Parricide: A Comparative Study of Matricide Versus Patricide

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Between 1990 and 2005, 64 parents were killed by their children in the province of Quebec, Canada. The authors reviewed all consecutive coroners' files on these cases and found that 27 mothers and 37 fathers were the victims of parricide. The sample included 56 perpetrators: 52 sons and 4 daughters; 9 cases of double parricide were found. Approximately 15 percent of the perpetrators (8/56) attempted suicide following the parricide. A psychiatric motive (stemming from depression or psychotic illness) was determined for 65.5 percent (36/56) of the perpetrators, and 67 percent of them had a psychotic disorder. Similarities and differences were found between cases of matricide and patricide.

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Five hundred forty-eight homicides were recorded in Canada in 2000.[1] About one-quarter (27%) of those homicides took place in Quebec, of which 42 (28%) occurred in an intrafamilial context. A parent was the victim in only three (7%) cases,[1] illustrating the rarity of this type of homicide.

Because parental homicide (also referred to as parricide) is an event with a low base rate, it presents a research challenge. For that reason, most of the literature on parricide consists of anecdotal case reports and small-cohort studies. The largest studies are those by Devaux *et al.*,[2] who reviewed 61 cases recorded between 1958 and 1967, and by Clark[3] and Green,[4] who reported on 26 and 58 cases of matricide, respectively.

Early explanations for parricide were predominantly psychodynamic interpretations. These theories included suggestions that the murderous impulse to kill a parent might have oedipal origins, as a defense against hostility or incestuous desires.[2,5–9] Some have hypothesized that an unresolved incestuous conflict or a parent-victim who mistreats the child excessively may push the child to the point of explosive violence.[8,10] In their study of 10 men charged with patricide, Singhal and Dutta[11] found that their fathers had been significantly more punitive than their mothers, and that the mothers had been overprotective and more tolerant than the fathers. The authors concluded that persons who commit patricide have an unusual, often difficult relationship with their fathers.[11] According to O'Connell,[12] a son who kills his mother is usually an unmarried, unambitious young man with an intense relationship with his mother, a feeling of social inferiority, and an absent or passive father. Similarly, Campion *et al.*[7] suggested that men who commit matricide feel weak, hopeless, and dependent, and are unable to accept a separate, mature male role. In a review of 17 cases of female parricide in Europe between 1977 and 1986, d'Orban and O'Connor[6] noted that the social situation of the mothers killed by their daughters was characterized by marked isolation.

Psychiatric explanations as to why a person might murder his or her parents arise from indications of a high rate of mental illness, primarily depressive or psychotic disorders, in parricide perpetrators.[13–16] The risk of parricide may increase with the presence of unidentified mental illness[14] or a lack of appropriate treatment for individuals with a psychiatric history.[15]

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A review of the literature indicates several factors that are associated with parricide. It is nearly always committed by sons,[2,5,17–20] with matricide by sons the most common form of parricide in Canada.[21] Perpetrators of parricide are often younger than 30,[2,19] and many are single.[3,4,12,15] The parricide is usually committed in the victim's house.[4,7] Perpetrators often reside with the victim and frequently use painful methods and excessive violence in committing the murder.[3,4,6,7]

The perpetrators' most common diagnosis is schizophrenia,[2–4,6,7,11] with active symptoms of psychosis present at the time of the parricide.[2,3,7,15,17,20,22] Persecutory paranoid motivation is often evident.[4] Among schizophrenics, matricide occurs more often than patricide.[2] While both matricide and patricide may be associated with schizophrenia, Bluglass[23] suggested that daughters who murder their mothers are invariably schizophrenic. Devaux *et al.*[2] reported that 17 percent of the perpetrators studied attempted suicide after the offense; the parricide-suicide dynamic was more frequent in the cases of schizophrenic persons. Maas *et al.*[24] noted that the fathers of patients charged with both patricide and matricide were killed before the mothers.

To date, few comparative studies of parricide have been performed. Of the existing studies, those that included control groups compared a group of parricide offenders to a group of hospitalized persons with chronic schizophrenia[6] and a group of female parricide offenders to a group of female filicide offenders.[11] These comparisons have not resulted in a clear delineation of the dynamics of parental homicide. Our objective was to examine the similarities and differences between samples of cases of matricide and patricide, to clarify factors that may be characteristic of parricide committed by men versus those characteristic of the same crime committed by women.

Methods

In an examination of coroners' files from the province of Quebec from 1990 to 2005, we identified 64 cases of parents murdered by their own children. Fathers were murdered by their son or daughter in 37 cases, and mothers were murdered in 27. All records, including medical and psychiatric records when available, were reviewed and compiled by the same two investigators, both of whom are coroners and psychiatrists. Autopsy reports were examined. The design of this descriptive study raised no ethics-related concerns, and the conduct of the study was granted authorization by the Office of the Coroner and the University of Ottawa Institute of Mental Health Research Ethics Board.

Table 1 Demographic Characteristics of Male Parricide Victims

	Female (n = 24)	Male (n = 36)
Mean age (±SD)	61.2 ± 15.1	61.6 ± 11.5
Civil status, *n*		
Married/C/L	15	20
Divorced	1	4
Widowed	6	4
Single	0	1
Unknown	2	7
Age range, y		
40–49	8	7
50–59	1	8
60–69	8	13
70–79	4	5
80+	3	3

Results

Between 1990 and 2005 we recorded 720 victims of domestic homicide in Quebec. There were 64 parricides, with an average of 4 victims and a range of 2 to 7 victims yearly. Parricide accounted for nine percent of all homicides occurring in a domestic context. Sons were by far the most frequent perpetrators of parricide (52/56, 92.8%). The larger sample of men who committed parricide allowed us to compare male matricide to male patricide. The female parricide offenders murdered mothers in three cases and a father in one case. The victims ranged in age from 50 to 90 years. Although the female parricide sample is small (n = 4), some of the results specific to this sample will be reported to illustrate this rare phenomenon.

Parricides by Sons

Characteristics of Victims

As shown in Table 1, the male parricide victims (n = 60) included 36 (60%) cases of patricide and 24 (40%) cases of matricide. The matricide victims ranged in age from 40 to 95, with a mean age of 61.2 years (SD 15.1). The patricide victims were aged between 41 and 87 years (mean, 61.6; SD 11.5). Most of the victims were between 60 and 70 years of age with no significant difference in age between male and female victims. Only one victim had a psychiatric history, two had a history of violence, and four had a history of substance abuse.

Table 2 Demographic Characteristics of Male Parricide Offenders

	Matricide	Patricide
Age, y		
	Range, 14–58	Range, 18–58
	Mean, 30.3	Mean, 32.8
	SD 12.6	SD 11.4
Age categories, y (*n*)		
	<20 (4)	<20 (2)
	20–30 (9)	20–30 (12)
	31–40 (5)	31–40 (8)
	41–50 (2)	41–50 (1)
	51–58 (2)	51–58 (3)

n, number of victims.

Characteristics of Offenses

Matricide. Almost all of the matricides occurred in the family home (22/24, 91.7%). A majority (17/24, 70.8%) of perpetrators were living with the parents at the time of the offense. The most common method of killing was use of a blunt instrument (8/24, 33.3%), followed by use of a knife (7/24, 29.2%) or a firearm (5/24, 20.8%). Other methods used were strangulation and carbon monoxide intoxication (2/24 and 1/24, respectively). A homicide-suicide dynamic was present in seven (29.2%) cases, and 13 percent (3/24) of perpetrators were intoxicated at the time of committing matricide. Three quarters of the matricides occurred without a warning sign (18/24, 75%). Although four of those perpetrators had had prior contact with a psychiatrist or a physician, the homicidal impulse was either not yet present or had not been disclosed. There was one case of retrograde amnesia following a matricide.

Patricide. Consistent with the cases of matricide, most of the patricides occurred in the family residence (34/36, 94.4%) and many perpetrators (21/36, 58.3%) resided with their parents at the time of their murderous acts. The most common method of killing was by use of a knife (12/36, 33.3%) followed by use of a firearm (10/36, 27.8%), blunt instrument (8/36, 22.2%), strangulation (3/36, 8.3%), or intoxication or beating (both 1/36, 2.8%). In six (16.7%) instances, the perpetrator also attempted or committed suicide, and 19.5 percent (7/36) of perpetrators who committed patricide were intoxicated. In contrast to the matricides, a lower number of patricides occurred without a warning sign (25/36, 69.4%), and only 8.3 percent (3/36) of the perpetrators had had contact with a psychiatrist or a physician.

Characteristics of Perpetrators

The ages of the offenders ranged from 14 to 58 years, with a mean age of 31.4 (SD 11.5). Table 2 provides more details. Seventy percent (17/24) of perpetrators who committed matricide had a psychotic motive (i.e., delusional thinking) compared with 63.9 percent (23/36) of those who committed patricide. The difference between psychotic motive and sex of the victim is not statistically significant. Only 2 (8.3%) of the 24 who killed their mothers had no psychotic motive, while 11.1 percent (4/36) of those who killed their fathers had no psychotic motive. A motive was unknown for five of the matricides (20.9%) and for nine (25%) of the patricides. For both matricide and patricide offenders, the most common Axis I diagnosis was schizophrenia or other psychosis (54.2% for matricides; 46% for patricides), followed by depression (16.7% for matricides; 13.9% for patricides) and intoxication (4.2% for matricides; 5.6% for patricides). Substance abuse other than acute intoxication was found in one (2.8%) case of patricide. It is interesting to note that 8.3 percent (2/24) of matricide and 5.6 percent (2/36) of patricide perpetrators were found not to have an Axis I mental disorder.

Table 3 Characteristics of Parricide Victims and Parricide Offenders

			Diagnosis (Axis I)				
	Sex of Offender	Suicide†	Schizo/ Psychosis	Depression	Intoxication	Nil	Unavailable/ Unknown
Matricide (*n* = 27)	24 Male	4 + 3F	13	4	1	2	4
	3 Female	—	2	—	1	—	—
Patricide (*n* = 37)	37 Male*	3 + 3F	18	5	2	2	7
	1 Female	1F	—	1	—	—	—
Double (*n* = 9)	9 Male	3 + 2F	6	1	—	1	1

*One patricide committed by two sons.
†Total of eight suicide attempts: four successful, four failed (F).

Parricides by Daughters

As female parricide is extremely rare, samples are not sufficient to use as a comparison group. Table 3 offers some limited elements of comparison. According to an investigation by d'Orban and O'Connor,[6] some features of matricide by daughters show a close similarity to matricide by sons. Specifically, female matricide perpetrators were women in midlife living alone with an elderly, domineering mother in marked social isolation. The mother-daughter relationship was characterized by mutual hostility and dependence, and the killing was often performed with extreme violence.[6]

We found four cases of parricide by women in our study. The first was a severely intoxicated woman in her early 30s who killed her elderly mother with a knife. In the second case, a woman in her 50s killed her elderly father by administering a variety of intoxicating substances. This woman had attempted suicide and had a diagnosis of depression. The third case involved a female in her late teens who killed her middle-aged mother with a firearm. Upon initial assessment, the daughter presented psychotic symptoms. In the fourth case, a psychotic woman in her mid-30s strangled her elderly mother. All four cases of female parricide occurred in the family home where both victim and daughter resided.

Discussion

Unlike many studies in which samples of homicidal offenders incarcerated after the parricide were examined, the present study included all cases of parricide that occurred within a specific time frame in a territory with a population of approximately 7.5 million. Canada has a population of approximately 32 million; Quebec is the second largest province. Approximately one-fifth of the total homicides nationwide are perpetrated in Quebec (rate of 1.34 homicides per 100,000). Our sample also included instances in which the offender had committed suicide. While this allowed a complete sampling of the parricides and collection of more complete data, the disadvantage was that the four offenders who had committed suicide could not be assessed after their murderous acts.

In contrast to the results of d'Orban and O'Connor,[6] we found that patricide occurred more frequently than matricide (57.8% patricides; 42.2% matricides). In addition, in contrast to the findings of McKnight,[21] patricide by sons outnumbered matricide by sons (60% versus 40%) in our study. The 60- to 69-year age group contained the highest number of victims: 13 men and 10 women (including two killed by a daughter). Most offenders were living with their victims at the time of the parricide (17/24, 70.8% matricides versus 21/36, 58.3% patricides). Geographical proximity may have been a risk factor in those cases that involved a dispute or strained familial context. It is noted that four adult perpetrators had only recently moved back to their parents' homes after separation from their spouses. Many offenders with schizophrenia had a high degree of psychosocial impairment and were never able to live independently. Our comparison revealed that matricides were more often preceded by a psychiatric or psychological contact than were patricides (4/24, 16.7% matricides versus 3/36, 8.3% patricides), but the difference was not statistically significant. Matricide perpetrators were less often intoxicated than those who committed patricide (3/24, 12.6% for matricides; 7/36, 19.5% for patricides). There was no criminal history of parricide perpetrators as indicated by police records.

Two-thirds (67%) of the male parricide offenders in our sample were motivated by delusional thinking. Two males presented with Capgras syndrome (misidentification syndrome) and believed that their parent victims had been replaced by impostors. Attempts to do physical harm to the misidentified person are believed to stem from the individual's belief that the imagined imposter in some way threatens his or her welfare.[25] Aggressive behavior may be facilitated because the individual no longer views the misidentified person as a close relative.[13] Other studies confirm that patients with Capgras syndrome are more likely to adopt violent behavior or to commit parricide.[10,13,25,26]

In eight instances, the victims' bodies were decapitated or mutilated, particularly their genitals. Of the six male murderers who mutilated the bodies of their victims, five were known to be schizophrenic. Perpetrators had not displayed positive psychotic symptoms such as delusions or hallucinations but had demonstrated irrational, disorganized behavior leading up to the offense. Of interest, two instances involved a double parricide. Double parricide occurs rarely and has received little attention to date. Studies of double parricide indicate that most adult perpetrators (nearly always male) are actively psychotic at

the time of the offense or have an antisocial motive for their actions (e.g., monetary gain).[24,27] A recent study of 11 men who committed double parricide found no single motive for the crime: six (54%) offenses occurred because of longstanding intrafamilial conflict, one involved a robbery, and another four (36%) involved delusional thinking at the time of the offense.[27] Our sample included nine cases of double parricide. Severe psychopathology was prevalent in this group, with seven (77.7%) diagnosed with schizophrenia (6/7) or depression (1/7). About half (5/9) had attempted suicide; three were successful. Most of the offenders in our sample were actively psychotic. The other two had expected to gain money from their actions.

Twenty-nine cases involved overkill, the use of an excessive amount of destructive violence. These murders were committed mostly by males (96.5%) diagnosed with schizophrenia (62%). One man (3.4%) had depression. Two men and one woman (10%) were severely intoxicated at the time of the offense. Only one (3.4%) of the offenders who used overkill had no psychiatric diagnosis, and five (17.2%) were undetermined due to lack of information.

Poor impulse control and loss of inhibition may result from a frontal lobe problem, and the elevated degree of impulsive violence found in cases of overkill associated with a diagnosis of schizophrenia raise an interesting question about the integrity of frontal lobe function in those individuals. Several studies using various investigative techniques have examined the question of frontal lobe dysfunction in connection with schizophrenia.[28–37] Findings in neuroimaging studies indicate the presence of subtle structural and functional abnormalities.[33–40] There is evidence of structural abnormalities in the amygdalae of men with schizophrenia and a history of violent behavior[33] and of impaired connectivity between the orbitofrontal cortex and the amygdala that was associated with impulsivity and aggressive behavior in schizophrenic men.[37] As orbital and medial areas are interlinked with limbic and reticular systems, damage to these areas can cause disinhibition and changes of affect.[41] In a functional brain imaging study, Spalletta *et al.*[35] found significantly reduced prefrontal regional cerebral blood flow (rCBF) during completion of a measure of executive functioning among violent inpatients compared with those classified as nonviolent. These investigators suggested that reduced prefrontal rCBF may underlie a loss of inhibition that could lead to aggression. The term pseudopsychopathic has been used to describe a syndrome in which disinhibition leads to abnormal behavior, sometimes associated with outbursts of irritability and aggression.[41] Comparative studies examining the brains of violent, homicidal offenders with and without schizophrenia and analyzing the relationship between neuroanatomical findings and neurobehavioral aspects are likely to benefit our understanding of the illness and expression of violence in sporadic cases.

We found 11 cases of parricide in which the victim was more than 75 years of age. Of these cases, three (27.3%) perpetrators were significantly depressed and motivated by compassion over actual distress or pain experienced by the parent victim. The methods used by these offenders were considered nonviolent. Most died of carbon monoxide intoxication. The gender of victims was evenly distributed in the elderly victims group (six men, five women). Parricide of an elderly parent was strongly associated with a depressive or psychotic motivation (9/11, 81.8%). In two (2/11, 18.2%) cases, the motivation was unclear. In addition to the three cases of depression, a significant proportion of offenders had a psychotic condition (6/11, 54.6%). Some parricides occurred in the context of a conspiracy (3/64, 4.7%), anticipated monetary gain (4/64, 6.2%), or a history of mistreatment of the murderers by the victims (3/64, 4.7%). In these latter instances, only one perpetrator had a schizophrenic illness, while the others had no diagnosis.

Some parricides occurred following an argument (10/64, 15.6%). It is interesting to note that one-third (3/10, 30%) of those perpetrators who killed in the heat of an argument or dispute were not found to have a mental illness. Two of them were severely intoxicated (20%) and three others were psychotic (30%). Data regarding mental status were not available for the other two perpetrators. Overall, the most common cause of parricide was psychosis with a diagnosis of schizophrenia, but other factors such as the wealth of the victim, anger, or substance abuse were also involved in the offenses, albeit to a lesser degree.

A substantial proportion (67%) of the parricides investigated in this study were motivated by delusional thinking, in keeping with previous research that found an association between homicidal violence and some symptoms of psychosis, including delusions, hallucinations, perceptual abnormalities,

or severe disorganization of thinking and behavior.[14,15,42–44] The potential for violence toward others appears to be increased with persecutory delusions in particular,[4,45–47] and emotional distress may heighten the risk that persecutory delusions will motivate violence.[48] As mentioned earlier, five (83%) of the six offenders in our sample who had mutilated their victims' bodies displayed severely disorganized thought and behavior at the time of the offense. Clinicians are aware that severe disorganization of thinking and behavior is sometimes accompanied by unmodulated extreme affective discharges such as excitement or rage, and assaultive or homicidal conduct or self-destructive behavior may be found in schizophrenic individuals with deficient impulse control. The risk of violence is increased with insufficient treatment of psychotic symptoms or nonadherence to prescribed antipsychotic medication.[15,44] In our study, 30 percent of the parricide offenders who were intoxicated at the time of the offense were psychotic. Comorbid substance abuse may increase the severity of psychotic symptoms and heighten the risk of homicide.[49–51]

Severe depressive states, with or without recognizable psychotic symptoms, may also contribute to homicide, which is often viewed as an act of extended suicide, with an over-representation of victims in the nuclear family and close relatives.[52–56] In more than one-quarter (27%) of parricides involving elderly victims in our study, perpetrators were significantly depressed and wanted to commit suicide but did not want to abandon their victims.

Conclusions

Most research on parricide is retrospective and descriptive. To our knowledge, this is one of the largest retrospective studies of men and women who have committed parental homicide. We found that cases of matricide and patricide were similar in many respects. The significant prevalence of schizophrenia, the presence of psychosis, and the commission of psychotically motivated homicides suggest that psychosis associated with other characteristics in a child is a risk factor for parricide. Most cases occurred without warning or knowledge that anything was wrong with the killer. The tragedy could not be predicted. However, in the cases in which warning signs were present, indicators such as a recent disorganization of behavior and significant worsening of a preexisting psychotic illness might be viewed as potential predictive factors in a young man with a history of prior assaultive behavior, especially within the family. We examined several cases in which it was established that the victim had feared for his life and sought help, but the concerns were not taken seriously. In contrast, there were cases in which the parent minimized the risk despite overt threats to his life. Clinicians treating individuals with schizophrenia would be wise to counsel significant family members who may sometimes be perceived negatively because they try to be helpful and promote treatment. A lack of insight and lack of medication compliance form part of a trail of clues leading to the parricide in these instances.

Our study was limited by a relative lack of data; not all subjects could be individually examined by standardized assessors, who had to rely on available data. Moreover, the small sample size of female parricide offenders limits conclusive statements regarding differences between male and female parricide perpetrators. Our study nevertheless offers an indication of various factors that may be characteristic of parricides by men versus those by women. Delineating similarities and differences between matricide and patricide might help to lay the groundwork for a profile of offenders that could assist in the assessment of parricide risk. Our study further highlights the role of psychosis in many cases of domestic homicide. As many of these cases progress through the next stage of legal resolution with verdicts to be rendered, data on the legal outcome are being collected. It will be interesting to find out how the legal system handles these cases, particularly in light of the fact that mental illness is so prevalent in this offender population. Although, based on our experience, murder in a family context is usually self-contained with a low risk of violent recidivism, these cases call for a high level of services in the psychiatric and psychosocial areas.

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