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# Filicide: A comparative study of maternal versus paternal child homicide

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## ABSTRACT

**Background** *Filicide is the murder of a child by a parent. Historically, filicide was regarded as a female crime, but nowadays, in the West, men have become increasingly likely to be convicted of killing their child. Previous research on filicide has primarily focussed on either maternal or paternal filicide rather than comparing the two.*

**Aim** *The aim of our study is to examine and compare the socio-demographic, environmental and psychopathological factors underlying maternal and paternal filicide.*

**Methods** *Data were extracted from records in a forensic psychiatric observation hospital in Utrecht, in the Netherlands for the period 1953–2004.*

**Results** *Seventy-nine men and 82 women were detained in the hospital under criminal charges in that period, having killed (132) or attempted to kill (29) their own child(ren). Differences between men and women were found with regard to age, methods of killing and motivation underlying the filicide.*

**Conclusions** *The categories of filicide identified corresponded to those in studies from other countries, indicating that filicide follows similar patterns throughout the Western world. The fact that 25% of fathers had killed in reaction to threatened separation or divorce, and that over a third of men and more than half of the women were mentally ill at the time may suggest that increased monitoring by primary care physicians under such circumstances might have preventive value. Copyright © 2008 John Wiley & Sons, Ltd.*

## Introduction

Filicide is a term used to denote the killing of one's child. Subcategories are neonaticide, when the victim does not survive the first 24 hours of life (Resnick, 1970), and infant homicide when the child is under one year at the time of death. In some countries infanticide is a verdict which applies only to the mother.

In previous centuries filicide was used to control family size and weed out weak, abnormal, deformed and illegitimate children, and to limit the number of females. Although the killing of unwanted female children still occurs in non-industrialized countries (Coale and Bannister, 1994; Das Gupta and Bhat, 1997; Johansson and Nygren, 1991; Yi et al., 1993), filicide of both sexes is still an important cause of infant mortality in wealthy parts of the world (Stanton et al., 2000). In the Netherlands, filicide occurs eight to nine times a year (Nieuwbeerta and Leistra, 2007). Whereas historically filicide has been recognized as a crime predominantly committed by women, nowadays men have become increasingly likely to be convicted of these crimes (Alder and Polk, 2001; Bourget and Bradford, 1990; Campion et al., 1988; Malmquist, 1980; Somander and Rammer, 1991; Vanamo et al., 2001).

Several filicide classification systems have been advanced. The first typologies were based exclusively on maternal filicides (e.g. Resnick, 1969; Scott, 1973; D'Orban, 1979). More recent typologies also acknowledged the role of male perpetrators (e.g. Bourget and Bradford, 1990; Guileyardo et al., 1999; Bourget and Gagné, 2002). Due to the relative simplicity and all-encompassing nature of Bourget and Bradford's (1990) classification system, this will be used in our study. A sub-category of 'psychotic filicides' was added in order to refer to those parents who were driven mainly by a psychotic motive when killing their child.

The first category in Bourget and Bradford's (1990) typology entails pathological filicide, characterized by a determining role of severe psychopathology in the perpetrator. This category includes altruistic filicides, extended suicides and psychotic filicides. Here, altruism refers to the motive of relieving the child of real or imagined suffering. In extended suicides, the child is considered as an extended part of the self that is taken along in death. In this case, a suicide or an attempt to suicide follows the filicide. Psychotic filicides are motivated by psychotic symptoms in the perpetrator. The second category of filicide deals with accidents, although often covers fatal abuse. Here, the death of the child is not the intention of the perpetrator; rather, it was an unwanted result of excessive physical maltreatment or neglect. The subcategory 'battered child' implies repeated serious assaults, with ending the child's life. A third category, neonaticide, refers to the killing of a newborn. Women committing neonaticide tend to deny that they are pregnant, are afraid of discovery of the pregnancy and/or assume that the child is stillborn (Haapasalo and Petäjä, 1999; Herman-Giddens et al., 2003; Koenraadt, 2003; Spinelli, 2001). The fourth and final category in this classification system includes retaliatory filicides, committed out of revenge towards the partner. Its perpetrators are sometimes referred to as suffering from the 'Medea complex' (Babatzanis and Babatzanis, 1991), referring to the ancient myth in which Medea sought revenge against her unfaithful husband Jason by killing their children.

Previous research has shown that mothers are overrepresented in cases of infant homicide (Bourget et al., 2007). Neonaticides are almost exclusively com-

mitted by mothers (Herman-Giddens et al., 2003; Koenraadt, 2003; Spinelli, 2001), whereas fathers are the most frequent perpetrators of filicide in later childhood (Bourget and Gagné, 2005; Marks and Kumar, 1996) and filicide in the context of killing or attempting to kill the entire family – also termed ‘familicides’ (Dubé et al., 2005; Léveillé et al., 2007; Wilczynski, 1997). Wilczynski (1997) found that fathers are more likely to use weapons in committing the offence. Filicidal fathers are generally found to be older than filicidal mothers (Bourget et al., 2007). Some studies report mothers to be more likely to kill girls and fathers to be more likely to kill boys (Daly and Wilson, 1988; Wilczynski, 1997). In addition, fathers more often than mothers kill their children after abuse or in retaliation (Bourget and Bradford, 1990; Bourget and Gagné, 2002; Dubé et al., 2005; Lewis and Bunce, 2003; Rohde et al., 1998). Recent studies have found that fathers are more often perpetrators of filicide followed by suicide (Byard et al., 1999; Cooper and Eaves, 1996; Hatters Friedman et al., 2005; Marzuk et al., 1992; Shackelford et al., 2005). Although the role of serious mental disorders such as depressive and psychotic disorders has been noted in both maternal and paternal filicide, these disorders are found to be more pronounced among female perpetrators when compared to male perpetrators (Bourget and Bradford, 1990; Bourget and Gagné, 2002, 2005; Lewis and Bunce, 2003; Stanton and Simpson, 2002).

Although there has, then, been some recent direct comparison between mothers and fathers who kill their children (e.g. Dubé et al., 2005; Léveillé et al., 2007), most studies focus on the characteristics of either male or female perpetrators (Bourget and Bradford, 1990; Campion et al., 1988; D’Orban, 1979, 1990; Malmquist, 1980; Marks and Kumar, 1996; Marleau et al., 1999; McGrath, 1992; Oberman, 2003; Somander and Rammer, 1991). Our aims in this study were to examine both maternal and paternal filicide and attempted filicide, comparing victim, offence and perpetrator characteristics.

## Methods

This is a retrospective clinical study and constitutes a part of a larger research project on domestic homicide in the Netherlands (see also Koenraadt and Liem, 2005). This study is based on the examination of clinical records in a forensic psychiatric observation hospital in Utrecht, between 1953 and 2004. This hospital has a national function. The records contain information on the social environment of the accused person, a report of his or her behaviour on the ward, a short medical examination, a psychological and a psychiatric assessment (Koenraadt, 1992; Koenraadt et al., 2007).

Filicides are defined as the killing of a child by a biological, step, foster or adoptive parent. In the period 1953–2004, 161 such persons were charged with completed ( $N = 132$ ) or attempted filicide ( $N = 29$ ). Although there is a clear judicial division between fatal and non-fatal attacks, from a forensic mental

health perspective those accused of a fatal crime may resemble those accused of an attempted fatal crime. The lethality of the act is typically beyond the influence of the perpetrator (Koenraadt, 1996). We therefore included attempted as well as completed filicides. A total of 161 subjects were related to 154 cases, this was because both parents were occasionally involved, including one of the eight cases of neonaticide. We deal throughout with the number of perpetrators rather than the number of cases. It has to be emphasized that the individuals included in the study were unconvicted at the time their data were recorded. Later examination of court files confirmed that all were subsequently convicted. The authors reviewed all files to extract information concerning demographic, situational and psychiatric factors. Inter-rater reliability was measured by testing for correlations in independent observations of behaviours. The average correlation coefficient was 0.84 (range 0.79–0.88). Motives were analysed using Bourget and Bradford's (1990) classification scheme discussed earlier. Cases were classified according to the most prevalent motive. For example, if an individual killed the child in a psychotic state, believing that the child was better off dead, the case was coded as a psychotic filicide, rather than as an altruistic filicide. Psychopathological factors were coded according to the DSM-IV-TR. Although many older files did not incorporate explicit DSM (Diagnostic and Statistical Manual of Mental Disorders) diagnoses, the files contain enough detailed information to allow for a retrospective DSM diagnosis.

## Results

### *Victim characteristics*

A total of 161 perpetrators killed 309 child victims, of whom eight were victims of neonaticide. Of the other victims reported in this study, just over half (55%) were male. At the time of the offence 144 (49%) were under one year old; 66 (23%) were aged between one and five; 71 (24%) were aged between five and 18 and a tiny minority of 10 (3%) was aged over 18. Boy victims predominated in all age categories.

### *Offence characteristics*

In 16 filicides (10%), the perpetrator also killed his/her (estranged) spouse. With one exception, these familicides were committed by men. All were biological parents of the child victims. Factors underlying these cases included fear of abandonment by the perpetrator's spouse, marital conflicts or financial problems. Table 1 shows the methods of homicide. Men were significantly more likely than women to have used a weapon [ $\chi^2$  (1,  $N = 160$ ) = 8.20,  $p < 0.01$ ].

Table 1: Homicide method used in the filicide according to gender

Homicide method	Gender					
	Male		Female		Total	
	N	Percentage	N	Percentage	N	Percentage
Firearm	3	4	0	0	3	2
Pointed weapon	20	25	12	15	32	20
Physical maltreatment	24	30	14	17	38	24
Striking weapon	7	9	3	4	10	6
Poisoning	1	1	8	10	9	6
Arson	2	3	1	1	3	2
Strangulation	18	23	41	50	59	37
Other	2	3	2	2	4	2
Total (including missing)	79		82		161	

*Perpetrator characteristics*

The 154 offences were committed by 161 perpetrators, 82 women and 79 men. Most perpetrators were biological parents of the victims (86%). The 18 of the 19 step-parents were male. The group of step-parents was too small for separate statistical analysis, however it is worth noting that nearly two-thirds (11) of the step-parents killed after maltreating the child but only 19% (26) of the biological parents. Most perpetrators were unemployed or worked in low-skilled jobs. The age range of male perpetrators was 19 to 72 years, and of females 18 to 58 years. Female perpetrators ( $30.5 \pm 7.8$ ) were younger than male perpetrators ( $34.2 \pm 10.0$ ) [ $F = 6.934$   $df = 1$ ;  $p < 0.05$ ]. Men victimized older children compared to women [ $6.5 \pm 7.5$  and  $4.3 \pm 5.3$ , respectively, ( $F = 4.238$ )  $df = 1$ ;  $p < 0.05$ ]. Women were not, however, found to be significantly more likely to kill victims under one year of age. There was no significant difference between male and female perpetrators in relation to the sex of the victim [ $\chi^2$  (1,  $N = 144$ ) = 0.43,  $p > 0.05$ ].

Categorization of the motives underlying the offence is displayed in Table 2. Female perpetrators predominated in the categories of neonaticide and or pathological filicide. The women had been significantly more likely to suffer from psychosis compared to men [ $\chi^2$  (1,  $N = 159$ ) = 6.92,  $p < 0.05$ ], but no gender difference was found concerning the frequency of depressive disorders. In Table 3 the prevalence of Axis I and Axis II disorders according to the DSM-IV-TR is displayed in male and female filicidal offenders. Accidental filicides and retaliating filicides were predominantly committed by males [ $\chi^2$  (7,  $N = 159$ ) = 19.77,  $p < 0.01$ ].

Table 2: Classification of filicide according to gender

Motive	Gender					
	Male		Female		Total	
	N	Percentage	N	Percentage	N	Percentage
Pathological filicide	29	37	46	56	75	47
Altruism	6	8	7	9	13	8
Extended suicide	12	17	18	20	30	19
Psychotic	11	14	21	26	32	20
Accidental filicide	25	32	17	21	42	26
Battered child	21	27	13	16	34	21
Other	4	5	4	5	8	5
Neonaticide	2	3	7	9	9	6
Retaliating filicide	19	24	4	5	23	14
Other	4	5	5	6	9	6
Total (including missing)	79		82		161	

Note: This filicide classification scheme is based on Bourget and Bradford (1990).

Table 3: Mental disorder in filicide according to gender

Type of mental disorder	Gender					
	Male		Female		Total	
	N	Percentage	N	Percentage	N	Percentage
No diagnosis on Axis I or Axis II	6	8	7	9	13	8
Only Axis I diagnosis	18	23	10	12	28	17
Only Axis II diagnosis	32	41	33	40	65	40
Axis I and Axis II diagnoses	23	29	30	37	53	33
Missing	0	0	2	2	2	1
Total (Including missing)	79		82		161	

## Discussion

### Findings

Most of the findings in our study corresponded to those reported elsewhere, but our study adds useful weight to the literature because of the size of the sample and the relative richness of the available data. Moreover, a study comparing both

maternal and paternal filicide has never previously been conducted in the Netherlands.

In all age categories, male victims predominated, a finding consistent with other studies (Bourget and Bradford, 1990; Cummings and Mueller, 1994; Marks, 2001). It has been suggested that this effect may be related to the increased physical vulnerability of male infants compared to female infants. Also, it may be a consequence of parental attributions about the infant's behaviour, as male infants are perceived as more aggressive and requiring harsher discipline than female children.

With regard to offence characteristics, it was found that men predominated as perpetrators of family homicides, involving both spouse and child(ren), a finding also reported elsewhere (Dubé et al., 2005; Léveillé et al., 2007; Wilczynski, 1997). This may relate to the concepts of women and children being considered as a man's property, and the lethal violence an attempt to re-establish his patriarchal rights under threat (Daly and Wilson, 1988; Wilson et al., 1995). In these cases, the primary target is his (estranged) spouse, and the children only pawns in this process. The fact that men were more likely to use weapons in the offence compared to women may be interpreted as displaced aggressive impulses from the other parent towards the children.

As in other European studies, female perpetrators were more prevalent than male perpetrators (Marks and Kumar, 1996; Silverman and Kennedy, 1988; Vanamo et al., 2001). The finding that these women were younger than the men, and had a younger victim than male perpetrators could be attributable to inclusion of neonaticides in the study, perpetrators of neonaticide typically being young women.

Consistent with other studies, female perpetrators predominated in the categories pathological filicide and neonaticide (Dubé et al., 2005; Hatters Friedman et al., 2005; Spinelli, 2001), whereas accidental filicides and retaliating filicides were predominantly committed by males – findings also reported elsewhere (Bourget and Bradford, 1990; Bourget and Gagné, 2002; Dubé et al., 2005; Lewis and Bunce, 2003). In contrast to other studies, however, fathers did not predominate in the category of extended suicides. Closer analysis of male-perpetrated extended suicide cases shows that the suicidal men in this study tended to present a pattern of anger and desperation, whereas suicidal women tend to display a pattern of hopelessness and helplessness. One could argue that filicide-suicide perpetrated by men can be considered as primarily homicidal and aimed towards the spouse, whereas filicide-suicide by women resembles primarily a suicide, which is aimed towards the self. Further qualitative research should assess this premise. Finally, corresponding to other studies, it was found that women were significantly more likely to commit the filicide out of psychotic motives (Bourget and Bradford, 1990; Bourget and Gagné, 2002, 2005; Lewis and Bunce, 2003; Stanton and Simpson, 2002).



### *Limitations*

In the study period 1953–2004, we identified a total of 154 filicide cases. Some of these cases included multiple victims and some included multiple perpetrators. Thirty-six cases constituted a fatal filicide occurring in the period 1992–2002. In that same period, there were 70 cases of filicide reported in the Netherlands, 56 of which did not end in the suicide of the perpetrator (Leistra and Nieuwebeerta, 2003; Liem et al., 2007). Hence, 64% of all filicides in the Netherlands in this period were included in the current study sample. Individuals are not sent to the hospital for observation when there are no apparent reasons to assume that psychopathological factors were involved in the offence. Those sent to an observation hospital are already thought to deviate psychologically from other accused persons (Farooque and Ernst, 2003; Haapasalo and Petäjä, 1999; Husain and Daniel, 1984; Marleau, 1995; Marleau et al., 1999; McGrath, 1992). This might have caused an overrepresentation of pathological filicides in our sample as well as an underrepresentation of accidental filicides.

Further, the sampling according to admission to hospital might have caused a relative overrepresentation of female perpetrators compared to male perpetrators, as women tend to be regarded as 'mad' rather than 'bad', and perhaps differentially referred to hospital (Marks and Kumar, 1996).

Similarly, the literature points to a dark figure in epidemiological reports on filicide, particularly concerning the death of a child younger than one year. Such deaths might mistakenly be classified as Sudden Infant Death Syndrome (SIDS) or other Sudden Unexplained Deaths in Infancy (SUDI) (Brookman and Nolan, 2006).

Filicide is rare. Therefore, in order to retrieve enough cases for analysis, we had to draw cases from a very long period of time. Disadvantages of this approach include possible selection differences over time with regard to admission to the hospital as well as the absence of explicit DSM diagnoses in older case files. However, the investigation procedures as well as the type of reporting used in the observation hospital have remained internally consistent over time – increasing the internal validity of the findings.

### **Conclusion**

In this comparative study of men and women who had killed their own children, differences between perpetrators according to gender were apparent in age, reason for the killing and method of attack. The importance of obtaining a clearer understanding of filicide is emphasized by indications that psychopathological factors in the perpetrator play an important role. The finding that a quarter of the filicidal fathers had been motivated by feelings of retaliation towards their partner has important implications for prevention. Primary care physicians may have a special role when aware of threats of separation or divorce. They should also be aware of the risks for depressed and psychotic parents.

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