Maternal filicide, child murder by the mother, may occur alone or as part of a joint filicide–suicide. This study considered differences among 3 groups of mothers who committed filicide: those who did so without a concomitant suicide attempt, those who made a nonfatal suicide attempt, and those who completed suicide. Traditional predictors of completed suicide did not distinguish mothers who completed or attempted suicide from those who did not. Mothers who completed suicide following filicide often had altruistic motives and more frequently utilized firearms. [Brief Treatment and Crisis Intervention 8:283–291 (2008)]

KEY WORDS: suicide, filicide, infanticide.

Maternal filicide, child murder by the mother, may occur alone or in conjunction with maternal suicide. Between 16% and 29% of mothers who commit filicide also commit suicide (Nock & Marzuk, 1999). In addition, approximately 5% of young mothers who commit suicide also commit infanticide (Appleby, 1996; Schalekamp, 2005). Of course, not all mothers who engage in suicidal behavior intend to die; some acts may aim to improve life circumstances or express distress (Canetto & Lester, 1995). In the context of completed child murder, however, nonfatal suicide attempts may represent attempts with lethal intentions, potentially in contradistinction to other nonfatal maternal suicide attempts.

Well-known risk factors for suicide itself include past suicide attempts, substance abuse, intoxication, unmarried status, unemployment, psychosis, and depression (American Psychiatric Association [APA], 2003; Jacobs, Brewer, & Klein-Benheim, 1999). For women, compared to men, though, unmarried status and unemployment are less strongly associated with suicide (Oates, 2003). Feelings of responsibility to the family are protective against suicide (Malone et al., 2000). However, filicide–suicide is a phenomenon that may have considerably different protective and risk factors than those relevant to suicide alone.

Motives for maternal filicide, described by Resnick (1969), include (a) altruistic, murder out of love, in which a mother believes that
her child’s death is in the child’s best interest, for a psychotic reason, for a nonpsychotic reason (such as a child’s terminal debilitating illness), or as part of an extended suicide (when the mother would not abandon her child to the world she is leaving through suicide); (b) **acutely psychotic**, when a psychotic or delirious mother has no comprehensible motive to kill the child; (c) **fatal maltreatment**, the most common overall type of filicide, which is the unplanned final outcome of abuse, neglect, or more rarely Munchausen’s syndrome by proxy; (d) **purposeful killing of an unwanted child**; and (e) **spouse revenge**, such as that committed by the mythological Medea. In an Australian sample, it was noted that sometimes “the mother’s efforts to ‘care’ for the children are reflected in the planning and preparations to ensure that she is successful in her efforts” at filicide–suicide (Alder & Polk, 2001, p. 51). Filicidal mothers who suffered extreme psychiatric disturbances “had much in common with the murderers” (Alder & Polk, 2001, p. 59). Alternatively, the Australian mothers who killed during a fatal physical beating predominantly did so when the child would not stop crying or obey another demand. Their motive would have often fallen into the fatal maltreatment category, and these mothers did not commit suicide (Alder & Polk). Similarly, Holden Burland, and Lemmen (1996), who studied mothers referred for psychological evaluation after filicide, found that none of the mothers whose motives fell into the fatal maltreatment or unwanted child categories attempted suicide.

Planning and preparation for filicide and suicide have been discussed in the literature. Bourget and Gagné’s (2002) Canadian coroners’ sample found that 56% (15/27) of the filicidal mothers committed suicide and four others made suicide attempts. The majority of the mothers who completed suicide left notes indicative of premeditation, whereas none of the mothers with nonfatal suicide attempts left a note. Stanton Simpson, and Wouldes (2000), in a small study of mentally ill maternal filicide offenders, found that although depressed mothers considered filicide for days to weeks, psychotic mothers described little or no warning. Mothers with acutely psychotic motives may spend less time contemplating filicide, and thus, their thinking may not progress to involve a paired filicide–suicide.

Forensic experience suggests that it is physically easier to kill a child than to kill oneself (P.J.R.). However, using the same lethal method for both filicide and suicide is more likely to result in a completed suicide. Particularly, use of firearms may predict whether a suicide attempt is likely to be fatal.

The child’s age may also be an important factor (Friedman, Horwitz, & Resnick, 2005). In Australian and Swedish samples, child victims of filicide–suicide had mean age of 4 and 6 years, respectively (Alder & Polk, 2001; Somander & Rammer, 1991). A Canadian study noted that mothers who killed their older children were more likely to also commit suicide than those who killed their infants (16% vs. 2%; Daly & Wilson, 1988). Considering evolutionary psychology, Daly and Wilson noted that a child’s reproductive value increases from birth to puberty and that older children have a greater expected contribution to parental fitness, so they should be at lower risk of filicide than younger children. This coincides with the finding that the highest risk period for filicide is in the first year of life (Paolozzi & Sells, 2002). Conversely and perhaps also related to evolutionary psychology, a recent study found that mentally ill mothers killed older children (Stone, Steinmeyer, Dreher, & Krischer, 2005). Furthermore, the literature suggests that mothers who commit filicide with suicidal intentions are more likely to kill more of their children (Alder & Polk; Meyer & Oberman, 2001).

Filicide–suicide cases are rarely included in research studies of filicides because samples
are often drawn from jail or psychiatric populations of living mothers (Friedman et al., 2005). Although several studies have investigated filicide–suicide (Alder & Polk, 2001; Bourget & Gagné, 2002; Somander & Rammer, 1991; Vanamo, Kauppo, Karkola, Merikanto, & Rasanen, 2001), differences between mothers who commit filicide and those who commit filicide–suicide have not been comprehensively described. The goal of our analysis was to compare characteristics of three groups of filicidal mothers: (a) mothers who completed filicide–suicide (FS), (b) mothers with psychiatric dispositions who killed their child(ren) and made nonfatal suicide attempts (FAS, filicide with attempted suicide), and (c) mothers with psychiatric dispositions who killed their child(ren) and did not attempt suicide (FO, filicide only).

Demographics, social history, psychiatric history, and substance use history were compared for the groups, with regard to known suicide risk factors. In addition, we hypothesized that (a) mothers who committed FS or FAS would be more likely to have an altruistic filicide motive than the mothers in the FO group; (b) mothers who committed FS would be more likely to use the same method for both acts, especially firearms, than mothers in the FAS group; (c) mothers who committed FS would be more likely to have attempted to kill older children than the other mothers; (d) mothers who completed FS would be more likely to have killed all their children, than mothers in the FO group; and (e) mothers who committed FS would be more likely to have a psychiatric history, including a history of suicide attempts, mental health treatment, and psychiatric hospitalization, than mothers in the other two groups.

Methods

Data were collected by retrospective review of records of (a) mothers who committed filicide followed by suicide (from 1965 to 2002), from the Cuyahoga County Coroner’s Office (Cleveland, OH) and (b) mothers who committed filicide, both with and without an associated nonfatal suicide attempt (from 1974 to 2002), and were found not guilty by reason of insanity (NGRI) in Michigan and Ohio. Nonfatal suicide attempts included, as previously defined by Moscicki (1997), potentially self-injurious acts for which there was evidence that the mother intended suicide. Though the statutes defining NGRI are somewhat dissimilar in the two states, both are predicated on a finding of mental illness. Data were gathered regarding demographics, child and family characteristics, maternal mental illness, maternal developmental and psychosocial characteristics, legal history, substance use history, maternal medical and reproductive history, and characteristics of the offense. Substance use immediately prior to the filicide was ascertained by self-report and/or toxicology screens depending on sample type. Mothers’ motives for the filicides were determined by consensus of the authors (including the originator of the motive classification system, P.J.R.). A more detailed description of factors recorded has been discussed elsewhere (Friedman, Hrouda, Holden, Noffsinger, & Resnick, 2005a; Friedman, Hrouda, Holden, Noffsinger, & Resnick, 2005b). Only mothers who killed their biological children up to age 18 were included in the analyses (Friedman et al., 2005). Analyses of variances, chi-square analyses, and Fisher’s exact tests were completed to compare the three groups.

Results

In total, 49 mothers who committed filicide were included in this study. Ten of the mothers also committed suicide (FS), 19 made accompanying nonfatal suicide attempts and were found NGRI for filicide (FAS), and 20 made no concurrent suicide attempt and were found NGRI for filicide (FO).
Table 1 shows the demographics, substance use history, and psychiatric symptom history in the three groups. Across the groups, mean maternal ages ranged from the late 20s to the early 30s. Mothers who committed FS were more likely to be married than those who committed FO ($p = .011$). A significant difference across groups existed regarding a history of problems with alcohol or drugs ($p = .032$ and $p = .015$ respectively), with mothers who committed FAS being most likely to have such a history. Compared to those found NGRI (FAS and FO), mothers who committed FS were less likely to have been noted to be delusional ($p = .001$).

No statistical difference existed between groups regarding employment (which ranged from 18% to 30% of mothers), domestic violence victimization (15%–30%), history of abuse/neglect of the child by any perpetrator (0%–25%), or custody disputes noted (10%–35%). No significant group differences existed regarding substance use in the hours prior to the filicide (10%–30%) or regarding reports of depression (47%–70%). Available information indicated that the two subgroups of mothers found NGRI (FAS and FO) did not differ significantly in regard to experiencing auditory hallucinations (63%–75%) or command auditory hallucinations (53%–55%), though, despite some missing data, there was a trend toward visual hallucinations being more common among mothers in the FO group (11% vs. 40%, $p = .065$).

Table 2 shows the specific factors considered in our hypotheses:

1. As hypothesized, mothers who committed FS or FAS were more likely than mothers in the FO group to have an altruistic motive for the filicide ($p = .007$). Whereas mothers with FAS frequently had altruistic motives, others had acutely psychotic incomprehensible motives.

2. Mothers in the FS group were more likely than those in the FAS group to use the same method for both acts ($p = .011$). Mothers sometimes used more than one method for filicide and suicide. Seventy percent of the mothers who committed filicide–suicide shot their offspring, compared with only 13% of those in the other groups ($p = .001$).

3. The mean age of the child victims (of filicide and attempted filicide) was, as hypothesized, older for the mothers in the FS group ($5.9 \pm 3.1$ years) compared with the FO group ($3.1 \pm 3.6$ years), though neither group differed significantly from the FAS group of mothers ($4.3 \pm 3.8$ years).

4. Contrary to this hypothesis, mothers who committed FS were not significantly more likely to kill all their minor children. The
majority (55%–70%) of each group attempted to kill all their minor children. Significant differences did occur in whether mothers succeeded in killing all their children; mothers with nonfatal suicide attempts (FAS) were similarly nonfatal in some filicide attempts. Six of 19 mothers (32%) with nonfatal suicide attempts similarly had a nonfatal filicide attempt in addition to a completed filicide, compared with only one mother (10%) in the FS group and no mothers in the FO group ($\chi^2 = 8.124$, $p = .017$).

5. The majority of mothers in each group had previous mental health treatment (70%–79%). Contrary to our hypothesis, women who committed FS had a trend toward being less likely to have had a known previous psychiatric hospitalization. Mothers found NGRI who had previous suicide attempts were significantly less likely to attempt suicide with their filicide ($p = .038$). There were no significant differences in the likelihood of planning suicide, however. Of note, 30% of the mothers with FO reported that they had planned to make a suicide attempt but did not do so.

### Discussion

This study compared characteristics of mothers who committed filicide–suicide (FS) with those of mothers who were found NGRI for committing filicide, with and without concomitant suicide attempts (FAS and FO, respectively). The majority of all mothers had prior mental health treatment. Some mothers had planned a suicide attempt along with their filicide but did not follow through with the attempt. Mothers who committed FS were more likely to have an altruistic motive for the filicide, use the same method for both acts (particularly firearms), kill older children, and be married, than the other mothers. Married women are ordinarily at lower relative risk of suicide than unmarried women, and raising a child younger than 18 years further

<table>
<thead>
<tr>
<th>Factor</th>
<th>FS ($n = 10$)</th>
<th>FAS ($n = 19$)</th>
<th>FO ($n = 20$)</th>
<th>$p$ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motive, if known: altruistic</td>
<td>100% (9)</td>
<td>78% (14)</td>
<td>37% (7)</td>
<td>$\chi^2 = 13.944$, $p = .007$</td>
</tr>
<tr>
<td>Acutely psychotic</td>
<td>0</td>
<td>22% (4)</td>
<td>47% (9)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>16% (3)</td>
<td></td>
</tr>
<tr>
<td>Same vs. different method of filicide and suicide attempt</td>
<td>100% (10)</td>
<td>53% (10)</td>
<td>NA</td>
<td>Fisher’s exact test, $p = .011$</td>
</tr>
<tr>
<td>Mean age of child victims</td>
<td>$5.9 \pm 3.1$ years ($n = 21$ victims)</td>
<td>$4.3 \pm 3.8$ years ($n = 28$ victims)</td>
<td>$3.1 \pm 3.6$ years ($n = 25$ victims)</td>
<td>$F = 3.526$, $p = .035$</td>
</tr>
<tr>
<td>Attempted to kill all offspring younger than 18 years</td>
<td>70% (7)</td>
<td>58% (11)</td>
<td>55% (11)</td>
<td>NS</td>
</tr>
<tr>
<td>Previous known admissions to psychiatric hospital</td>
<td>20% (2)</td>
<td>37% (7)</td>
<td>60% (12)</td>
<td>$\chi^2 = 4.814$, $p = .09$</td>
</tr>
<tr>
<td>Previous known suicide attempt</td>
<td>20% (2)</td>
<td>26% (5)</td>
<td>60% (12)</td>
<td>$\chi^2 = 6.522$, $p = .038$</td>
</tr>
</tbody>
</table>

Note. FS = maternal filicide–suicide; FAS = filicide with attempted suicide; FO = filicide only (without suicide attempt); NS = not significant.
reduces the risk of suicide (Gold, 2006; Hoyer & Lund, 1993). However, in our sample the opposite occurred. Largely, mothers in the FO group were single, whereas those in the FS group were often married. Often, mental health professionals completing risk assessments are comforted by a woman’s marital and parental status. This study suggests that in assessing the potential for filicide–suicide, marital status might not mitigate risk. Though being a mother decreases the relative risk of suicide (Hoyer & Lund; Qin & Mortensen, 2003), maternal status is necessary for filicide to occur.

Other long-term suicide risk factors include depression and psychosis (Simon, 2004). Depression was frequently present. Mothers who committed FS were less likely to be delusional than the other mothers. This may be because nondelusional mothers were more able to plan and execute the dual acts of filicide and suicide. Another potential reason for this finding is the variable recording practices of the coroner’s office, possibly delusional thinking was not identified during police recording, and—unlike the mothers in the other two groups—these mothers were obviously not interviewed about their motives. The presence of auditory command hallucinations appeared unrelated to whether a suicide attempt was made, though accurate information about command hallucinations was not available among those who committed suicide. Perhaps a larger sample with differentiation of themes within the hallucinations would yield a difference (e.g., command hallucinations are more likely to be obeyed if there is a hallucination-related delusion and if the voice is familiar; Junginger, 1990). Though recent substance use is a short-term risk factor for suicide (APA, 2003; Simon), we found no significant group differences; only a minority (10%–30%) used substances just prior to their act. Though unemployment and domestic violence victimization (APA; Friedman & Loue, 2007) increase the risk of suicide attempts overall, no difference occurred among the groups in our sample.

As hypothesized, mothers who committed FS were more likely than those in the FAS group to use the same method of death for both acts. Firearm use was much more prevalent among mothers who completed FS. Considering the lethality of firearms, their use may be the critical factor in whether a filicide with a suicide attempt becomes a completed filicide–suicide. National data reveal that for every completed suicide by firearm, there were only 0.3 firearm-related suicide attempts; firearms are the most common method of fatal suicide by women as well as by men in the United States (Gold, 2006). Although some mothers in our sample had planned a joint filicide–suicide, they did not make a suicide attempt. A mother who intended to commit joint filicide–suicide may experience a “relief of tension” after committing filicide and thus may not attempt suicide (Resnick, 1969).

Regarding our hypothesis, mothers who committed FS were most likely to have an altruistic motive, followed by mothers who committed FAS. Filicidal mothers found NGRI (FAS and FO) were more likely to have acutely psychotic motives than those who committed suicide (FS). An altruistic motive, murder out of love, is consistent with suicidal behavior in a loving mother.

The mean age of the filicide victims was older in the FS group, compared with that of those victims in the FO group. (There was no difference from the FAS group.) This is consistent with the evolutionary theory. The finding would likely be more robust if comparison was also made to a correctional sample of mothers because fatal maltreatment is the most common cause of filicide overall (Adelson, 1991), and fatal maltreatment victims tend to be younger. For a fatal maltreatment filicide–suicide to occur, a mother whose child was unintentionally killed as the outcome of chronic abuse or
neglect would then commit suicide. None occurred in our sample.

In our study, mothers who committed filicide–suicide were not statistically more likely to attempt to kill all their minor children than mothers in the other groups. However, mothers found NGRI are already more likely than those found criminally responsible (guilty) to kill more of their children (Holden et al., 1996), and the majority of all the mothers in our study attempted to kill all their children. This is in distinction to fatal maltreatment filicide in the general population, when, as the “accidental” end result of abuse or neglect, only one child would be likely to be killed. Alder and Polk’s (2001) Australian filicide study found, “consistent with their view of the world and their rationale for taking their own and their children’s lives,” their FS group mothers most often killed all their children. Bourget and Gagné’s (2002) Canadian filicide study found that of their six cases of multiple child deaths, all mothers committed FS. In contrast, Vanamo et al.’s (2001) Finnish study found that of 20 maternal FS offenders, only 2 had killed more than one child.

Unexpectedly, mothers in the FO group were most likely to have a documented history of suicide attempts, whereas mothers in the FS group were less likely to have a prior suicide attempt. A planned and organized first suicide attempt can be lethal; for 50% of women younger than 40 years, the first suicide attempt is fatal (Maris, 1981). It is striking that a first suicide attempt (fatal or not) in these mothers was paired with a fatal filicide. The method chosen may have played an important role. Some mothers made concomitant nonfatal attempts at both additional filicides and suicide.

In this sample, traditional predictors of completed suicide did not distinguish mothers who completed or attempted suicide along with their filicide from those who did not. Mental health professionals completing risk assessments on mothers need to consider mother’s potential for both filicide and suicide. Weapon availability, particularly handguns, should be considered. Motives behind filicidal thinking should also be elicited.

Our study has several limitations. The primary issue is one of the differential results potentially being partially related to differences in the sample types, a frequent issue in filicide studies (Friedman et al., 2005). The amount and quality of psychiatric data varied between the samples (see Bennewith et al., 2005). Because the goal of coroners’ office is to determine the cause of death, they did not always need to collect psychiatric records or perform psychological autopsies. In addition, in order to establish an insanity defense, it behooves the attorney to amass data regarding depression, hallucinations or delusional thinking, compared to the necessity for coroner cases. In addition, coroners’ information often involves second-hand reporting such as from relatives and neighbors rather than extensive psychiatric interviews that often occur when defendants plead NGRI. Some data are certainly accurately assessed across groups (e.g., child age, number of children, method), although other variables have more possibility for error. Specifically, issues such as psychosis, delusional thinking, depression, past suicide attempts, past psychiatric care, and previous substance use may have been underestimated in the maternal FS perpetrators as an artifact of data recording practices. When whole families were lost, less historical data were available. However, coroners’ records did reveal frequent histories of mental health treatment.

Although an optimal sample would include all cases of maternal filicide (including incarcerated mothers), collection of data solely from the coroner’s office, which would have identified all filicides (without any suicide attempts), may not have yielded complete psychiatric information regarding mothers. Not including
mothers who were found guilty of filicide and incarcerated biased our sample: away from those with fatal maltreatment and unwanted child motives. Our study groups included those who completed suicide and those with psychiatric dispositions, yet all mothers with psychiatric illness would not have been captured in our sample because not all mentally ill perpetrators are granted psychiatric dispositions. Nonetheless, mothers in the filicide–suicide group still differed significantly in their motives, compared to the hospitalized groups. It is also possible that, on occasion, the data collected in FS cases may have been seen in a more favorable light due to the differences in quality of psychiatric information gathered, though we attempted to guard against any effect on the assignment of motives by using the consensus of the authors. Because data collected for the study spanned 38 years, marital status and drug use could be distorted by attitudes toward marriage and drug use in different decades. Unfortunately, sample sizes were not large enough to perform discriminant analyses to build models for predicted outcomes.

However, our study also has major strengths. The sample size is relatively large in the context of the filicide literature. Findings were specific to maternal filicide perpetrators who could potentially be evaluated within the mental health community prior to their acts. Furthermore, strict definitions of child age were used, and cases were reviewed by authors, including the originator of filicide motive classification.

In summary, our study findings confirmed the hypothesis that mothers who committed filicide–suicide or filicide with nonfatal suicide attempts predominantly had altruistic motives. Furthermore, mothers in the completed filicide–suicide group most often utilized firearms. Mothers who committed filicide–suicide killed older children. Some mothers, after killing one child, had further filicide and suicide attempts that were similarly nonfatal. More research is needed to prevent the tragedy of filicide, alone and in combination with suicide.

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References


