

Paternal Filicide in Québec

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In this retrospective study, relevant demographic, social, and clinical variables were examined in 77 cases of paternal filicide. Between 1991 and 2001, all consecutive coroners' files on domestic homicide in Québec, Canada, were reviewed, and 77 child victims of 60 male parent perpetrators were identified. The results support data indicating that more fathers commit filicide than do mothers. A history of family abuse was characteristic of a substantial number of cases, and most of the cases involved violent means of homicide. Filicide was frequently (60%) followed by the suicide of the perpetrator and more so (86%) in cases involving multiple sibling victims. The abuse of drugs and alcohol was rare. At the time of the offense, most of the perpetrators were suffering from a psychiatric illness, usually depressive disorder. Nearly one-third were in a psychotic state. The proportion of fatal abuse cases was comparatively low. Many of the perpetrators had had contact with health professionals prior to the offense, although none had received treatment for a psychiatric illness.

J Am Acad Psychiatry Law 33:354–60, 2005

The incidence of filicide more than doubled in Canada between 1988 and 1997. Filicide refers to the murder of a child by a parent. The highest rates of homicide among children younger than 18 years occurs among victims younger than 1 year.¹ Although several studies have found that mothers are more likely than fathers to be the perpetrators in child murder,^{2–14} other data reveal that men commit filicide as often or more often than women.^{15–23} In Canada in 1997, parents were found to be responsible in 65 percent of child homicides, with mothers implicated in 25 (26%) cases. Fathers were the perpetrators in 37 (39%) cases, an increase from a low of 17 percent in 1992.¹

Despite these findings, paternal filicide has attracted limited research and is not well understood. Most studies exploring the nature and etiology of filicide have focused exclusively on child homicides committed by mothers.^{12,24–28} Moreover, few of the studies investigating paternal filicide^{2,6,18,29–32} employed large samples of fathers, limiting the generalizability of results and preventing identification of patterns characteristic of child homicides by fathers. Compounding the problem is the lack of a standardized system of organizing data for the classification of

filicide. Several investigators have proposed general classification systems that categorize cases of filicide based mostly on motives or on the source of the impulse to kill.^{2,9,11,33,34} Although these classifications have been useful in identifying and describing filicide, various problems have become evident over time. One such limitation is the absence of strict criteria, which has led to a considerable overlap between categories, resulting in difficulties in accurate assignment of one case to a specific group. Another shortcoming stems from the exclusion in current classification systems of specific factors as potential predictor variables. For instance, the influence of psychosis in filicide has not been fully considered, despite evidence indicating that a high proportion of perpetrators suffer psychiatric disorders, often with psychotic features.^{2,6,8,11,12,15,21,24,29,35–39} As well, the role of the perpetrator gender differences remains unclear, as some classification systems were applied specifically to maternal offenders.^{9,34} In the absence of a clear delineation of characteristics typical of paternal offenders, however, similarities and differences between genders cannot be established, and the influence of gender differences remains obscured. A more detailed classification of relevant factors would facilitate identification of subgroups and enable a clearer analysis of perpetrators of filicide.

In light of these shortcomings, we²⁴ recently developed a classification system applicable to perpetrators of either gender that takes into account several characteristics of filicide and associated circumstances. We identified five types of filicide offense:

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Table 1 Classification System for Filicide

Classification	Description
Type of filicide	
Mentally ill	Axis I diagnosis present; psychotic or nonpsychotic; infanticide. Mental illness present. Intent may be present.
Fatal abuse	Recurrent or isolated event of neglect or shaken-baby or battered-child syndrome. Mental illness not present. Intent not present.
Retaliating	Associated with revenge and anger. Mental illness not present. Intent present.
Mercy	Child ill with severe or debilitating illness. Not better accounted for by any other category. Mental illness not present. Intent present.
Other/or insufficient information	May include cases with multiple factors.
Unknown	Mental illness may be present. Intent may be present.
Specifiers	
Group A	Associated or not associated with suicide
Group B	Associated or not associated with substance abuse
Group C	Predictable or not predictable

mentally ill, fatal abuse, retaliating, mercy, and other/unknown (Table 1). All types of filicide are specified as either with or without intent—the conscious desire to kill. Mentally ill filicide refers to cases in which the offense is associated with a DSM-IV⁴⁰ major Axis I mental illness active at the time of the filicide. The presence or absence of psychosis as a determinant is documented in this category, as are cases of infanticide, a term used only for mothers to account for postpartum phenomena, hormonal influences, and other nonspecific mental disturbances. Fatal abuse filicide includes cases of child neglect and battered-child and shaken-baby syndromes. This type of filicide is committed without specific intent, and the event cannot meet the criteria for mentally ill filicide. In contrast, retaliating filicide is associated with specific intent to commit murder and can be the result of anger or revenge. Mercy filicide is also committed with specific intent to kill and occurs when the child has a severe and debilitating illness. The parent does not have psychosis, and the event is not better accounted for by any other category. The category of other/unknown is only used when information is insufficient to allow for an accurate classification, and it can include cases with multiple factors. This classification system also allows the inclusion of more specific information related to each case as needed, on the basis of actual case evidence. Cases of filicide can be specified according to whether they are associated with suicide/attempted suicide and substance use. Each case can also be identified as predictable or unpredictable, with the aim of assisting in the future prevention of filicides.

To date, our 2002 filicide classification has been applied only to maternal offenders.²⁴ In this study,

we used this system to categorize filicides committed by a sample of paternal perpetrators of child homicide in the province of Québec, Canada, collected retrospectively over 11 years.

Method

This retrospective clinical study is based on the examination of coroners' files on domestic homicide pertaining to children killed by their fathers in the province of Québec from 1991 to 2001. The study was conducted with the Québec Coroner Head Office. Access to the relevant material was granted authorization by the Quebec Coroner Head Office. The information reported herein is a matter of public record and is exempted from review by an Institutional Review Board. Collection and analysis of the data were performed in an anonymous manner. Seventy-seven cases of paternal filicide were identified, representing the total number of victims of paternal filicide that occurred during this 11-year period. In each case, the coroners' files typically contained information on the victim's characteristics, the circumstances of death, the spatial location of the homicide, and the type of weapon used; the coroner's report for the particular death, including opinion and recommendations; the police investigative report; the autopsy report; and biochemical laboratory findings. Medical records were also part of the files when available and appropriate. From these files we extracted information about circumstances surrounding the homicides, and demographic and clinical factors of victims and perpetrators, to enable categorization according to our classification system.²⁴ All records were reviewed and compiled by the same two inves-

tigators, coroners with a medical specialty in psychiatry.

Results

The frequency of cases of paternal filicide in Québec between 1991 and 2001 is shown in Table 2. Incidences of paternal filicide increased substantially between 1991 and 1996. The frequency of cases fluctuated over the next five years, with highest incidences taking place in 1998 and 2001.

Characteristics of Victims

The 77 victims ranged in age from newborn to 35 years (mean age, 7). At the time of their deaths, 18 of the children (23%) were aged less than 1 year, 20 (26%) between 1 and 5 years, 17 (22%) between 6 and 10 years, and 22 (29%) more than 10 years. Forty-two (55%) of the victims were male. The difference in the number of male and female victims was not statistically significant, based on this sample.

Characteristics of Offenses

Most (91%) of the homicides occurred in the home of the offender. Multiple victims were involved in 14 (23%) of the filicide events. Two siblings were killed in 11 events; in 3 instances, three siblings were killed. There was no instance in which both parents participated in the killing of their children. In 11 (18%) filicides, the offender also killed his spouse. Forty-six (60%) of the total homicides were followed by the suicide or attempted suicide of the offender, with 6 filicidal men surviving their suicide attempt and 26 filicidal men completing suicide. The most common means of fatal assault was the use of a firearm (34%), followed by beating (22%). Details of the methods of homicide are presented in Table 3.

Table 2 Frequency of Paternal Filicides in Québec From 1991 to 2001

Year	Frequency	1 Victim	More Than 1 Victim
1991	2	2	—
1992	2	2	—
1993	6	6	—
1994	4	2	1
1995	9	9	—
1996	15	8	3
1997	6	2	2
1998	11	4	3
1999	5	5	1
2000	2	2	—
2001	15	5	4
Total	77	47	14

Table 3 Means of Homicide

Method	Number of Victims	Percent
Firearm	26	34
Battery	17	22
Knife	9	12
Strangulation	8	10
Blunt instrument	5	7
Carbon monoxide intoxication	2	1
Other intoxication	1	1
Drowning	1	1
Fall	1	1
Other	7	9

Characteristics of Perpetrators

The 77 offenses were committed by 60 fathers who ranged in age from 20 to 76 years (mean, 39). The majority (92%) of perpetrators were white and of Canadian birth (97%). A rupture of the marital relationship had recently occurred for 24 (40%) fathers: 23 through a separation and 1 through becoming a widow. Family violence was indicated in 24 (40%) cases, but in 18 the evidence of violence within the family was inconclusive. Of the cases indicating family violence, 20 (33%) children had been victims of such violence, 1 had inflicted violence, and 3 (5%) had only witnessed it. Drugs and/or alcohol were used by the perpetrator at the time of the offense in only 3 (5%) of 77 cases. One-fourth (27%) of the filicidal men had a history of repeated violent behavior.

The presence of severe psychopathology was determined in 36 (60%) of the 60 fathers. Thirty-one (52%) of the men were suffering from major depressive disorder, six (10%) from schizophrenia or other psychoses, and three (5%) from acute substance intoxication. Over half (54%) of the fathers had had contact with others regarding their problems, including medical or psychiatric staff (15%), police/legal staff (8%), family (12%), other (12%), or a combination of medical/psychiatric staff, police/legal staff, or family (8%).

There were 14 cases of multiple deaths involving 31 children. Of these cases, 12 of the fathers also attempted suicide at the time of the offense, with only 2 surviving serious attempts. Five of these fathers left a suicide note, indicating premeditation. Only 1 of the 12 filicidal men involved in homicide-suicide cases did not have a diagnosed mental problem, although he was determined to have been acutely intoxicated at the time of the filicide. Of the others, nine were suffering from a major depressive

Table 4 Classification of Filicide in the Study Sample

Type of Filicide	Cases
Mentally ill	49
With psychotic intent	28
Fatal abuse	19
Retaliating	2
Mercy	0
Other/unknown	7

disorder and two from psychosis. Three of the fathers had previously contacted psychiatric staff regarding their problems, one had had police/legal contact prior to the offense, and another one had made a prior threat to a spouse. None of the men had a history of suicide attempts/ideation, and there were no indications of family violence. Of the multiple homicide-suicide cases, seven (15 children) involved a firearm as the method of murder; in three cases (6 children), a knife was used; in two (3 children), a blunt instrument; and in one (3 children), strangulation. Another method was used in one case involving two children.

Categorization of our study sample is shown in Table 4. The most frequent classification of these homicides was mentally ill filicide, found in 49 (64%) cases. There were 19 (25%) cases of fatal abuse, 2 (4%) of retaliating filicide, and 6 (8%) in the other/unknown category.

Discussion

In this 11-year review (1991–2001) of coroners' files in Québec, we identified a total of 77 cases of paternal filicide. Fifty-six of the cases occurred between 1991 and 1998. In that same time period, there were 34 cases of maternal filicide in Québec.²⁴ While several older lines of evidence support the assertion that mothers are more likely to be the perpetrators in child murder^{2–14} our results support data indicating that fathers commit filicide more often than do mothers.^{15–23}

Compared with previous reports of factors characteristic of paternal filicide, an analysis of the data shows several similarities. Twenty-three percent of all of the victims in our sample were less than one year of age, in agreement with indications of a high risk of being a homicide victim in this age group^{1,17,20,41–47} and mirroring the number of infants killed by their fathers according to a recent examination of 70 filicides in Finland.⁴⁸ In two (3%) cases, the victim was a newborn. Neonaticide, the killing of an infant in

his or her first day of life, is rarely committed by fathers.² Consistent with results of some studies,^{6,30,48} a higher proportion of children killed by their fathers were male, but the difference between genders in this sample was not statistically significant. Rodenburg⁶ demonstrated that perpetrator gender correlated with victim gender, with fathers more likely to kill boys and mothers tending to kill girls.⁶ Violent methods of killing (i.e., shooting, beating, stabbing, and strangulation) were used in 85 percent of cases, characteristic of other reports of a high frequency of violent means employed by male perpetrators of filicide.^{2,10,19,36,49,50} Our results were also similar to those of other studies reporting a high frequency of completed or attempted suicides following homicides by fathers.^{20,36,43,48,51} In our sample, perpetrators attempted to kill themselves after murdering their children in 60 percent of cases. In the instances involving multiple sibling victims, the majority (86%) of fathers committed suicide after murdering their children.

Analysis of the data additionally reveals differing results compared with those of other studies of paternal filicide. Eleven (18%) of the 60 men in our sample also killed their spouses at the time of the filicide. Other researchers have reported substantially higher incidences of this type of offense (termed familicide) by filicidal men.^{30,36,52} Only 25 percent of cases in our sample were fatal abuse filicides, inconsistent with several reports of a high proportion of cases of fatal abuse by fathers.^{2,32,52,53} By contrast, in a review of 32 deaths of children of families in the U.S. Air Force, Brewster *et al.*⁵³ reported that 84 percent of infants aged between one day and one year were victims of fatal child abuse. Our findings also differ from reports of related substance abuse in cases of paternal filicide,^{11,21,36} as use of drugs and/or alcohol at the time of the offense was indicated in only two cases. Marleau *et al.*³⁶ found that 7 of the 10 filicidal men in their sample had a history of drug and/or alcohol abuse, with four of these men under the influence of psychoactive substances at the time of the offense. Somander and Rammer²¹ also noted a high frequency of alcohol abuse in their review of 41 paternal offenders, particularly in the 30 men who committed suicide following the homicide.

Prior abuse of a child by a parent is a clear indication of risk of filicide,^{17,41,43,45,48,53–55} particularly when the abuse is perpetrated by fathers.^{53,55} In our sample, there was conclusive evidence of a history of

family violence in 24 (40%) cases, with inconclusive evidence in another 18 cases. Of those 24 cases, 17 (70%) were classified as fatal abuse filicide. Although this might seem consistent with indications that many filicides are the outcome of anger that escalates into a fatal assault against the child,⁵⁶ as 30 percent of the cases in our sample involving previous family violence were not fatal abuse filicide, it seems important to consider the association of other factors, including existing psychopathology, in the perpetration of paternal filicide. Common forms of psychiatric disorders have been found frequently in both women and men who have murdered their children.^{2,6,8,11-12,15,21,24,29,35-39} While evidence is insufficient to identify a specific type of psychiatric disorder that increases the likelihood of the occurrence of filicide, depressive disorders and schizophrenia or other forms of psychosis have been found frequently in filicidal parents,^{2,12,15,24,29,36,39} and relations between the illness and homicidal motives are often observed in depressed and schizophrenic offenders.⁵⁷ In a study comparing parental and non-parental homicide, Bourget and Bradford¹¹ found that nearly 31 percent of parents who committed filicide had a diagnosis of major depression compared with none of the perpetrators of nonparental homicides. In our examination of maternal filicide cases,²⁴ we found that 22 (81%) of 27 mothers had a diagnosis of major depressive disorder, schizophrenia, or other psychosis. Resnick² found that schizophrenia occurred more often in maternal offenders and that depression with psychotic features was present more than twice as often in filicidal mothers (71%) as in fathers (33%). However, others have reported comparably higher frequencies of psychotic and depressive symptoms among filicidal fathers.^{15,29,36} Campion *et al.*²⁹ and Adelson¹⁵ noted the presence of psychotic features in at least 40 percent of filicidal fathers in their studies.^{15,29} Marleau *et al.*³⁶ found that 7 (70%) of the 10 filicidal fathers in their study had an Axis I disorder, according to DSM-III-R criteria,⁵⁸ including four mood disorders, one dysthymic disorder, one schizophrenia, and one psychosis. Four of the offenders were actively psychotic at the time of the offense. A similarly high incidence of psychiatric illness was characteristic of the fathers in our sample; in 37 (62%) of the 60 perpetrators, a depressive or psychotic disorder was present at the time of the offense. In cases in which the diagnosis was that of depression (31/37), psy-

chotic elements were present in 12 (39%). In total, the presence of psychosis was established in 18 (30%) of 60 of the filicidal fathers or 28 (36%) of 77 of the total number of filicidal acts.

In the series, some cases revealed a very high level of distress and despair, such as the case of an immigrated man whose wife was the main provider for the family. The man's wife had been seemingly healthy, but was urgently hospitalized for a stomach ache, found to have terminal cancer, and died within a week. The father became acutely delusional and killed his three children. Other cases revealed significant social deprivation and lack of coping skills in the parent, such as a poorly educated man with bipolar illness living on welfare. The man lost his temper and smothered his 8-month-old baby, who had been crying continuously. The young victim, who was born prematurely at 34 weeks, had suffered anoxic encephalopathy and was left with severe body deformities and developmental delays.

All three cases of retaliating homicide followed a separation, as did 27 (55%) of the 49 mentally ill filicides.

The numerous reports of an association with pre-existing psychiatric disorders clearly indicate the necessity of identifying existing psychopathology in filicidal parents. The importance of making such an identification is compounded by indications that a significant number of homicidal parents come to the attention of psychiatrists or other health professionals prior to the offense.^{2,9,55} In an investigation of 48 cases of child homicide by parents or parent substitutes, Wilczynski⁵⁵ found that two-thirds of the male and female offenders had had contact with professional agencies prior to the homicide. While some of the offenders' reasons for contacting agencies included concerns about their perpetration of physical abuse, the most frequent reason was concern over their mental health.⁵⁵ In our sample of 27 maternal offenders,²⁴ we reported that almost half of the women had contacted others regarding their problems prior to the offense, including doctors or psychiatrists. Similarly, over half of the fathers in our sample had had previous contact with doctors, psychiatrists, and/or other professionals. However, none had had treatment for a psychiatric illness.

Offenders with prior professional agency contact may be more likely to perpetrate violence on the child before the homicide. Wilczynski⁵⁵ found a history of previous violence in almost two-thirds of the

cases with prior agency contact, while one-fourth of the cases had had no such contact.⁵⁵ Of the 19 offenders in our sample who were determined to have had agency contact prior to the filicide, 12 (63%) had a history of violence toward their children and 7 (37%) had not been violent toward their children.

To summarize our results, a high proportion of victims were aged less than one year, with more male than female victims. Neonaticide was rare. A history of family abuse was characteristic of a substantial number of cases, and most of the cases involved violent means of homicide. Filicides were frequently followed by the suicide of the perpetrator, particularly in cases involving multiple sibling victims. The abuse of drugs and alcohol was rare. At the time of the offense, most of the perpetrators were suffering from a psychiatric illness, usually depressive disorder. Nearly one-third were in a psychotic state. The proportion of fatal abuse cases was comparatively low. Many of the perpetrators had had contact with health professionals prior to the offense, although none had received treatment for a psychiatric illness.

Our findings provide insights into the nature of paternal filicide, a phenomenon that is not well understood. However, potential limitations of the study should be acknowledged. While it is based on a review of coroners' files and includes all paternal filicides in Québec over a period of 11 years, the study is limited by the fact that it is a retrospective post-mortem analysis. Because of missing data in some cases, we were unable to explore a possible relationship between the filicidal act and a history of family violence. Another shortcoming of our study concerns the relatively small sample size, which limits extension of results to the population of filicide perpetrators. In the same vein, as the study was conducted in Canada, it is possible that the findings are not generalizable to other countries.

Prevention of filicide begins with the identification of high-risk families and the delineation of precipitating factors involved in each particular situation. In our sample, most of the filicidal fathers had a psychiatric illness, mainly depressive disorder, and recent marital separation and a history of family abuse were common. While prediction is complicated by the fact that such factors are widespread in the population without leading to filicide and may result in significant overprediction, it is evident from our study that many of the filicidal fathers failed to get help, despite the fact that some had sought help

from others, including health care professionals, prior to the killing. Filicide deserves a high level of professional attention to identify high-risk families and to develop appropriate intervention strategies. Early recognition of psychiatric illness is essential. The possibility of homicidal tendencies in depressed fathers, particularly when suicidal ideation is indicated, should be assessed systematically as part of any psychiatric evaluation. Direct questions as to the status of the marital relationship and family violence and child abuse may help to identify fathers at risk for filicide.

The importance of obtaining a clear understanding of paternal filicide is underscored by indications that a high proportion of child homicides are perpetrated by fathers. While additional research is necessary to enable the development of predictive criteria for paternal filicide, it is hoped that this review will be useful in the development of a clearer profile of men who commit filicide. To that end, we have attempted to extract relevant factors by using a classification system²⁴ that takes into account several characteristics of filicide and associated circumstances. Testing this system in a sample of paternal offenders may aid future research investigating parental filicide and increase its value to clinicians. As prevention and treatment of filicidal behavior implies the recognition of causes involved in each particular situation, a clear characterization of men who kill their children could facilitate the identification of risk and enable effective intervention strategies.

Acknowledgments

The authors thank the Québec Coroner's Office and dedicated staff for having rendered this research possible.

References

1. Statistics Canada: Family violence: a statistical profile, 1997. Ottawa, Ontario, Canada: Statistics Canada, 1999
2. Resnick PJ: Child murder by parents: a psychiatric review of filicide. *Am J Psychiatry* 126:73-82, 1969
3. Resnick PJ: Murder of the newborn: a psychiatric review of neonaticide. *Am J Psychiatry* 126:1414-20, 1970
4. Piers MW: Infanticide. New York: W. W. Norton, 1978
5. Tuteur W, Gloptzer J: Murdering mothers. *Am J Psychiatry* 116: 447-52, 1959
6. Rodenburg M: Child murder by depressed parents. *Can Psychiatric Assoc J* 16:41-9, 1971
7. Hemphill RE: Infanticide and puerperal mental illness. *Nurs Times* 3:1473-5, 1967
8. Harder T: The psychopathology of infanticide. *Acta Psychiatr Scand* 43:196-245, 1967
9. d'Orban PT: Women who kill their children. *Br J Psychiatry* 134:560-71, 1979

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10. Jason J: Child homicide spectrum. *Am J Dis Child* 137:578–81, 1983
11. Bourget D, Bradford JMW: Homicidal parents. *Can J Psychiatry* 35:233–8, 1990
12. Myers SA: Maternal filicide. *Am J Dis Child* 120:534–6, 1970
13. Copeland AR: Homicide in childhood: the Metro-Dade County experience from 1956 to 1982. *Am J Forensic Med Pathol* 6:21–4, 1985
14. Kaplun D, Reich R: The murdered child and his killers. *Am J Psychiatry* 133:809–13, 1976
15. 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
16. Adelson L: Pesticide revisited: the slaughter continues. *Am J Forensic Med Pathol* 12:16–26, 1991
17. Fornes P, Druille L, Lecomte D: Childhood homicide in Paris, 1990–1993: a case report of 81 cases. *J Forensic Sci* 40:201–4, 1995
18. Krugman RD: Fatal child abuse: analysis of 24 cases. *Pediatrician* 12:68–72, 1985
19. Marks MN, Kumar R: Infanticide in England and Wales. *Med Sci Law* 33:329–39, 1993
20. Marks MN, Kumar R: Infanticide in Scotland. *Med Sci Law* 36:299–305, 1996
21. Somander LKH, Rammer LM: Intra- and extra-familial child homicide in Sweden 1971–1980. *Child Abuse Negl* 15:45–55, 1991
22. Wright C, Leroux JP: Les enfants victimes d'actes criminels violents. *Juristat* 11:1–13, 1991
23. Farooque R, Ernst FA: Filicide: a review of eight years of clinical experience. *J Natl Med Assoc* 95:90–4, 2003
24. Bourget D, Gagné P: Maternal filicide in Québec. *J Am Acad Psychiatry Law* 30:345–51, 2002
25. Marleau JD, Roy R, Laporte L, *et al*: Homicide d'enfants commis par la mère. *Can J Psychiatry* 40:142–9, 1995
26. Alder CM, Baker J: Maternal filicide: more than one story to be told. *Women Crim Just* 9:15–39, 1997
27. Smithey M: Infant homicide at the hands of the mothers: towards a sociological perspective. *Dev Behav* 18:255–72, 1997
28. Laporte L, Poulin B, Marleau J, *et al*: Filicidal women: jail or psychiatric ward? *Can J Psychiatry* 48:94–8, 2003
29. Champion JF, Cravens JM, Covan F: A study of filicidal men. *Am J Psychiatry* 145:1141–4, 1988
30. Daly M, Wilson MI: Homicide. New York: Aldine de Gruyter, 1988
31. Daly M, Wilson MI: Some differential attributes of lethal assaults on small children by stepfathers versus genetic fathers. *Ethol Sociobiol* 15:207–17, 1994
32. Scott PD: Parents who kill their children. *Med Sci Law* 13:120–6, 1973
33. Guileyardo JM, Prahlow JA, Barnard JJ: Familial filicide and filicide classification. *Am J Forensic Med Pathol* 20:286–92, 1999
34. Scott PD: Fatal battered baby cases. *Med Sci Law* 13:197–206, 1973.
35. West DJ: *Murder Followed by Suicide*. London: Heinemann, 1965
36. Marleau JD, Poulin B, Webanck T, *et al*: Paternal filicide: a study of 10 men. *Can J Psychiatry* 44:57–63, 1999
37. Button JH, Reivich RS: Obsessions of infanticide. *Arch Gen Psychiatry* 27:235–40, 1972
38. McGrath P: Maternal filicide in Broadmoor Hospital. *J Forensic Psychiatry* 3:271–97, 1992
39. McKee GR, Shea SJ: Maternal filicide: a cross-national comparison. *J Clin Psychol* 54:679–87, 1998
40. American Psychiatric Association: *Diagnostic and Statistical Manual of Mental Disorders* (ed 4). Washington, DC: American Psychiatric Association Publishers, 1994
41. Browne K, Lynch M: The nature and extent of child homicide and fatal abuse. *Child Abuse Rev* 4:309–16, 1995
42. Grimmins S, Langley S, Brownstein HH, *et al*: Convicted women who have killed children: a self-psychology perspective. *J Interpers Violence* 12:49–69, 1997
43. Crittenden P, Graig S: Developmental trends in the nature of child homicide. *J Interpers Violence* 5:202–16, 1990
44. Nixon J, Peran J, Wilkey I, *et al*: Social class and violent child death: an analysis of fatal non-accidental injury, murder, and fatal child neglect. *Child Abuse Negl* 5:111–6, 1981
45. Sabotta EE, Davis RL: Fatality after report to a child abuse registry in Washington State, 1973–1986. *Child Abuse Negl* 16:627–35, 1992
46. Schloesser P, Pierpont J, Poertner J: Active surveillance of child abuse fatalities. *Child Abuse Negl* 16:3–10, 1992
47. Schmidt P, Grass H, Madea B: Child homicide in Cologne (1985–1994). *Forensic Sci Int* 79:131–44, 1996
48. Vanamo T, Kauppi A, Karkola K, *et al*: Intra-familial child homicide in Finland 1970–1994: incidence, causes of death and demographic characteristics. *Forensic Sci Int* 117:199–204, 2001
49. Byard RW, Knight D, James RA, *et al*: Murder-suicides involving children: a 29-year study. *Am J Forensic Med Pathol* 20:323–7, 1999
50. Adinkrah M: Men who kill their own children: paternal filicide incidents in contemporary Fiji. *Child Abuse Negl* 27:557–68, 2003
51. Cooper M, Eaves D: Suicide following homicide in the family. *Violence Victims* 11:99–112, 1996
52. Stanton J, Simpson A: Filicide: a review. *Int J Law Psychiatry* 25:1–14, 2002
53. Brewster AL, Nelson JP, Hymel KP: Victim, perpetrator, family, and incident characteristics of 32 infant maltreatment deaths in the United States Air Force. *Child Abuse Negl* 22:91–101, 1998
54. de Silva S, Oates RK: Child homicide: the extreme of child abuse. *Med J Aust* 158:300–1, 1993
55. Wilczynski A: Prior agency contact and physical abuse in cases of child homicide. *Br J Social Work* 27:241–53, 1997
56. Ewing CP. *Fatal Families: the Dynamics of Intrafamilial Homicide*. Thousand Oaks, CA: Sage Publications, 1997
57. Häfner H, Böker W: Mentally disordered violent offenders. *Soc Psychiatry* 8:220–9, 1973
58. American Psychiatric Association: *Diagnostic and Statistical Manual of Mental Disorders* (ed 3, rev). Washington, DC: American Psychiatric Association Publishers, 1987