio-economic background, income, education or adverse conditions in the workplace itself like adverse working conditions, negative attitude towards help seeking, and stigma

against mental illness.[5]
In some of the places, changes in educational systems, lack of proper parental care, family problems, peer pressure, adjustment disorders, academic pressure, sexual abuse, financial problems are the man causes of suicides. Unreciprocated love also seems to be a major cause.[2]
The present study was mainly to assess the magnitude of female deaths taking into consideration all the above risk factors in the population in around our area.

MATERIALS AND METHODS

The present study was made on the female dead bodies which were subjected to Post- mortem examination in the mortuary of the Department of Forensic Medicine, Kakatiya Medical College during Three years. 400 females who were confirmed as death by suicide, as mentioned in the inquest were included in the study. All these females were subjected to Post mortem examination and registered in the police stations coming under our jurisdiction. All deaths which occurred on spot or while undergoing treatment were selected. Cases where the cause of death is not confirmed as suicide and is ambiguous were excluded from the study. Unidentified bodies, decomposed bodies where the post mortem exam findings are unclear and exhumed bodies were also excluded. Inquest, first information report, statement by relatives, panchanama, of scene of offence is collected from Police ad pot mortem report form Forensic department. In some cases where they are admitted to the Hospital, their investigations, included X-rays,and CT scanning reports were also taken.

RESULTS

Out of the 400 confirmed female suicides, the predominant age group was 21-30 years which saw about 176 cases. 72 women in the age group of 11-20 years and 60 between 31-40 committed suicides (fig: 1)
Most of these suicides were from rural background (195) while urban background had lesser number of cases (81)(fig:2)
Among the economic status, the suicides were more common among the low economic group (309)and very less among the rich (9). 229 of these women were married while 62 were unmarried (fig: 3).
57 were widowed and 52 were either divorced or separated (Table: 1). Most of the women were illiterate (258) while 4 had studied uptopostgraduation (Fig:4)
Of the types of deaths, 165 cases were due to poisoning

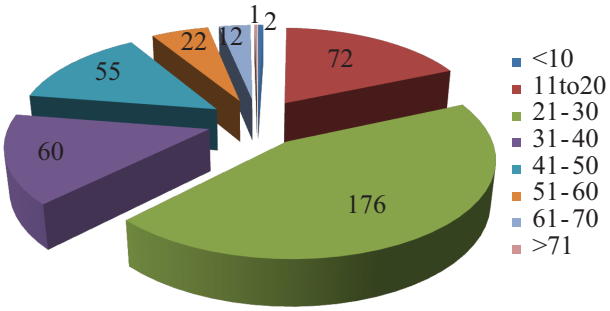

Figure-1: Age fo victims

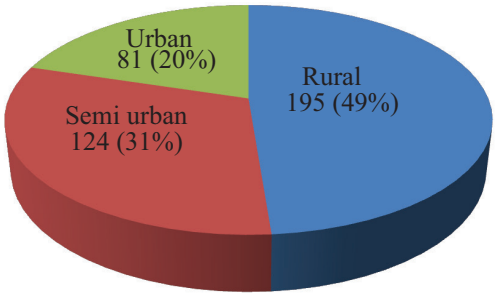

Figure-2: Habitat of victim

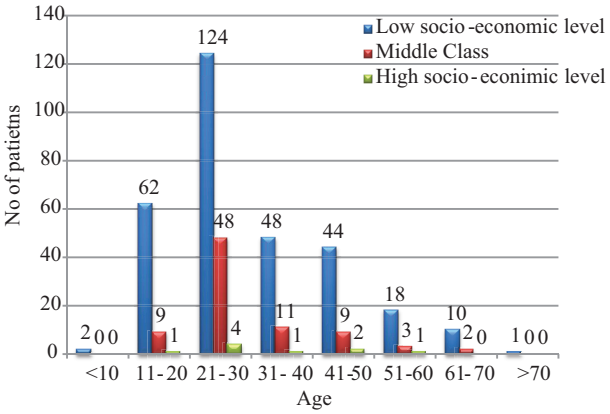

Figure-3: Socioeconomic status of women

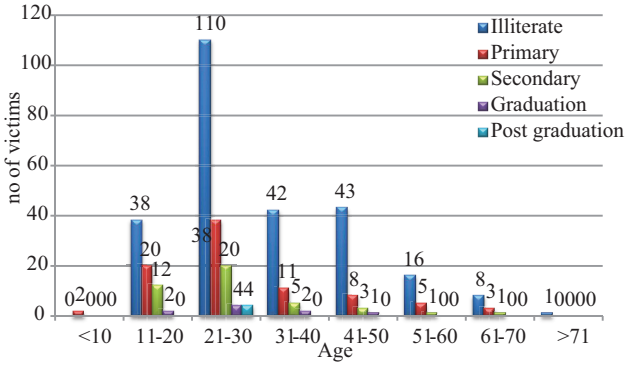

Figure-4: Educational Status of the victims

while 138 were due to burns(table: 2). There were no deaths due to fall from height or train accidents.
While many of the deaths occured in the in – laws house (240), 77 each occurred in the maternal house or in open area (table: 3).

Marital Status	<10	11-20	21-30	31-40	41-50	51-60	61-70	>71
Unmarried	2 (0.5%)	38 (9.5%)	20 (5%)	2 (0.5%)	0	0	0	0
Married	0	24 (6%)	112 (28%)	44 (11%)	35 (8.8%)	12 (3%)	2 (0.5%)	0
Widowed	0	8 (2%)	8 (2%)	8 (2%)	14 (3.5%)	8 (2%)	10 (2.5%)	1 (0.3%)
Divorced/ Separated	0	2 (0.5%)	36 (9%)	6 (1.5%)	6 (1.5%)	2 (0.5%)	0	0

Table-1: Marital status of the victims

Age	Drowning	Hanging	Burns	Poisoning	Railway Deaths	Fall From Height
<10	0	0	2	0	0	0
11-20	15	21	12	24	0	0
21-30	8	25	65	78	0	0
31-40	1	11	25	23	0	0
41-50	2	8	26	19	0	0
51-60	2	2	6	12	0	0
61-70	0	2	2	8	0	0
>71	0	0	0	1	0	0
total	28	69	138	165	0	0

Table-2: Method of deaths

Age	Maternal House	In Law's House	Other's House	Open Area
<10	2	0	0	0
11-20	35	22	1	14
21-30	25	104	3	44
31-40	14	35	1	10
41-50	1	45	1	8
51-60	0	21	0	1
61-70	0	12	0	0
>71	0	1	0	0
Total	77	240	6	77

Table-3: Place of death

Age	Dying declaration	Suicidal Note	Information to others	No information
<10	0	0	0	2
11-20	12	2	10	48
21-30	14	3	17	142
31-40	1	1	10	48
41-50	4	0	9	42
51-60	2	0	2	18
61-70	1	0	2	9
>71	0	0	0	1

Table-4: Declaration of death

Husband was the first one to see the body and report in 155 cases while64 and 50 case were reported by the mother-in-law and father-in-law respectively(Fig: 5).

The most common time to commit suicide seemed to be in the night (140) when the rest of the members of the house are asleep and 66 were in the early morning time. During the day 79 suicides were committed while

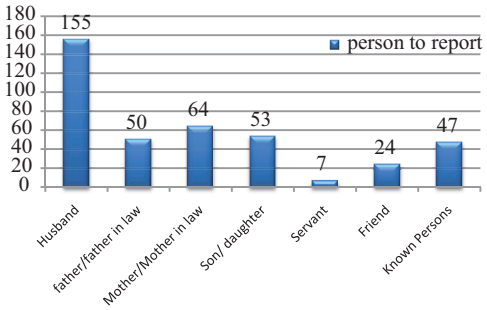

Figure-5: Person to report

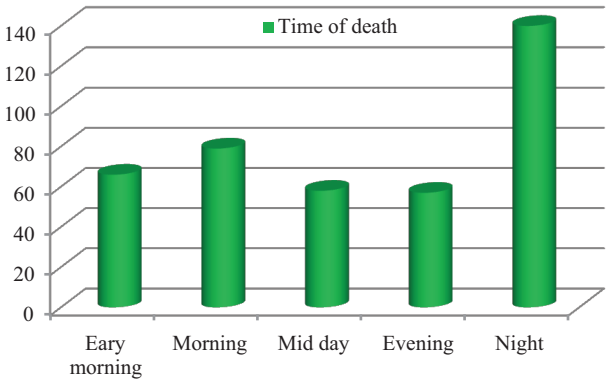

Figure-6: Time of death

mid day had observed58 deaths(fig:6).

Suicide note was seen only in 50 cases of which 17 were in 21-30 age group, while dying declaration was seen in 34 cases, again in the same age group. But suicides with no information was the most predominant mode with 310 deaths (table: 4).

The most common precipitating factor or reason for suicide was observed to be health issues in 159 cases, followed by dowry harassment and marital discord (66 and 62 respectively) Love failure was observed in 42

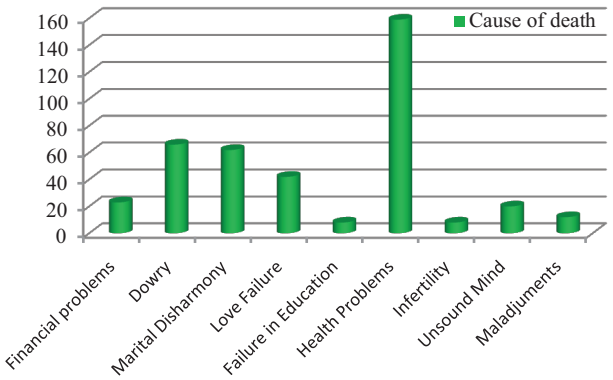

Figure-7: Cause of death

cases while financial problems, infertility, maladjustments were othercauses (Fig:7).

DISCUSSION

The peak age for committing suicides is 21 – 30 years(176), followed by 11-20 years and 31-40 yrs. This could be that the young are more emotional and vulnerable. Many other studies corroborated this. Sudheer K V et al found youth to be most susceptible to suicidal tendencies[2], while Rama Rao et al found 21-40 years to be so.[6] In contrast in a study in Canada, the most sensitive age was 30-69 years[7] In Canada too, the most common age for female suicides was between 30-34.[8] In fact according to their study, suicide was the leading cause of death second to motor accidents.[10]

Most of the victims in our study were from rural background, belonging to the low socio-economic class and were illiterate, especially in the vulnerable age group. This was corroborated by Rama Rao et al, who also found most of the people committing suicides were from the low socio-economic background, rural area and illiterate.[6] In studies abroad too, this was found to be one of the major risk factors for suicides.[15-19]

Marital status was married for most of the victims and many of them being in the age group 21-30. This could be due to marital discord or dowry harassment by the in-laws. Most of the time,the body was first reported by the husband. The death frequently occurred in the night in the in-laws house rather than in maternal house.

The preferred mode of death seemed to be by poisoning followed by succumbing to burnsaccounting to more than 3/4ths of the total deaths. In contrast, in a study by Stephanie Langlois et al, hanging or strangulation seemed to be the predominant cause in 39% of the cases while poisoning and inhalation of motor fumes came in second with 26% off the cases. In USA 60% of the suicides in a study were committed with a firearm.[9] Death by hanging was seen to be predominant in another study by Rama Rao et al in Andhra Pradesh. This was said to be probably due to the easy availability of the ligature materials.[6]

Although marital discord and dowry harassment cause were quite prominent of the reasons for deaths which were in more than 1/4th of the cases, nearly half of the victims committed suicides due to health reasons. In a study by Jha et al, it was observed that marital disharmony was a root cause for several cases of burns.[11] In yet another study in Delhi by Singh et al, the most common method for suicides in females was by burning.[12] Similar was reported by Dasgupta and Tripathi who reported 23% of suicidal deaths by burning in married females.[13,14] Mental retardation was one of te reasons for suicides according to a study by Yi Ju Pan et al in Taiwan[19] as also by other studies by other authors. In a study by Eve Moscicki et al, Mental and addictive disorders are the major risk factors for suicide in all age groups. Other risk factors include, disrupted marital status, prior suicide attempt, family history of psychiatric disorder or suicide, a firearm in the home, and a recent, severely stressful life event.

CONCLUSION

Despite the advances in the medical and educational fields, the mental health of our society is worsening. Studies suggest that depression substantially increase the risk of death, especially the ones by unnatural causes. Hence it is necessary to prevent the deaths by adopting a few measures. It is always better for society to play an important role in identifying the risk prone groups. Health education, timely crisis intervention either by medical like counseling or by psycho-socio measures will be of a great value.

REFERENCES

1. WHO : http://www.who.int/mental_health/prevention/suicide/suicideprevent/en/
2. SudheerKV,SethuramaSubbaiah A: Incidents of suicides aming youth in Kerala: An analytical and retrospective study into psychosocial determinants and consequences. Congitive discourses int multidisciplinary Journal: July 2013;1:6-10
3. Vijayakumar L. Suicide and its prevention: The urgent need in India. Indian J Psychiatry. 2007;49:81–4.
4. Windfur, K., &Kapur, N. (2011). Interntational Perspectives on the epidemiology and aetiology of suicide and self-harm. In R. C. O'Connor, S. Platt, & J. Gordon (Eds.), International handbook of suicide prevention: Research, policy and prac-

tice (pp. 27–58). London: Wiley.
5. Milner, A., Spittal, M. J., Pirkis, J., &LaMontagne, A. D. Suicide by occupation: A systematic review and meta-analysis.British Journal of Psychiatry 2013;203:409–416.
6. RaoBharati Rama, V Chand Basha , k Sudahakar Reddy; An analytical study of deaths due to hanging in Warangal Area, Andhra Pradesh. Indian Journal of Froensic medicine and toxicology; 2012:6:16-19.
7. Camaron A Mustard, Amber Bielecky, Jacob Etches, Russel Wilkins, Michael Tjepkema et al. Suicide mortality by occupation in Canada. Can J Psy. 2010;55:369-76
8. StÈphanieLanglois and Peter Morrison: Suicide deaths and suicide attempts:2002: Health Reports, Vol. 13, No. 2. : 9-21.
9. 4 Centers for Disease Control and Prevention. Preventing Suicide. Available at http://www.dcd.gov/safeusa/suicide. Accessed March 7, 2001
10. Statistics Canada. Leading Causes of Death at Different Ages, Canada, 1998: Shelf Tables (Catalogue 84-208-XPB) Ottawa: Minister of Industry, 2001.
11. Jha SS. Burns mortality in Bombay. Burns 1981;8:118-22
12. Sinha SK. Bride burning cases in Bihar go unreported. The Times of India 1987;7.
13. Dasgupta SM, Tripathi CB. Burnt Wife Syndrome. Annals Acad. Med 1984;13:37-42
14. Tripathi RP. The rise and fall of the Mughal Empire. Allahabad Central Book Depot. 1966:290.
15. Milner A, Spittal, M. J., Pirkis, J., &LaMontagne, A. D. Community Ment Health J. 2015;52:383-386.
16. Morrell, S., Page, A., & Taylor, R. Birth cohort effects in New South Wales suicide, 1865–1998. ActaPsychiatricaScandinavica 2002;106:365–372
17. Lorant, V., Deliege, D., Eaton, W., Robert, A., Philippot, P., &Ansseau, M. Socioeconomic inequalities in depression: a meta-analysis. American Journal of Epidemiology 2003;157:98–112
18. Page, A., Morrell, S., & Taylor, R. Suicide differentials in Australian males and females by various measures of socio-economic status, 1994–98. Australian and New Zealand Journal of Psychiatry 2002;26:318–324.
19. Pan, Y. J., Stewart, R., & Chang, C. K. Socioeconomic disadvantage, mental disorders and risk of 12-month suicide ideation and attempt in the National Comorbidity Survey Replication (NCS-R) in US. Social Psychiatry and Psychiatric Epidemiology 2013;48:71–79.
20. Charlotte Björkenstam, Lars-Age Johansson, Peter Nordström, Ingemar Thiblin, Anna Fugelstad, Johan Hallqvist, Rickard L jung. Suicide or undetermined intent? A register-based study of signs of misclassification; . Population Health Metrics 2014;12:2-10.
21. Qin P, Agerbo E, Mortensen PB: Suicide risk in relation to socioeconomic, demographic, psychiatric, and familial factors: a national register-based study of all suicides in Denmark, 1981–1997. Am J Psychiatry 2003;160:765–772
22. Mortensen PB, Agerbo E, Erikson T, Qin P, Westergaard-Nielsen N: Psychiatric illness and risk factors for suicide in Denmark. Lancet 2000, 355:9–12