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Combined Homicide-Suicide in Galveston County*

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ABSTRACT: Combined homicide-suicides have been classified based on the psychopathology of the perpetrator and the nature of the relationship between perpetrator and victim(s). To further understand the nature of this tragic phenomenon and to test the validity and practicality of a previously suggested classification system, investigators systematically collected data on all combined homicide-suicide events that occurred in Galveston County, Texas over a continuous 18-year period (n = 20). The most common psychopathological finding for perpetrators was high serum alcohol levels that suggested intoxication. Most combined homicide-suicides fell into one of the relational categories and most of these, as predicted, were of the consortial type, possessive subtype. As expected, due to the small sample size, the less common types of combined homicide-suicide were not represented in this sample.

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

After killing Desdemona and stabbing himself, Othello exclaims

"I kissed thee ere I killed thee.
No way but this,
Killing myself to die upon a kiss."
(He falls over her and dies.)

Othello
Act 5, Scene 2
William Shakespeare

Combined homicide-suicide, defined as "the homicidal killing of one or more persons followed immediately or very soon by suicide by the homicidal offender" (1), typically generates much publicity and public concern. Yet the scientific literature on this tragic phenomenon is remarkably limited. In an effort to better understand this highly consequential behavior, two of the authors (Felthous and Hempel) proposed a two-part classification system of combined homicide-suicide that was based on the available literature: a classification predicated on the *psychopathology* of the perpetrator and a classification based on *relationship characteristics,* i.e., the nature of the relationship between perpetrator and victim. Including, but exceeding somewhat the simple stress-diathesis model, Felthous and Hempel suggested a three-dimensional conceptualization: "(1) psychopathology and ego deficits of the perpetrator, (2) cumulative and precipitating stressors, and (3) motivation and vector of destructive urges against self and other victim(s)." The question then presents itself as to whether this classification based on a review of the literature holds up as valid and practical when applied directly to actual cases of combined homicide-suicide.

The proposed classification of combined homicide-suicide based on relationship characteristics integrated and modified Marzuk's classification of homicide-suicide (2), Dietz's classification of mass murderers (3), and the FBI's classification of criminal homicides (4). The five classes and subclasses of this system are presented in Table 1.

A principal objective of this present study was to determine how closely a natural series of combined homicide-suicide cases would correspond to these descriptive categories gleaned from the literature. The perpetrator pathology-based classification grouped homicide-suicide into six types of disorders: depression, sociopathy, psychosis, alcohol abuse and intoxication, jealousy, and paranoia (1). General descriptive groupings could have useful implications regarding treatment and ultimately prevention in homicidal-suicidal behavior.

The purpose of this study was to test the utility of the aforementioned proposed classification of combined homicide-suicides. It was also believed that the systematic study of the phenomenon could provide information about the motivation, psychological stressors, and psychopathology of individuals who commit combined homicide-suicide.

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TABLE 1—*Classification of suicides based on the relationship of the actor to the victim.*

Type	Subtype
Consortial	Possessive
	Physically ailing
Filial	Neonaticidal (under 24 h old)
	Infanticidal (24 h to one year)
	Pedicidal (1–16 years)
Familial	
Adversarial	
Pseudo-Commando	
Cult	

TABLE 2—*Demographics on perpetrators and victims.*

	Perpetrators (n = 20)		Victims (n = 22)	
Gender	*n*	%	*n*	%
Males	19	95.0	4	18.2
Females	1	5.0	18	81.8
Race/Ethnicity	*n*	%	*n*	%
Caucasian	9	45.0	11	50.0
African-American	5	25.0	5	22.7
Hispanic	5	25.0	5	22.7
Asian-American	1	5.0	1	4.5
Age	*n*		*n*	
Range		20–88		7–86
Mean		44.7		38.6
Median		40.0		36.5
Mode Decade	7	4th (30 s)	9	4th (30 s)

Method

The Medical Examiner's Office records of all combined homicide-suicides (n = 20) that occurred in Galveston County from 1980 through 1998 were identified and thoroughly reviewed. A data retrieval outline form was used to systematically gather information concerning demographics, psychiatric history, medical history, and history of stressful events for both the perpetrator and victim(s). Details specific to individual homicide-suicide cases (hereafter termed "event") and the relationship between the victim and perpetrator (see above classification) were also gathered. Data were first tabulated according to data category (e.g., demographics) and then according to the perpetrator-victim relationship. Data supporting individual psychopathology, except for alcohol abuse at the time of the event, were insufficient for an initial classification of perpetrators based on mental disorders because such information was not consistently obtained by the Medical Examiner's Office.

Results

Demographics

Table 2 contains demographic statistics for the 20 perpetrators and 22 victims. All but one perpetrator were male and all but four victims were female. About half of the perpetrators and victims were Caucasian. Perpetrators and victims were split evenly between African-Americans and Hispanic-Americans and one dyad was Asian-American. All victims belonged to the same ethnic group as their killers. As a group, victims were younger than perpetrators with both groups clustering in the fourth decade as is demonstrated in Fig. 1.

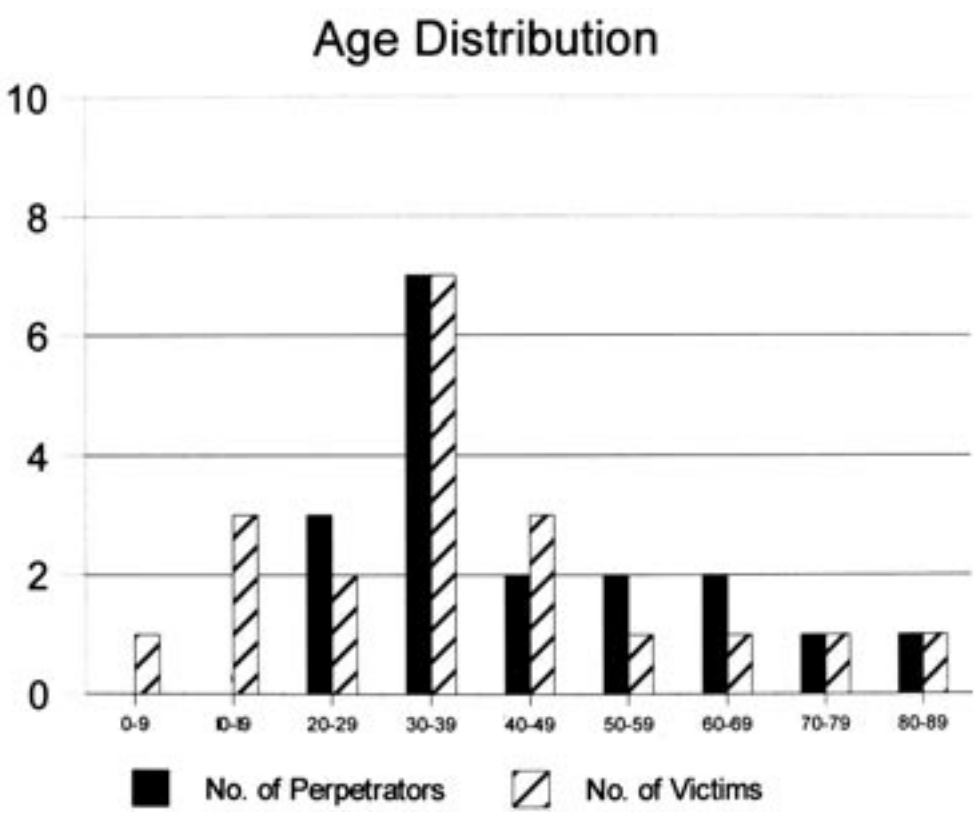

FIG. 1—*Age distribution of perpetrators and victims.*

Circumstances

Location

As can be seen from Table 3, both perpetrators and victims were killed in the same location in most combined homicide-suicides. In all cases where both victims and perpetrators were fatally shot with the same firearm, the homicide-suicide occurred in the same place, and, if not in the same room, within very close proximity. Clearly, the deadliest place for both perpetrators and victims was in a dwelling, especially one in which both had lived. Within the dwelling, most were killed in a bedroom.

Lethal Weapon/Instrument

Most of these combined homicide-suicides involved use of firearms (95.0%, 19/20), and most perpetrators (80.0%, 16/20) used a handgun (see Table 4). Where a handgun was used to kill the victim, a handgun was also used to commit suicide. Moreover, with but a single exception the same weapon was used to commit both homicide and suicide. A .38 was the most used pistol. Interestingly no knives were used. In the only homicide-suicide that did not involve a firearm, the perpetrator strangled the victim with a necktie and then committed suicide by carbon monoxide poisoning.

TABLE 4—*Lethal weapon/instrument.*

Weapon/Instrument	Used on Victim(s) (Homicide)	Used on Perpetrator(s) (Suicide)	Used on Both V. & P. in Same Event
Firearm			
Handgun			
.38	7	8	7
.32	3	3	3
.357	3	3	3
"Pistol"	3	2	2
Total	16	16	15
Long Barrel			
12 gage shotgun	3	1	2
.22 rifle	0	1	0
WWII vintage Mauser	1	0	0
"Rifle"	1	1	1
Total	5	3	3
Total Firearms	22	19	18
Necktie (strangulation)	1	0	0
Vehicle (Carbon monoxide inhalation poisoning)	0	1	0

Psychopathology

Information about subjects' psychiatric and substance use history was disappointingly limited. Three perpetrators had a history of alcoholism, lead poisoning, and depression, respectively. One perpetrator experienced "unconfirmed" hallucinations for two weeks prior to the event. Victims had no known history of prior psychiatric diagnosis, symptomatology, or hospitalization documented in their autopsy files.

The single female perpetrator in this series of combined homicide-suicides suffered from depression thought to have been triggered by marital problems and separation. She was hospitalized for one week after attempting suicide. Two days after her hospital discharge she purchased a gun and on the fifth day post discharge she fatally shot and killed her husband and then herself.

At the time of the postmortem examination, serum alcohol was in most, but not all, cases measured and recorded for perpetrators and victims. Other drugs were sometimes tested as well, and occasionally various other bodily fluids and tissues were tested. Of the 20 perpetrators, 13 clearly had their blood alcohol level measured, and eight of these cases were positive. In two cases urine was positive for alcohol as well. One perpetrator had 80 mg% alcohol in the kidney, but his other fluids/tissues were apparently not tested. Serum alcohol concentrations ranged from 20 to 285 mg%, with four perpetrators having a serum alcohol concentration of over 180 mg%. Of those perpetrators not found to have alcohol in their systems, two had cocaine or a cocaine metabolite (benzoylecgonine), one had diazepam, and one had $\triangle$ 9-carboxy tetrahydrocannabinol (9-carboxy THC), a metabolite of cannabis, in the urine. One third ($n = 7$) of all perpetrators had no drugs or alcohol detected, although in four of these it is not clear whether alcohol/drugs were tested.

Only two of the 14 victims tested for alcohol were positive with 80 and 70 mg%, respectively, the first also showing positive 9-carboxy THC. One victim was thought to have been intoxicated with alcohol and marijuana at the time of the event, one was "presumptive for cannabinoids," and one showed acetone in the urine.

History of Aggression against Self or Others

A significant limitation of this study was the lack of available information on file concerning psychopathology of perpetrator or

TABLE 3—*Place of combined homicide-suicide.*

Premise/Dwelling	Victim	Perpetrator	Both
Domicile			
Couple's	7	7	7
Victim's	2	3	2
Perpetrator's	1	1	1
Other:			
Daughter's home	1	1	1
Motel room	3	2	2
Location			
Bedroom	7	6	4
Family/living room	3	2	2
Garage	0	2	0
Backyard	2	2	2
Other:			
Between family room & kitchen	0	1	0
Vessel/Vehicle			
Whose			
Victim's	1	1	1
Perpetrator's	0	0	0
Couple's	1	1	1
Unknown	0	1	0
Type			
Car/van	1	2	1
Shrimp boat	1	1	1
Space			
Wheelhouse	1	1	1
Other			
Alley	1	0	1
Restaurant, storeroom	2	1	1

victim. In most cases, close friends and family members were either unwilling or unavailable to participate in collateral source interviews since the time span was 18 years. Lacking an instrument that was tried, tested, and standardized, a final relative limitation of the present study was the need to rely on our own data retrieval outline in order to address the study aims.

By far, disturbed or disturbing behaviors were documented for perpetrators more than victims (Table 5). Half (10) of the perpetrators had a history of some indication of suicidal risk or external aggression. Of the nine perpetrators who had reportedly displayed some form of verbal or physical aggression, seven had expressed threats. In four cases verbal threats appeared to have involved a gun. Aggressive acts, including threats, were directed primarily at victims or associates, friends, or close relatives of the victim. Interestingly, in the only two cases wherein information was available on criminal history the alleged offense was terroristic threats.

Two perpetrators attempted suicide and one threatened suicide. None of the victims had a history of suicidal or criminal acts.

Relationships

Based on relational descriptors (e.g., "wife," "girlfriend"), relationships between perpetrators and victims were at least at one time close if not intimate (see Table 6). Most ($n = 17$) could be classified as consortial (present or ex-girlfriend/spouse) and, of these,

TABLE 6—*Classification of combined homicide-suicides based on relationship between perpetrator and victim.*

Type	Subtype	Number	Percentage
Consortial		17	85%
	Possessive	15	75%
	Physically Ailing	2	10%
Filial		1	5%
Familial		1	5%
Other		1	5%

TABLE 5—*History of aggressive acts against self or others by perpetrators and victims of combined homicide suicide.*

	Perpetrator			Victim		
Case No.	Suicide Attempts	Criminal History	Aggressive Behavior	Suicide Attempt	Criminal History	Aggressive Behavior
5	…	Outstanding warrant for terroristic threats.	Many times threatened wife at work with a gun. Beat wife. Had .22 and .38 taken from him.	…	…	…
6	Overdose attempted 6 mos. prior to the event.	…	…	…	…	…
7	(Wife returned out of fear he would kill himself.)	…	Stalked his wife (victim). Many arguments with wife.	…	…	Numerous "fights" with perpetrator.
8	…	…	Perpetrator forced way into apartment immediately preceding the event.	…	…	…
9	…	Terroristic threats.	Family took several guns from perpetrator.	…	…	…
10	Suicide attempt requiring (psych.) hospitalization.	…	Threatened several people.	…	…	…
11	…	…	Obnoxious and abusive towards wife (victim) and stepson. Threatened stepson and (his) friends with gun. Instigated confrontations.	…	…	…
12	…	…	Repeatedly threatened victim.	…	…	…
15	…	…	…	…	…	Neighbor heard both arguing over fallen food. Victim threatened perpetrator and later said (he) would shoot him if he did not pick up the food.
16	…	…	Threatened to kill wife week prior to event. Pointed a gun at her at a local department store. Incident was reported to the police.	…	…	…
18	…	…	Argued with victim on day of the event.	…	…	…

most ($n = 15$) were likely possessive (because intolerable separation was a precipitating stress), whereas two involved a physically ailing member. One of the possessive consortial homicide-suicides was triadic, because a male friend of the perpetrator's ex-girlfriend was shot and killed in the same event. In each of the two physically ailing cases the more seriously physically ailing member was the perpetrator, though the victim too suffered from health problems. The single filial and the single familial cases both involved turmoil with the perpetrator's spouse, and, thus, appeared related to the possessive type of consortial homicide-suicide. A question exists whether the event with male roommates involved a platonic relationship or whether homosexual bonding was involved. Without more information, this case was classified under "other." No adversarial, pseudo-commando, or cult homicide-suicides were identified in this series.

Stressors

For most (14 perpetrators) there was some recent sign of turmoil in the relationship between perpetrator and victim. In six cases an argument had occurred. A not uncommon theme was the perpetrator losing or being rejected by the victim: greater separation or divorce impending (5), awareness of another friend/lover (3), belief that perpetrator was no longer loved by the victim (2) and/or told to leave (1).

Discussion

Consistent with previous research, most perpetrators of combined homicide-suicide were male and most victims were female. With only a few exceptions (5,6), males have been found to constitute over 90% of the combined homicide-suicide perpetrators (7–16). As we have discussed before, the higher rate of combined homicide-suicide among males is consistent with the higher rate of homicides and the higher rate of suicide among males (1).

Similarly the high percentage of victims who were female in this series, 81.8% ($n = 18$), corresponds with results of other studies (ranging from 70.1 to 87.5%) (6,8–13). The single female perpetrator was also the gender-exception to the otherwise all male series of possessive, consortial homicide-suicides in the present study.

Results of this study show a somewhat higher mean age for perpetrators (44.3 years) and victims (38.0 years) in comparison with the mean ages of perpetrators (38.3 years) and victims (33.2 years) in other U.S. studies (1,9,10,15) and in Adler's study (7) from Germany (34.8 ± 12.1 years for perpetrators). The higher means in the present study are affected by the broad distribution of ages. In both this study and others, the age of the perpetrators is typically older than the victim. However, when compared with the average age spread between married couples in Texas (wives are 2.64 years younger), the average age differential for homicide-suicide dyads was not statistically significant. Consistent with other studies, the risk of combined homicide-suicide appears highest in the fourth decade of life for all classification types except the physically ailing subtype. As expected (6,8,17), the physically ailing subtype of consortial homicide-suicide was committed by middle-aged or elderly men.

The racial distributions of perpetrators and victims are congruent with the racial composition of the general population in Galveston County, Texas. Although pure homicide perpetrators and victims tend to be overrepresented by African Americans (18,19), and pure suicide is committed disproportionately by Caucasian Americans (3,10); previous research is not completely consistent as to whether Caucasian Americans (8,13,14) or African Americans (9,10,15,20) are overrepresented among those who commit combined homicide-suicide. Moreover, as Hannah et al. (11) illustrated in their Virginia study of two cohorts separated by time, prevalence of demographics and circumstances can change. In central Virginia, homicide-suicides changed from predominantly multiple victim killings by Caucasian Americans in urban settings to mostly dyadic deaths by African Americans in rural settings. Noteworthy in the present study is that *every* victim was of the same racial/ethnic group as the perpetrator; not surprising given the intimate to familial nature of the relationships in which combined homicide-suicide occurs.

The circumstances of the act were consistent with what has been reported in the literature. The home of the victim and/or perpetrator is the deadliest place and the bedroom is the deadliest room (12,15,16). Even though this is a constant finding in various jurisdictions, Palermo et al. demonstrated that the probability of the perpetrator dying in the home of the perpetrator/victim can be significantly higher in some counties (viz., King County, Washington and Milwaukee County, Wisconsin) than others.

As reported in other studies (8–11,12,15,17,20,21), shooting was the most common means of killing self and others in this combined act. Handguns, particularly .38 calibers, were the most commonly used lethal instruments in the present series. The high frequency of handgun use is likely related to their availability in the U.S. It should be emphasized, however, that in countries where handguns have not been so available, homicide-suicides are accomplished to a greater extent by other means. In the United States, statistical differences occur in the proportion of cases where handguns are used between different jurisdictions and between different time periods. For example Palermo et al. (12) found that a significantly higher proportion of perpetrators used handguns in their homicide-suicides in Milwaukee and King Counties in comparison with five other U.S. counties. In the German study by Adler et al. (7), one of the most common attributes of perpetrators of impulsive homicide-suicide was an occupation or hobby through which firearms were available if not required and used.

Although the amount of information on psychopathology was disappointingly meager, the finding that nearly half ($n = 9$) of the perpetrators had positive serum alcohol and four had alcohol concentrations over 180 mg% is remarkable. This compares with the Los Angeles study by Allen (8) in which 21% of the perpetrators of homicide-suicide had blood alcohol levels of 100 mg% or higher. Cantor and McTaggart (22) in Queensland, Australia found that alcohol levels for perpetrators of homicide-suicide were not significantly different than those of individuals who only committed suicide. In the present study, the high proportion of perpetrators with chemical substances, especially alcohol, suggests the possibility that intoxication may predispose susceptible individuals to combined homicide-suicide. Nonetheless, the predisposing potential of alcohol abuse and intoxication (17) should be of no surprise, as alcohol intoxication has long been recognized to be a risk factor for the separate acts of homicide and suicide, especially in the home (23).

In one case, history of the event suggests that the perpetrator's intoxicated state may have contributed to the tragedy. While intoxicated with alcohol, he went to visit his wife, who was staying at his daughter's residence. After his daughter would not allow him to enter, he left, returned with a gun, entered the house, argued with his wife, shot his wife in the head, and then shot himself.

It is noteworthy that whenever a victim was positive for chemical substances, the corresponding perpetrator was positive as well. The two victims with serum alcohol were killed by individuals with measured serum alcohol, but at a lower level. The only victim with

cocaine (and also marijuana) was killed by a perpetrator who also had cocaine in his blood. Thus, co-consumption was a possibility in every case where the victim was positive for drugs/alcohol.

That the perpetrator with the most documentation for depression was female raises an interesting gender question. Could female perpetrators tend towards depression, whereas males are affected more by character pathology and/or alcohol abuse? Unfortunately the information on psychopathology was insufficient to permit classification based on mental disorder alone. Clearly, if psychopathology is to be studied in individual cases, a greater attempt at "concurrent" psychological autopsy using a consistent, standardized method of data collection and including interviews of acquaintances will be required.

Two perpetrators had reportedly threatened suicide and one attempted suicide. The girlfriend of one perpetrator, who had no documented history of externally directed aggression, told her mother that the perpetrator had told her he planned to break up with her and then kill himself. The following day he committed the combined homicide-suicide. In a second case, the perpetrator's separated wife returned to the perpetrator out of concern for his welfare, because he had threatened to kill himself. He then killed her and himself. The only female perpetrator in this series had been hospitalized recently for attempted suicide before killing her separated husband and herself. Though depressed and suicidal, she had also reportedly threatened other people, so her earlier aggression was not entirely self directed. There was no documentation suggesting suicidality of any of the victims.

One perpetrator had reportedly borrowed a gun in order to kill his pet dog. The dog was described as "good" and there was nothing wrong with it. After shooting and killing his dog, he drove to his ex-wife's home allegedly to make up with her. When an argument ensued, he pulled out a single action revolver, cocked it, hesitated, let the hammer down, and then he shot her four times. Soon after, he fatally shot himself in the head.

One of the victims may have behaved more aggressively than the perpetrator, as neighbors had recently heard him threaten to shoot the perpetrator if the perpetrator did not pick up some fallen food. In one case, the perpetrator and victim argued on the day of the event and another case was notable for numerous prior arguments between perpetrator and victim. In these two cases, one cannot say who was the more aggressive before the fatal event. With these three possible exceptions, victims were far less aggressive than perpetrators, at least from available documentation.

From the literature, the vast majority of combined homicide-suicides are of the consortial type (11,17,24), possessive subtype (1), and again results of this study are consistent with this observation. Seventeen of the 20 cases clearly involved heterosexual relationships between perpetrator and victim, typically present or past spouse or girlfriend. Where information was provided on the nature of the relationship, turmoil was suggested, either by an argument shortly preceding the event and/or some distancing, which might well have led the perpetrator to dread the loss and feel envious or rejected. Information on the nature of the relationships in the single filial and familial cases was too scant to identify a similar dynamic, and in the two physically ailing cases it is at least conceivable that impending separation, loss, or perceived rejection could have played a role in these other types as well.

As expected the most common pattern in this series was consortial-possessive of which there were 17 (85%). All of these cases involved, by definition, a perpetrator and victim who had a romantic or intimate relationship as was indicated by terms such as girlfriend or wife. All but one (19,95%) of the perpetrators were male and all but four victims (18.2%) were female. About half of these cases involved a wife or ex-wife ($n = 11$) and the other half, girlfriend or ex-girlfriend ($n = 6$). In most possessive consortial cases ($n = 8$), a descriptor of the relation (e.g., "ex" or "separated") indicated separation or distancing that had already occurred. Beyond this, as expected, most of these had documentation indicating further separation or threat of disruption of the relationship ($n = 7$, 53.8%).

In both physically ailing subtypes, the perpetrator was male, the victim was female, and the two were married. One involved an elderly couple (88 and 86 years, respectively) but the other was middle age with a 13-year age spread (58 and 45 years).

In one of the two cases classified as consortial, physically ailing, the 88-year-old man suffered from carcinoma of the prostate with metastasis to paraaortic and mediastinal lymph nodes and both lungs. The diagnosis had been made 10 to 12 years earlier and medication was prescribed for pain management. Although his wife suffered from osteoarthritis, it appears he was the more disabled of the two, as his son was considering having him placed in a nursing home. The latter possibility could well have served as the more acute stressor.

In the second physically ailing case, the 58-year-old husband reportedly suffered from colon cancer, micronodular alcoholic cirrhosis, alcoholism, and generalized atherosclerosis. His 45-year-old wife-victim suffered from severe bilateral emphysema, fibrous adhesions, angina, and possible failing vision.

Although a few perpetrators showed signs of suicidality prior to the event, aggressive, threatening, and angry behavior was more common. Other investigators have argued that suicide is the primary impulse in homicide-suicide, which has been called "extended suicide" (12). Nonetheless, any attempt to generalize about either homicide or suicide as the principal driving force based on this or other published studies would probably be too speculative and may well vary from case to case. In addition, these data do not allow for conclusions regarding the validity and utility of our proposed classification for less common relational types of suicide-homicide because the sample size was too small to capture the less common types.

The only filicidal homicide-suicide does not fit the described pattern. First, the victim was too old (23 years) to be subcategorized based on the age of the child-victim. Second, fathers are more likely to suicide after killing a consanguineous child; this victim was his wife's son by a previous marriage. Given that the perpetrator's wife had just ejected him from the premises, and, after he returned and shot this stepson, she wrested the gun away from him; one might ask if she too would have been killed had she not overpowered him and taken control of the weapon. Thus, what ended up as a filial event could have been familial.

As would be expected, the single familial homicide-suicide was committed by a male offender, the father. An intriguing twist to this event was that he apparently left a note attributing his wife with shooting their seven-year-old daughter and herself before he took his own life with the same .38 caliber pistol.

The least classifiable event involved a 78-year-old widower who killed his 77-year-old roommate. More documented information about the nature of their relationship may have been helpful. If they had a homosexual or homophilic relationship, this could have represented a consortial context. Given the alleged argument recently overheard, the precipitating stress may have been a dispute over control more than a threat of abandonment or rejection. In this case, the homicide-suicide could have been more akin to the adversarial type even though the relationship was not one typically considered as strictly formal.

This analysis of Felthous and Hempel's classification system of combined homicide/suicide was compromised by the small sample size that likely resulted in the lack of less common types. Conclusions about the validity of some subtypes must await further study that includes adequate sample sizes that allow the range of subtypes to be studied. Moreover, cases of mass murder in which suicide also occurs should be included in future studies as this event is a combined homicide-suicide that is simply larger in scope.

The present study supports the observation that the consortial-possessive type is by far the most common. This realization alone points to the possibility that the drive to kill object and self is the result of distorted bonding associated with a disturbed, desperate need to control the other person. But then this may be true regardless of the type of homicide-suicide, as even adversarial and pseudo-commando homicide-suicide perpetrators are exercising "ultimate control" in a losing battle to preserve a more idealized, real, or delusional relationship with (the) other(s). Support for this hypothesis must await in-depth psychological examinations of perpetrators who survived their homicide-suicide attempt and of those who did not, with extensive psychological autopsies, using standardized instruments.

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