

Maternal Filicide in Québec

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In an eight-year review (1991 to 1998) of all consecutive coroners' files in Québec, Canada, the authors identified a total of 34 cases of victims who were killed by their mothers. Most victims were less than six years of age, and there were several cases in which multiple siblings were murdered. There were 27 mothers in the sample, and 15 of those women committed suicide after the filicide. A psychiatric motive was determined for more than 85 percent of the mothers, and most of the mothers had received previous treatment for a depressive or psychotic disorder. Based on the characteristics of this sample, the authors developed a filicide classification system that is flexible and simple to use but must be standardized to become a useful tool for clinicians.

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Approximately 600 homicides occur in Canada every year,¹ and approximately 15 percent of the victims are children less than 18 years of age. Evidence suggests that in most cases of child homicide, parents are the perpetrators.²⁻⁴ In 1997, 76 percent of the 96 Canadian child homicide victims were murdered by a family member.⁵ Fathers were the perpetrators in 37 (38.5%) cases, and mothers in 25 (26.0%). The highest rates of homicide among children less than 18 years of age are victims less than 1 year of age (infanticide). The majority of these infants are murdered by family members (93%), of which mothers account for 45 percent of cases and fathers 40 percent.

Bourget and Bradford⁶ have reported that mothers are more likely to be the perpetrators in child murder, and several older lines of evidence support this assertion.^{3,6-10} Recently, however, some data suggest that fathers commit filicide at an equal or greater rate than mothers.¹¹⁻¹⁶ Wright and Leroux¹⁷

reported Canadian data (1980-1989) that determined that in cases of parental homicide, approximately half were committed by fathers and half by mothers.

Homicidal parents have high rates of suicide attempts.^{3,4,7} There are suggestions that women who commit homicide are more likely to commit suicide after the act than are fathers. West⁴ reported that 50 percent of women who commit filicide also commit suicide. Suicide attempts by homicidal parents are often serious and successful.^{4,10,18,19}

Bourget and Bradford^{6,20} have examined the influence of psychiatric illness on parental homicide. Pathological filicide refers to instances of parental homicide in which the offense is related to the parent's psychiatric illness. There is an increased prevalence of pathological filicide among homicidal women.^{11,19,21-22} The most common diagnosis in maternal offenders is major depression with psychotic features.^{3,4,7,9,19,23-28}

Bourget and Bradford,⁶ in a study comparing parental and nonparental homicide, found that 30.8 percent of parents who commit filicide had a diagnosis of major depression compared with none of the perpetrators of nonparental homicides. Of the nine mothers who committed filicide, five were in a postpartum period of less than five weeks from delivery when the offense occurred. More than 46 percent of parental offenders also had a personality disorder, 23 percent had a substance abuse disorder, and 15.4 percent an adjustment disorder. Nonparental of-

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fenders most often had a personality disorder (53.2%), followed by a substance abuse disorder (25.5%) and adjustment disorder (8.5%). In a study examining 10 homicidal fathers, Marleau *et al.*²⁹ found that all 10 had either an Axis I or Axis II disorder, according to DSM-III-R criteria.³⁰ Seven fathers had an Axis I diagnosis: four mood disorders, one dysthymic disorder, one schizophrenia, and one psychosis. Eight men had Axis II diagnoses. Four of the offenders were actively psychotic at the time of the offense, seven had histories of substance abuse, and four were under the influence of psychoactive substances at the time of the offense.

Several researchers have proposed classification systems for filicide. Resnick⁹ was one of the first to propose a classification based on motive: altruism, acute psychosis, unwanted child, accident, and spousal revenge. The classification system proposed by Scott³¹ is more focused on the source of the impulse to commit filicide, and includes the categories of battering mothers, mentally ill mothers, retaliating mothers, unwanted children, and mercy killing. Guileyardo *et al.*³² suggest a classification into 16 subtypes, based on selection of the primary motive or cause for the filicide.

D'Orban² focused on maternal filicide and proposed six categories: battering mothers, mentally ill mothers, neonaticides, retaliating mothers, unwanted child filicide, and mercy killing. Battering mothers and mentally ill mothers were the most common types of maternal filicide perpetrators in his sample.

Bourget and Bradford⁶ proposed five types of filicide in an attempt to incorporate clinical situation and motive. These included:

1. Pathological filicide, including altruistic features and extended homicide-suicide
2. Accidental filicide, including battered-child syndrome
3. Retaliating filicide
4. Neonaticide, including the unwanted-child motive
5. Paternal filicide

Pathological filicide refers to cases in which the perpetrator most likely has a major psychiatric illness, most often major depressive disorder with psychotic features or schizophrenia. Personality disorders are often associated with retaliating and paternal filicides.

Although these various classifications have been helpful in identifying the types of filicide, they fall short of clearly representing the multifactorial nature of filicide. The role of psychiatric illness, gender differences, impulsivity, and neurotransmitter activity require more consideration. In this study, we present the characteristics of the victims and maternal perpetrators of 34 child homicides in the province of Québec, Canada, collected over seven years. We then propose a revised classification system based on our sample of filicides.

Methods

This is a retrospective clinical study, based on the examination of coroners' files from the province of Québec during the period from January 1991 through May 1998. This study was authorized by the Québec Coroner Head Office. Collection and analysis of the data were performed in an anonymous manner. From these files, 75 cases of children murdered by a parent were identified; 40 cases involved children murdered by the father, 34 cases involved murder by the mother, and one case was undetermined. All records were reviewed and compiled by the same two investigators, coroners with backgrounds in psychiatry.

Results

Characteristics of Victims

Of the 34 victims, 19 (55.9%) were male and 15 (44.1%) were female. They ranged in age from approximately four weeks of age to 13 years, with the majority of children being younger than six years of age (<1 year, 8 (23.5%); 1–5 years, 17 (50%); 6–10 years, 7 (20.5%); >10 years, 2 (5.9%)) at the time of their deaths.

Characteristics of Offenses

Most offenses occurred in the family home (24/34, 70.6%). The most common method was carbon monoxide poisoning (8/34, 23.5%), followed by use of a firearm (6/34, 17.6%), strangulation (5/34, 14.7%), drowning (5/34, 14.7%), stabbing (4/34, 11.8%), beating (2/34, 5.9%), and other (4/34, 11.8%). In five instances, two siblings were killed, in one case three siblings. In all six instances, the maternal suicide occurred immediately after the murder.

Characteristics of Perpetrators

The 34 offenses were committed by 27 mothers (mean age, 32.25 years; age range 19–49 years). The majority of perpetrators were white (23/27, 85.19%) and of Canadian birth (26/27, 96.30%). Family violence was indicated in 22.2 percent of the cases (6/27), but in 15 families the evidence of violence within the family was inconclusive.

A psychiatric motive was determined for the actions of 23 of the 27 mothers (85.2%). In fact, 18 mothers had a diagnosis of major depressive disorder and 4 had a diagnosis of schizophrenia or other psychosis. There were no diagnoses of substance abuse or paraphilia. Almost half of the mothers had had contact with others regarding their problems, including medical or psychiatric staff (6/27, 22.2%); a combination of either medical/psychiatric staff, police/legal staff, or family members (2/27, 7.4%); or another contact (5/27, 18.5%).

There were six cases of multiple deaths involving 13 children. All of these mothers also committed suicide at the time of the offense. All but one mother left a suicide note, indicating premeditation. In three of the cases (seven children) carbon monoxide poisoning was used as the method of killing, in two cases (four children) a firearm was used, and in one case (two children; the mother who did not leave a suicide note) stabbing was the method of murder and suicide. There were no indications of family violence in the six cases. All six mothers had been treated previously for psychiatric illness, five for depression, and one for psychosis. Three of the mothers had contacted a doctor or psychiatrist regarding their problems.

In 11 cases (22 children), the mother committed suicide at the time of the murders. Of those mothers, nine left a note. The most common method was carbon monoxide poisoning (four cases, eight children), use of a firearm (four cases, six children), stabbing (one case, two children), strangulation (one case, one child), and suffocation (one case, one child). For all 11 mothers, a psychiatric motive was determined. Ten mothers had had treatment for a psychiatric illness, most often for depression (9/10; 1/10 for psychosis). Six of the mothers had had contact with others regarding their problems, three with a doctor or psychiatrist.

In four other cases the mother attempted suicide but failed; none of those mothers had prepared a note. Two cases involved drowning, one involved

strangulation, and one involved an unspecified method. Three of the mothers had been treated previously for depression, but none had previous contact with others regarding her problems.

Discussion

In this eight-year review (1991–1998) of coroners' files in Québec, Canada, we identified a total of 34 cases of victims who were killed by their mothers. Most victims were less than six years of age, and there were several cases of the murder of multiple siblings. There were 27 mothers in the sample, and 15 of those women committed suicide after the filicide. A psychiatric motive was determined for more than 85 percent of the cases. Most of the mothers had received previous treatment for a depressive or psychotic disorder. Almost half of the mothers had contacted others regarding their problems, including doctors or psychiatrists.

Although many classification systems have been proposed, they tend to be descriptive, providing information on motives. There are limitations to this type of classification system: it is difficult to place a perpetrator within a single category by applying preset criteria. Filicide situations are complicated and involve a combination of factors.

Research advances in genetics and the recent delineation of the role of the serotonergic system in aggression, impulsivity, and suicide may have direct implications in the understanding of filicide. Previous studies have identified a relationship between a serotonergic receptor gene and suicidality.³³ Stanley *et al.*,³⁴ in a sample of patients without a history of suicidal behavior but with a history of mild aggressive behavior, found that serotonergic dysfunction was related to aggression independent of suicidal behavior. Although it is still speculative at this stage, it would not be unexpected that similar mechanisms are found to play a significant role in homicide—specifically, in filicide. Clearly, future genetic and molecular research will be invaluable to the understanding of violent and murderous behavior. It thus becomes important that a classification system include the specifications of impulsivity, aggression, and suicidality, as well as a clear identification of any psychiatric diagnoses.

We propose a new classification system, with the purpose of providing clinicians with a flexible instrument to assist future research by the homogeneous categorizing of filicide (Table 1). Five major group-

Table 1 Classification System for Filicide

Classification	Description	Intent	Mental Illness
Type of filicide			
Mentally ill	Axis I diagnosis present; psychotic or nonpsychotic; infanticide	Present or not present	Yes
Fatal abuse	Recurrent or isolated event of neglect or shaken baby or battered child syndrome	Not present	No
Retaliating	Associated with revenge and anger	Present	No
Mercy	Child ill with severe or debilitating illness; not better accounted for by any other category	Present	No
Other or unknown specifiers	Insufficient information; may include cases with multiple factors	Present or not present	Yes or no
Group A	Associated with suicide or not associated with suicide		
Group B	Associated with substances or not associated with substances		
Group C	Predictable or not predictable		

ings identify types of filicide offense: mentally ill filicide, fatal abuse filicide, retaliating filicide, mercy filicide, and other/unknown filicide. In mentally ill filicide, the offense is associated with a major Axis I mental illness active at the time of the filicide and can be specified as either with or without intent. In a psychotic case, the filicide is a result of delusions, hallucinations, or thought disorganization, and delusional altruistic motives may be present. At the present time, similar to previous classification systems, this category does not distinguish among specific diagnoses, although we have found it useful to document the presence of psychosis as a determinant. Infanticides occur within the first year of life of the child. The term can only be used in mothers to account for postpartum phenomena, hormonal influences, and other nonspecific mental disturbances. In infanticide, the mother is unable to cope with her life changes and the baby. Infanticide is only determined when the filicide is not better accounted for by other categories. Fatal abuse filicide is committed without specific intent, and can be the result of recurrent abuse or an isolated event. It includes cases of battered-child and shaken-baby syndromes and child neglect. The ultimate “accidental” death of the child is not the motive for the abuse. To warrant a classification of fatal abuse filicide, the event cannot meet the criteria for mentally ill filicide. Retaliating filicide in contrast is associated with specific intent to commit murder, and it can be the result of anger or revenge. Retaliating filicide may typically occur in unstable parents with severe personality disorder and chaotic relationships who deliberately kill their children to cause their spouses to suffer. Mercy filicide is also committed with specific intent to harm and occurs when the child has a severe and debilitating ill-

ness. The parent does not have psychosis or perceptual disturbances, and the event is not better accounted for by any other category. The category of other/unknown filicide is only used when information is insufficient to allow for an accurate classification and can include cases with multiple factors.

In all cases intent must be specified. With intent, the offender had a conscious desire to kill. Offenders without intent had no specific conscious desire to kill (Table 2). Intuitively and supported by clinical evidence, intentionality (the presence or lack of intent for homicide) may be a relevant, discriminant variable. It would be particularly useful to distinguish cases of fatal abuse filicide from retaliating filicide. The determination of intent may represent a challenging task. With mentally ill individuals, the intent may be psychotic (i.e., based on a delusional system that incorporates the child). It may also be that a mentally ill mother does not possess the mental capacity to form an intent. To keep the schema simple, the absence of deliberate intent guides the determination.

There are three other potential specifiers the clinician can use as needed. The specifiers would not affect the main classification but, following the DSM-IV model, would assist in gathering more specific information on circumstances related to the filicide. With specifier A, the filicide is associated with suicide or attempted suicide and must be based on

Table 2 Intent and Mental Illness in Filicide

	No Intent	Intent
Mentally ill	Mentally ill filicide: psychotic/nonpsychotic infanticide	Mentally ill filicide: psychotic/nonpsychotic infanticide
Not mentally ill	Fatal abuse filicide: recurrent/isolated	Retaliating filicide; mercy filicide

evidence. Specifier B classifies filicide on the basis of whether substance use was associated with the murder. Again this classification must be made on the basis of actual evidence. Finally, specifier C identifies filicide as either predictable or unpredictable. This is an opinion rendered by the clinician after an examination of the characteristics of the filicide. Such characteristics as previous threats of violence to self or family and a history of abuse are considered when assigning this specifier. This specifier will have little clinical impact but it is hoped that it will become an indicator that will assist in the future prevention of filicides. Unpredictability is sometimes associated with impulsivity of the act in the absence of any forewarning.

Categorization of our study sample is found in Table 3. The majority (23/27, 85%) fit into the mentally ill filicide category, 3 (11%) were fatal abuse filicides, and the remainder was unknown. We were unable to identify any clear case that could be attributed to the other categories. This is not unlike most studies that have shown a predominance of fatal abuse and mentally ill filicide among various samples of maternal perpetrators (e.g., Refs. 2, 6, 8, 11, 19, 21, and 22). In our experience, we have found retaliating filicide and mercy filicide to be rare and sporadic. On closer scrutiny, some cases that at first glance appeared to fit one or the other category bore more complexity. Several cases from this sample illustrate our classification system and how it works within the complexity of filicide.

Case Studies

In the first example, Case A, a 6-year-old male child with autism was drowned by his 43-year-old mother. After committing the filicide, she cut her own wrists, but survived. Although she had no previous contacts with medical, criminal, or social services for mental distress, after the filicide she was found to have been depressed, overwhelmed by her circumstances, and psychotic. Using our filicide clas-

sification system, the initial identification might be mercy filicide; however, this event is better classified by mentally ill filicide, psychotic type, with intent. This event was not predictable, the mother had not disclosed her difficulties prior to the events.

Case B illustrates the possible complexity of filicide cases. In this case, the 31-year-old mother had a childhood history of sexual abuse by her father and brothers for 5 to 10 years. She had a long history of severe depression, including a plan to hang herself, in addition to a diagnosis of borderline and schizoid personality disorder. She had a recent history of abortion and seasonal worsening of her depression symptoms, and she was three months postpartum. In this case the mother killed her two-year-old daughter, three-month-old son, and herself by carbon monoxide poisoning and left a note indicating that she did not want her children to suffer because of her mental illness. Her immediate family and others saw no indications of her intent in the days preceding the filicide. In classifying this filicide, infanticide would be rejected, despite the mother's being three months postpartum, because of her previous history of mental illness. Mercy filicide would not be considered, because the children were not ill and the mother had a psychosis. The most appropriate classification would be mentally ill filicide, psychotic, with intent, and associated with suicide. Given her long and severe illness, the event might have been predictable.

A different type of filicide case is found in case C, in which a two-and-half-year-old girl was beaten to death over three days. The mother had been very deprived socially and personally, and subjected her two children to at least six months of total neglect and physical abuse according to social service authorities. Three days before the event, the mother and her friend had taken the children to a small cabin, apparently to get away from a former partner. The children were abused until the daughter died of injuries. On examination, the mother was not found to have an Axis I mental disorder, but she had borderline intelligence. This is a clear case of fatal abuse filicide, recurrent actions. Although the event was the result of cumulating physical abuse, there was no specific intent to kill the child. Suicide was not associated with the filicide, but the event was clearly predictable.

In case D, the 20-year-old mother had a history of violence and psychosis, with many previous

Table 3 Classification of Filicide in the Study Sample

Type of Filicide	Cases (n)
Mentally ill with psychotic intent	23
Fatal abuse	3
Retaliating	0
Mercy	0
Other/unknown	1

contacts with social, medical, and criminal services. When she was 12 years old, her father had murdered her mother in front of her and her siblings and had been judged unfit to stand trial. She maintained a punk lifestyle, was unemployed, and regularly used illegal drugs. She had been a prostitute and had had a spontaneous abortion less than a year before the filicide. Her common-law husband of three years had left the home six months earlier and had petitioned the court for custody of the children, aged 2 years and 11 months. He claimed she had been very violent in the past and that she had threatened to kill the children if he did not return to the home. The day of the filicide, the mother had visited an aunt and had been acting in a bizarre manner, claiming she did not have children. She had exhibited religious delusions involving a religious sect and disorganized thoughts. She then went home and stabbed her two-year-old son to death. She was later found unfit to stand trial.

Although this case might be labeled a retaliating filicide because of the mother's previous threats to harm her children, a more appropriate classification based on her history of psychosis and behavior the day of the filicide would be mentally ill filicide, psychotic type. Suicide was not associated with the filicide. The previous reports of violent behavior, the family history of violence, and her threat to murder the children all suggest this filicide could have been predicted.

Conclusions

Using a sample of mothers who committed filicide in the province of Quebec, we have developed a filicide classification system. This revised classification system takes into account several characteristics of filicide and associated circumstances. A new classification must be a flexible and standardized instrument that allows the extraction of subpopulations for research and identification of biological and genetic markers. This attempt to reclassify filicide must be viewed in the context of new research in genetics and identification of genes and the involvement of serotonergic systems in suicide and aggression. This calls for the development of a classification system that would allow the identification of subgroups with similarities of clinical factors and behavior. It is

hoped that the proposed classification will be a step in that direction.

Although it is a flexible and simple tool to use, it must be further standardized to increase its value to researchers and clinicians. This instrument will be tested in a similar review of paternal filicide and a longitudinal collection of homicidal parents referred for psychiatric assessment at two of the major forensic psychiatric facilities in Canada.

References

1. Statistique Canada: Statistique de la Criminalité au Canada: 1996. Ottawa, Ontario, Canada: Statistique Canada, 1999
2. D'Orban PT: Women who kill their children. *Br J Psychiatry* 134:560-71, 1979
3. Rodenburg M: Child murder by depressed parents. *Can Psychiatr Assoc J* 16:41-8, 1971
4. West DJ: *Murder Followed by Suicide*. London: Heinemann, 1965
5. The Daily. Statistics Canada, June 11, 1999
6. Bourget D, Bradford JMW: Homicidal parents. *Can J Psychiatry* 35:233-8, 1990
7. Harder T: The psychopathology of infanticide. *Acta Psychiatr Scand* 43:196-245, 1967
8. Hemphill RE: Infanticide and puerperal mental illness. *Nurs Times* 3:1473-5, 1967
9. Resnick PJ: Child murder by parents: a psychiatric review of filicide. *Am J Psychiatry* 126:73-82, 1969
10. Tuteur W, Glotzer J: Murdering mothers. *Am J Psychiatry* 116:447-52, 1959
11. Adelson L: Slaughter of the innocents: a study of forty-six homicides in which the victims were children. *N Engl J Med* 264:1345-9, 1961
12. Adelson L: Pedicide revisited: the slaughter continues. *Am J Forensic Med Pathol* 12:16-26, 1991
13. Fornes P, Druilhe L, Lecompte D: Childhood homicide in Paris, 1990-1993: a case report of 81 cases. *J Forensic Sci* 40:201-4, 1995
14. Krugman RD: Fatal child abuse: analysis of 24 cases. *Pediatrician* 12:68-72, 1985
15. Marks MN, Kumar R: Infanticide in England and Wales. *Med Sci Law* 33:329-39, 1993
16. Somander LH, Rammer LM: Intra- and extrafamilial child homicide in Sweden 1971-1980. *Child Abuse Neglect* 15:45-55, 1991
17. Wright C, Leroux JP: Les enfants victimes d'actes criminels violents. *Juristat* 11:1-13, 1991
18. McKnight CK, Mohr JW, Quinsey RE, Erockko J: Mental illness and homicide. *Can Psychiatr Assoc J* 11:91-8, 1966
19. Myers SA: Maternal filicide. *Am J Dis Childhood* 120:534-6, 1970
20. Bourget D, Bradford JMW: Affective disorder and homicide: a case of familial filicide, theoretical and clinical considerations. *Can J Psychiatry* 32:222-5, 1987
21. Coid J: The epidemiology of abnormal homicide and murder followed by suicide. *Psychol Med* 13:855-60, 1983
22. Daniel AE, Harris PW: Female homicide offenders referred for pretrial psychiatric examination: a descriptive study. *Bull Am Acad Psychiatry Law* 10:261-9, 1982
23. Button JH, Reivich RS: Obsessions of infanticide: a review of 42 cases. *Arch Gen Psychiatry* 27:235-20, 1972

24. Good MI: Primary affective disorder, aggression and criminality: a review and clinical study. *Arch Gen Psychiatry* 35:954–60, 1978
25. Hirose S: Depression and homicide: a psychiatric and forensic study of four cases. *Acta Psychiatr Scand* 59:211–17, 1979
26. Hudgens RW: Murder by a manic-depressive. *Int J Neuropsychiatry* 1:381–383, 1965
27. Morrison D: Psychopathologie et violence: revue des concepts et applications. *Union Med Can* 114:456–67, 1985
28. Schipkowensky N: Affective disorders: cyclophrenia and murder. *Int Psychiatr Clin* 5:59–75, 1968
29. Marleau JD, Poulin B, Webanck T, *et al*: Paternal filicide: a study of 10 men. *Can J Psychiatry* 44:57–63, 1999
30. Diagnostic and Statistical Manual of Mental Disorders (ed 3, rev). Washington, DC: American Psychiatric Association, 1987
31. Scott F: Parents who kill their children. *Br J Psychiatry* 13:120–6, 1973
32. Guileyardo JM, Prahlo JA, Barnard JJ: familial filicide and filicide classification. *Am J Forensic Med Pathol* 20:286–92, 1999
33. Du L, Bakish D, Lapierre YD, *et al*: Association of polymorphism of serotonin 2A receptor gene with suicidal ideation in major depressive disorder. *Am J Med Genet* 96:56–60, 2000
34. Stanley B, Molcho A, Stanley M, *et al*: Association of aggressive behavior with altered serotonergic function in patients who are not suicidal. *Am J Psychiatry* 157:609–14, 2000