# **Original Research Paper**



## **Forensic Medicine**

## A SOCIOPSYCHOLOGICAL STUDY ON SUICIDAL DEATHS

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ABSTRACT A well-known definition of suicide was stated by Shneidman in 1976 – "human act of self-inflicted, self-intentional cessation of life". The primary aim of the study is to analyse socio- psychological causes, factors and methods frequently adopted in suicidal deaths and ways of dealing with it. Psychological evaluation reveals detailed picture of mental degradation and associated suicidal risk factors. Suicide is outcome of an individual who cannot correlate the existing reality with expectations. Pattern adopted for suicide varies from person to person and place to place. Hence a cross sectional study was done on 278 dead bodies sent for autopsy and it was found that 21-30 years age group more prone and poisoning was thecommonly adopted method of suicide. In relation to motive for suicida deaths, maximum number of suicidal problems, in which marital disharmony constitutes a major cause of death.

## **KEYWORDS**: Suicide, psychological evaluation, Methods adopted.

#### INTRODUCTION

Death is a final journey, it may begin suddenly which may be natural or unnatural (accidental, suicidal, homicidal). Suicide is not new in human history rather it is as old as humanity itself and its sources reach far back into the beginning of the civilization. Suicide is a global phenomenon in all regions of the world. About 78% of global suicides occurred in low- and middle- income countries. According to World Health Organization (WHO), about 800,000 lakh people die due to suicide every year. Suicide is the second leading cause of death, especially in the age group of 15 to 29 years. A major proportion of all unnatural deaths results from suicides.

Suicide is a major social problem which reflects the mental well being of an individual and also imposes a huge burden on social, emotional, economic status of the family and the society. Personal problems, relation with family and friends and relation with society are the major contributory factors that convert a normal individual into a victim of suicide. An attempt has been made in this study to ascertain the nature, severity and effect of the suicidal deaths on the society, so as to analyze and bring out a way to enlighten it.

### **OBJECTIVES**

The objective of the present study was to analyze socio psychological causes, factors, methods frequently adopted and the motive for suicide in suicidal deaths.

#### MATERIAL AND METHODS

The present study has been carried out in the Department of Forensic Medicine and Toxicology, Sri Venkateswara Medical College, Tirupati. A cross sectional study was done on suicidal deaths comprising of 278 dead bodies which was brought for autopsy. A proforma was designed and incorporated with necessary details that has to be recorded with informed consent from the family members, relatives and friends of the deceased people and with the data obtained detailed analysis was done.

#### OBSERVATIONS AND RESULTS

Age of the suicidal individuals is broadly grouped into ten year intervals. Youngest was 14 years old and oldest was 80 years old. Male suicidal deaths are 164 (59 %) which out numbered female suicidal deaths 114 (41%). Highest incidence was noted in the age group of 21 to 30 years (32.4 %), followed by 31 to 40 years (23.0 %), 11 to 20 years(15.5%), 41 to 50 years (11.9 %), 51 to 60 years(9.3%), 61 to 70 (6.5%) years and 71 to 80 years(1.4%) respectively. In the present study, most of the suicidal victims were labourers 81 (29.14 %), followed by house wife 69 (24.82 %), self employed 33 (11.87 %),

student 32 (11.51 %), private sector 26 (9.35 %), farmer 21 (7.55 %), government sector 9 (3.24 %) and least in unemployed 7 (2.52 %). Among the methods adopted in suicidal deaths, gender wise distribution of cases is as follows: out of 278 cases, majority belongs to 102 cases of poisoning, out of which 69 (67.64 %) are males, 33 are females (32.36 %) followed by 93 burns cases, 38 (40.86 %) are males and 55 (59.14 %) are females; 56 hanging cases, 36 (64.28 %) are males and 20 (35.72 %) are females; 21 rail run over cases, 18 (85.71 %) are males and 3 (14.29 %) are females; 3 drowning cases, 2 (66.67 %) are males and 1 (33.33 %) are females and 2 fall from height cases, both sexes have equal distribution, one each. One complex method was seen by a female, using both hanging and poisoning methods. In the present study, family problems was the reason for maximum number of suicidal deaths i.e., 108 (38.9 %), followed by chronic illness 47 (17.0 %), addiction 26 (9.3 %), depression 25 (9.0 %), love failure 14 (5.0 %) and least in academic failure 7 (2.5 %) and psychiatric illness 7 (2.5 %). Cause not known cases constitute 22 cases (7.9 %). There are also multiple motives, which constitute to 13 cases (4.7%).

## DISCUSSION

With increasing age numbers of cases are reducing in both genders. Among these cases the youngest one was 14 years old and eldest one was 80 years old. In males highest incidence was noted in the age group of 21-30 years (28.05 %), followed by 31 – 40 years (26.83 %). In females highest incidence was noted in the age group of 21 – 30 years (38.60 %) followed by 11 - 20 years (23.68 %). In the present study, most of the suicidal victims were labourers 81 (29.14 %), followed by house wives 69 (24.82 %), self employed 33 (11.87 %), students 32 (11.51 %), private sector employees 26 (9.35 %), farmers 21 (7.55 %), government sector employees 9 (3.24 %). Least number of people are in unemployed category 7 (2.52 %). In the present study, maximum number of suicidal deaths are due to poisoning i.e., 102 (36.70 %), followed by burns 93 (33.45 %), hanging 56 (20.14 %), rail run over 21 (7.55 %), drowning 3 (1.08 %) and least in fall from height 2 (0.72 %). In one case (0.36 %) poisoning and hanging both methods were adopted by the individual. Among age wise distribution in motives, most of the cases were seen in 21 - 30 years (males 17, females 32) of age group in family problems. According to Dr. D. A. Pawale et.al, out of 1502 autopsies were carried out in which suicides constituted 527 cases (35.08%). Males constituted 28.68% of cases belonging to the age group 21-30 and females 34.66% while in the age group between 31-40 males consisted of 18.85% cases and females 30.67%. Farmers accounted 212 cases (40.22%), 125 cases (23.71%) belonged to housewife, 57 cases (0.10%) were unemployed and 44 (0.08%) were students. Economic crisis/poverty involved with 184 (34.91%) cases,

family related conflicts or problems with 132 (25.04%) cases, addicts with 54 (0.10%). According to W. Sandhya Manohar et.al, out of 117 cases 32 cases from males and 58 cases from females cause of death was poisoning, it is considered as most prominent cause of death. According to Sachidananda Mohanty et.al, two important methods of suicide were, poisoning (70.97%) with mostly ingestion of insecticide or pesticide (53.25%) followed by hanging (20.97%).

#### CONCLUSION

Present study shows poisoning as the leading cause of death followed by burns and hanging. This distribution can be explained taking into consideration the geographical location of the study area which is agriculture based. Suicide is a Universal phenomenon and is preventable by meticulous screening and counseling of the individuals. The people in risk group as, from low socio economic group, illiteracy, need continuous health education and counseling for their minor health ailments. Proper counseling is to be extended to the girls in pubertal age and there should be proper health care provision to reduce their physical pain, induced by onset of menstruation. Old age persons should be properly taken care especially when they are left alone by the loss of their life partner. The National Health policy on mental disorders leading to suicides should be made more effective by, Universal prevention strategies designed in such a way so as to identify population at risk and especially those in remote and inaccessible areas and also by improving health standards in needful areas. Social barriers, stigmas and social beliefs should be addressed effectively.

TABLE 2: AGE AND SEX WISE DISTRIBUTION OF METHODS ADPOTED IN SUICIDAL DEATHS:

AGE	POISON ING	POISON ING		BURNS		HANGING		RAIL RUN OVER		DROWNING		FRO IT	MUTIPLE METHODS	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
11-20	3	9	4	10	5	6	4	2	0	0	0	0	0	0
21-30	13	8	15	26	13	9	5	0	0	0	0	0	0	1
31-40	19	7	10	9	10	3	3	0	1	0	1	1	0	0
41-50	12	0	5	7	6	1	1	0	0	1	0	0	0	0
51-60	14	5	3	0	0	1	1	1	1	0	0	0	0	0
61-70	5	4	1	3	1	0	4	0	0	0	0	0	0	0
71-80	3	0	0	0	1	0	0	0	0	0	0	0	0	0
TOTAL	69	33	38	55	36	20	18	3	2	1	1	1	0	1
	102	102		93		56		21		3		2		
%	67.64	32.36	40.86	59.14	64.28	35.72	85.71	14.29	66.7	33.3	50	50	0	100

TABLE 3: AGE & SEX WISE DISTRIBUTION AMONG MOTIVES IN SUICIDAL DEATHS:

	FAMILY		CHRONIC		DEPRESSI		ADDICTI		LOVE		HUMILIATI		PSYCHIATRI		ACADEMIC		NOT		MULTIPLE	
AGE I	PROBLEMS		ILLNESS		ON		ON		FAILURE		ON		C ILLNESS		FAILURES		KNOWN		MOTIVES	
	AGE										I I		(excluding depression)							
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
11-20	1	8	2	2	3	1	1	0	2	4	0	5	0	0	3	3	4	4	0	0
21-30	17	32	3	5	2	3	8	0	7	0	0	1	1	0	1	0	5	3	2	0
31-40	13	14	5	2	4	3	9	0	0	1	1	0	1	1	0	0	3	0	7	0
41-50	9	4	7	2	1	2	3	0	0	0	0	0	0	1	0	0	0	0	4	0
51-60	3	1	8	4	2	1	4	0	0	0	0	1	0	0	0	0	2	0	0	0
61-70	4	1	3	2	0	2	1	0	0	0	0	1	1	2	0	0	1	0	0	0
71-80	1	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTA	48	60	30	17	13	12	26	0	9	5	1	8	3	4	4	3	15	7	13	0
	108		47		25		26		14		9		7		7		22		13	
%	44.4	55.6	63.8	36.2	52	48	100	0	64.3	35.7	11.1	88.9	42.9	57.1	57.1	42.9	68.2	31.8	100	0

## REFERENCES

- Vvpillai text book of Forensic Medicine and Toxicology 17th edition, 2016, see II, chapter 13, Medicolegal aspects of Injuries and deaths; gg.288.
  Gautam Biswas, volume 1; Recent Advances in Forensic Medicine & toxicology,
- Gautam Biswas, volume 1; Recent Advances in Forensic Medicine & toxicology Nagesh kumar GRao, First edition; Section III, Chapter 18,429-430.
- World Health Organization available from https://www.who.int/mediacentre/factsheets /fs398/en/.
- M E N T A L H E A L T H C A R E A C T 2 0 1 7, http://www.prsindia.org/uploads/media/MentalHealth/MentalHealthcareAct,2017.pdf.
- Dr. D. A. Pawale et.al Trends in suicidal deaths brought for medico legal autopsy at RCSM medical college Kolhapur :Retrospective study Journal of Forensic Medicine, Science and Law; A Journal of Medicolegal Association of Maharashtra Vol 24. Number 2 (July-Dec 2015).
- W. Sandhya Manohar Microanalysis of the Adolescents Suicides, Indian Journal of Forensic Medicine and Pathology, Volume 9 Number 2, April June 2016; DOI: http://dx.doi.org/10.21088/ijfmp.0974.3383.9216.3.
- Mohamy S, Sethi A, Patnaik KK and Mishra A. Socioeconomic Demographic Study of Suicide among the People in a Southern Town Berhampur of Odisha State (India). Austin J Forensic Sci Criminol. 2014;1(2): 6.