Spousal Homicide and Suicide in Quebec

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Domestic violence is a cause for major concern in psychiatry today, yet little is known about the amplitude and dynamics of spousal homicide and extended suicide. Within the jurisdiction of the Quebec Coroner's Office, the investigation files on all consecutive cases of deceased victims of intrafamilial violence occurring between 1991 and 1998 were reviewed. Using a validated checklist, a variety of variables were systematically collected and reviewed for descriptive analysis. Three hundred eighty-eight cases of death were studied. Of this sample, 145 cases (37.4%) concerned victims of conjugal homicide. Fifty-eight cases (40.01%) concerned victims whose homicidal spouses subsequently killed themselves. Suicidal offenders were more likely to be men, to be estranged from their spouse through separation, and, most often, to have used a firearm in the commission of the extended homicide-suicide. The majority of offenders suffered from clinical symptoms of depression. This study emphasizes the need to develop a detailed tool to assist coroners in the field and police investigators with the gathering of specific information that will be of use to clinical researchers.

J Am Acad Psychiatry Law 28:179–82, 2000

The phenomenon of family homicide represents a most valid concern in contemporary society. In the province of Quebec, a progressive decline in the total number of homicides was reported in the past 10 years. However, there was an increase in the overall number of death occurrences due to family violence over the same time period. On average, domestic homicide represented roughly 30 percent of the total number of homicides. In 1995 and 1996, domestic homicide represented 38 percent and 35 percent, respectively, of the total number of homicides. Women are six times more at risk of being murdered by a spouse than by a stranger.[1] These figures are indicative of the importance of the phenomenon of family violence.

Marital status appears to be one of the most important variables in studying battered women. A review of three large spousal homicide samples (from Canada, Chicago, and New South Wales, Australia) looked at the risk of homicide victimization in relation to marital status.[2] Wives in all three countries incurred a substantially elevated risk when estranged from their husbands rather than co-residing with them. In Canada, the female/male ratio was 3.77 when co-residing, while it was 9.00 when estranged. Separated women who had suffered abuse prior to separation were more seriously abused afterward. It is commonly assumed that the most important weapon that women have in response to physical abuse by their spouse is to divorce him. Courts, criminal justice officials, counselors, shelter houses, and many others often suggest to battered women that the solution to their problem is divorce. However, several studies have shown that separated and divorced women are more at risk[2, 3] and that the first two months after separation represent a higher risk.[1]

Women who have been victims of assault by their spouse or ex-spouse are sometimes found to react severely to their victimization. Browne[4] conducted a survey of 42 women who were facing charges for murder or attempted murder in the death or serious injury of their mates. She compared them with a group of women who had been involved in abusive relationships in which no lethal incident had occurred. In the female homicide group, there was

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some evidence that the deceased had battered them. All subjects had experienced at least two physically abusive incidents; most of the women in both groups reported at least four. Nearly all of the women in the homicide sample were living with their partners at the time of the incident, although a few had been separated from their mates for up to two years prior to the homicide.

While many studies have looked at the "battered women syndrome" and at spousal violence in general, there is only scarce information focusing on the extended homicide-suicide phenomenon.[5,6] Overall, observers have documented a relative stability in rates of homicide-suicide.[7,8] According to Coid,[7] this reflects the underlying prevalence of major mental illness. While most studies of homicide-suicide compared characteristics of the perpetrators of homicide only with perpetrators of suicide only, Rosenbaum[9] specifically conducted a comparison of homicide-suicide couples with the perpetrators of spousal homicide only. With one exception, all homicide-suicides were perpetrated by men, while homicide only was more evenly distributed between men and women. Among the homicide-suicide couples, depression was a frequent denominator associated with the rupture of the relationship. The homicide-suicide couples were less likely to have a personality disorder, to abuse substances, or to have been under influence at the time of the tragedy.

In contrast to the view that depression plays a determinant role in the etiology of homicide-suicide, many authors have favored a sociobiological or sociocultural hypothesis. In this line of thinking, male proprietary attitudes toward women are involved in the dynamics of killing a female spouse.[8,10] In an extensive review of family homicide in British Columbia, Cooper and Eaves[11] concluded that homicide-suicide cases were most often attributable to male proprietariness or mental illness.

Methods

The present study is part of an ongoing research project with the Quebec Coroner's Office. We were authorized to have unlimited access to all investigation files on consecutive cases of deaths secondary to domestic or intrafamilial violence occurring in the province of Quebec since 1991. The analysis included all 388 victims of homicide by either a family member or a spouse, including offenders who subsequently killed themselves (victims of suicide), regardless of the marital status at the time of death. For the purpose of the present study, the period 1991 to 1998 was targeted. Using a validated checklist, a variety of variables was systematically collected and reviewed by two certified forensic psychiatrists with backgrounds in research work. For descriptive and nonparametric analysis, the data were coded and computer-analyzed using the Statistical Package for the Social Sciences[12] and the Epi Info package.[13] In dealing with missing values, the analysis was performed on the remaining data. These results are, therefore, underestimated (worst case), but in the present study this procedure might increase the strength of the found relation.

Results

Demographics

Between 1991 and 1998, a total of 388 deaths were directly attributable to family and spousal violence. Of this sample, 145 deaths (37.4%) concerned victims of conjugal homicide. Fifty-eight of these deaths (40.0%) were victims whose homicidal spouses subsequently killed themselves. The sample under scrutiny, therefore, consists of 58 victims of suicidal offenders (SO group) and 87 victims of nonsuicidal offenders (NSO group).

Age, Sex, and Marital Status

The SO group was slightly older than the NSO group (median age 41 versus 36 years; $p = .031$). In the SO group, the victims were almost exclusively women (93.1%), while in the NSO group, the majority of victims were still women (77.0%), although nearly one quarter of victims were men. In the sample studied, there were no same-sex relationships.

Victims of NSOs were more likely to be in either a legal or a common-law marriage than victims of SO (73.8% versus 57.9%, respectively; corrected $p = .073$). There is a tendency for the victims of SO to be separated or divorced (33.3% versus 17.9%, respectively; corrected $p = .056$).

History of Violence

Among victims of both NSO and SO, many had suffered abuse at the hands of their homicidal spouse. It was not possible to identify a difference between the groups since conclusive data on that issue were missing in a large number of cases. In the remaining cases, the respective figures were as high as 80.0 per-

Table 1 Method of Killing

Method	NSO Group n = 87 (%)	SO Group n = 58 (%)
Firearm	23 (26.7)	35 (61.4)
Knife	40 (46.5)	10 (17.5)
Strangulation	12 (14.0)	7 (12.3)
Miscellaneous	11 (12.8)	4 (7.0)
Missing data	1	1

cent in the NSO group (missing data, 65.5%) and 48.6 percent in the SO group (missing data, 36.2%).

Findings Relevant to the Homicide Incidents

The killing methods are illustrated in Table 1. When suicide was concerned, suicidal offenders chiefly used a firearm (61.4%).

History of Substance Use

Table 2 outlines the results from postmortem toxicological studies in the victims of homicide and suicide. The toxicological analyses were performed by a governmental laboratory and included quantitative analyses of most detectable substances of abuse, including alcohol, and a wide range of pharmacological and nonpharmacological substances. As can be seen, the NSO group showed significantly more positive results of drug screens than the SO group (45.6% versus 20.8%, respectively; corrected $p = .006$). Alcohol was by far the most frequent substance used in the NSO group.

Presence of Psychiatric Motive

Each case was analyzed individually by two psychiatric investigators who reviewed summaries of past medical and psychiatric charts, witness statements, and other sources of information (e.g., suicidal "letters"). Based on that review, the investigators had to reach a consensus as to the likely absence or presence of a "psychiatric motive" in each case. By psychiatric motive, it is meant that significant clinical symptoms were considered to have played a role in the commission of the homicide and suicide where applicable. Various expressions of psychotic thinking, thought disorganization, or severe depression could be found in some of the material available. Because it was not possible retrospectively to come up with a psychiatric diagnosis as such in many cases, the researchers have elected to keep the term as broad as possible. Psychiatric motive would then encompass a variety of conditions in which there was a connection between the reported mental state of the person and the resulting behavior. Table 3 summarizes the results. As can be seen, there are substantial percentages of undetermined data (NSO group, 55.5%; and SO group, 31.8%), therefore no statistical interpretation was performed. However, in the remaining data, a very strong tendency toward the presence of psychiatric motive in the SO group has been observed (SO group, 34 of 40 cases [85.5%]; NSO group, 21 of 39 cases [53.8%]).

Table 2 Postmortem Toxicology Screening

Screening Result	NSO Victims n = 87 (%)	SO Victims n = 58 (%)
Screen negative	43 (54.4)	42 (72.9)
Screen positive	36 (45.6)	11 (20.8)
Missing	1	5

Table 3 Psychiatric Motive

Motive	NSO Group n = 87 (%)	SO Group n = 58 (%)
Positive	21 (20.7)	34 (58.6)
Negative	18 (24.1)	6 (10.3)
Undetermined	48 (55.2)	18 (37.9)

As further data become available with collateral information obtained from medical reviews, trial proceedings, and appeals, the authors are in a better position to define the diagnostic category when appropriate, using conservative and standard DSM-IV diagnostic criteria. Missing or undetermined data were again substantial in both groups (NSO group, 52.8%; SO group, 34.4%). In the remaining data, major depression was documented in 33 of 38 cases (86.0%) in the SO group, in contrast to 8 of 41 cases (19.5%) in the NSO group. The perpetrators in the NSO cases were more often acutely intoxicated with alcohol (18 of 41 cases [43.9%]) than in the SO group (2 of 38 cases [5.2%]).

Conclusions

The present study is part of an ongoing data collection project on all victims of domestic homicide and homicide-suicide in the province of Quebec. With a population of more than seven million, Quebec registers somewhere around 135 homicides per year, with approximately one third of those being cases of spousal homicide. The proportion of spousal homicide in Quebec is comparable to that of Canada overall. Needless to say, a study such as this may

prove of great benefit to further our understanding of domestic violence and, more specifically, spousal homicide.

Interestingly, the study highlighted few differences between the homicide incidents and the extended homicide-suicide incidents, but these were significant. For instance, the extended homicide-suicide incidents involved predominantly male offenders. Interestingly, but not surprisingly, they mostly used a firearm. This is consistent with findings from the British Columbia study.[11] In contrast, a knife was the method of killing in the majority of the NSO murders. There was a tendency for couples in the SO group to be estranged through separation or divorce. In the absence of statistical interpretation that is due to much missing data, there was, however, a very strong tendency for the SO group to present significant clinical symptoms of a mental illness that was accountable for the homicidal and suicidal behavior. Clearly, depression was the most common diagnostic category. These findings are consistent with those of Rosenbaum,[9] who found that depression was common in the homicide-suicide perpetrators. However, the present study did not aim to address the issues of underlying defense mechanisms or psychodynamics hypotheses, and the results would, therefore, not support or invalidate the hypothesis that guilt was operative in the commission of the extended suicide.

One striking finding was the fact that in approximately one quarter of the homicidal incidents, a female spouse killed a male spouse. This finding may bring forth various interpretations. It may give credence to the "battered wife syndrome" theory where self-defense is a motivation and the homicide is an expression of self-defense. In a 1990 ruling, the Supreme Court of Canada accepted "battered woman syndrome" as an admissible expression of self-defense in a murder trial.[6] Because of the nature of the present study, data on a history of domestic physical abuse was incomplete in the majority of cases. However, a review of individual cases confirmed that at least 4 of 20 homicidal women (20%) definitely had been subjected to prior physical violence from their mates. Psychiatric issues and the role of substance abuse are other areas of interest that will definitely require more scrutiny.

Inherent weaknesses of the present study are that the review was retrospective and that a large amount of data was missed, specifically, data regarding certain variables. However, it is likely that the missing data led to an underestimation, so that more striking results might be anticipated. The strengths of the study are the inclusiveness of the review of all cases of spousal homicide and suicide occurring in the designated area and the accuracy of the data given through the legal source consulted and the subsequent corroboration of that data.

Subsequent to the findings of the present study, the authors wish to develop a more detailed tool to assist coroners in the field and police investigators with the gathering of specific information that will be of use to clinical researchers. This would involve, for instance, collecting collateral information from neighbors and relatives about the background of individuals, specifically, past violence and psychiatric history. Therefore, it is hoped that this study will constitute a preliminary step in the further understanding of domestic violence.

Acknowledgments

The authors thank the Coroner-in-chief, Mr. Pierre Morin, and his dedicated staff for having made this research possible.

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