Alan R. Felthous,[1] M.D. and Anthony Hempel,[2] D.O.

Combined Homicide-Suicides: A Review

REFERENCE: Felthous, A. R. and Hempel, A., **"Combined Homicide-Suicides: A Review,"** *Journal of Forensic Sciences*, JFSCA, Vol. 40, No. 5, September 1995, pp. 846–857.

ABSTRACT: Although the rate of combined homicide-suicides is low compared with that for suicide alone or homicide, homicide-suicides generate much public concern. In some cases, the homicide-suicide involves annihilation of an entire family or multiple nonfamily members. A difficult phenomenon to study—in part because the perpetrator is dead—it is, nonetheless, crucial to attempt to advance our understanding of this tragic phenomenon from a psychiatric view. This literature review then addresses demographic variables; proposes two classifications, one based on psychopathology, the other on the relationship between offender and victim; and suggests a three dimensional analytical approach to understanding homicide-suicide: 1) psychopathology and ego deficits of the perpetrator, 2) cumulative and precipitating stressors, and 3) motivation and vector of destructive urges against self and the other victim(s) [*1*]. Finally, some implications for mental health clinicians and forensic experts are offered.

In attempting to understand acts of homicide-suicide, inquiry into the following dimensions should be useful: *Ego Weakness.* What type of mental disorder(s), psychopathology, or personality traits may have contributed to the homicidal-suicidal behavior? *Stressors.* What type of acute and chronic stressors did the individual experience leading up to this act? *Vectors.* Whom did the individual select to kill and why? Were some victims more clearly primary and others secondary or incidental?

KEYWORDS: psychiatry, homicide, mass murder, murder, suicide, violence

Karl Menninger once wrote that suicide is motivated by a desire to kill, a desire to be killed, and a desire to die; corresponding to anger and hostility, guilt and shame, and hopelessness and despair [2]. If these are ever moving forces, we might expect them to be most evident in combined suicide-homicides.

Occasionally a person is disposed to kill one or more people and self. Does this represent a social derailment or a mental derangement or is combined homicide-suicide the result of both individual psychopathology and social factors? Notorious tragedies pull on the hearts of everyone. For mental health professionals, combined homicide-suicide remind us both of our limitations and challenge us to extend our efforts to understand and to heal. Knowledge about the phenomenon should be useful to professionals who evaluate and treat potentially homicidal and suicidal patients and jail inmates, especially suspects who have just killed someone. Forensic experts who evaluate defendants accused of murder or attempted murder and those who consult on civil cases involving homicide-suicide where medical malpractice is claimed should find information about this tragic behavior to be useful.

Homicide-suicides have not been well studied, because they are uncommon events that do not lend themselves to thorough, systematic clinical investigations. If clinical case studies are not suited for generalizations, epidemiological and studies with large groups of subjects provide less descriptive information, especially diagnostic findings. The knowledge base is uneven; much less has been published in the literature on studies of cult homicide-suicide than consortial homicide-suicides, for example. The perpetrator of a homicide-suicide is dead and unavailable for psychiatric assessment afterwards. Often the act eliminated as well the closest person who might have served as a collateral source of information. Thus, good empirical data on the phenomenon are meager, and our attempt to understand homicide-suicide must be tempered with this acknowledgment.

In perpetrators of homicide-suicide, common ego weaknesses, for example, are depression, jealousy or paranoid ideation, and a pattern of poor control of aggressive impulses. The perpetrator usually directs homicidal impulses against the object of his frustration, his unfaithful lover or the employer who fired him, and himself as well, having lost the life sustaining element known as hope.

Here we begin by summarizing demographic findings of those who commit homicide-suicide (Table 1) and observations about the act itself. Then, two classifications are presented: one based on psychopathology; the other on the nature of the relationship between the perpetrators of homicide-suicide and their homicidal victim. Psychopathology corresponds to the ego weaknesses and psychological defects that might result in homicide-suicide or allow this extreme behavioral response to occur. Categorization based on relationship between the killer and his/her victim(s) and an attempt to understand the features and quality of this relationship should serve to elucidate the vectors of the homicidal drives.

In this review, suicide denotes the act of deliberately taking one's own life, and homicide is taking another person's life. More specifically, homicide is the unlawful killing of another human being and includes, but is not limited to, murder. The exact legal category typically goes unclassified and undefined in studies on homicide-suicide, because the cases typically do not result in a criminal charge or trial. Homicide-suicide is the homicidal killing of one or more persons followed immediately or very soon by suicide by the homicidal offender. Often the two lethal acts occur within 24 hours, such that the homicide(s) and suicide appear to be part of the same act.

Homicides have been further classified as primary, secondary,

Received for publication 30 Dec. 1994; revised manuscript received 16 Feb. 1995; accepted for publication 16 Feb. 1995.

[1]Marie B. Gale Professor of Psychiatry, Director of the Adult Division, and Chief of the Forensic Service Department of Psychiatry and Behavioral Sciences, The University of Texas Medical Branch, Galveston, TX.

[2]Resident in Psychiatry and Co-Chief Resident, Department of Psychiatry and Behavioral Sciences, The University of Texas Medical Branch, Galveston, TX.

Presented at the 46th Annual Meeting of the American Academy of Forensic Sciences, San Antonio, TX, 1994.

TABLE 1—*Studies of homicide-suicide United States.*

Investigator	Years	Location	Population	Number of Offenders	Number of Victims
Allen	1970–1979	Los Angeles	5,654 Homicides 4,799 Suicides	104	116
Berman	1974–1975	Philadelphia Baltimore Washington, D.C.	972 Suicides from medical examiners files plus 5	20	
Dorpat		Seattle		5	5
Currens	1985–1990	Kentucky	Computer searches, matching death certificates, etc. 1,080	67	80
Palmer	1972–1977	North Carolina	Homicide offenders	90	90
Rosenbaum	1978–1987	Albuquerque	(Police files)	12	12
Selkin	Reported in 1976	Los Angeles & Denver	Files from coroners' offices	13	13
Wolfgang	1948–1952	Philadelphia	621 homicide offenders	24	26
Milroy	1975–July 1992	Yorkshire & Humberside	Great Britain	52	65
West	1946–1962	Wales & England	Files from the Criminal Record Office, Scotland Yard	148	187

or tertiary. In primary homicides, the killing is the primary objective and the offender typically already has some type of relationship with the victim(s), whereas in secondary homicides the killing is at least associated with and may subserve another criminal act. Homicide committed in the course of an armed robbery is secondary, even though it may be difficult to determine whether the homicidal motive was instrumental. In tertiary homicides, the offender has no prior relationship with his victims and there is no apparent instrumental or other criminal motive.

Demographic Findings

Before discussing sex, age, social level, and ethnicity of those who commit homicide-suicide, several caveats are in order. To the extent that generalizations from available figures are possible, the demographic characteristics of dominant patterns of homicide-suicide may obscure those of less common patterns. For example, if most who commit homicide-suicide are consortial men and only a few are women who kill their children, any distinctive characteristics of the filicidal mothers will be over-shadowed by the data on uxoricidal men. Secondly, the constancy of demographic findings has not been tested across all major geopolitical boundaries or over the centuries of time; findings on homicide-suicides could be more substantially affected by cultural forces than available data allow us to appreciate. Thirdly, all studies with relatively large numbers of subjects did not examine and report on the same parameters. Thus, for demographic and other variables the number of comparable studies varies.

Sex

Most perpetrators of homicide-suicides are males, over 90 percent in recent U.S. studies (Table 2). The percentage of males who commit homicide-suicide in the United States may even be higher than the male contribution to homicides alone [*3,4*]. An epidemiological study of homicide-suicides in Kentucky in 1985–1990 revealed that nearly all offenders were male (97%); whereas nearly three fourths (73%) of the 80 homicide victims were female [*5,6*]. A study in North Carolina [*7*] and other studies as well [*8–12*] further support the observation that nearly all perpetrators of homicide-suicide in the United States are male, and the majority of the victims are female (Table 2).

TABLE 2—*Sex of offenders in homicide-suicides United States.*

Investigators	Geographical Areas	Percent Males	Percent Females
Allen	Los Angeles	93.3	6.7
Berman	Philadelphia, Baltimore, Washington, D.C.	100.0	0.0
Fishbain	Dade County, Florida	92.5	7.5
Currens	Kentucky	97.0	3.0
Palmer	North Carolina	94.0	6.0
Rosenbaum	Albuquerque, N.M.[a]	95.7	4.3
Selkin		85.0	15.0
Wolfgang	Philadelphia	92.0	8.0
	Great Britain		
Milory	Yorkshire & Humberside	94.2	5.8
West	England & Wales	59.5	40.5

[a]Includes perpetrators from an article in *Time* Magazine.

Cultural factors apparently affect this sexual distribution, however, for in the earlier British study by West, only 60% of offenders were males [*13*], yet the more recent British study by Milroy showed over 90% of offenders were males [*14*], suggesting that even within a given society the male-female ratio of offenders can change over time. Those who commit homicide-suicides classified as the physically ailing spouse, consortial, familial, adversarial, pseudocommando, and cult homicide-suicide are virtually all males.

Variations between countries suggest that social factors may influence to what extent each of the sexes is represented in the commission of all homicide-suicides and of the separate subtypes of this phenomenon. Infanticide-suicide is unusual in this country and unregistered in some studies of homicide-suicide, whereas in Japan, by contrast, 500 cases are reported each year [*9*].

Since the majority of homicide victims in the United States are males, about 75 to 90% of all homicide victims, it is remarkable that females constitute the majority of victims in homicide-suicide. Moreover, this fraction—four out of every five homicide-suicide victims are females—is a remarkably constant finding (Table 3).

It is well known that rates of suicide and rates of homicide are higher among men [*15*]. If men in general are given to more lethal and violent means of dealing with frustration and disappointment, the higher rate of homicide-suicide among men should be of no surprise. Is there something innate to maleness that enhances the likelihood of all violent acts including homicide-suicide?

Although in all patterns of homicide-suicide, most of the offenders are males, the proportion of female killers is increased where victims are immediate members of the family or children [*13*]. This is also true for primary homicides alone compared with secondary homicides [*3*], but the proportion of female offenders is higher yet for intimate homicide-suicides. If males show a greater tendency to kill other males, females are more likely to kill a spouse, family member, or other intimate than anyone else [*16*]. In Wolfgang's 1958 study of homicide, 47 wives killed their husbands and 53 husbands killed their wives [*12*]. On this deadly scoreboard, the males and females were about equally lethal to one another. On the other hand, the near 50 percent gender distribution of those who kill intimates has not been replicated in all studies [*16*]. According to a recent study of the U.S. Department of Justice, males predominated in interspousal homicide involving white partners whereas among black couples wives were just as often the killer as the husband (53% black uxoricides vs. 62% of white uxoricides) [*17*]. Nonetheless, the predominance of males who commit homicide-suicide occurs within a context of intimate homicides wherein the figures are not so lopsided.

Most perpetrators who kill their own children and then self are female, the child's mother. In West's study, 91% of those who killed their own children and themselves were female [*13*]. In Somander's Swedish series, suicidal women killed only their own children [*18*]. The U.S. Department of Justice Survey showed mothers to account for most (55%) accused of killing offspring [*17*].

Upon examining patterns of homicide-suicide, the sex of the offenders seems to make a difference. If a parent kills the young children and then commits suicide, but spares the other adult partner, the offender is usually the children's mother [*7,13,19*]. Conversely, adult males are more likely to kill the entire family, including the other adult [*19*].

Age

Perpetrators of homicide-suicide tend to be older than those who kill only others. This is in contrast with primary homicides alone wherein offenders and victims are of comparable age [*3*]. In secondary homicides the offenders are younger, young adults and even adolescents [*3*].

In the Kentucky study, for example, the median age of homicide-suicide offenders was 41 and the median age of the victims was 35 [*5,6*]. Marzuk found the mean age in three United States studies was 39.6 years [*20*]. Other studies, too, have found that those who commit homicide-suicide are older than those who commit only homicide [*7,8,10,12*]. This finding has led to the suggestion that

TABLE 3—*Sex of homicide-suicide offenders in Great Britain.*

Study	Geographic Area	Years	Percent Males	Percent Females
West	England & Wales	1946–1962	59.5%	40.5%
Milroy	Yorkshire & Humberside in England	1975–1992	94.2%	5.8%

Age of Homicide-Suicide Offenders			
Investigator	Location	Median Age of Homicide-Suicide Offender	Mean
Allen	Los Angeles	(over 40)	
Berman	Philadelphia, Baltimore Washington, D.C.	36	
Currens	Kentucky	41	
Milroy	Yorkshire and Humberside in England	49	
Rosenbaum	Albuquerque		42.3 ± 14.2 SD
Wolfgang	Philadelphia	38.3	

Sex of Victims in Homicide-Suicide			
Investigator	Geographical Area	Male Victims	Female Victims
Allen	Los Angeles	19.8%	80.1%
Berman	Philadelphia, Baltimore Washington, D.C.	12.5%	87.5%
Currens	Kentucky	27.0%	73.0%
Palmer	North Carolina	14.0%	86.0%
Cumulative Average, United States Studies		18.3%	81.7%
West	England and Wales	29.9%	70.1%

TABLE 4—*Race/ethnicity of homicide-suicide offenders.*

Investigator	Location	White	Black	Hispanic	Other	Unknown
Allen	Los Angeles	52%	28%	9.6%	2.0%	8.4%
Berman	Philadelphia, Baltimore, Washington, D.C.	45.0%	...	...	...	...
Currens	Kentucky	86.0%	9.0%	...	...	...
Palmer	North Carolina	70.0%	30.0%	0.0%	0.0%	...
Rosenbaum	Albuquerque	50.0%	0.0%	50.0%	0.0%	
Wolfgang	Philadelphia	50.0%	50.0%	...	...	0.0%
Combined Average, United States Studies		58.8%	23.4%	29.8%		

suicide is usually primary and the clinical condition is predominately depression, because both suicide and depression are associated with older age groups. It has been reported that those males and females who kill a close relative tend to be over the age of 30 [*17*]; whereas homicides of uninvolved and unrelated victims are typically committed by males under the age of 30 [*16*]. Third, some compelling stressors may be more common in advancing age, for example, physical and mental disabilities, chronic illness with pain and suffering and terminal illness. Finally, those in middle age groups may be more sensitive to some stressors such as unexpected loss of a job with resultant unemployment status.

Two possible explanations should be mentioned. The older age of the offender may be a function of mental disorders, depressive and paranoid conditions, that increase with age. Second, the offender's relationship with the victim may be related to the offender's age. An older offender will have had time to establish an intimate relationship lasting long enough for bonding, dependence, turmoil, and instability to develop (Table 3).

An interesting finding has been reported for spousal homicide alone from 1976 through 1985 [*21*]. The rate of spousal homicide increases with age for whites, but shows an inverse relationship for blacks. So we might ask whether race/ethnicity also affect the relationship between age and homicide-suicide.

Social Class and Ethnicity

Various patterns of criminal behavior, including criminal homicide, are more commonly reported within the lower socioeconomic classes (SES) [*22*]. It is, therefore, of interest to note that in at least one American community homicide-suicide was predominantly a middle class phenomenon [*10*]. In Berman's study of 18 homicide-suicides, slightly more than half were employed and all but one were blue collar workers [*9*]. In West's study the percentage of offenders who were in the middle and upper classes was higher for homicide-suicide than those in the matched homicide group [*13*]. In this regard combined homicide-suicide appears to be akin to suicide alone, which is also associated with middle and upper class status. One explanation is that both suicide and homicide-suicide are often triggered by losses, such as the loss of a job. Those in the lower classes cannot lose what they do not have and so are less likely to consider self-destruction in response to deprivation or unemployment, conditions to which they have sadly become accustomed.

In comparison with the relative dearth of data on SES, the literature is more informative about national and ethnic-racial differences. Within the United States, the rate of homicide-suicide has been found to be 0.22 per 100,000 people, a rate which is similar to rates in European and other countries [*23*], whereas rates of suicide and homicide separately show great variability between countries. Milroy observed that the homicide-suicide rate in England and Wales remained constant over thirty consecutive years beginning in 1957, despite an inexorable rise in the homicide rate over that same period [*14*]. Since the rate of homicide-suicide is rather constant, the percentage of homicides associated with suicide is higher in countries with a low homicide rate. In Denmark, with a low homicide rate, for example, the percentage of homicide-suicides is 42%; whereas in the United States, with a homicide rate of 10 per 100,000, the percentage of homicide-suicides is only 4% [*10,24*].

In a given country, the percentage of homicide-suicides per total homicides can show even greater differences between ethnic-racial groupings. For example, in Israel the percentage of homicide-suicides was highest for Western Jews, intermediate for Oriental Jews, and lowest for non-Jews, reflecting the reverse order for the rates of all homicides in each of these groups [*24*].

The relative differences in rates of homicide-suicide between black Americans and white Americans is not very clear (Table 5). In the Rosenbaum study, hispanics and whites were equally represented among homicide-suicide cases; whereas in the homicide without suicide comparison group, blacks were over-represented and whites were proportionately fewer [*10*]. Other investigators, too, have observed that, although homicide alone is over-represented among the black Americans, homicide-suicide is committed predominately by white males [*7,8*]. In Berman's study of 18 homicide-suicides, less than half (45%) of the offenders were white [*9*]. Wolfgang found an equal number of black and white perpetrators of homicide-suicide [*12*]; however, relative to the composition of homicide offenders collectively in his study, whites were more represented [*12*]. On the other hand, the Kentucky study, with 67 homicide-suicides, found that although a larger percentage of the homicide-suicides was committed by whites, the rate was higher among blacks (3.4 per million; 2.7 per million,

TABLE 5—*Age of homicide-suicide victims.*

Investigator	Location	Median Age of Victims	Mean Age of Victims
Allen	Los Angeles	(16–50)	
Berman	Philadelphia, Baltimore, Washington, D.C.	34.5	
Currens	Kentucky	35.0	
Rosenbaum	Albuquerque		34.7 ± 11.5 SD
Wolfgang	Philadelphia	30.1	

respectively, CDC) [5,6]. Since the rate of suicide is higher for whites and the rate of homicide is higher for blacks [4,25,26]; and the rate of primary homicide in particular is higher for blacks [3,22]; if homicide-suicides are higher among blacks perhaps it is the homicide-rate more than suicide rate that "elevates" the rate of homicide-suicides. Wolfgang has suggested that suicide tends to be committed by a higher status group, whereas homicide is associated with low status [12]. As will be discussed, certain patterns of homicide-suicide are committed almost exclusively by white males.

In any case, homicide-suicides apparently occur at a remarkably constant rate across cultural, ethnic, racial, and geopolitical boundaries. Interestingly, the rates of intimate homicides, studies suggest, are also remarkably stable, even in the face of extreme shifts in the homicide rates [16]. Since the homicides of homicide-suicides involve predominantly victims in intimate relationships, it should be of no surprise if rates of intimate homicides and rates of homicide-suicide are subject to similar influences and are of comparable stability.

The Act

Lethal Means

In all studies in the United States completed since 1950, shooting was by far the most common method of committing homicide [5,6,8,9,12], and the offender chose the firearm for suicide as well. Presumably this relates to the greater availability of firearms, especially .38s and other handguns, in this country. The increasing availability of firearms in recent decades may account for the larger percentage of homicides committed by firearms in comparison with Wolfgang's earlier Philadelphia study [12]. Firearms are apparently used more often in homicide-suicides than in spousal homicides alone [21].

In West's earlier study in England and Wales, by contrast, poisoning by coal gas was the most common means of homicide, used by nearly half of the offenders [13]. Coal gas was plentiful then and, relative to the United States, firearms were less available. Given the greater percentage of filicidal mother's in West's series, one might also ask whether a less violent means was selected where the motive was more altruistic than might be the case in many homicides of adults. At any rate, Milroy's more recent study of homicide-suicide in England [14] showed coal gas was no longer used, because domestic gas there no longer contains carbon monoxide, and the use of firearms has increased, becoming the most common lethal means [14] though not with the frequency noted in recent U.S. studies.

Lethal Place

Though not specified in most studies, from available data, the home of the offender and/or victim is the deadliest place for homicide-suicide [12,14]. Within the home, more homicide-suicides are committed in the bedroom than any other room [12,14] (Table 7). The significance of the bedroom may be both practical (where both partners are often together) and symbolic (where emotional and intimate exchanges occur) (Table 8).

TABLE 6—*Age of homicide-suicide offenders and victims in United States studies.*

Investigator	Mean Age of Offenders	Mean Age of Victims	Difference
Berman	36.0 years	34.5 years	1.5 years
Currens	41.0 years	35.0 years	6.0 years
Wolfgang	38.0 years	30.1 years	7.9 years
Average	38.3 years	33.2 years	5.1 years

Classification Based on Psychopathology

Some attempt to classify based on diagnoses is important, if accurate diagnosis and effective treatment is to be preventive. Assessment of psychopathology should help to clarify the nature of the ego weakness contributing to the homicidal and suicidal behavior. Studies of homicide-suicide do not all rely on the same diagnostic manual and may lack, understandably, accurate *post-mortem* psychiatric diagnoses. Thus, here mental and emotional conditions will be classified using general, descriptive categories rather than names of specific disorders.

Depression

One of the most common disorders in homicide-suicide is depression. In West's definitive study of homicide-suicide in England and Wales, the most prevalent disorder was depression [13]. In studies where perpetrators of homicide-suicide are compared with perpetrators of homicide alone, depression is far more common among the former group. This finding holds even when the control group involves victims who are in a dyadic relationship with the killer [10].

Depression is especially common in those who kill members of their nuclear family and themselves. In one small series, three out of four who killed members of their family and themselves were depressed [19]. In West's study, depressed mothers killed their young children out of psychotic identification with them and the suicidal impulse appeared to be primary [13]. Uxoricidal men and filicidal parents who commit suicide are especially likely to have been depressed [20].

Several investigators have concluded that in homicide-suicide, the homicide is an extension of the suicidal act. Demographically, the homicide-suicide has more in common with suicide than homicide. Like suicide, but unlike homicide, the perpetrator tends to be an older white male. Victims are intimates of family members, whereas, homicide-only victims are not so consistently closely tied to their killer. Lester cautions, however, that even killers are a heterogeneous group, with both under-controlled and over-controlled individuals [25]. Those who commit only suicide, likewise, show great variations in temperament and self-centeredness [25]. Clinically the question of whether the suicidal or homicidal drive is primary should probably be considered on a case by case basis.

Whether or not the individual is mentally ill, a core element of the motivation may be common to many. The individual can no longer endure life without what is perceived to be a vital element: a spouse, a family, a job, physical or mental health, a cult to lead, but cannot bear the thought of the other person(s) carrying on without him, so he forces the other(s) to join him in death and sometimes in other pre-homicidal "unifying" experiences such as coerced sex. Where the loss is one of self-esteem, believed to have been caused by nameless-others or "society," a violent, destructive, annihilistic blaze may seem the best final solution.

Although "diagnostic observations" of several homicide-suicide studies are limited to police observations after the fact, despondency and depression are commonly reported [8]. Nonetheless, even despondent individuals, who react to an unacceptable situation by committing homicide-suicide, are not invariably depressed.

TABLE 7—*Means of committing homicide in homicide-suicides.*

Investigator	Geographic Area	Year	Lethal means				
			Shooting	Stabbing	Asphyxiation/ Strangulation	Beating	Other
Allen	Los Angeles	1970–1979	87.8%	5.1%	0.8%	3.4%	2.5%
Berman	Philadelphia, Baltimore, Washington, D.C.	1974–1975	95.0%	—	—	—	—
Curren[a]	Kentucky	1985–1990	94.0%	—	—	—	—
Wolfgang	Philadelphia	1948–1952	57.9%	23.1%	11.6%	3.9%	3.9%
Milroy	Yorkshire and Humberside in England	1975–	42.0%	15.0%	26.0%	5.0%	11.0%
West	England & Wales[b]	1954–1961	19.8%	11.7%	10.7%	4.8%	3.7%

[a]In the Kentucky study 94.0 percent of cases involved shooting in both the homicide and the suicide.
[b]Not shown in the table, homicide by coal gas poisoning was by far the most common means, used in 49.2 percent of homicides, at a time when heating with coal gas was common in Great Britain.

In West's study, more offenders were described as "normal" than depressed [*13*].

Sociopathy

Although criteria for antisocial personality disorder are not obtained postmortem sufficiently to establish the diagnoses in these studies, several investigators report antisocial features in the offenders. Some offenders had prior criminal records and/or were known to have been involved in domestic disturbances prior to the homicide-suicide.

Psychosis

Though most offenders are probably not overtly psychotic, a significant minority are psychotic, with thought disturbance and loss of reality testing. Filicidal and homicidal mothers and family-annihilating fathers are more likely to be psychotically disturbed than those who kill their spouse or consort. A paranoid offender, as discussed above, may be deluded and therefore psychotic.

Alcohol Abuse and Intoxication

Given the apparent association between acts of criminal violence and acute intoxication immediately prior to the violent act [*24*], it is reasonable to ask whether alcohol intoxication can be a factor in setting the stage for homicide-suicide.

Unfortunately, surveys of homicide-suicide do not always include alcohol levels and histories of substance abuse. In the Los Angeles study, 21% of the offenders and 12% of the victims had blood alcohol levels of 0.10% or higher and were considered intoxicated at the time of the event [*8*]. However, the victims of homicide-suicide were less likely to have positive alcohol levels (12.5%) in comparison with reported findings of victims of homicide alone (45 to 60%) [*9*]. From Marzuk's review, alcohol or drug abuse does not differentiate homicide-suicide from suicides or homicides generally [*20*]. In comparison to those who only killed another, Wolfgang found perpetrators of homicide-suicides were less likely to have consumed alcohol [*12*].

Jealousy

Jealousy is not uncommonly cited as a motive for a man to kill his partner and himself. In some cases delusional jealousy may be strongly present and constitute a diagnosable disorder. In Rosenbaum's study of homicide-suicide and homicide only cases, all killers in both groups were described as "extremely jealous of their partners" [*10*]. Rosenbaum concluded that "morbid jealousy" is the "most important feature." On the other hand, of 78 homicide-suicides, West found only two killers with "morbid jealousy" [*13*]. The difficulty in comparing studies is the unclarity about the meaning of "morbid jealousy." Was the suicidal killer simply upset that his partner found a new lover? Or, did he actually have a delusion of infidelity?

Paranoia

West concluded that "The greatest risk of murder-suicide would occur in paranoids.... especially those in whom the emotional distress takes a depressive form" [*13*]. Especially in extra-familial homicide-suicides and mass homicides, paranoid traits and delusions are more typical pathological features [*19*]. In considering perpetrators of most homicides, where suicide too is not an uncommon outcome, Dietz has observed that paranoid thinking is often seen in those who kill large numbers of victims [*26*].

TABLE 8—*Site where homicide victim was found.*

Study	Geographic Location	Bedroom	Bathroom	Living Room	Kitchen	Other: Home	Away from Home
Wolfgang	Philadelphia	8	0	8	4	0	6
Milroy	Yorkshire and Humberside	24	6	8	2	15	5
Cumulative Percentages		37.2%	7.0%	18.6%	7.0%	17.3%	12.7%

Classification of Homicide-Suicide Based on Relationships

Patterns of homicide-suicide will now be described that are distinguishable by relationships. With some modification, this classification incorporates Marzuk's classification of homicide-suicides [*20*], Dietz's classifications of mass murderers [*26,27*], and the FBI's classification of homicides for investigative purposes [*28*]. Though not all-encompassing, most homicide-suicides in the United States would fit into this system, which is consistent with the more general classification of homicides as primary, secondary, and tertiary. The patterns of homicide-suicide suggested here are: consortial (possessive and physically ailing), filicidal (neonaticidal, infanticidal, and pedicidal), familicidal, adversarial, pseudo-commando, and cult.

According to Jason [*3*], Smith [*22*], and others, most homicides can be classified as primary, that is, not occurring in the commission of another crime, and nonprimary (all others), secondary, occurring during commission of another crime. By their dichotomy, virtually all homicide-suicides are not committed in association with other criminal activity and would be considered primary. Most primary homicides involved people who knew each other and are of similar ages. Most are intersexual, intraracial, and the lethal weapon is typically a firearm or knife. Others have separated out those homicides not committed during a crime and not involving a victim in a preestablished relationship. These are tertiary homicides, expanding on the original binary classification. Consortial, filial, familial, and cult homicide-suicides are primary, and pseudo-commando homicide-suicides are tertiary. In adversarial homicide-suicides, a formal relationship may be present, but it is not necessarily one of closeness or longevity.

The FBI has classified homicide for purposes of criminal investigations [*28*]. Most consortial and all filial and familial homicide-suicides correspond to the FBI's category of domestic homicides. Our adversarial homicide corresponds to the FBI's "authority killing." The pseudocommando type of Dietz is designated "nonspecific motive killing" by the FBI.

Consortial Homicide-Suicides

Possessive Subtype—This is by far the most common pattern. In most homicide-suicides the offender, typically male [*9*], kills his spouse, lover, or would-be lover, usually female [*7–9*]. The male may have been rejected by the woman of his romantic fantasies or by his wife of many years. She turned her affections to another man, expelled him from the household, or initiated separation or divorce with the involvement of an interloper. Not necessarily a passive victim of the woman's change of heart, the man may have abused her until she could tolerate no more. Or, both partners may have been reciprocally dependent and abusive to one another [*9*] (Table 10).

Where the relationship is examined, it is typically in the process of separation or divorce [*16*]. Homicide of one's partner, without suicide, is also more common in unstable, distancing relationships. Over 90% of consortial homicide-suicides are committed by males [*20*]; and, in Silverman's study, 100% of the killings, with and without suicide, were committed by males [*16*]. It appears that males killing female partners, whether or not followed by suicide, is more likely to occur when this relationship is undergoing dissolution marked by turmoil.

The offender may kill the rival lover as well as the object of affection and self, resulting in death of the entire triad. In a few reported cases the relationship was between homosexual partners [*8,12*].

Ego weaknesses described include tendencies towards dependency, over-possessiveness in the relationship and jealousy, but depression and even psychosis have been reported; however, psychosis in homicide-suicides is not common in the United States [*9*]. Given the not uncommon history of abuse in the relationship, impulsivity, anger and hostility, and a tendency towards projection may occur as well. The stressor is the threat of losing one's partner, with or without the help of a interloper. Distancing in the relationship is experienced as intolerable, so the individual kills his partner and himself. The man who kills his entire family (see the following) may represent an extension of the consortial homicide-suicide.

Though most adult killings committed within the context of a "suicide pact" appear to represent double suicides [*29,30*], in England; Japan; and Bangalore, India [*31*], one subtype, wherein one member coerces the other to suicide, may not always be easily distinguishable from homicide-suicide. In Fishbain's study of 40 suicide pact victims, in 45% of the pacts the male member killed the female. Guns were used by 40% of the pact members [*29*].

Physically-Ailing Consort Subtype

In both Allen's study in Los Angeles [*8*] and West's study in England and Wales [*13*], ailing health in both marital partners is the distinguishing characteristic of some homicide-suicides. In some cases only the suicide victim or the homicide victim, but not both, is affected by poor health [*20*]. The illness results in physical incapacitation associated with pain and suffering [*31*], or it causes their financial ruin. Those who commit homicide-suicide with failing physical health tend to be elderly men.

The enabling mental disorder, where present, is likely depression. The stress is the physical disability of the actor and/or spouse, including inability to cope and intolerable loneliness. Though described as altruistic and similar to mercy killing, the motive may involve despair for one's own future.

TABLE 9—*Assailant's relationship to victim.*

Study	Husband (or ex-husband)	Wife (or ex-wife)	Boyfriend	Girlfriend	Male Parent and/or Lover	Female Parent and/or Lover	Other Relative	Friend/ Acquaintance	Other
Allen	44	2	29	3	8	2	5	6	4
Curren	50	—	7	—	—	—	—	—	—
Palmer	56	3	—	—	5	—	2	22	2
Dorpat	3	0	1	0	0	0	0	1	0
Totals	153	5	37	3	13	2	7	29	6
Total percentage	63.5	2.0	15.1	1.2	5.3	0.8	2.9	11.8	2.5

NOTE: In United States studies over three-quarters of homicide-suicides a husband or a boyfriend kills a wife or girlfriend, and most of these dyadic deaths involve a marital pair.

TABLE 10—*Sex of offenders in spousal/consortial homicide suicides.*

Investigator	Number of Homicide-Suicide Offenders	Percentage of Spousal/Consortial	Percentage of Male Offenders in Spousal/Consortial Homicide-Suicides	Percentage of Female Offenders in Spousal/ Consortial Homicide-Suicides
Allen	104	75.0%	92.3%	71.4%
Berman	18	67.0%	67.0%	—
Dorpat	5	80.0%	80.0%	—
Palmer	90	65.0%	94.6%	50.0%
Rosenbaum	24	100.0%		
Selkin	13	53.0%		
Cumulative Average		73.3%	83.5%	60.7%
West	148	43.2%	69.3%	5.0%
Milroy	52	62.0%	62.0%	0%

Adversarial Homicide-Suicide

Typically represented by a disgruntled employee, this pattern appears to be reported more frequently in the news media today, though it is not much discussed in the professional literature. The perpetrator is depressed, paranoid, or both, and his concerns focus on his compromised employment, or interpersonal conflicts at the work place may have led to his dismissal. Feeling bitter, cheated, and resentful, he blames superiors or co-workers for his plight. Although there is often at least a kernel of truth to his complaints, the individual may have developed a persecutory delusion that specific individuals conspired to harm him.

Adversarial homicide corresponds to the authority killing of the FBI classification [*28*]. The essential feature is that the offender feels he has been wronged by some person or institution in authority. The perceived wrong may correspond to an actual event such as job dismissal, or it can be delusional. The offender is typically emotionally or mentally disturbed, the disturbance characterized as depressed, paranoid, or psychotic. One or more primary targets or intended victims are sought out for direct confrontation and violent killing with firearm, not uncommonly a powerful or semiautomatic weapon, but others, "secondary targets" can be killed as well. Thus, the killing can turn into a mass homicide. Although many of these cases involve an authority figure, the object of the offender's wrath may be in a peer relationship with antagonistic or competitive qualities; though it may be academic whether the adversarial or authoritarian aspects are most essential; in any case, the central feature is the perception that the other person has wrongfully harmed or deprived the offender in some way that seems to have materially and gravely worsened his life.

Ego weaknesses, then, include paranoid and narcissistic traits, or a depressive inclination. Especially if multiple victims are killed, paranoid delusions may have been present. Stressors are losses, setbacks, or humiliations that caused the individual to feel cheated or unfairly deprived by the object of his rage, often an employer or supervisor; but this pattern can occur in a non-employment context as well; student or parent of a student and teacher, patient and physician; litigant and others involved in the lawsuit [*20*]. The lethal weapon is usually one or more firearms. Where individuals are singled out to be killed, the pattern may resemble the familicidal type; or conversely, the man may try to "take out" as many people as he can, resembling the pseudo-commando type next to be described. Several people can be killed indiscriminately on the spot, or the disgruntled individual may seek to kill several individuals at different places. The actor eventually turns the gun on himself and takes his life; some, of course, threaten suicide or make a half-hearted or inadequate attempt; thereby, excluding themselves as perpetrators of both homicide and suicide.

The disgruntled employee reminds us that these patterns are not always crisply distinct. Overlapping themes exist. Other types, the spurned lover and the family annihilator, may also be out of work, with unemployment adding to the sense of distress and low self-esteem. Or the disgruntled employee may as well experience frustrations in his intimate relationships; but it is his unemployment status which seems to matter most and drives him to direct his homicidal rage at people associated with his earlier employment.

Filial Homicide-Suicides

Homicide is a significant cause of mortality among children. In England and Wales, about one-quarter of victims of homicide are children under 16 years [*32*], and 81% of them are killed by their parents. Children are more likely to be killed by a parent than by anyone else [*20,33*], and a significant percentage of parents attempt or commit suicide after child-killing [*33,34*] (Table 10). D'Orban, who studied and classified 104 women admitted to Holloag Prison in Great Britain from 1970 to 1975, included a category termed "mentally ill mother," those who were depressed or psychotic [*32*]. Of the 24 mentally ill mothers, 13 attempted suicide at the time of child killing or immediately after and most of them were considered mentally ill (Table 11).

Although Japan has a relatively high rate of suicide pacts, those involving forced one-parent child suicide pacts in that country may actually represent homicide-suicides [*30*].

It is useful to further classify filicides as neonaticide, that is, where the child victim is under one day old, and infanticide, where the child is not yet a year old. More often than fathers, mothers kill their babies within one day. Suicide is uncommon when mothers kill a child under one year.

Mothers and fathers are more likely to commit suicide after killing a child from 1 to 16 years of age (pedicide). Men are less likely to take their own lives if the child-victim was not their own biological offspring and time for early bonding was lacking, or where the motive for child killing was severe abuse [*18*]. In Rodenburg's series, all 41 child-killing mothers killed only their own children; and, of these, 41% attempted (5) or completed (12) suicide following the filicide [*33*].

Mothers who kill their children and themselves are described as depressed or even psychotic; whereas those who kill their children without attempting suicide are less likely to be mentally ill [*32*].

TABLE 11—*Females who kill their own children.*

Study	Total No. of Assailants	No. of Female Assailants	Percentage of Female Assailants	Percentage of Female Assailants Who Kill Their Own Children
Allen	104	7	6.7	78.6
Milroy	52	3	6.8	100.0
West	148	60	7.3	91.7
Wolfgang	24	2	8.3	50.0
Cumulative percentages of homicidal and suicidal females who killed their own children.				80.1

The percentage of female assailants is comparable in all four studies that separated the women who killed their own children. Clearly most of the women who committed homicide-suicide killed their own children.

In Somander's study of 77 child-killers in Sweden, 58 committed homicide-suicide, and, of these, 18 involved multiple victims [*18*]. In Rodenburg's Canadian series [*33*], 10 of 41 mothers, 24 percent, killed more than one child. In d'Orban's series, multiple killings were associated only with the categories of "retaliating women" (3 of 9) and "mentally ill mothers" (14 of 24), and most of both groups killed or attempted to kill their own children [*32*]. Thus, those women who killed or attempted to kill all of their children were typically mentally ill and suicidal. Even mothers who kill all of their children, as a rule, do not typically kill children who are not their own offspring or their husbands [*33*] (Table 12).

Stresses of child-killing mothers may be, in part, those related to parenthood. D'Orban has found that marital stress was less significant among mentally ill women, in contrast to child-killing women in other categories [*32*]. Repeatedly, authors have noted that the mother typically regards the child as an extension of herself and the pedicide represents an extension of suicide [*32,35*]; or, she believes "altruistically" that she must spare the child, through death, of having to suffer in an intolerable world [*18,32*].

Familicidal Homicide-Suicide

Since mass murderers not uncommonly kill themselves as well as others, they constitute an overlapping population with homicide-suicide perpetrators. Dietz has suggested three typologies of mass murderers: familicidal offender, pseudo-commandos, and set-and-run killers [*26*]. Family annihilators and pseudo-commando's either attempt or commit suicide or they force the police to kill them. The family annihilator kills each member of the family and sometimes, as well, the family pet. He is described as "the senior man of the house," who diagnostically is "depressed, paranoid, intoxicated, or a combination of these" [*26*].

A family annihilator who killed his wife with a double-bladed ax, and killed his six children, but failed in his attempted suicide was reported by Evseeff and Wisniewski [*34*]. He was raised in a family marked by violence, alcoholism, wife beating, and was subjected to physical and sexual abuse. His own life in adulthood recapitulated the patterns of alcoholism, sexual abuse, and violence. After abducting his wife and cutting her with a knife, he attempted suicide by cutting his wrists. From his hospital assessment, he was diagnosed as a "sociopath with alcohol addiction." The precipitant to the present family annihilation and attempted suicide appeared to have been his wife's pregnancy and her insistence on separation. The diagnosis was "Psychotic Character Disorders with Passive Aggressive Features" (Figure 1).

Ego weaknesses in this case appear to have been the man's severe character pathology, whatever the precise disorder, perhaps worsened by alcoholism. Stresses had been both acute and chronic:

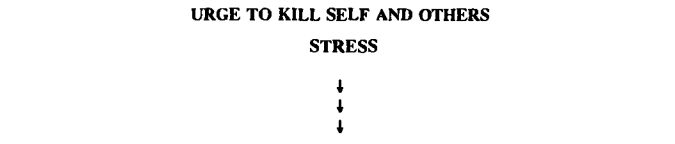

FIG. 1

TABLE 12—*Percentage of child killers who also commit suicide—United States.*

Study	Location	Years	Total No. of Offenders	No. of Homicide/ Suicide Offenders	Percentage of Homicide/Suicide Offenders
Meyers	Detroit	1940–1965	71	12	17.0%
Adelson	Cuyahoga County, Ohio	1944–1960	41	8	19.5%
Adelson	Cuyahoga County, Ohio	1970–1986	194	22	11.3%

The percentage of child killers who committed suicide was very similar in two separate studies over comparable time periods. Although percentage of child killers who killed themselves in Cuyahoga County, Ohio dropped later this century, the increased rate of child homicide exceeded the increased rate of child homicide-suicide.

Study	Location	Years	Number of Child Killers	Number who Suicide	Percentage who Suicide
Rodenburg	Canada	1964–1968	69	14	20.3%
Somander	Sweden	1971–1980	77	43	53.2%

In countries where the homicide rate is low the percentage of child killers who commit suicide is relatively high.

from childhood, physical and sexual abuse, witnessing sexual acts and violence between his parents, and having been abandoned. His own father committed suicide once his divorce was finalized. *Acute stresses* were his wife's pregnancy and insistence on separation, her expelling him from the house, and his loss of employment. *Vectors* directed homicidal rage at his wife who rejected him. Feeling the need to keep the family together, the children, too, fell prey to his destructiveness. One might speculate whether he regarded the children as extensions of his wife, to be killed together with her, or of himself, and whether the homicide-suicide was viewed on some level as uniting this family in death when it could no longer remain together in life.

Family annihilating fathers slay their entire family, wife and children, whereas mothers more typically kill their children but spare their husbands. Both mothers and fathers who slaughter family members, are typically reported to be seriously depressed or psychotic; but we should ask whether this vector of the father's homicidal rage more typically is directed at the wife and the children and self secondarily; whereas, the mother wishes to kill herself first [*13*]. Whereas mentally ill mothers who kill their children are at high risk for suicide, child-killing fathers are more likely to suicide only if their child-killing was one element of attempting to slay the entire family. In Rosenburg's Canadian study, 40% of child-killing fathers also killed their wives [*33*]. Somander's Swedish study confirmed that, in contrast to females, males who kill their children sometimes kill their spouses as well [*18*].

Pseudo-Commandos

The pseudo-commando killer of Dietz's classification [*26*] appears to correspond to the nonspecific-motive killer of the FBI's classification [*28*]. The offender selects a public place where many people can be slaughtered at once, and then he kills indiscriminately people with whom he has no relationship, formal or informal. He brings to the scene powerful weapons, perhaps a small arsenal, and plenty of ammunition. The mass killing occurs in daylight when visibility is good and many people are present. The apparent lack of an escape plan is consistent with the presumption that the offender expected to die himself [*26*].

Since the pseudo-commando more typically forces police to kill him [*26*] and does not actively kill himself, one might question whether the pseudo-commando commits an authentic homicide-suicide. A pseudo-commando, such as George Hennard, can shoot himself. If not, he may position himself to be killed by police. The pseudo-commando may have an interest in firearms and notorious acts of violence. In preparation for mass killings, he arms himself as though single-handedly preparing for battle against an entire army. Examples include Charles Whitman's mass slaying of 14 from the University of Texas Tower, James Huberty's McDonald Restaurant massacre of 21 people in San Ysidro, California, George Hennard's slaughter of 22 people at the Luby's Cafeteria in Killeen, Texas, and Marc Lepine's massacre of 14 women at the University of Montreal in Canada. The perpetrator ensures his own death by passive or active suicide, but takes out as many people as he can in a last stand "blaze of glory." The pseudo-commando is likely to kill far more people than the familicidal offender. He may be embittered, angry, and resentful; if mentally disturbed, excessive suspicion and paranoid thinking are features of the disturbance.

The pseudo-commando can be further classified into one of two subtypes based on whether the victims were indiscriminately targeted or represented a predesignated group, even if nameless to him, as belonging to a pseudo-community [*36,37*]. The indiscriminate pseudo-commando targets a random group of people who share one characteristic, vicinity to perpetrator. Charles Whitman killed anyone who was within the range of his high powered rifle. James Huberty randomly shot every person he laid his eyes on at the McDonald's in San Ysidro. The victim's only relationship with the perpetrator is in being in a particular location at a particular time.

The "pseudo-community-pseudo-commando" may have never had a real life encounter with his victims, but he targets a particular group or "community" of people. The pseudo-community denotes a group of people who have a common characteristic which the perpetrator perceives to be inflammatory. The "pseudo-community pseudo-commando" has a delusion that his pseudo-community is after him, out to get him, taunting him or conspiring against him. This perceived abuse by the pseudo-community is the motive for the homicidal acts. This pseudo-community can represent such a threat that the perpetrator is driven to mass homicide. Though active or passive suicide may occur, suicide is always the killer's intent or a result of his slaughter.

Four months prior to his massacre at Luby's restaurant, George Hennard made an official complaint to the F.B.I. in person. He reported "My civil rights have been violated by a secret group of white women" [*38*]. Hennard was delusional in believing that white women were following him, talking maliciously about him and even standing in front of his car and preventing him from driving. The targeted object's of Hennard's pseudo-community were the "white treacherous vipers." In his community in Texas, Hennard expressed obscenities at females in Luby's Cafeteria while directing most of his gunfire at them [*39*].

On December 6, 1989 Marc Lepine walked into a University of Montreal engineering class armed with a semiautomatic rifle, told all the males to leave, and then opened fire, killing the female students. This was the worst mass homicide in Canadian history. Lepine hated women who were feminists. Seconds before the massacre, he made his motives clear to the women by saying "I am fighting feminism" [*39*]. Lepine, like Hennard, killed himself after killing his last female victim. Also like Hennard he had been troubled by his pseudo-community of women for a long time.

Cult Homicide-Suicides

Combined homicide and suicide is rare in cults and the determination afterwards as to whether each death was a homicide or a suicide is not always clear and certain. It may, therefore, seem presumptuous to include this type in a classification of homicide-suicides. Nonetheless, because of the potentially large scale of the disaster when it occurs, cult homicide-suicides should not be overlooked in classifying homicide-suicides.

Many cults are not violent and self destructive, and of those that are, their members may engage in such behaviors only under certain conditions. Yet, to others it will seem after the fact, as though the violent and self-destructive cult was inexorably headed towards disaster by actively establishing those very conditions that would result in disaster. Here we focus on the cult leader who prepares his followers for violent confrontation, and who arranges for them and for himself to be killed. It may be academic whether he has them killed by suicide, by agents within the cult, or by outside forces. Even though the followers may themselves engage in killing and suicide, their psychology and behavior may not be very similar to that of their leader.

David Koresh, Jim Jones, and others provide notorious examples

of leaders who brought their cults to violent self-destruction. They were willing to kill and be killed, and have their followers kill and be killed, if their cult was threatened. The leaders of such groups are typically described as charismatic, narcissistic, grandiose, and paranoid. They exercise near total power over their followers, subjects who have discarded all vestiges of autonomy to subserve their leader. He persuasively develops a view that his leadership is divine and the rest of society is the enemy that threatens their existence. Whether his grandiosity and paranoid thinking represents character traits or pathological loss of reality testing remain subject to some speculation, because he dies without having been evaluated professionally.

Practical Considerations

Suicides can and do occur in psychiatric hospitals. Serious homicide attempts are unusual in these settings. Combined homicide-suicides invariably occur in the community, especially in homes; not institutional settings. Yet, some, who pass through treatment settings, as inpatients or outpatients, may eventually be capable of homicide-suicide, and clinicians should be alert to this possibility.

Where a patient appears depressed, hopeless, and despondent, clinicians routinely inquire about suicide. If a patient is paranoid, suspicious, angry, and hostile, clinicians should explore the patient's aggressive thoughts and impulses. But, one should not lose sight of the fact that suicidal and homicidal states can exist in the same person at the same time. Moreover, a primarily homicidal state can become a primary suicidal state, and the reverse can probably occur as well.

Certainly assessment of suicide and homicide potential requires a thorough history of prior destructive and desperate acts: suicidal and/or homicidal threats, preparations, and self-destructive acts; homicidal thoughts and preparations, including arming oneself, and all manner of aggressive and impulsive behaviors including domestic violence and fighting. Violent, self-destructive and aggressive fantasies and nocturnal dreams should also be inquired about. Violent fantasies need not be alarm signals per se, but they should always be explored for degree of reality adherence, associated affect, and intention and planning. If the violent recourse is only conditional, what are the conditions likely to trigger such a response? What conditions have triggered similar responses in the past? What lethal means are contemplated and how available are they? How close and available are the potential victims to the patient? Inquire about patterns of alcohol and drug consumption. In some cases, drug screening can be useful.

In some cases the treater, with the patients' awareness and agreement, should periodically contact one or two others who are especially significant in the patient's life such as the patient's spouse. This can serve the clinician for obtaining collateral background information about the patient and monitoring his condition and potential for violence. The other person can be educated about warning signs that may require more professional attention or precautionary measures.

Beyond the need to explore both dimensions of danger, *especially* in a patient who appears both depressed and paranoid; it is most important that all members of the treatment team communicate with one another. It may be the nurse or social worker and not the physician who astutely identifies and documents serious danger signs. But the discipline notes can read like independent tracts in the medical record and documented important findings unfortunately are not always fully appreciated by all. Good clinical care, safe management, and prudent liability-protective measures begun in the hospital, it is hoped, will set the stage for effective aftercare planning, minimizing the risks of homicides, suicide, and combined homicide-suicides in the community.

Any psychiatric assessment, inpatient or outpatient, should address current stresses, presence of mental disorder, and the risk of harm to self or others. Though unusual, individuals occasionally are at risk for killing themselves and others. A more complete assessment of dangerousness, then, involves relating the risk to stresses, ego weaknesses and mental disturbance, and the nature and direction of violent vectors, including motivation and strengths of the impulse. Accurate assessment of these dimensions may enable the clinician to develop a safe and effective treatment plan, reducing risk of homicide-suicide.

References

[1] Felthous, A., "Psychosocial Dynamics of Child Abuse," *Journal of Forensic Sciences*, Vol. 29, No. 1, 1984, pp. 95–99.

[2] Menninger, K., "The Motives," *Man Against Himself*, Harcourt, Brace and Word, Inc., New York, N.Y., 1938, pp. 16–73.

[3] Jason, J., Strauss, L. T., and Tyler, C. W. Jr., "A Comparison of Primary and Secondary Homicides in the United States," *American Journal of Epidemiology*, Vol. 117, No. 3, 1983, pp. 309–319.

[4] Durrett, J. J. and Stromquist, W. G., "Preventing Violent Death," *The Survey*, Vol. 59, 1925, pp. 435–438.

[5] Centers for Disease Control, Homicide Followed by Suicide-Kentucky, 1985–1990, *Journal of the American Medical Association*, Vol. 266, No. 15, October 16, 1991, p. 2062.

[6] Currens, S., Fritsch, T., Jones, D., Bush, G., Vance, J., Frederich, K., Adams, R., Adkins, M., Bothe, J., Murphy, G., Webb, C., and Finger, R., "Homicide Followed by Suicide-Kentucky, 1985–1990," *Morbidity and Mortality Weekly Report*, Vol. 40, 1991, pp. 652–659.

[7] Palmer, S. and Humphrey, J. A., "Offender-Victim Relationship in Criminal Homicide Followed by Offender's Suicide: North Carolina, 1972–1977," *Suicide and Life Threatening Behavior*, Vol. 10, 1980, pp. 106–118.

[8] Allen, N. H., "Homicide Followed by Suicide: Los Angeles, 1970–1979," *Suicide and Life Threatening Behavior*, Vol. 13, 1983, pp. 155–163.

[9] Berman, A. L., "Dyadic Death: Murder-Suicide," *Suicide and Life Threatening Behavior*, Vol. 9, No. 1, Spring, 1979, pp. 15–23.

[10] Rosenbaum, M., "The Role of Depression in Couples Involved in Murder-Suicide and Homicide," *American Journal of Psychiatry*, Vol. 147, No. 8, 1990, pp. 1036–1039.

[11] Selkin, J., "Rescue Fantasies in Homicide-Suicide," *Suicide and Life Threatening Behavior*, Vol. 16, No. 2, 1976, pp. 79–85.

[12] Wolfgang, M. E., "An Analysis of Homicide-Suicide," *Journal of Clinical and Experimental Psychopathology*, Vol. 19, No. 3, 1958, pp. 208–218.

[13] West, D. J., *Murder Followed by Suicide*, Harvard University Press, Cambridge, MA, 1967.

[14] Milroy, C. M., "Homicide Followed by Suicide (Dyadic Death) in Yorkshire and Humberside," *Medicine, Science, and the Law*, Vol. 33, No. 2, 1993, pp. 167–171.

[15] Straus, M., "State and Regional Differences in U.S. Infant Homicide Rates in Relation to Sociocultural Characteristics of the States," *Behavioral Sciences and the Law*, Vol. 5, No. 1, 1987, pp. 61–75.

[16] Silverman, R. A. and Mukkherjee, S. K., "Intimate Homicide: An Analysis of Violent Social Relationships," *Behavioral Sciences and the Law*, Vol. 5, No. 1, 1987, pp. 37–47.

[17] Dawson, J. M. and Langan, P. A., "Murder in Families," Bureau of Justice Statistics, *Special Report*, U.S. Department of Justice, Washington, D.C., 1994.

[18] Somander, L. H. and Rammer, L. M., "Intra- and Extra Familial Child Homicide in Sweden, 1971–1980," *Child Abuse and Neglect*, Vol. 15, 1991, pp. 45–55.

[19] Goldney, R. D., "Family Murder Followed by Suicide," *Forensic Science*, Vol. 9, 1977, pp. 219–228.

[20] Marzuk, P. M., Tardiff, K., and Hirsch, C. S., "The Epidemiology of Murder-Suicide," *Journal of the American Medical Association*, Vol. 267, No. 23, 1992, pp. 3179–3183.

[21] Mercy, J. A. and Saltzman, L. E., "Fatal Violence Among Spouses in the United States, 1976–1985," *American Journal of Public Health*, Vol. 79, No. 5, 1989, pp. 595–599.
[22] Smith, M. D. and Parker, R. N., "Type of Homicide and Variation in Regional Rates," *Social Forces*, Vol. 59, 1980, pp. 136–147.
[23] Killias, M., "International Correlations Between Gun Ownership and Rates of Homicide and Suicide," *Canadian Medical Association Journal*, Vol. 148, No. 10, 1993, pp. 1721–1725.
[24] Collins, J. J. and Schlenger, W. E., "Acute and Chronic Effects of Alcohol Use on Violence," *Journal of Studies on Alcohol*, Vol. 49, No. 6, 1988, pp. 516–521.
[25] Lester, D., "Murder Followed by Suicide in Those Who Murder Police Officers," *Psychological Reports*, Vol. 60, 1987, p. 1130.
[26] Dietz, P. E., "Mass, Serial and Sensational Homicides," *Bulletin of the New York Academy of Medicine*, Vol. 62, No. 5, 1986, pp. 477–491.
[27] Dietz, P. E., "Patterns in Human Violence," In *American Psychiatric Association: Annual Review*, Vol. 6, R. E. Hales and A. J. Frances, Eds., American Psychiatric Association, Inc., Washington, D.C., 1987, pp. 465–490.
[28] Douglas, J. E., Burgess, A. W., Burgess, A. G., Kessler, R. K., "*Crime Classification Manual: A Standard System for Investigating and Classifying Violent Crimes*," Lexington Books: New York, NY, 1992.
[29] Fishbain, D. A., D'Achille, L., Barsky, S., Aldrich, T. E., "A Controlled Study of Suicide Pacts," *Journal of Clinical Psychiatry*, Vol. 45, 1984, pp. 154–157.
[30] Fishbain, D. A. and Aldrich, T. E., "Suicide Pacts: International Comparisons," *Journal of Clinical Psychiatry*, Vol. 46, 1985, pp. 11–15.
[31] Fishbain, D. A., Goldberg, M., Rosomoff, R., Steele, R., Rosomoff, H. L., "Case Report: Homicide-Suicide and Chronic Pain," *The Clinical Journal of Pain*, Vol. 5, 1989, pp. 275–278.
[32] D'Orban, P. T., "Women Who Kill Their Children," *British Journal of Psychiatry*, Vol. 134, 1979, pp. 560–571.
[33] Rodenburg, M., "Child Murder by Depressed Parents," *Canadian Psychiatric Association Journal*, Vol. 16, No. 1, 1971, pp. 41–48.
[34] Evseeff, G. S. and Wisniewski, E. M., "A Psychiatric Study of Violent Mass Murderer," *Journal of Forensic Sciences*, 1973, pp. 371–376.
[35] Resnick, P., "Murder of the Newborn: A Psychiatric Review of Neonaticide," *American Journal of Psychiatry*, Vol. 126, No. 10, 1970, pp. 1414–1420.
[36] Walker, J. I. and Brodie, H. K. H., "Paranoid Disorders," In *Comprehensive Textbook of Psychiatry*, Fourth Edition, Williams & Wilkins, Baltimore, MD, pp. , 1985.
[37] Cameron, N., "The Paranoid Pseudo-Community Revisited," *American Journal of Sociology*, Vol. 65, 1959, pp. 52–58.
[38] Karpf, J. and Karpf, E., *Anatomy of a Massacre*, WRS Publishing Company, Waco, Texas, 1994.
[39] Time Life Books, *Mass Murders: Profiles of a Rare and Notorious Breed of Killer*, Time Life Books, 1992, USA.
[40] Dorpat, T. L., "Suicide in Murderers," *Psychiatry Digest*, Vol. 27, No. 6, 1966, pp. 51–55.

Address requests for reprints or additional information to
Alan R. Felthous, M.D.
Forensic Service Department of Psychiatry and Behavioral Sciences
University of Texas Medical Branch
Galveston, TX 77555-0428