

## Characteristics of Homicide followed by Suicide Incidence of our Experience

P Vijaya Sagar

**Author Affiliation:** Assistant Professor, Department of Forensic Sciences, MNR Medical College and Hospital, Sangareddy 502294, Telangana, India.

**Corresponding Author:** P. Vijaya Sagar, Assistant Professor, Department of Forensic Sciences, MNR Medical College and Hospital, Sangareddy 502294, Telangana, India.

E-mail: [vijaysagar1999@gmail.com](mailto:vijaysagar1999@gmail.com)

### Abstract

**Background:** Homicide-suicides are a distinct group of violent deaths that separate them from murders and suicides. Although such incidents are uncommon, they have devastating effects on families and societies, and typically attract a lot of mainstream media coverage. **Aims:** present study aims to incidents of homicide followed by suicides that occurred within our experience. **Materials and methods:** The observational data obtained from records of post mortem from the department of Forensic from 2017 to 2019. **Results:** Out of the total 82 cases of homicides there were 11 cases murder-suicides involving 11 victims and 5 assailants. It is about 13.4% of all homicides and 3.4% of 2384 medico legal autopsies conducted during the period. female victims were distributed in a wide range of age . Most commonly involved age group ranges between 0-14 years and 15-24 years with4 cases (36.4%), married subjects 6 cases (54%) of rural areas with five cases (63.7%). Drowning or burns was the method of choice in murder-suicide deaths. Most of the cases have a relationship to perpetrator is spouse , boyfriend or girlfriend 5 cases(45.5%) and most of the patients have mental illness in study of 6 cases 54.5%. **Conclusions:** A risk assessment should include determining the chance of involvement not only in suicide and homicide, but also in murder-suicide as a perpetrator or a victim.

**Keywords:** Homicide-Suicides; Victims; Assailants; Perpetrator.

### How to cite this article:

P. Vijaya Sagar, Characteristics Of Homicide Followed By Suicide Incidence Of Our Experience. J Forensic Chemistry Toxicol. 2020;6(1):37-41

### Introduction

Homicide-suicides, also referred to as dyadic deaths, involve homicide committed against one or more victims followed shortly thereafter by the suicide. Homicidesuicide denotes a perpetratormurder case, followed by his suicide almost immediately or soon after the homicide.<sup>1</sup> They are fairly uncommon, and responsible influences, and the mode of involvement varies from region to region.<sup>2</sup> Multifactorial factors such as extramarital sex, mental illness, tension at work, financial difficulties, domestic conflicts etc.<sup>3</sup> More than 95 percent of the offenders were identified to the victims of past murder / suicide studies.<sup>4</sup>

The attacker was most frequently a former or

current husband or other intimate partner with the crime taking place at the victim's home.

Some experts consider the homicides to be simply a side effect of the suicide, wherein the specific decision to kill oneself precipitates a perceived necessity to kill others. Other experts say that murder-suicide cannot be categorized with either homicides or suicides but is actually a distinct behavior. Although there are some common risk factors among perpetrators of homicide, suicide, and murder-suicide, the latter behavior has some distinct characteristics. Although murdersuicide is a uncommon occurrence, it is widely reported in the media, and therefore such occurrences can appear to increase in frequency. This analysis looks at how murder-suicide rates are increasing.<sup>5</sup>

Some studies find the killings merely a side effect of the suicide, in which the particular decision to kill oneself precipitates a perceived need to kill others. Many experts claim murder-suicide can not be classified as either homicide or suicide, but it is a distinct activity in fact. While certain common risk factors exist among homicide, suicide and murder perpetrators

The attention given to murder-suicides in the past several years could make it seem that the incidence is increasing, but the trend has not been well-studied. This article incidents of homicide followed by suicides that occurred within our experience.

## Materials and Methods

The observational data obtained from records of post mortem from the department of Forensic from 2017 to 2019. We reviewed 2384 cases of medico legal autopsies conducted and found 82 cases of homicidal deaths. Out of these 179 homicide cases, there were 11 cases of 'murder-suicide'. Homicide and suicide incidents were identified by the manner of death recorded from the death certificates. Homicide-suicide incidents were defined as suicide incidents where the perpetrator committed at least one homicide within 1 day prior to his or her

**Table 1:** Gender wise distribution of victims.

Gender	Number of cases	Percentages
Males	3	27
Females	8	63
Total	11	100

Sex wise, female victims outnumbered the male victims with a male female sex ratio of 0.4:1 female victims were distributed in a wide range of age.

suicide death.

We ruled out cases of dyadic suicides and other cases where the person unintentionally died while attempting to save a person's suicide. For this case, the assailants' suicide took place at the same time as the accidents, and there was no need to draw a defined time frame for the assailant's suicide. Specific information of these incidents have been gathered from the post mortem report, police investigation, available history from the relatives or eye witness, etc., and in few cases from hospital case papers.

## Results

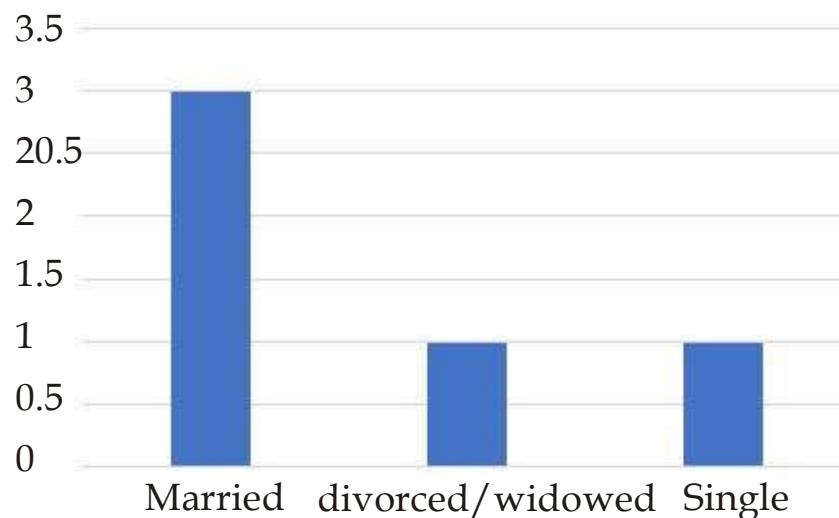
Out of the total 82 cases of homicides there were 11 cases murder-suicides involving 11 victims and 5 assailants. It is about 13.4% of all homicides and 3.4% of 2384 medico legal autopsies conducted during the period.

Most of the cases are of married subjects 6 cases (54%) followed by single 2 cases (18%).

**Table 2:** Age wise distribution of victims in study.

Age of victim	Number of cases	Percentages
0-14 years	4	36.4
15-24 years	4	36.4
25-34 years	2	18.2
>35 years	1	9
Total	11	100

Most commonly involved age group ranges between 0-14 years AND 15-24 years with 4 cases (36.4%) followed by 25-34 years 2 cases(18.2%).



**Fig. 1:** Incidence according to marital status in perpetrators.

**Table 3:** Cases distribution of place of incidence.

Place of incidence	Number of cases	Percentages
Rural	7	63.7
Urban	4	36.3
Total	11	100

Majority of the cases were reported from the rural areas with five cases (63.7%) and urban cases are 4(36.3%).

**Table 4:** Cases distribution according to method of killing of victims in present study.

Method of killing	Number of cases	Percentages
Drowning	3	27.3
Burns	4	36.4
Poisioning	2	18.2
Stabbing	1	9.1
Others	1	9.1
Total	11	100

Drowning or burns was the method of choice in murder-suicide deaths. The assailants also adopted the same method to commit suicide as majority by burns 4 cases 36% followed by drowning 3 cases(27%).

**Table 5:** Relationship to perpetrator.

Relationship	Number of cases	Percentages
Spouse, boyfriend or girlfriend	5	45.5
Parent	2	18.2
Stepchild	3	27.3
Other known to victim	1	9.1

Most of the cases have a relationship to perpetrator is spouse , boyfriend or girlfriend 5 cases(45.5%) followed by stepchild 3 cases (27%).

**Table 6:** Characteristics of suicide following homicide in present study.

Characteristics	Number of cases	Percentages
Mental illness	6	54.5
Legal problems	4	36.4
Other relationship problems	5	45.5
Drug abuse	2	18.2
History of previous suicide attempts	4	36.4

Most of the patients have mental illness in study of 6 cases 54.5%.

## Discussion

In present study total 82 cases of homicides there were 11 cases murder-suicides involving 11 victims and 5 assailants. It is about 13.4% of all homicides and 3.4% of 2384 medico legal autopsies conducted . it is 0.8 per. 10000 persons in study which is in coincidence with

Cohen et al.<sup>6</sup> reported very high rate from 0.3

to 0.7 per 100,000 persons to 0.4 to 0.9 per 100,000 persons in their two groups involving elderly persons. According to them overall incidence in the United States and other countries was also ranged from 0.2 to 0.3 per 100,000 persons. Campanelli and Gilson<sup>7</sup> who reported the incidence to be 0.26 per 100,000 persons; Hanzlick and Koponen<sup>8</sup> reported the incidence to be 0.46 per 100,000 persons; while Hannah et al. <sup>9</sup>in their two cohorts reported the incidence to be 0.34/100,000 and 0.38/100,000.

Sex wise, female victims outnumbered the male victims with a male female sex ratio of 0.4:1 . female victims were distributed in a wide range of age . Other studies have found that overcrowding increases the risk of violence, generally, and the risk of violence against women, in particular.<sup>10</sup>Other studies have found that overcrowding increases the risk of violence, generally, and the risk of violence against women, in particular,we also found that having a history of intimate partner conflict was highly common among most homicide-suicide perpetrators, even those who did not victimize their intimate partners in the homicide-suicide incident (e.g., extrafamilial homicide-suicide and filicide-suicide incidents). Our findings also suggest that homicide-suicide perpetration, particularly by males, is mostly preceded by intimate partner conflicts/violence as opposed to other determinants of suicidal behavior.

In present study most commonly involved age group ranges between 0-14 years and 15-24 years with 4 cases (36.4%) followed by 25-34 years 2 cases(18.2%) . literature reports indicated that the average age of offenders was 40 to 50 years. Moreover, the age ranges included almost all of the decades. The age range in Travis et al. ,<sup>16</sup> research was 19 to 86 years. Friedman et al.<sup>11</sup> stated in a recent paper on filicide suicide that fathers who killed their children, and then themselves, were typically older (mean age, 38.2 years) than mothers (mean age, 31.8 years). Salari<sup>5</sup> concluded that older men (> 60 years) who are suicidal . Cohen et al.<sup>6</sup> found that 83 percent of murder-suicides in the older age groups (over 55 years) were of the spousal/consortial type. In the younger groups the percentage was almost the same, at 79 percent. They found some distinct differences, however, between murder-suicides committed by younger and older people.

In present study predominantly married subjects of 54% followed by single 18%. Hannah et al.<sup>9</sup> found

that the precipitating co-factor in 48 to 73 percent of the cases was impending divorce or separation. In the New Hampshire study, Campanelli and Gilson<sup>7</sup> found that only 31 percent of the pairs involved occupied the same home at the time of the murder-suicide. Palermo et al.<sup>12</sup> found that 31.7 percent had filed for divorce or separated. Comstock et al.<sup>13</sup> found in Oklahoma that 30.1 percent had a current divorce or estrangement. Cohen et al.<sup>6</sup> reported that more than half of the younger couples involved in murder-suicides had separated.

In present study drowning or burns was the method of choice in murder-suicide deaths. The assailants also adopted the same method to commit suicide as majority by burns 4 cases 36% followed by drowning 3 cases(27%) . studies by different authors as Oklahoma study,<sup>13</sup> 97.3 percent of the murder-suicides were carried out with firearms. In their study of older people in Florida, Malphurs and Cohen<sup>14</sup> reported that 100 percent of the incidents involved firearms. Friedman et al.<sup>11</sup> noted that in filicide-suicides, firearms were used 73 percent of the time. In England and Wales, Travis et al.<sup>15</sup> sought to determine whether tougher gun laws had decreased the rate of murder-suicides

In present study more of the cases have a relationship to perpetrator is spouse , boyfriend or girlfriend 45.5% followed by stepchild in 27%. Malphurs and Cohen<sup>16</sup> found that 70.5 percent of all murder-suicides were spousal/consortial. They also found that 10.5 percent were infanticides, 8.7 percent were extrafamilial, and 6.5 percent were familicides (destruction of the entire family). Saleva et al.<sup>17</sup> studied homicide-suicide in Finland for one year and found that 90 percent of the victims were spouses and/or children, and 100 percent were family members. Bossarte et al.<sup>18</sup> found that homicide-suicides with victims younger than 15 were primarily perpetrated by parents (73.9%).

In this study 54.5 % had mental illness . Palermo et al.<sup>12</sup> noted that depression often follows a breakup and then triggers the murder-suicide event. Campanelli and Gilson<sup>7</sup> found in New Hampshire that 38 percent of those who committed murder-suicide were depressed. Rosenbaum<sup>19</sup> found that most murder-suicide perpetrators had depression, whereas none of the homicide-only sample in his study did. Guileyardo et al.<sup>20</sup> also mention drug abuse and alcohol as one of the subtypes of filicide. But in the present study there was no history of any drug abuse or alcohol consumption of the perpetrator mothers. Due to culture and other social restrictions.

## Conclusions

Although homicide/suicide is a rare incident, each incident results in at least two deaths and frequently includes the death of a child. There are certain clinical presentations that should alert mental health professionals to be suspicious of the risk of possible murder-suicide: a middle-aged man who is recently separated or facing pending estrangement from his intimate partner and who is depressed ; or an older male who is the primary caregiver for a spouse who is ill or debilitated, where there is a recent onset of new illness in the male, depression. A risk assessment should include determining the chance of involvement not only in suicide and homicide, but also in murder-suicide as a perpetrator or a victim.

## References

1. Bossarte RM, Simon TR, Barker L et al. Characteristics of homicide followed by suicide incidents in multiple states, 2003–04, *Inj Prev.*, 2006, vol. 12 suppl 2(pg. ii33-ii38)
2. Felthous AR, Hempel A et al. Combined homicide-suicides: a review, *J Forensic Sci.*, 1995, vol. 40(pg. 846-857)
3. Palmer S, Humphrey JA (1980) Offender-victim relationships in criminal homicide followed by offender's suicide, North Carolina 1972-1977. *Suicide Life Threat Behav* 10: 106-118.
4. Kivivuori J, Lehti M et al. Homicide followed by suicide in Finland: trend and social locus. *J Scand Stud Criminol Crime Prevention* 2003;4(2):223-36
5. Salari S. Patterns of intimate partner homicide suicide in later life: strategies for prevention. *ClinInterv Aging.* 2007;2(3):441-452.
6. Cohen D, Llorente M, Eisdorfer C et al. Homicide-suicide in older persons. *Am J Psychiatry*(155):390-6.
7. Campanelli C, Gilson T. Murder-suicide in New Hampshire 1995- 2000. *Am J Forensic Med Pathol* 2002;23(3):248-51.
8. Hanzlick R, Koponen M et al. Murder suicide in Fulton County, Georgia: comparison with a recent report and proposed typology. *Am J Forensic Med Pathol* (15):168-73.
9. Hannah SG, Turf EE, Fierro MF et al. Murder-suicide in Central Virginia. A descriptive epidemiologic study and empiric validation of the HanzlickKoponen typology. *Am J Forensic Med Pathol* 1998;19(3): 275-83.
10. Anacleto AJ, Njaine K, Longo GZ, et al. (2009) [Prevalence of intimate partner violence and associated factors: a population-based study in Lages, Santa Catarina State, Brazil, 2007]. *Cad*

- SaudePublica 25: 800–808.
11. Friedman S, Hrouda D, Holden C, et al: Filicide-suicide: common factors in parents who kill their children and themselves. *J Am Acad Psychiatry Law*:2005;33:496–504.
  12. Palermo GB, Smith MD, Jentzen JM, et al: Murder-suicide of the jealous-paranoia type: a multicenter statistical pilot study. *Am J Forensic Med Pathol* :1997;8:374–83.
  13. Comstock RD, Mallonee S, Kruger E, et al. Epidemiology of homicide-suicide events: Oklahoma, 1994–2001. *Am J Forensic Med Pathol* 26:229–35, 2005
  14. Malphurs J, Cohen D et al. A statewide case-control study of spousal homicide-suicide in older persons. *Am J Geriatric Psychiatry* :2005; 13:211–17.
  15. Travis A, Johnson L, Milroy C et al. Homicide-suicide (dyadic death), homicide and firearms use in England and Wales. *Am J Forensic Med Pathol* :2007; 28:314–18.
  16. Malphurs JE, Cohen D et al. A newspaper surveillance study of homicide-suicide in the United States. *Am J Forensic Med Pathol* :2002;23:142–8.
  17. Saleva O, Putkonen H, Kiviruusu O, et al: Homicide-suicide: an event hard to prevent and separate from homicide or suicide. *Forensic Sci Int*:2007;166:204–8, 2007
  18. Bossarte RM, Simon TR, Barker L: Characteristics of homicide followed by suicide incidents in multiple states, 2003–2004. *Inj Prev*:2006;12(Suppl 2):ii33–ii38,
  19. Rosenbaum M: The role of depression in couples involved in murder-suicide and homicide. *Am J Psychiatry* :1990; 147:1036–9.
  20. Guileyardo JM, Prahlow JA, Barnard JJ et al. Familial filicide and filicide classification. *Am J Forensic Med Pathol* 1999;20(3):286–92
- 
-