

International Journal of
Offender Therapy and
Comparative Criminology

Volume 53 Number 5

October 2009 497-516

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10.1177/0306624X09334646

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Domestic Homicide Followed by Parasuicide

A Comparison With Homicide and Parasuicide

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Homicide–suicides are a rare yet very serious form of interpersonal violence that occur mainly in partnerships and families. As both perpetrator and victim die in a homicide–suicide, data sources in previous studies typically lack detailed information. This study overcomes this limitation by making use of homicides followed by a suicide attempt of the perpetrator (homicide–parasuicides). The authors examine to what extent these homicide–parasuicides can be understood as being primarily an expression of homicidal or of suicidal behavior. In total, 77 homicide–parasuicides are compared to 430 homicides and 161 parasuicides. The results show that homicide–parasuicides constitute a different category of lethal violence with regard to demographic, individual, and event-related characteristics. Subanalyses of homicide–parasuicides involving women and children reveal similar differences. The finding that a large majority of the perpetrators were mentally ill, dependent on the victim, and killed when faced with separation from the victim may suggest that increased monitoring of this group might have preventive value.

Keywords: *homicide–suicide; domestic homicide; parasuicide; uxoricide; filicide*

Homicide–suicide is a generic term referring to a homicide and a subsequent suicide by the same actor.¹ Although homicide and suicide are two well-defined entities, there is no standard legal description of the homicide–suicide phenomenon (Palermo, 1994), because cases typically do not result in a criminal charge or trial.

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International literature suggests that with few exceptions, virtually all victims of homicide–suicide are either female sexual partners or blood relatives, usually children (Campanelli & Gilson, 2002; Carcach & Grabosky, 1998; Gartner & McCarthy, 2008; Harper & Voigt, 2007; Malphurs & Cohen, 2002; Marzuk, Tardiff, & Hirsch, 1992; West, 1965). In recent years, the proportion of homicide–suicides has ranged from as low as 1.4% in Georgia (Hanzlick & Koponen, 1994) to almost 15% of all recorded homicides in New Hampshire (Campanelli & Gilson, 2002). In the Netherlands, homicide–suicides occur on average seven times per year, equivalent to approximately 4% of all homicides per year and 0.5% of all suicides per year (Liem, Postulart, & Nieuwbeerta, 2007, 2009).

The range of victimization is very large when dealing with a solitary homicide or suicide, but when these acts are combined and thus involve multiple victims, the range of secondary victimization spreads drastically. Paradoxically, although such cases lead to widespread societal disturbance, relatively little scientific attention has been paid to homicide–suicide. Rather, homicide and suicide have been studied as separate entities: Suicides are considered public health or mental health problems and are thought of as tragedies for the deceased and for surviving family members. Homicides, on the other hand, are viewed as crimes or offenses against society to be handled by the criminal justice system (Unnithan, Huff-Corzine, Corzine, & Whitt, 1994). Given their dichotomous background in lethal violence, homicide–suicides are viewed as a variation of either homicidal *or* suicidal behavior. According to the former view, a suicide follows out of feelings of guilt, shame, or a fear of consequences relating to the homicide (Henry & Short, 1954; Stack, 1997). According to the latter view, homicide–suicide is perceived of as primarily suicidal. In this light, the homicide victim is considered as being “taken along” in the perpetrator’s suicide (Milroy, 1993; West, 1965).

So far, very few studies have examined the differences between homicide–suicides compared with homicides and suicides. Most existing empirical studies on homicide–suicide have taken on a descriptive, epidemiological approach (Allen, 1983; Barraclough & Clare Harris, 2002; Campanelli & Gilson, 2002; Lecomte & Fornes, 1998; Milroy, 1993). Other studies (qualitatively) describe a relatively small number of homicide–suicide cases (Goldney, 1977; Rosenbaum, 1990; Saint-Martin, Bouyssy, & O’Byrne, 2008; Saleva, Putkonen, Kiviruusu, & Lönnqvist, 2007). With a few exceptions (Carcach & Grabosky, 1998; Logan et al., 2008; Stack, 1997; West, 1965), in the majority of studies on homicide–suicide there is no comparison group of homicides not followed by suicide. In addition, because of the nature of homicide–suicide, both perpetrator and victim die in these events. Hence, the data sources used in previous studies typically lack detailed information. The present study overcomes this limitation by relying on homicides followed by a failed suicide of the perpetrator, also termed homicide–parasuicides (Berman, 1996; Brett, 2002). This allows for the studying of the mental state of the perpetrator as well as the motives underlying

the offense. It has been suggested that in homicide–parasuicides, the nonlethal outcome of the act may be a matter of chance. Hence, this group is likely to have similar characteristics as the homicide–suicide group.

This is the first study to compare homicide–parasuicide to both homicide and parasuicide. This study aims to assess to what extent homicide–parasuicide can be understood as a homicidal phenomenon, as a suicidal phenomenon, or as a different type of lethal violence.

Theoretical Background

Conventional theories on homicide and suicide perceive homicide–suicide to be a variation of the two behaviors. Similar to the original psychodynamic theory postulated by Freud, the central underlying assumption in Henry and Short's (1954) study is that suicide and homicide are alternative aggressive responses to frustration. From this view, aggression toward others and aggression toward the self—their most extreme outcome being homicide and suicide—are determined by either external or internal attribution styles. Homicide followed by suicide blurs the otherwise clear-cut division between outward attribution and inward attribution styles—if homicide is outwardly directed and suicide is inwardly directed, why does someone commit homicide and then commit a suicide? Henry and Short (1954) therefore proposed that in a homicide–suicide, both attribution styles are present. They hold that the victim in a homicide–suicide represents a source of frustration but also a source of nurturance. When the source of frustration is killed in a homicide, the source of nurturance is also lost. Hence, the killing of the victim can restore or even increase frustration over the loss of a loved object. The self then becomes a legitimate target of aggression in the form of suicide (Stack, 1997). From this view, the relationship between victim and perpetrator in a homicide–suicide is characterized by a high degree of frustration, showing patterns of discord and physical abuse—a notion corroborated by previous empirical research (Morton, Runyan, Moracco, & Butts, 1998; Rosenbaum, 1990; Stack, 1997).

Others have approached homicide–suicides from a psychoevolutionary point of view, grounded in psychological motivations related to reproductive fitness. This perspective, advanced by Daly and Wilson (1988), holds that homicides involving wives can best be understood as an outcome of sexually proprietary masculine psychology, which treats wives as valued sexual and reproductive commodities that might be usurped by rivals. (Lethal) violence against wives serves to deter wives from pursuing alternative relationships that are not in the interest of the husband (Wilson & Daly, 1993). Similarly, from a psychoevolutionary perspective, the killing of children by mothers occurs when mothers are young and without the necessary resources to rear their young children. Child homicide by fathers, on the other hand, occurs when the child's father has doubts about his paternity. From a psychoevolutionary

perspective, Daly and Wilson point to the fact that children with stepparents have an increased risk of becoming lethally assaulted compared to children with biological parents. Here, the opportunity costs of investment in a nonbiological child are higher than the benefits associated with the investment (Buss, 2005), the latter being—in terms of regenerating interests—nonexistent. In this view, the killing of a nonbiological child increases the reproductive fitness of one's biological children. In short, although from a psychoevolutionary point of view homicide of family members can increase personal regenerating interests, suicide following a homicide is “spiteful”: The actor carries out a course of action that is devastating in his regenerating interests. Hence, evolutionary psychologists argue that the more a homicide opposes evolutionary interests, the more likely it is to incorporate mental illness or to be followed by suicide (Daly & Wilson, 1988). The relevance of these associations are supported by the consistent finding that the majority of the homicide–suicide perpetrators suffer from mental illness (Felthous & Hempel, 1995; Malphurs & Cohen, 2002) and the majority of the victims constitute (estranged) partners and children (Campanelli & Gilson, 2002; Carcach & Grabosky, 1998; Gartner & McCarthy, 2008; Harper & Voigt, 2007; Malphurs & Cohen, 2002; Marzuk et al., 1992; West, 1965).

In contrast to the layperson, who has a generalized fascination with homicide, scholarly researchers most typically study a subpopulation of homicide (Wilson, 1993). The same accounts for the study on homicide–(para)suicide. This study focuses on intrafamilial homicide–parasuicide. Extrafamilial homicide–(para)suicides such as terrorist suicide missions and mass shootings by disgruntled individuals are often extensively reported on in the media, probably because of their shocking effect. These types of killings are very rare, especially in the Netherlands (Liem & Koenraadt, 2007; Liem et al., 2007, 2009). Moreover, the motives and characteristics underlying extrafamilial homicide–(para)suicide are drastically different from intrafamilial types of homicide–(para)suicide. Therefore, the current study focuses on the most common types of homicide–parasuicide, namely those taking place within the family, involving uxoricides (the killing of an intimate partner), filicides (the killing of a child), parricides (the killing of a parent), and siblicides (the killing of a sibling).

Method

This empirical research is based on three groups: a study group of homicide–parasuicide perpetrators and two control groups, one consisting of homicide perpetrators who did not engage in suicidal behavior and the other involving individuals who committed a parasuicide without engaging in homicidal behavior. Parasuicides cannot be equated with completed suicides: Those attempting suicides and those committing suicide constitute different populations (Mann, 2002). Hence, to exclude

nonserious parasuicides following a homicide, only near-lethal parasuicides are selected for the analysis. Parasuicides following a homicide were assessed using the Pierce Suicide Intent Scale (Pierce, 1977). This scale consists of 12 items ranging from timing, intent, and premeditation to lethality. Cases were coded as involving a parasuicide if the risk for a suicidal outcome was considered high.² Here, factors that were not under the control of the perpetrator played a prominent role in determining whether the victim(s) and perpetrator survived. These include the unexpected presence of witnesses who summon help, the promptness and quality of emergency medical response, weapon “failure,” and so on (Hillbrand, 2001). Parasuicides in the control group for the homicide–parasuicides were selected according to the same criteria.

Data Sources

Both homicide and homicide–parasuicide cases were collected from the Pieter Baan Centre, a forensic psychiatric observation hospital in the Netherlands. The hospital has a national function. Reports stemming from this hospital consist of an investigation of the social environment of the accused person, a report of the behavior on the ward, a short medical examination, and a psychological and a psychiatric assessment (Koenraadt, Mooij, & Mulbregt, 2007). Approximately 9,000 cases (occurring in the period 1953–2004) were manually screened to establish if they involved a domestic homicide. These cases were examined in close detail and subsequently coded and statistically processed. The final analysis consisted of 507 individuals who were accused of having committed a domestic homicide. Seventy-seven were found to have committed a serious parasuicide following the offense.

Near-lethal parasuicide cases were retrieved from the department of psychiatry of the Erasmus MC, University Medical Center, Rotterdam. Individuals having committed a parasuicide requiring medical care are sent to this hospital. Here, a psychiatric consultation follows. The reports of these consultations include information on sociodemographic, psychopathological, and other background characteristics. Parasuicides were matched to homicide–parasuicide cases according to gender and family situation. To control for within-subjects variance and to improve the ability to find important differences, the ratio of control to cases (i.e., the ratio of parasuicide-only cases to homicide–parasuicide cases) was raised to 2—in other words, we aimed to include two parasuicide control cases for each homicide–parasuicide case. The available psychiatric consultation files included the period 2000 to 2004. All files were manually searched and included in the study if the patient committed a severe parasuicide according to the Pierce Suicide Intent Scale and if the patient matched the characteristics required for our control group.

All data were made anonymous. Data extraction conformed to ethical and judicial guidelines.

Measures

With regard to sociodemographic characteristics, the socioeconomic status of the perpetrator was operationalized by employment and education. Education was defined as low or absent when the perpetrator had not received any further education other than primary education. The ethnicity of the accused was considered as non-Dutch if one or both parents were born in a country outside the Netherlands.

Criminal antecedents of the perpetrator were coded as present if the perpetrator was previously convicted for a violent offense. Psychopathological characteristics were assessed using the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.). Although many older files did not incorporate explicit *DSM* diagnoses, the files contain enough detailed information to allow for a retrospective *DSM* diagnosis.

Event-related characteristics involved the homicide method, which was regarded as violent when the victim was killed by a firearm, a striking or a pointed weapon, by physical maltreatment, or by being set on fire. Relatively nonviolent methods included poisoning and asphyxiation.³ Similarly, the parasuicide method was considered as violent if the parasuicide was committed by a firearm, by hanging, or by jumping in front of a moving object (Denning, Conwell, King, & Cox, 2000).

For the sake of quantitative analysis, the motive for filicides was simplified into three clusters: killing as a result of physical abuse, altruism, and killing as a means of reprisal against a(n) (estranged) partner. Motives for uxoricides were simplified into killing as a result of physical abuse, a fear of abandonment, or narcissistic rage. The latter refers to a feeling of being hurt and/or being wronged in the context of pathological self-love and was coded as present if reported in the psychological/psychiatric assessment. These categories are meant to parallel as closely as possible the typologies used in previous research (Liem & Koenraadt, 2008a, 2008b). Motives for parasuicides were based on previous research on suicidal behavior (De Groot, 2008) and entailed mental illness, domestic problems, and relationship problems. Finally, the variable symbiosis refers to a far-reaching, mutual dependency between victim and perpetrator. From the individual's point of view, there is hardly a distinction between the self and the other. The role of premeditation is assessed by making use of a modified version of Wallace's (1986) index of premeditation, consisting of eight indicators (Dawson, 2005). These indicators range from bringing a weapon to the home or location of the victim, breaking into the victim's home, to ambush the victim as she or he leaves the home or workplace. If at least one of the eight indicators was present, the event was coded as premeditated.

Analysis

To determine the differences between homicide–parasuicide, homicides, and parasuicides, ANOVA and chi-square tests were used. To estimate the probability that a homicide would result in a homicide–parasuicide or, conversely, to assess the probability that a parasuicide would be combined with a homicide and to further assess the marginal effect of each variable, multivariate logistic regression analyses were

Table 1
Total Sample of Homicide–Parasuicides, Homicides, and Parasuicides⁵

	Homicide–Parasuicide	Homicide Only	Parasuicide Only
Uxoricide	39	246	78
Filicide	30	98	62
Parricide	9	81	17
Sibicide	2	16	4
Total (cases)	80	441	161
Total (perpetrators)	77	430	161

Table 2
Study Sample in Relation to Domestic Homicide in the Netherlands, 1992 to 2001

	Uxoricide	Filicide	Parricide
National occurrence	474	70	44
Died of suicide	30	19	1
Pieter Baan Centre			
<i>n</i>	124	35	30
% Of national occurrence	26	50	68
% Excluding suicide	28	69	70

conducted. Controls were introduced for three sociodemographic variables: perpetrator's gender, age, and ethnicity. Analyses were carried out using SPSS software.

Table 1 represents the number of cases used for the analyses. It has to be emphasized that the homicide perpetrators included in the study were unconvicted at the time their data were recorded. Later examination of court files confirmed that all were subsequently convicted. With regard to the representativeness of the study sample in relation to national data, we compared the relative occurrence of different types of homicide in our sample to the national occurrence. From Table 2 it can be deduced that in the period 1992 to 2001, 28% of the uxoricides, 69% of the filicides, and 70% of the parricides not ending in the suicide of the perpetrator were included in the current sample.

Results

In total, 77 homicide–parasuicides were compared to 430 homicides and 161 parasuicides. Additional analyses were conducted on subsamples of uxoricide–parasuicides and filicide–parasuicide.

Sociodemographic Characteristics

The majority of the perpetrators in all three groups were male. Perpetrators of homicide–parasuicide were older than homicide-only perpetrators ($F = 8.018$, $df = 1$, $p = .005$). Those committing a homicide–parasuicide were significantly more likely to be divorced compared with those only committing a homicide (36% vs. 22%, $\chi^2 = 7.922$, $df = 1$, $p = .005$). Homicide–parasuicide perpetrators had in common with individuals from the other two groups a relatively low socioeconomic status, approximately 50% being unemployed and one third having acquired a low level of education or no education at all. Differences between the groups were found, however, with regard to the ethnicity of the perpetrator. Individuals committing a homicide–parasuicide were found to be predominantly Dutch, in contrast to the two other groups (78% vs. 65%, $\chi^2 = 5.176$, $df = 1$, $p = .014$, and 78% vs. 65%, $\chi^2 = 3.925$, $df = 1$, $p = .032$, respectively).

Individual Characteristics

Homicide–parasuicide perpetrators were significantly less likely to be the victim of abuse in childhood compared to perpetrators of homicides not followed by a parasuicide (13% vs. 27%, $\chi^2 = 6.134$, $df = 1$, $p = .008$). The results further showed that homicide–parasuicides resembled parasuicides concerning the prevalence of previous suicide attempts: In both groups, approximately one third committed one or more suicide attempts preceding the index event.

Homicide–parasuicide perpetrators were found to be significantly more likely than other homicides to suffer from a mood disorder, most notably depression (31% vs. 7%, $\chi^2 = 10.494$, $df = 1$, $p = .000$). Incorporating other factors, multivariate analyses revealed that depression in the perpetrator raised the odds for a parasuicide following a homicide more than 15 times (see Table 3). These results were not replicated for homicide–parasuicides related to parasuicides: In both groups, depression was common in about one third. The two groups differed however concerning the presence of a psychotic disorder: Whereas 29% in the homicide–parasuicide group were diagnosed with a psychotic disorder, only 7% of the parasuicide groups suffered from a psychotic disorder ($\chi^2 = 20.222$, $df = 1$, $p = .000$).⁴ Regression analysis showed that the presence of a psychotic disorder increased the odds for a homicide–parasuicide relative to a parasuicide almost 20 times. Finally, homicide–parasuicide perpetrators were more likely to suffer from a personality disorder compared with those only committing a parasuicide (62% vs. 30%, $\chi^2 = 21.393$, $df = 1$, $p = .000$). Here, a personality disorder raised the odds for a homicide–parasuicide more than 4 times.

Event-Related Characteristics

Compared with the homicide-only group, those committing a homicide–parasuicide were significantly less likely to use violent methods in the homicide (51% vs. 73%,

Table 3
Logistic Regression Odds Ratio Predicting the Risk of Homicide–Parasuicide
(*n* = 77) Relative to Homicide (*n* = 430) and Parasuicide (*n* = 161)⁶

	Homicide–Parasuicide vs. Homicide			Homicide–Parasuicide vs. Parasuicide		
	Logistic Coefficient	Standard Error	Odds Ratio	Logistic Coefficient	Standard Error	Odds Ratio
Covariates						
Perpetrator is male	.637	.372	1.892	1.026	.545	2.790
Age	.015	.012	1.015	-.014	.019	.986
Perpetrator is Dutch	.487	.331	1.627	.923	.485	2.516
Predictor variables						
Mood disorder	1.501*	.379	15.686	-.445	.483	.641
Psychotic disorder	.052	.343	1.053	2.988*	.698	19.853
Personality disorder	.188	.299	1.206	1.462*	.429	4.315
Multiple victims	.864 [‡]	.355	2.373	-.740	.457	.477
Suicide threats	1.446*	.364	4.245	.286	.496	1.330
Premeditation	.616 [‡]	.297	1.852	1.557*	.460	4.747

* $p < .001$. [‡] $p < .05$.

$\chi^2 = 14.913$, $df = 1$, $p = .000$). On the other hand, they were more likely to use violent methods in the parasuicide compared to the parasuicide-only group (25% vs. 11%, $\chi^2 = 6.786$, $df = 1$, $p = .010$). The results further showed that homicide–parasuicide perpetrators differed from both homicides and parasuicides in the number of victims included in the offense: Whereas 27% of the homicide–parasuicides included multiple victims, in 11% of the homicides multiple victims were involved ($\chi^2 = 16.293$, $df = 1$, $p = .000$) and in 41% of the parasuicides multiple relatives could potentially be harmed ($\chi^2 = 4.009$, $df = 1$, $p = .031$). Multivariate analysis revealed that a homicide involving multiple victims raised the odds for a subsequent parasuicide more than 2 times. Homicide–parasuicide perpetrators were more likely to have a symbiotic relationship with the victim at the time of the offense compared with both homicide-only perpetrators (33% vs. 7%, $\chi^2 = 42.115$, $df = 1$, $p = .000$) and parasuicide-only perpetrators (33% vs. 1%, $\chi^2 = 32.043$, $df = 1$, $p = .000$).

Motives

The homicide–parasuicide group differed significantly from the parasuicide-only group with regard to the parasuicide motive: Whereas very few homicide–parasuicide perpetrators committed a parasuicide motivated by domestic problems, roughly one of four parasuicide-only individuals mentioned domestic problems as the primary reason for the parasuicide (3% vs. 27%, $\chi^2 = 19.450$, $df = 1$, $p = .000$). Rather, those

committing a homicide–parasuicide attributed the parasuicide to relationship problems or psychiatric illness.

Behavioral Warning Signs

The homicide–parasuicide group differed significantly from both other groups concerning the presence of behavioral warning signs prior to the event: More than one third of the homicide–parasuicide perpetrators threatened suicide prior to the offense compared with 7% of the homicide perpetrators and 18% of those committing a parasuicide ($\chi^2 = 53.509$, $df = 1$, $p = .000$, and $\chi^2 = 7.605$, $df = 1$, $p = .005$, respectively). Suicide threats preceding the homicide raised the odds for a subsequent parasuicide roughly 4 times. Homicide–parasuicide perpetrators were also more likely than individuals in the other two groups to premeditate the event (63% vs. 43%, $\chi^2 = 10.166$, $df = 1$, $p = .002$, and 63% vs. 23%, $\chi^2 = 31.147$, $df = 1$, $p = .000$, respectively). Premeditation proves to be an important predictor for a homicide–parasuicide relative to both homicide and parasuicide, raising the odds for homicide–parasuicide relative to homicide almost 2 times and increasing the likelihood of homicide–parasuicide relative to parasuicide almost 5 times.

Examining Subgroups

Next, we examined the two most common subgroups of homicide–parasuicides: uxoricide–parasuicides and filicide–parasuicides. Uxoricide–parasuicides were matched to both uxoricides not involving a parasuicide and to individuals having committed a parasuicide, who were or had recently been involved in an intimate partner relationship. Filicide–parasuicide perpetrators were matched to both nonsuicidal filicide perpetrators and to parasuicide individuals who had at least one child under their care at the time of the parasuicide.

Uxoricide–Parasuicides

The majority of the findings in the subanalysis of uxoricide–parasuicides resembled the results from the overall analysis (see Table 4). Whereas no significant gender differences were observed in the total group, uxoricide–parasuicides were significantly more likely to be committed by men (95% vs. 81%, $\chi^2 = 4.619$, $df = 1$, $p = .037$). Whereas age and ethnicity differentiated homicide–parasuicide perpetrators from the other two groups in the overall analysis, among the subsample of uxoricide–parasuicides no such differences were found. Definite separations were prevalent in approximately one fourth of all groups. Among both uxoricide–parasuicides and uxoricides not followed by parasuicide, the killing was typically committed out of a fear of abandonment or narcissistic rage.

In contrast to the results from the overall analysis, a subanalysis of uxoricide–parasuicides did not show significant differences between uxoricide–parasuicides

Table 4
Homicide-Parasucides Compared to Other Homicides and Other Parasucides

	Domestic Homicide (total), %			Uxoricide, %			Filicide, %		
	Homicide-Parasuicide (n = 77)	Homicide (n = 430)	Parasuicide (n = 161)	Uxoricide-Parasuicide (n = 39)	Uxoricide (n = 246)	Parasuicide (matched) (n = 78)	Filicide-Parasuicide (n = 30)	Filicide (n = 98)	Parasuicide (matched) (n = 62)
Sociodemographic characteristics									
Gender									
Male	78	76	73	95	81	92	47	54	40
Female	22	24	27	5	19 [†]	8	53	46	60
Age (mean)	37.0	33.1*	38.3	38.7	36.5	41.5	36.1	30.4*	36.9
Same household	73	64	73	67	61	65	83	89	79
Conjugal separation	36	22*	24	28	24	32	63	26	19*
Unemployed	49	46	58	61	47	49	37	45	68 [†]
Low or no education	33	34	-	33	31	-	31	45	-
Dutch ethnicity	78	65 [†]	65 [†]	72	59	70	83	70	59 [†]
Stepparent							0	20*	0
Victim age (mean)	27.6	32.4	-	33.0	35.5	-	8.2	4.4*	11.1
Individual characteristics									
Criminal antecedents	14	19	-	26	20	-	0	16 [†]	-
Previously violent	33	35	-	41	40	-	23	38	-
toward family members									
Victim of abuse	13	27*	-	3	23*	-	14	29	-
in childhood									
Previous suicide attempts	29	-	32	29	-	36	30	17	31
Psychiatric hospitalization	20	17	25	26	16	20	7	14	23
Mood disorder	31	7*	27	28	5*	31	33	14 [†]	27
Psychotic disorder	29	20	7*	21	13	8	40	27	3*

(continued)

Table 4 (continued)

	Domestic Homicide (total), %			Uxoricide, %			Filicide, %		
	Homicide-Parasuicide (<i>n</i> = 77)	Homicide (<i>n</i> = 430)	Parasuicide (<i>n</i> = 161)	Uxoricide-Parasuicide (<i>n</i> = 39)	Uxoricide (<i>n</i> = 246)	Parasuicide (matched) (<i>n</i> = 78)	Filicide-Parasuicide (<i>n</i> = 30)	Filicide (<i>n</i> = 98)	Parasuicide (matched) (<i>n</i> = 62)
Psychoactive substance abuse or dependence	20	13	23	21	13	18	17	19	21
Personality disorder	62	58	30*	59	63	33*	79	57†	26*
Event-related characteristics									
Violent homicide method	51	73*	—	54	76*	—	40	63*	—
Violent parasuicide method	25	—	11*	37	—	12*	9	—	7
Multiple victims	27	11*	41†	18	9	17	53	21	72
Symbiosis	33	7*	1*	39	8*	3*	33	3*	0*
Motives									
Homicide motives									
Uxoricide									
Abuse				0	7	—			
Narcissistic rage				33	43	—			
Fear of abandonment				46	31	—			
Filicide									
Abuse							0	36*	—
Altruism							7	10	—
Reprisal							17	14	—
Parasuicide motives									
Psychiatric illness	15	—	9	7	—	9	27	—	7†
Domestic problems	3	—	27*	8	—	0	47	—	37
Relationship problems	41	—	45	47	—	64	7	—	42*
Behavioral warning signs									
Suicidal threats	35	7*	18*	31	8*	20	50	7*	13
Death threats	9	9	—	3	8	—	17	4†	—
Signs of premeditation	63	43*	23*	53	45	24*	82	23*	25*

**p* < .01. †*p* < .05.

and a matched parasuicide sample with regard to previous suicide threats. In both groups, previous threats were common. In addition, opposed to findings from the overall analysis, the killing of a partner in uxoricide–parasuicides was not more likely than uxoricides to be premeditated. Among the premeditated uxoricide–parasuicides, the perpetrator typically staged the event as a suicide pact or decided beforehand that both the victim and he should die. Many of these cases were classified as familicides involving spouse and child(ren). In the majority of the uxoricide–parasuicides, the parasuicide however was not premeditated. Here, the suicidal act resulted from feelings of guilt related to the homicide, fear of judicial consequences, or a wish to be reunited with the victim in death.

Filicide–Parasuicides

The majority of the findings in the subanalysis of filicide–parasuicides correspond to the findings in the overall analysis (see Table 4). All filicidal parents who committed a parasuicide following the offense were biological parents of the victim (100% vs. 80%, $\chi^2 = 6.689$, $df = 1$, $p = .004$). Filicide–parasuicides were more likely to involve older victims compared to filicides not followed by a parasuicide ($F = 8.206$, $df = 1$, $p = .005$).

In contrast to the results from the overall analyses, the subanalysis of filicide–parasuicides revealed that filicide–parasuicide perpetrators were significantly less likely to have been convicted for a violent offense prior to the index offense (0% vs. 16%, $\chi^2 = 5.260$, $df = 1$, $p = .021$) but more likely to suffer from a personality disorder compared with nonsuicidal filicide perpetrators (79% vs. 57%, $\chi^2 = 4.765$, $df = 1$, $p = .031$).

Suicidal parents killed their child(ren) out of different motives compared to nonsuicidal parents: Whereas in more than one third, the latter killed their child as a result of physical abuse, none of the suicidal parents did (0% vs. 36%, $\chi^2 = 14.747$, $df = 1$, $p = .000$). In addition, filicide–parasuicide perpetrators differed from parasuicide-only individuals in the motive for the parasuicide: Whereas the first were primarily motivated to commit parasuicide out of relationship problems and mental illness, the latter typically did so as a result of domestic problems or as a result of conflicts with the children.

Filicide–parasuicide perpetrators differed from filicide-only perpetrators in being more likely to have expressed death threats (17% vs. 4%, $\chi^2 = 5.294$, $df = 1$, $p = .036$), including threats directly related to the child(ren).

Finally, the parasuicides in the filicide–parasuicide group were typically planned, which stands in contrast with the parasuicides in the uxoricide–parasuicide group. In the latter, a parasuicide was often committed as a means of self-punishment as well as a wish to be reunited with the victim. The wish to be reunited is arguably already anticipated by filicide–parasuicide individuals: Rather than joining the victim in death to continue their (dependent) bond, they make sure that the bond between them will never be broken.

Discussion and Conclusion

Findings

The demographic characteristics of the homicide–parasuicide perpetrators largely correspond to studies based on successful homicide–suicides nationally (Liem et al., 2007, 2009) and internationally (Barber et al., 2008; Carcach & Grabosky, 1998; Logan et al., 2008; Stack, 2003; West, 1965): the majority of the perpetrators being White males in their thirties. These similarities also suggest that our sample of homicides followed by near-fatal parasuicides resembles homicides followed by a fatal suicide. Following Girard (1993), it can be postulated that this relatively high age can be ascribed to the difficulty to respond to life-changing events that jeopardize self-concept, such as the loss of work or a breakdown in the marital relationship. Replacing these identity supports as a worker or as an intimate partner is more difficult for an older person than it is for a younger person in the same predicament. In this light, both suicide and homicide–suicide serve as a protection of self-concept: When circumstances threaten a person's identity, denying an essential aspect of what a person believes to be his or her true self, both suicide and homicide–suicide provide the ultimate release from a potentially painful conflict.

The finding that homicide–parasuicide perpetrators were overall found to have a low socioeconomic status corroborates findings by others (Koziol-McLain et al., 2006). Starzomski and Nussbaum (2000) have argued that gender roles could play a determining role in explaining why men could see domestic homicide–suicide as an option in the face of economic hardship. Here, the main role of these men as financial providers for their families is jeopardized, leading them to protect their family members from the fate that would befall them without his support. In this light, Duwe (2004) holds that men are more likely to define their self-worth by their occupations than women. In addition, they are more likely to be ousted from the home following a divorce or separation. The overrepresentation of men among homicide–suicides could thus also be interpreted that they have relatively more to lose in case of the loss of occupation or in case of a divorce.

The findings further showed that homicide–parasuicide perpetrators differed from individuals in the other two groups with regard to a high degree of psychopathology. This deterioration of cognitive processing could aggravate the perpetrator's psychological estrangement from moral values and respect for the autonomy of family members (Starzomski & Nussbaum, 2000), in many cases evolving into disregarding the victim's autonomy altogether, considering the victim as a part of the self that cannot be separated. Such symbiotic relationships are not present among those only attempting to kill themselves or others.

These findings suggest that homicide–parasuicide cannot simply be interpreted as a variation of homicidal or suicidal behavior, but constitutes a unique phenomenon. Where major mental disorder, including personality disorder, is accompanied by real

or perceived threats to child and/or intimate relationships, clinicians must incorporate a full assessment of family relationships, particularly bearing in mind that now standard risk assessment strategies focused on either suicide *or* homicide prevention may let them down in this unusual group. In such an assessment, special attention should be paid to the role of dependency in the relationship between the individual and his or her close family members. Furthermore, the findings indicate that the majority of the cases showed signs of premeditation; not infrequently, warning signs such as suicide threats were given. These threats are often symptomatic of underlying suicidal ideation. In this regard, clinicians cannot rely on spontaneously uttered homicide threats to detect risk. They should be mindful that individuals reporting suicidal ideation may also be experiencing homicidal ideation that they are unwilling to report. Conversely, individuals reporting homicidal ideation may also be experiencing suicidal ideation. The latter may increase the homicidal risk because such individuals may feel that they have nothing to lose. In this regard, it should be noted that there is a misconception that asking for suicidal ideation increases the odds for suicide or would inspire the suicidal patient (Hillbrand, 2001). Suicide threats or suicidal ideation should at all times be taken seriously.

Uxoricide–parasuicide. The finding that the majority of the uxoricide–parasuicide perpetrators were male corresponds to other international studies (Belfrage & Rying, 2004; Bourget, Gagne, & Moamai, 2000; Easteal, 1993; Hanzlick & Koponen, 1994), reasons that could be found in the role of guilt following the offense. It has been argued that women do not experience such feelings of guilt after killing their intimate partner (Wolfgang, 1958). Rather, they feel relieved after having been “freed” from their tormentor and are therefore less likely to commit (para)suicide following an intimate partner homicide.

A fear of abandonment was a predominant motive in almost half of the cases. This reflects the role of dependency in uxoricide–parasuicides—sometimes evolving to such an extent that the relationship between victim and perpetrator has symbiotic characteristics. Arguably, when the female victim threatens to leave or rejects the perpetrator, a part of the latter’s sense of identity is lost; through the symbiotic nature of their relationship, she has become a part of him. When emotional dependency is not enough to convince her to stay, he may respond with lethal violence. In killing her, a part of the self is killed with it (Palermo, 1994). When joining her in death by committing suicide, he arguably retains the relationship that could not be maintained in life. Other motives for uxoricide–parasuicide constitute a narcissistic feeling of being hurt. From a psychological point of view, narcissism, or love of the self, aims to protect one’s self-esteem. When self-esteem is lowered or threatened by rejection or divorce, aggression arises as an instrument of recovery (Tangney & Dearing, 2002). From this point of view, the victim is killed to restore the perpetrator’s sense of self. A subsequent suicidal act by the perpetrator can be understood as arising from feelings of shame after the homicide. This time, the perpetrator is

humiliated by his actions alone and thus wishes to do away with the one responsible for this humiliation: the self (see Kohut, 1971).

The finding that almost one third of the uxoricide–parasuicide suffered from a depressive disorder at the time of the offense replicates findings reported by others (Bourget et al., 2000; Rosenbaum, 1990). From a psychodynamic perspective, Klein (1975) has argued that a fear of losing a loved object, that is, the (estranged) spouse, is the forerunner of depression. An overrepresentation of mood disorders among the uxoricide–parasuicide perpetrators then could be explained by the perpetrator’s fear of abandonment and subsequent loss of self-esteem: In the case of spousal abandonment, his psychological self is shattered. Uxoricide–parasuicide and parasuicides have in common this high rate of depression. Whereas the uxoricide–parasuicide perpetrator attempts to restore his sense of self by responding violently toward the cause of his dejection, namely his (estranged) partner, individuals only committing parasuicide arguably do not feel the need to continue the bond with the victim in death. Although in both groups, feelings of revenge and anger toward the (estranged) intimate partner are pronounced, the parasuicide-only perpetrator might not have the same type of dependent relationship with his intimate partner that requires him to take her “along” in his death. Similar to the findings in the overall sample, the prevalence of a symbiotic relationship with the victim among uxoricide–parasuicide perpetrators underlies this argument.

Filicide–parasuicide. The results of the subanalysis of filicide–parasuicides showed that the majority of these acts were committed by women, a finding in contrast with national findings on filicide–suicide (Liem et al., 2007, 2009; Liem & Koenraadt, 2007). This relative overrepresentation of women in the current sample could be attributed to relatively less lethal suicide methods used by women, independent of their level of suicidal intent (Denning et al., 2000). Therefore, they are more likely to survive a suicide attempt and more likely to be included in the sample.

Parents committing a filicide–parasuicide constitute a subgroup different from parents only committing a filicide and parents only committing a parasuicide. The filicide–parasuicide group can overall be characterized as consisting of desperate, depressed parents who, in contradiction to the nonsuicidal group, have not showed previous signs of outward aggression toward their children. These findings resemble those reported in previous studies comparing filicides to filicide–(para)suicides (Hatters Friedman, Holden, Hrouda, & Resnick, 2008; Léveillé, Marleau, & Dubé, 2007; Marleau, 1999; Shackelford, Weekes-Shackelford, & Beasley, 2005). This suggests that traditional reliance on previous child abuse as a predictor of risk is of little use with a desperate filicidal perpetrator.

Conjugal separation seems to play a large role in these perpetrators—causing desperation on one hand and anger on the other. Similar to uxoricide–parasuicides, the angry component in filicide–parasuicide is typically of narcissistic nature. Here, it is not so much the love of the children that leads the perpetrator to kill them and

subsequently kill himself but vengeance for being humiliated (Rochlin, 1973) by rejection, divorce, or disputes over child custody. The perpetrator feels humbled and, driven by narcissistic impulses, proceeds to kill the child(ren) in an act of revenge: only revenge will rectify the feeling of being wronged and abandoned.

Limitations

The study at hand has relied on data from a forensic observation hospital. Subjects sent to a psychiatric hospital are thought to deviate psychologically from other accused persons (Farooque & Ernst, 2003; Marleau, Poulin, Webanck, Roy, & Laporte, 1999; McGrath, 1992). This might have caused an overrepresentation of mentally ill perpetrators in our sample, in particular with regard to uxoricide perpetrators: Whereas the majority of perpetrators of other types of domestic homicide occurring in the Netherlands were included in our sample, only one third of the uxoricide perpetrators were included, possibly excluding those with less severe psychopathology.

Furthermore, the killing of family members followed by a serious suicide attempt constitutes a rare event. Therefore, to retrieve enough cases for analysis, we had to draw cases from a relatively long period of time. Disadvantages of this approach include a different set of societal circumstances causing the nature of these cases to differ.

In addition, the data retrieved from the department of psychiatry of the Erasmus MC typically did not include information on the individual's level of education, the presence of previous domestic violence, and their criminal history. This can be attributed to the different nature of the reports, which were created for mental and physical health purposes as opposed to criminal justice purposes.

Finally, it should be noted that parasuicides and fatal suicides constitute two different types of behavior, conducted by different populations (Mann, 2002). We have attempted to only include those parasuicides that had a near-fatal character. The results showed, however, that a relatively low proportion of the parasuicides was committed by violent means, such as firearms. Suicide attempts involving firearms are proven to be more lethal than those involving other methods (Shenassa, Catlin, & Buka, 2003). Future research should attempt to overcome this limitation by making use of the so-called psychological autopsy method (Shneidman, 1981), based on a combination of interviews with those closest to the deceased and an examination of corroborating evidence from hospital reports and criminal records. From this information, an assessment is made of the suicide victim's mental and physical health, personality, experience of social adversity, and social integration (Cavanagh, Carson, Sharpe, & Lawrie, 2003). The psychological autopsy method has been useful in the study of suicide (Conwell, Duberstein, Cox, Herrmann, Forbes, & Caine, 1996; Isometsä, 2001) and could well be applied to those having died in a homicide-suicide in order to get a view of the psychopathological, motivational, and circumstantial characteristics of the perpetrator.

Notes

1. Although homicide–suicide is often referred to as *murder–suicide*, the latter denotes the legal aspect of homicide, whereas homicide–suicide includes both murder and manslaughter. Therefore the term *homicide–suicide* will be used rather than the term *murder–suicide*.

2. The Pierce Suicide Intent Scale has a maximum value of 25. According to this scale, the risk for suicide was considered low if the score was less than 4; risk was regarded as medium if the score ranged from 4 to 10 and high if the total score was higher than 10.

3. Although asphyxiation could also be understood as a relatively violent method when accomplished by strangulation, in the majority of the cases the victim was smothered and hence, in contrast to killing by a weapon or by physical maltreatment, coded as nonviolent.

4. All individuals suffering from a psychotic illness were found to be manifestly psychotic at the time of offense.

5. In this time period, a total of five sibicides were included in the study sample. Because no specific national statistics on the incidence of sibicide were available for this time period, no degree of representation can be given.

6. Although the variable symbiosis proved to be important in distinguishing homicide–parasuicides from both homicides and parasuicides, because of its strong relation with homicide–parasuicide this variable violates the assumptions of independence of observations and hence distorts the model. Therefore, it is left out of the multivariate analysis.

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