

## **ORIGINAL RESEARCH PAPER**

## **Forensic Medicine**

# TREND OF SUICIDE IN VARANASI DISTRICT IN UTTAR PRADESH

**KEY WORDS:** Suicide, autopsy, Varanasi, N.C.R.B.

Piyush Kumar Gangwar\*

Junior Resident, Department of Forensic Medicine, Institute of Medical Sciences, Banaras Hindu University, Varanasi, Uttar Pradesh, PIN 221005

Manoj Kumar Pathak

Professor, Department of Forensic Medicine, Institute of Medical Sciences, Banaras Hindu University, Varanasi, Uttar Pradesh, PIN 221005

ABSTRACT

Fifteen suicides took place every one hour during the year 2015 in India by N.C.R.B. Data Maximum number of suicides was reported in Maharashtra followed by Tamil Nadu and West Bengal. In our study 150 cases were taken in this study which included suspected suicide. Collection of data includes questionnaires schedule recorded and interview sessions at the time of autopsy with the concerned investigating officer, parents of the victim, other family members and relatives of the victim, neighbor's and other persons accompanying the deceased. Data also collected from police inquest, post-mortem register and reports, hospital memos in hospitalized cases, death certificate if hospital death is there, suicide notes/other relevant reports etc.

#### INTRODUCTION

The National Crime Record Bureau Report on Suicides in India, 1, 31,666 suicides in year 2014 and 1,33,623 suicides in year 2015 were reported [1]. Fifteen suicides took place every one hour during the year 2015 in India. Maximum number of suicides was reported in Maharashtra followed by Tamil Nadu and West Bengal [1]. Although suicide rates were commonly highest among middle aged males, rates among young people have been increasing. Young adults are a particularly vulnerable group and currently show the highest rates of suicide in the world. The adolescents grew up in a rapidly changing social environment which is not like as was earlier. A case of 22 years married male committed suicide as he could not save his newborn child who died in hospital. Other suicide triggers include physical illness, bankruptcy, illicit relationships, and drug intoxication etc, Relationship of suicide to negative life events, stress, loss of job, loss of loved ones etc., and negative interaction needs to be understood in the framework of a model of vulnerability, support, coping, and problem-solving.

## **MATERIAL & METHODS**

Present study entitled "Trend of Suicide in Varanasi District in Uttar Pradesh" is carried out with the help of cases brought for Postmortem examination in the Department of Forensic Medicine, I.M.S., B.H.U., Varanasi, over a span of 1<sup>st</sup> January 2016 to 31<sup>st</sup> July 2017. During this period total 3513 postmortem were done in Department of Forensic Medicine, Institute of Medical Sciences, B.H.U., Varanasi. Out of which 150 cases were taken in this study which included suspected suicide. Collection of data includes questionnaires schedule recorded and interview sessions at the time of autopsy with the concerned investigating officer, parents of the victim, other family members and relatives of the victim, neighbor's and other persons accompanying the deceased. Data also collected from police inquest, post-mortem register and reports, hospital memos in hospitalized cases, death certificate if hospital death is there, suicide notes/other relevant reports etc.

## **OBSERVATION & RESULTS**

During the period of the study (1<sup>st</sup> January 2016 to 31<sup>st</sup> July 2017) a total number of 150 cases of suspected suicide cases in Varanasi region have been included in the study. Analysis of sociodemographic observations of the victims (e.g. age, sex, social status, family type, etc.) along with important observations with regards to psychiatric and medico-legal aspects of these cases have been included. These cases of suicide suspects were analyzed on various parameters in depth.

When age and gender both are taken in to consideration then highest number is 31 to 45 years males 34 (22.67%) which is followed by 20 to 30 years Females 33(22%) which is just one less highest 31 to 45 years males group, lowest is in 46 to 60 years and >60 years females 01(.67%) in both.(Table 1). Social/Marital status of the victims Maximum were Married 76(50.67%) followed by

Un-married 59(39.33%) followed by widow/widower 13(8.67%) followed by Divorced 02(1.33%). (Table 2). Victims were more from Nuclear family 79(52.67%) than Joint Family 71(47.33%). (Table 3).

Maximum number of Victims chose Hanging 58(38.67%) followed by Suspected Poisoning 35(23.33%), followed by burning them self or self-emollition 20(13.33%) followed by Railway tract injury 17(11.33%), followed by Drowning 13(8.67%), followed by Fire arm injury 04(2.67%), followed by Fall from Height 03(2%). (Table 4). Motive of Victims, Maximum having Family problems 50, followed by victims motiveundetermined 31, followed by having Financial/property related disputes 22, followed by love affair/extramarital related 16, followed by Dowry related 11, followed by Failure in exams 09, followed by victims suffering from chronic illness 06, followed by Aggrieved and Frustrated from life 03, and Unemployed/loss of job 03, followed by sex abuse 01, and Drug addiction 01. (Table 5).

Psychiatric status when they ended there life. Maximum victims were depressed 61, followed by stressed 53, followed by no psychiatric illness 19, followed by impulsive 08, followed by where status could not be known 05, followed by who did in aggression/anger 04. (Table 6).

Table 1: Age and Gender wise Distribution of Victims

Age Group	Male	Percent	Female	Percent	Total
		age		age	
<20 years	11	7.33%	08	5.33%	19
20 to 30 years	29	19.33%	33	22%	62
31 to 45 years	34	22.67%	14	9.33%	48
46 to 60 years	15	10%	01	.67%	16
>60 years	04	2.67%	01	.67%	05
Total	93		57		150

#### Age and gender wise distribution



Table 2: Showing Social status of the victims

Marital status	No. of Deceased	Percentage	Males	Females
Un-married	59	39.33%	43	16
Married	76	50.67%	39	37
Widow /Widower	13	8.67%	10	03
Divorced/separated	02	1.33%	01	01
Total	150	100%	93	57

#### Marital/social status wise distribution

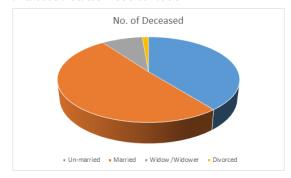


Table 3: Showing type of family victim belonged to

Family Type	No. of Deceased	Percentage
Joint	71	47.33%
Nuclear	79	52.67%
Total	150	100%

#### Type of family wise distribution

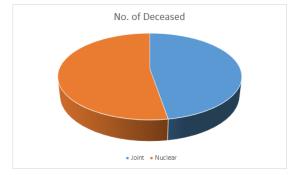
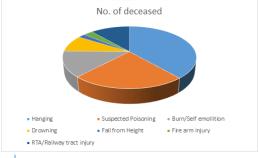


Table 4: Showing cause/ Manner of death of the victim

Cause of death		Percent	Males	Females
	deceased	age		
Hanging	58	38.67%	32	26
Suspected Poisoning	35	23.33%	27	08
Burn/Self emollition	20	13.33%	02	18
Drowning	13	8.67%	13	02
Fall from Height	03	2%	03	00
Fire arm injury	04	2.67%	04	00
RTA/Railway track injury	17	11.33%	14	03
Total	150	100%	93	57

## Cause of death (Method of suicide) wise distribution



**Table 5: Shows Motive of Victims** 

Motive of suicide	Male	Female	Total
Family problems	23	27	50
Chronic illness & Psychiatric illness	03	03	06
Sex Abused	01	00	01
Dowry related	00	11	11
Drug Addiction	01	00	01
Failure in Exams	06	03	09
Love affair & Extramarital	13	03	16
Grieving & Frustrated from life	03	00	03
Financial/Property Related	21	01	22
Loss of Job/Unemployed	03	00	03
Unknown	22	09	31

Table 6: Showing Psychiatric status of deceased

Psychiatric status of victim	Male	Female	Total
Anger/aggression	03	01	04
Stressed	34	19	53
Impulsive	05	03	08
Depressed	36	25	61
Unknown	03	02	05
None	12	07	19

#### DISCUSSION

Age and gender wise distribution of the victims of suspected suicide cases. Highest deaths were in 20 to 30 years age group followed by 31 to 45 years age group then <20 years age group then 46 to 60 years age group followed by >60 years. When age and sex both are taken in to consideration then highest number is 31 to 45 years males followed by 20 to 30 years Females, we had similarities with most of the studies[5][9][11] [10] [12]. Marital/ social status of the victims Maximum were Married followed by Un-married followed by widow/widower followed by Divorced. Suicidal deaths are more prominent in married persons. [3] [5] [10] [11] [12]. Study with which our findings do not correlate [6]. Victims were more from Nuclear family than Joint Family. We found nuclear family victims were more but also many victims were who were living away from their family. A study showing more of suicide in victims belonging to nuclear family [7]. Maximum number of Victims chose Hanging followed by Suspected Poisoning. The studies with which our study shows similarity were [2] [4] [6] [8] [9] [11]. The studies with which our study showed slight variation as poisoning more common [3] [5] [10] [12].

In our study, we superficially tried to form the groups and categories the motives in few of the groups., Maximum victim's motive was Family problems, followed by unknown, followed by financial/property related disputes, few of the studies showed resemblance and few showed similar motives. According to N.C.R.B Report 2015 'Family Problems' and 'Illness' were major causes of suicides, According to Rastogi P. et al. The study also reveal that Domestic unhappiness and shattered Family relation is the most common precipitating factor for committing suicide, followed by Unhappy Love affairs. According to Chavan. B. S. et al. Psycho-social stressors were found in 61 (60.3%) suicide victims; while 47.5% of the subjects believed interpersonal stressors were the cause of suicide, and 8.9% of suicide victims had financial stressors. According to Baruah. AM. Et al. and Pawale. D.A. et al. Economic crisis/poverty was most common cause followed by family related conflicts or problems. According to Behera. A. et al.

Maximum victims were depressed, followed by stressed, followed by no psychiatric illness, followed by impulsive, followed by where status could not be known, followed by who did in aggression or anger. As there is usually an association between psychiatric statues of victim when they take such a serious step of ending their life. There are few studies which favors our study that there is correlation .According to Behera A. et al. From total cases of suicide, 34% of cases were suffering from any form of mental disease and depressive psychosis is more common in this series. 16.4% of cases were having some form of chronic painful disorder at the time of committing suicides. According to Chavan. B. S. et

al. Behavioral change before attempt of suicide was seen in 57.4% of the subjects. Among the behavioral changes, 35.6% of the subjects became withdrawn, with loss of interest in the surroundings; and 15.8% were irritable and aggressive.

#### CONCLUSION

The age group 20-30 years has highest victims followed by 31-45 years age group and lowest in above 60 years age group. Incidence was higher in married victims and in nuclear families, which shows that there is increasing family problems and coping with them, this capacity is decreasing, which was more in joint families. Psychiatric history and psychiatric treatment history showed that there is major need of counselling and increasing awareness, as many of the victims could have been saved if they had the counselling. As early detection can be very helpful. There should be awareness programs in school and colleges and also in the villages and local societies, and in the offices in government sector as well as private sectors.

#### **REFFERENCES**

- 1 N.C.R.B DATA 2015
- 2 A study of suicidal deaths in central Nepal Nuwadatta Subedi, et. Al Department of Forensic Medicine and Toxicology, College of Medical Sciences, Bharatpur, Chitwan, Nepal
- 3 Rastogi Pooja. Suicide in Youth: Shifting Paradigm. J Indian Acad Forensic Med, 32(1).
- 4 Mohanty Setal. Suicide in India A four year retrospective study. Journal of Forensic and Legal Medicine. 2007; 14:185-189.
- 5 BeheraA. etal. Review of Suicidal Cases, A Retrospective Study. JIAFM, 2005; 27(2): 100-102.
- Chavan BS, Singh GP, Kaur J. Psychological autopsy of 101 suicide cases from northwest region of India. Indian J Psychiatry 2008;50:34-8.
   Sharma R, Grover VL, Chaturvedi S. Suicidal behavior amongst adolescent students
- 7 Sharma R, Grover VL, Chaturvedi S. Suicidal behavior amongst adolescent student in south Delhi. Indian J Psychiatry 2008;50:30-3.
- 8 Soman CR, Safraj S, Raman Kutty V, Vijayakumar K, Ajayan K. Suicide in South India: A communitybased study in Kerala. Indian J Psychiatry 2009;51:261-4.
- Lalwani S. et.al. Study of suicide among young and middle aged adults in South Delhi. Indian J. Prev. Soc. Med.35(3 and 4): 174-178.
   Santhosh. C.S. etal. Pattern of Suicidal Deaths at District Hospital Davangere A
- Cross-Sectional Study, Jindian Acad Forensic Med. 2013; 35(3): 233-235

  Baruah A.M. et al. Pattern Of Suicidal Deaths Brought For Medico Legal Autopsy At Gauhati Medical College: A Retrospective. Study J Punjab Acad Forensic Med
- Toxicol 2014;14(2): 86-90.

  Pawale D.A. etal. 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) 2015;24(2):07.

www.worldwidejournals.com