Yekeen A. Aderibigbe,[1] *M.D.*

Violence in America: A Survey of Suicide Linked to Homicides

REFERENCE: Aderibigbe YA. Violence in America: A survey of suicide linked to homicides. J Forensic Sci 1997;42(4):662–665.

ABSTRACT: This paper describes murder-suicide in the United States from 1990 through 1995, using the cases reported in six major newspapers. Spousal murder-suicide was the predominant type with a range of 42%–57%; familicide-suicide was the second predominant type with a range of 22%–47%. The perpetrators were predominantly males; the victims were female sexual partners or consanguineous relatives. Firearms (guns) were used in 90% of the cases. The author concludes that a national surveillance system that specifically identifies and codes this phenomenon, and multi disciplinary studies are necessary to hinder this phenomenon.

KEYWORDS: forensic science, forensic psychiatry, murder-suicide, familicide-suicide, extra familial, spousal, consortial, United States

Deadly violence in the public, workplace, at home, and within marital and dating relationships has been an area of growing concern between psychiatrists and social researchers. Within the past decade, these have become both public health and criminal justice problems (1). This is typified by the common and daily news headlines or captions such as "murder-suicide leave two dead"; "man kills rival and self over a woman"; "couple found dead in home after an argument"; "family members found slain at home"; "a gunman kills five and self," etc. As a prototype of deadly violence, this paper focuses on murder-suicide (dyadic death).

Murder-suicide is a two-stage sequential act in which an individual commits homicide and shortly thereafter commits suicide. The term "dyadic death" was used by Berman (2) to describe this phenomenon. The incidence for murder-suicide is generally reported in terms of the percentage of homicides. The international rates of murder-suicide vary considerably. In his seminal study on murder-suicide in 1966, West (3) reported a 33% homicide-suicide rate of all murders for England and Wales. Other values reported in the very early studies (1950–1974) on this topic were 4% in Philadelphia, U.S. (4), 5% in Hong Kong (5), 8% in Finland (6). More recent studies on the same topic have yielded results with large variances in the incidence rates. For instance, Gudjonson and Petursson (7) reported that the proportion of murderers who completed suicide in Nordic countries ranged from 2% for Greenland to 30% for Denmark. In Quebec, Canada, Butea and colleagues (8) found that the proportion of murder-suicide to overall suicide was 1–2% whereas it was 9–22% to overall homicide. Similarly, in a recent review of the epidemiology of murder-suicide in the U.S., Marzuk and colleagues (9) reported an estimate of 0.20 to 0.30 per 100,000 persons in certain localities. Based on an earlier U.S. national survey spanning over a week, by Levington and Riley (10), Marzuk and colleagues (9) made an estimated that 1000–1500 deaths per year in the U.S. are due to murder-suicide. The reasons for the great variance in incidence rates from one country to the other are uncertain, but may be due to differences in overall homicide rates in each of the countries as well as political undertone. Landau (11) compared international rates of homicide, suicide, and homicide-suicide and found an inverse relationship between homicide and suicide. Coid (12) espoused that in nations with high homicide rates, murder-suicide accounted for a relatively small portion of the total homicide, i.e., the higher the rate of homicide in a population, the lower the percentage of people who are found to commit suicide. Butea and colleagues (8) reported a direct relationship between murder-suicide and suicide, and an inverse relationship between murder-suicide and homicide. The availability of handguns and different societal attitudes toward their use and the control of violent behavior can also explain the difference in incidence rates between countries.

Attempts to provide empirical information on murder-suicide have generally taken a descriptive approach, and a range of societal, clinical, circumstantial, and personality factors have been implicated. Several studies have indicated that the typical perpetrator in dyadic death is a male, married, or living with a woman in a relationship marked by physical abuse. In addition, he has a history of alcohol and psychoactive substance abuse disorder and depression (8,9,13,14). Heterosexual women who are ending love relationships appeared to be at increased risk for becoming victims; 19%–26% of male spouse murderers committed suicide compared with 0%–3% of their female counterparts (4,15). Marzuk and colleagues (9) found that amorous jealousy accounted for 50%–75% of all murder-suicide in the U.S. Wallace (16) reported that 8–9% of murder-suicide cases in Australia occurred among "affluent" people.

Deadly violence poses a disproportionate current and future burden; this author thinks it deserves more attention than it has received. This article proposes to appraise this problem as reported in major national newspapers in the United States of America, over a six-year period. Further, it offers psychological explanations for understanding the problem, and suggests preventive methods. This is not meant as an exhaustive case-by-case or year-by-year analysis but rather an examination of what appear to be representative cases.

Materials and Methods

In general, research on murder-suicide is severely limited. All the previous studies have been largely retrospective and limited to specific geographical areas. The United States of America (U.S.) is not an exception because it has no national surveillance system

[1]Department of Psychiatry, Medical College of Virginia, Virginia Commonwealth University, Richmond, VA.

Received 4 April 1996; and in revised form July 1996; accepted 21 Oct. 1996.

or database that records/documents this kind of mortality. Instead, all cases of homicides and suicides are adequately documented as separate/single entities. Because murder-suicide is an awesome act that provokes intense feelings among the people, cases of murder-suicide are usually published as they occur in the major newspapers and magazines that have nationwide readerships. Their reports are usually based on information from medical examiners, coroners, and police departments in the locale of occurrence.

In this study, all cases of murder followed by completed suicide that were reported in major U.S. newspapers and indexed in a computer database called Newspaper Abstracts (NABS), between January 1990 through December 1995 were reviewed. Six major newspapers, namely Atlanta Constitution, Boston Globe, Chicago Tribune, Los Angeles Times, New York Times, and Washington Post were indexed. In this review, a murder-suicide has occurred when, on the basis of medical examiner and/or police, as reported in the newspaper, a person had committed murder(s) and subsequently committed suicide within one week of the murder(s). Whereas murder is a degree of homicide and a statutory legal term, suicide is not a legal term. The legal proof of murder component of this phenomenon is usually not pursued under the justice system because the perpetrator is usually dead; the time interval between the homicide and suicide in most cases is less than 24 h. Thus, this study excluded cases in which the perpetrators only assaulted others prior to suicide and those who committed homicide but failed to complete a suicide attempt.

Perpetrators and their victims were classified according to the typology proposed by Marzuk and his colleagues (9); classification was based on the victim-offender relationship and the principal motive or precipitant (see Table 1). Cases of mass murder-suicide [in which a perpetrator killed a number of people in a relatively short time frame (minutes to hours) and then killed himself] were included in this study.

Results

Table 2 presents the number of cases and types of perpetrators of murder-suicide. These were only cases that satisfied the criteria of the present study and published in the six major newspapers indexed in NABS. Spousal or consortial murder-suicide was the predominant type in each of the year under review, except for 1991 where familicide-suicide was the predominant type of murder-suicide. The proportion of spousal or consortial murder-suicide ranged from 42%–57%. Familicide-suicide was the second predominant type of murder-suicide in each of the year under review except for 1992 and 1993 where extra familial murder-suicide ranked second highest in proportion. The range of familicide-suicide was 22%–47%. Extra familial murder-suicide ranked as the third highest in four different years with a range of 15%–26%. The perpetrators in spousal or consortial murder-suicides were predominantly the male partners. In familicide-suicide, the father was the predominant perpetrator in all the years under review, except 1991 where there were equal number of fathers and mothers as the perpetrators. The principal method of both homicide and suicide was the use of firearms; this was the method in 90% of the cases. Table 3 presents the number of deaths by year and relationships. Deaths of people in spousal and consortial relationship accounted for the highest proportion in three of the six years reviewed (1992, 1993, and 1994); deaths in individuals with familial ties accounted for the highest proportions in 1990 and 1991. The proportion of deaths of individuals in spousal or consortial relationship ranged from 27%–53%, whereas the proportion of deaths in people with familial ties ranged from 23%–46%. About one-third to one half of deaths (35%–54%) in individuals with familial ties involved children less than 18 years of age; the proportion of extra familial deaths ranged from 20%–36%.

TABLE 1—*Marzuk's et al. (1992) proposed clinical classification of murder-suicide based on victim-offender relationship (type).*

Type of Relationship
I. Spousal or Consortial
Perpetrator
1. Spouse
2. Consort
II. Familial
Perpetrator
1. Mother
2. Father
3. Child (under 16 yr.)
4. Other adult family member (over 16 yr.)
III. Extrafamilial
Class
A. Amorous jealousy
B. "Mercy killing" (because of declining health of victim or offender)
C. "Altruistic or extended suicides" (includes salvation fantasies of rescue and escape from problems)
D. Family financial or social stressors
E. Retaliation
F. Other
G. Unspecified

Discussion

A survey of murder-suicide in the United States of America as reported in major newspapers was conducted. The most common type of murder-suicide was spousal/consortial killing, with the man killing his wife or girlfriend because of a breakdown of their relationship. A third to half of the deaths of familicide-suicide involved children less than 18 years of age and the father was the predominant perpetrator. Four of the newspapers Atlanta Journal Constitution, Boston Globe, New York Times, and Washington Post are headquartered/based in states in the east coast of the country and thus, more likely to report cases of murder-suicide only in this region of the country. The Chicago Tribune and Los Angeles Times are likely to cover few states in the Midwest and West Coastal regions respectively. Several states were not covered by these newspapers, thus, the total number of cases of homicide-suicide for the entire nation was no doubt under reported. In order to get an accurate total count of cases of murder-suicide nationwide, there should be a national surveillance system and standardized coding system to register this phenomenon. The surveillance system should also ensure a well coordinated and extensive linkage system. A proper surveillance system could foster a better understanding of the epidemiologic patterns of this phenomenon; it could also help in designing and implementing appropriate preventive and educational measures.

Psychological Considerations in Murder-Suicide

There is a relative absence of comprehensive theoretical models to explain murder-suicide. Murder-suicide may be understood in the light of some psychological factors. Depression and pathological jealousy are frequently at the basis of the amorous-paranoia type of murder-suicide. In a study of murder-suicide (amorous-paranoia type), Rosenbaum (14) found that 75% of the perpetrators were depressed, 17% had psychoactive substance related disorders

TABLE 2—*Classification of perpetrators of murder-suicide based on victim-offender relationship.*

Type of Relationship	1990	1991	1992	1993	1994	1995
I. Spousal or Consortial Perpetrator						
1. Spouse	10	6	18	14	14	17
2. Consort	6	9	10	14	13	11
Subtotal and (%)	16 (43%)	15 (36%)	28 (52%)	28 (52%)	27 (57%)	28 (42%)
II. Familial Perpetrator						
1. Mother	2	8	0	1	3	2
2. Father	9	9	10	8	7	20
3. Child (Under 16 Yr.)	1	0	0	1	1	0
4. Other Adult Family Member (Over 16 Yr.)	0	3	2	2	2	1
Subtotal and (%)	12 (32%)	20 (47%)	12 (22%)	12 (22%)	13 (28%)	23 (35%)
III. Extrafamilial Perpetrator	9 (25%)	7 (17%)	14 (26%)	14 (26%)	7 (15%)	15 (23%)
Total	37	42	54	54	47	66

*Based on computer indexed reports of six major U.S. Newspapers.

TABLE 3—*Total number of deaths from murder-suicide.*

	1990	1991	1992	1993	1994	1995
Spouses	20 (20%)	12 (11%)	38 (27%)	28 (21%)	28 (29%)	44 (28%)
Consorts	14 (14%)	18 (16%)	20 (14%)	28 (21%)	24 (24%)	12 (9%)
Members of Same Family	39 (40%)	50 (46%)	33 (23%)	37 (27%)	26 (27%)	60 (39%)
Extrafamilial Members (Friends, Acquaintances and Strangers)	25 (26%)	29 (27%)	51 (36%)	41 (31%)	20 (20%)	37 (24%)
Total	98	109	142	134	98	153

*Based on computer indexed reports of six major U.S. Newspapers.

whereas 33% had antisocial personality disorder. The depression in perpetrators of murder-suicide may be characterized by paranoid delusions, ideas of reference, suspiciousness and persecutory themes. These may provoke hostility, aggression, and violence all directed toward their spouse or consort resulting in death (homicide). West (3) reported that male perpetrators of murder-suicide of the amorous-paranoia type suffered from paranoia. The killing of a loved partner or significant other has been explained also by poor differentiation between self and others; the perpetrator thinks the spouse/consort is an integral part of himself. Berman (2) espoused that lack of self and object differentiation and poor impulse control will lead to unleashing fatal violence on self and a loved one.

Murder-suicide could also be seen from the angle of shame-rage in dysfunctional marital and family relationships. Shame is the feeling that one is fundamentally inadequate, unworthy, or bad, and because of this, the sense of self (self-esteem) in relation to others is vulnerable or threatened (17). Shame elicits a flight-or-fight response, in which someone hides one's "true self" from further shame exposure and/or aggressively reacts with rage and maladaptive narcissistic defenses (18,19). This may manifest as hostility and violence toward loved ones as in spousal or familicide killings or strangers as in extra familial killings. When explosive episodes of shame-driven rage and violence are followed by feelings of guilt, the perpetrator may make reparation by also turning the destructive violence on himself. In a study of murder-suicide, Wolfgang (4) reported that perpetrators of murder have poor self-esteem (resulting from a frustrating relationship); feelings of guilt which often lead to suicide. Other psychological factors that would account for deadly violence in a relationship include feelings of helplessness, powerless, inadequacy, inordinate need to control partners as possessions, over sensitivity to shame and humiliation (20,21).

Future Directions

Scientific explanations of behavior involve a specification of both its antecedent events or initial conditions and the general laws that describe how these events are interrelated. Thus, to curb the trend of murder-suicide, we need to know when and under what conditions violence might occur and who needs to be protected. In order to determine the actual magnitude of this phenomenon and institute appropriate preventive measures, there should be a national surveillance system for the collection, analysis, interpretation, and dissemination of data and information on this problem. There should also be a database that is specific to murder-suicide deaths just as there are for homicide and suicide as separate entities. The conceptual framework for prevention must include perpetrator, victim and social/environmental factors. In the future, there should be multi-center collaborative studies; when conceptualizing and executing these studies, input should be solicited from experts of diverse disciplines that deal with human behavior and the criminal justice system, e.g., epidemiologists, psychiatrists, psychologists, criminologists, sociologists, and law enforcement officers. Because firearms are the predominant tools used in these fatal destructions, intervention strategies should include stricter gun control. Because couples in strained relationships are frequently involved in this phenomenon, preventive efforts should be geared toward providing these individuals with effective, accessible, and affordable psychological counseling and crisis management. Similarly, people with chronic and terminal illnesses that express feelings of hopelessness and helplessness, and potential to act out with fatal rage, as well

as individuals that harbor homicidal wishes and ideations for members of the public or people in establishments, should be identified and offered appropriate psychological counseling (and treatment) and social support. Workers relieved of their jobs unexpectedly, especially after several years of service should receive psychological counseling, and there should be a "crisis line" available to them some three to six months after termination.

References

1. Moore J. Violence prevention: Criminal justice or public health? Health Affairs 1993;12:34–45.
2. Berman A. Dyadic death: Murder-suicide. Suicide Life Threatening Behav 1979;13:155–65.
3. West DJ. Murder followed by suicide. Harvard University Press, Cambridge Massachussetts, 1966.
4. Wolfgang ME. An analysis of homicide-suicide. J Clin Exp Psychopathol 1958;19:208–18.
5. Wong M, Singer K. Abnormal homicide in Hong Kong. Br J Psychol 1973;123:295–8.
6. Virkkunen M. Suicide linked to homicide. Psychiatr Q NY 1974;48:276–82.
7. Gudjonsson GH, Petursson H. Homicide in the nordic countries. Acta Psychiatr Scand 1990;82:49–54.
8. Butea J, Lesage AD, Kiely M. Homicide followed by suicide: A Quebec case series, 1988–1990. Can J Psychol 1993;38:552–6.
9. Marzuk P, Tardiff K, Hirsch C. The epidemiology of murder-suicide. J Am Med Assoc 1992;267:3179–83.
10. Levinton J, Riley M. 7 deadly days. Time Magazine 1989 17 July, 31–53, 57–61.
11. Landau SF. Pathologies among homicide offenders: Some cultural profiles. Br J Criminol 1975;15:157–66.
12. Coid J. The epidemiology of abnormal homicide and murder followed by suicide. Psychol Med 1983;13:855–60.
13. Palmer S, Humphrey JA. Offender-victim relationships in criminal homicide followed by offender's suicide, North Carolina, 1972–1977. Suicide Life Threatening Behav 1980;10:106–18.
14. Rosenbaum M. The role of depression in couples involved in murder-suicide and homicide. Am J Psychol 1990;147:1036–9.
15. Daly M, Wilson M. Homicide. New York. Aldine Degruyter, 1988.
16. Wallace A. Homicide: The social reality. Bureau Crime Stats Res. Sydney, New South Wales Australia, 1986.
17. Broucek FJ. Shame and the self. Guilford Press, New York, 1991.
18. Kaufman G. The psychology of shame. Theory and treatment of shame-based syndromes. Springer Publishing Company, New York, 1989.
19. Morrison AP. Shame: The underside of narcissism. Jason Aronson, Northvale, N.J., 1989.
20. Maiuro RD, Cahn TS, Vitaliano PP, Wagner BC, Zegree JB. Anger, hostility, and depression in domestically violent versus generally assaultive men, and nonviolent control subjects. J Consult Clin Psychol 1988;56:17–23.
21. Shope A, Stacey WA, Hazelwood LR. Violent men, violent couples: The dynamics of domestic violence. Lexington Books, Lexington Massachussetts, 1987.

Additional information and reprint requests:
Yekeen A. Aderibigbe
Department of Psychiatry
Medical College of Virginia
Virginia Commonwealth University
P.O. Box 980710
Richmond, VA 23298-0710