Mental illness, gender and homicide: A population-based descriptive study

Sandra Flynn a,⁎, Kathryn M. Abel b, David While a, Hetal Mehta a, Jenny Shaw a

a Centre for Suicide Prevention, Community Based Medicine, 2nd Floor Jean McFarlane Building, University of Manchester, Oxford Road, Manchester, M13 9PL, UK
b Centre for Women's Mental Health, 3rd Floor Jean McFarlane Building, University of Manchester, Oxford Road, Manchester, M13 9PL, UK

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In England and Wales, a lifetime history of mental disorder is recorded in almost a third of homicides but mental illness as a defence in homicide cases has recently come under review. In this study, we aimed to compare the social, criminological and clinical characteristics of women and men convicted of homicide and secondly, to understand how pathways through the judicial system differ by gender of the perpetrator, characteristics of the offence and mental illness. A cross sectional study of 4572 convicted homicide perpetrators in England and Wales 1997–2004 was performed. Significantly more women who had committed homicide had a lifetime history of mental illness and were more likely to be mentally ill at the time of offence compared to men. Women more often received non-custodial sentences, whether or not they had mental illness. If the victim were a child or other relative, the courts were more lenient with women. Gender and the presence of mental illness both influence the characteristics of homicide and outcome of the legal process in the UK. Our findings suggest that all perpetrators of homicide should have a psychiatric assessment pre-trial. Psychiatrists need to rate risk objectively in a gender blind way when providing psychiatric reports to be used as evidence in court.

1. Introduction

Worldwide, violent crime is rarely committed by women (UN, 2000). Women who commit such offences were not thought to pose the same degree of risk to society as men who commit violent crime; in part because their victims are usually their own children or partners (Appleby et al., 2006). Furthermore, it is widely acknowledged that, when women do kill, it is generally in the context of self defence, chronic domestic abuse, or as a consequence of mental illness (Jurik and Winn, 1990). Arguably, it is also culturally unacceptable to consider women as violent killers without the diagnosis of a mental illness (Wilczynski, 1997). As a consequence, there may be an underlying bias towards diagnosing women with abnormal mental states when they commit homicide, and subsequently a bias in the handling of women through the judicial system and their pathways to care.

Women commit approximately 10% of all homicides in England and Wales (Home Office, 2007) and almost a third of homicides were committed by people with a recorded lifetime diagnosis of mental disorder (Appleby et al., 2006). The pattern of homicide committed by women also appears to be different to that committed by men, but there is limited understanding of why this is. Evidence consistently suggests that when women do kill, mental illness is an important feature of the offence. Swatt and He (2006) examined situational factors in intimate partner homicides in Chicago, reporting that women more often experienced physical injury prior to the homicide and were more likely to use a knife to kill their victims than men, suggesting a defensive reaction as a result of previous abuse (i.e. battered women's syndrome). A recent study by Hakkanen-Nyholm et al. (2009) analysed offence characteristics and crime scene behaviour by gender in a sample of Finnish homicides. They found that gender changes the characteristics of the offence including who they killed. Women more often killed a family member; they were less likely to kill in a public place and more often moved and covered the body. Most research has focused on victim specific offences, for example killing of an intimate partner (Swatt and He, 2006) and child homicide (Resnick, 1969). Similarly, studies of infanticide report that mental illness is an important causal factor for women who kill their own child (Resnick, 1969) and in our recent study, up to 50% of women convicted of killing an infant had a lifetime diagnoses of mental disorder (Flynn et al., 2007). One of the largest European studies of female homicide to date included 132 women who underwent forensic psychiatric examination following homicide, attempted murder, or attempted manslaughter (Putkonen et al., 1998). Seventy-two percent of the women were diagnosed with a personality disorder and 61% had previously been under the care of mental health services.

Legislation guiding the management of mentally ill perpetrators of homicide varies greatly between countries. It is not a universal principle that the mental state of the offender diminishes the verdict and outcome in court for those convicted of homicide. Several recent
high profile cases of child homicide in the US and UK illustrate the different approaches to the interface between mental illness and homicide by women. In the US, the jury recently found the 20-year old mother, Karrae Starr, guilty of the first-degree murder of her 3-year old daughter, despite recognising that she was suffering with a mental illness; she received a diagnosis of borderline personality disorder. Starr was sentenced to 32 years in prison and will receive treatment whilst in prison. Also in the US, Melissa Huckaby (age 29) was charged with the abduction, sexual assault and murder of 8-year old Sandra Cantu (a friend of her daughters). Mental illness was not raised as a factor in her defence, despite her alleged previous suicide attempt, recent engagement with a mental health program supervised by the Court, and prescribed antidepressant medication. Following a guilty plea, Huckaby received a life sentence without the possibility of parole, instead of the death penalty. In the UK, a 22-year old mother Maria Kompusova killed her 3-month old son after weeks of abuse. She was cleared of murder but found guilty of manslaughter and received a 5-year jail sentence.

In most countries, an individual can be charged with murder if it is proved that there was intent to kill. If a guilty verdict is reached, a mandatory life sentence is passed and the perpetrator is imprisoned. In some countries (e.g. UK), if intention to kill cannot be shown, the charge of manslaughter can be brought. Similarly, if the perpetrator experienced an “abnormality of mind” at the time of the killing, the court allows for the defence of manslaughter on the grounds of diminished responsibility. A range of non-custodial sentences are available to the courts for individuals found guilty of manslaughter, including probation and hospital orders (with or without restriction) for those suffering from mental illness. In addition, women who were found to have killed an infant less than 12 months old may be charged with infanticide. A woman can use an infanticide defence when it is found that the “balance of her mind was disturbed by reason of her not having fully recovered from the effects of giving birth to the child or by reason of the effect of lactation consequent upon the birth of the child” (Home Office, 2001). Infanticide is recognised as a legally distinct event from murder and manslaughter by 27 countries around the world, but not in the US. Following the tragic cases of Andrea Yates and Dena Schlosser, in March 2009 Texas State Representative Jessica Farrar introduced a Bill calling for infanticide to be recognised by the courts in Texas, which raised debate but failed to become legislation. Perpetrators can also be found not guilty by reason of insanity or unfit to plead, due to mental illness or disability. Where an offence is punishable by imprisonment, but perpetrators have a mental illness, mental impairment or psychopathy that is considered treatable, the individual can be admitted to secure hospital for treatment. In spite of judicial differences between countries, the experience of women who commit homicide in the judicial system is different to that of men in many settings: i.e. in the UK (Hederman and Gelthorpe, 1997); Croatia (Muzinic Masle et al., 2000); Australia (Armstrong, 1999); and in the US (Auerhahn, 2007).

Despite recent public interest and media focus on female homicide perpetrators, there are few population-based studies of women who kill and few examining mental illness and its relationship to outcome. Previous studies have described the patterns and trends of homicide by women, but small sample sizes, biased sampling frames (generally prisons), historical samples, and biased case inclusion criteria make the conclusions from this evidence limited. We wished to address this gap in the literature by examining the characteristics and outcomes of an up to date national sample of women and men convicted of homicide.

The National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (NCI) collates a national database of all perpetrators convicted of homicide, with particular focus on mental illness (e.g. Appleby et al., 2001, 2006; Flynn et al., 2007). Using this national register we are able to construct a sample based on a national consecutive series of homicide convictions in a whole population sample. This allows us to examine whether social, behavioural or mental health characteristics are related to different outcomes.

1.1. Aims of the study

In this study, we used the NCI data first to compare the social, criminological and clinical characteristics of women and men convicted of homicide and secondly, to understand how pathways through the judicial system differ by gender of the perpetrator, characteristics of the offence and mental illness. We hypothesised that women who kill would more commonly experience mental illness at the time of the offence, and therefore be less likely to be convicted of murder than men. We anticipated that, as a result of their mental illness, pleas for diminished responsibility would be more likely to be accepted for women than men.

2. Method

This study is based on a recent 8-year consecutive case series (1997–2004) of all people convicted of homicide in England and Wales using data from the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (NCI) (Appleby et al., 2008).

Data collection has 3 stages. First, the Home Office routinely collate data on those convicted of homicide (murder, manslaughter or infanticide) in England and Wales. From the data, we determined the outcome from court and categorised disposals as prison, hospital disposal and non-custodial sentence (probation/supervision orders). The NCI is notified of all homicide cases within the study period. Records of previous offences were obtained from the Police National Computer. Secondly, psychiatric reports prepared for the trial were obtained. Psychiatric assessments are undertaken and reports written either on the instruction of the defence following arrest or when ordered by the judge at trial. In this sample, psychiatric reports were obtained on 54% of homicides with significantly more reports prepared for women (Table 2). Since 2001, it is no longer mandatory for homicide perpetrators to undergo psychiatric assessment. Consequently, as a proportion of homicide convictions there has been a decrease in reports annually. Although it is possible that perpetrators with mental disorder may be missed, recent evidence from this dataset has shown a significant increase in the number of perpetrators with schizophrenia and those who were mentally ill at the time of the offence (National Confidential Inquiry, 2009). In addition there has been no change in the proportion of reports by sex of the perpetrators, since the law changed. Thirdly, identifying details are submitted to the main hospital and Community Trust in the perpetrator’s district of residence and adjacent districts to identify those with a history of mental health service contact. When the perpetrator’s previous contact with services had been confirmed (17% of the total sample), a consultant psychiatrist or other member of the mental health team is sent a questionnaire to complete relating to the care and treatment received by the patient, including their primary diagnoses at the time they were in contact. The return rate of questionnaires sent to consultant psychiatrists was 96%. Diagnoses are made in accordance with ICD-10 diagnostic criteria (World Health Organisation, 1992). An assessment of the accuracy of hospital checks showed that 97% of patients in contact with services in the previous year were detected (Appleby et al., 2001).

2.1. Ethnicity

Data defining black or minority ethnic group was provided by the Homicide Index. Ethnic status was categorised based on police observation or self reports by the perpetrator to the police and subsequently coded onto the homicide index.

2.2. Statistical analysis

Pearson’s chi square with significance levels set at 5% was used to compare characteristics between women and men convicted of homicide. Where numbers in cells were less than 5, Fisher’s exact test was used. Results were reported using the chi square statistic, confidence intervals, and P values. If an item of information was not known for a case (i.e. data were missing), the case was removed from the analysis of that item. The denominator in all estimates is the number of valid cases.

Logistic regression was used to identify factors (i.e. victim age, relationship to the victim, method of homicide, mental illness and outcome in court) that may predict hospital disposal. Stata 10.0 software (Stata Corp, 2007) was used to calculate odds ratios (OR), 95% confidence intervals and associated P values. Forward stepwise logistic regression was selected as the analytical model. Univariate analyses were first performed to assess the association between individual factors (e.g. the victim was the perpetrator’s son or daughter, a diagnosis of schizophrenia, mental illness at offence, lifetime history of mental illness or received a diminished responsibility verdict) and a hospital disposal, with a multivariate model then fitted to identify independent predictors of hospital disposal. The final regression model included only those variables that were independently significant at the 5% level. The model explained 70% of the variance in the dependent variable.
2.3. Ethical considerations

Ethical approval for the NCI was obtained on 1 October 1996. Exemption was granted under Section 253 of the NHS Act 2006 (originally enacted under Section 60 of the Health and Social Act (2001)) to use confidential and patient identifiable information in the interest of improving patient care without informed consent. This has enabled the NCI to gather information on homicide perpetrators with previous contact with mental health services, where records are available (95%). The study is also registered under the Data Protection Act (1998).

3. Results

Four thousand five hundred and seventy two people in England and Wales were convicted of homicide over an 8-year period, of which slightly less that 10% (n = 446) were women.

3.1. Social, criminological and clinical characteristics by gender

3.1.1. Social characteristics of perpetrators by gender

There were significant differences in the social, criminological and clinical characteristics between female and male perpetrators (Tables 1 and 2). Compared to men who killed, women were slightly, but significantly older: mean age 30 (14–81); men 27 (9–99), more likely to be unemployed and on long term sickness leave. Over half of women were married and only 10% lived alone, whereas men were more likely to be single, living alone or homeless. Men were also more likely to have previous convictions for violence and a history of drug misuse. Significantly more women used a sharp instrument as a method of homicide compared to men.

3.1.2. Criminological characteristics of perpetrators by gender

The relationship between the victims and perpetrators in homicide was significantly different between the genders: nearly a quarter of all the women’s victims were their own children, including stepchildren (Table 1). Over a third of women perpetrators killed a current or former spouse/partner. If other family members (parents, siblings etc.) were included, two thirds of women’s victims were relatives compared to a quarter of men’s. Women were significantly less likely to kill acquaintances or strangers than men.

3.1.3. Clinical characteristics perpetrators by gender

Psychiatric reports were obtained on 54% of homicides. Significantly more reports were prepared for women, and this has remained constant over the study period, both before and after the change in law (Table 2). Of those with psychiatric reports, women were more likely than men to be diagnosed with a lifetime history of mental illness and to have been recorded as experiencing symptoms of mental illness at the time of the offence; most often symptoms of depression. Women were also significantly more likely to have been diagnosed with an affective disorder, personality disorder or alcohol dependence (Table 2) than men. Two thirds of women who killed their child had a lifetime history of mental illness, significantly more than men (67, 66% v. 50, 28%, P<0.01) and over half were assessed as mentally ill at the time of offence, (40, 52% v. 22, 24%, P<0.01). Of these filicide cases, women were significantly more likely than men to have a primary diagnosis of an affective disorder (29, 29% v. 16, 9%, P<0.01) or, schizophrenia (16, 16% v. 7, 4%, P<0.01), and to have experienced delusions (11, 15% v. 5, 5%, P=0.03), and symptoms of

### Table 1

Demographic, behavioural and offence characteristics of women who kill compared to men who kill.

<table>
<thead>
<tr>
<th></th>
<th>Women perpetrators N=446</th>
<th>% valida</th>
<th>95% CI</th>
<th>Men perpetrators N=4126</th>
<th>% valida</th>
<th>95% CI</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographic features</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age of perpetrator: median (range)</td>
<td>30 (14–81)</td>
<td>19</td>
<td>15–23</td>
<td>27 (9–99)</td>
<td>22</td>
<td>21–24</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Black or minority ethnic group</td>
<td>82</td>
<td>48</td>
<td>43–54</td>
<td>1253</td>
<td>62</td>
<td>60–64</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Not currently married/co-habiting</td>
<td>180</td>
<td>65</td>
<td>60–71</td>
<td>1135</td>
<td>57</td>
<td>54–59</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Unemployed/long term sick</td>
<td>27</td>
<td>10</td>
<td>6–14</td>
<td>345</td>
<td>19</td>
<td>18–21</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Homeless</td>
<td>2</td>
<td>1</td>
<td>0–2</td>
<td>62</td>
<td>3</td>
<td>2–4</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td><strong>Behavioural features</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>History of alcohol misuse</td>
<td>130</td>
<td>45</td>
<td>40–51</td>
<td>894</td>
<td>47</td>
<td>45–50</td>
<td>0.53</td>
</tr>
<tr>
<td>History of drug misuse</td>
<td>106</td>
<td>37</td>
<td>31–43</td>
<td>982</td>
<td>51</td>
<td>49–53</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Previous convictions for violence</td>
<td>87</td>
<td>20</td>
<td>16–24</td>
<td>1611</td>
<td>41</td>
<td>39–42</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td><strong>Offence variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Age victim: median (range)</td>
<td>34 (0–92)</td>
<td>28</td>
<td>22–32</td>
<td>1219</td>
<td>30</td>
<td>28–31</td>
<td>0.39</td>
</tr>
<tr>
<td>Female victim</td>
<td>123</td>
<td>23</td>
<td>19–27</td>
<td>176</td>
<td>4</td>
<td>3–5</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Victim was child (inc. step child)</td>
<td>102</td>
<td>36</td>
<td>31–41</td>
<td>675</td>
<td>16</td>
<td>15–18</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Victim was a spouse</td>
<td>160</td>
<td>64</td>
<td>59–68</td>
<td>1106</td>
<td>27</td>
<td>25–28</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Victim was a family member or spouse</td>
<td>284</td>
<td>64</td>
<td>59–68</td>
<td>1106</td>
<td>27</td>
<td>25–28</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Victim was an acquaintance</td>
<td>95</td>
<td>21</td>
<td>18–25</td>
<td>1324</td>
<td>32</td>
<td>31–34</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Victim was a stranger</td>
<td>21</td>
<td>5</td>
<td>3–8</td>
<td>790</td>
<td>24</td>
<td>22–25</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td><strong>Method of homicide</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharp instrument</td>
<td>199</td>
<td>45</td>
<td>40–49</td>
<td>1447</td>
<td>35</td>
<td>34–37</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Blunt instrument</td>
<td>27</td>
<td>6</td>
<td>4–9</td>
<td>476</td>
<td>12</td>
<td>11–13</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Hitting, kicking, causing to fall</td>
<td>33</td>
<td>7</td>
<td>5–10</td>
<td>664</td>
<td>16</td>
<td>15–17</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Strangulation or suffocation</td>
<td>17</td>
<td>4</td>
<td>2–6</td>
<td>296</td>
<td>7</td>
<td>6–8</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Shooting</td>
<td>14</td>
<td>3</td>
<td>2–5</td>
<td>270</td>
<td>7</td>
<td>6–7</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td><strong>Final outcome</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Murder</td>
<td>127</td>
<td>28</td>
<td>24–33</td>
<td>2174</td>
<td>53</td>
<td>51–54</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Manslaughter section 2 (diminished responsibility)</td>
<td>48</td>
<td>11</td>
<td>8–14</td>
<td>191</td>
<td>5</td>
<td>4–5</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td><strong>Disposal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital order</td>
<td>44</td>
<td>10</td>
<td>7–13</td>
<td>237</td>
<td>6</td>
<td>5–7</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Prison</td>
<td>310</td>
<td>70</td>
<td>65–74</td>
<td>3777</td>
<td>92</td>
<td>91–92</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Other non-custodial</td>
<td>97</td>
<td>22</td>
<td>18–26</td>
<td>131</td>
<td>3</td>
<td>3–4</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>

* The denominator is the number of completed items.
depression at the time of offence (34, 46% v. 14, 15%, <0.01). Men were significantly more likely than women to kill a current or former spouse partner. When current or former spouses/partners were the victims, men were significantly more likely than women to be recorded as mentally ill at the time of offence (155, 33% v. 22, 19%; P<0.01).

3.2. Pathways to care

Perpetrators with a lifetime history of mental illness were less likely to receive a prison disposal (1099, 76%, CI 74–78 v. 2988, 96% CI 95–96.5; P<0.01), and more likely to receive a hospital order (267, 18%, CI 16–20 v. 15, 0.5% CI 0–1) or non-custodial sentence (81, 6%, CI 4–7 v. 119, 4% CI 3–4; P<0.01).

3.2.1. Pathways to care by gender of the perpetrator

The pattern of court outcome and disposal of women and men convicted of homicide is shown in Table 1. Overall, data show that, compared with men, women were less likely to receive a verdict of murder and were more often convicted of manslaughter on the grounds of diminished responsibility. Women were more likely to receive a non-custodial sentence (probation/supervision orders) or hospital disposal and less commonly received a prison disposal than men.

3.2.2. Pathways to care by gender and relationship to victim

Fig. 1 examines court outcome by relationship to the victim, by gender. The differences were particularly marked where victims were spouses or children. Women who killed a spouse were significantly less likely to be imprisoned and more likely to receive a non-custodial sentence. When victims were the perpetrators’ son or daughter, men were more often imprisoned, whilst women received a hospital disposal or non-custodial sentence. By analysing the disposal by verdict, significant gender differences were also found (Fig. 2). Men who received a manslaughter verdict were more likely to go to prison whereas women more often received non-custodial sentence. Furthermore, if found unfit to plead, or not guilty by reason of insanity, men more often received a hospital disposal whereas women commonly received non-custodial sentences.

3.2.3. Pathways to care by mental illness

Of those perpetrators who were recorded as mentally ill at the time of the offence, and not given a hospital disposal, significantly more women received a non-custodial sentence (22, 28% v. 23, 6%, P<0.01). However, men with lifetime history of mental illness more often received a prison disposal (963, 79% v. 136, 60%) compared to women.

3.2.4. Factors predicting hospital disposal

Logistic regression examined variables predictive of perpetrators receiving a hospital disposal. The final model presented in Table 3 shows that a diagnosis of schizophrenia (OR 24.8; CI 15.5–39.7), mental health outcome in court (such as Manslaughter Section 2 diminished responsibility/infanticide/unfit to plead/not guilty by reason of insanity) (OR 16.6; 10.7–25.9), any mental illness at the time of offence (OR 4.5; CI 2.9–7.2), recent contact with mental health services (OR 2.5; CI 1.6–3.9), having a victim over the age of 75 years (OR 3.0; CI 1.5–6.2), and being from a black or minority ethnic group (OR 2.0; 1.3–3.2) were significant predictors of hospital disposal for all perpetrators. The gender of the perpetrators did not have a significant impact on hospital disposal. The greatest predictor of hospital disposal was a diagnosis of schizophrenia in both women and men, although the confidence intervals were wide reflecting the small numbers.

3.2.5. Factors associated with non-custodial disposal

Non-custodial sentences were more likely for women with or without mental illness if they killed a son or daughter (26, 54% v. 41, 23%, P<0.01), (13, 30% v. 22, 12%, P<0.01). Male perpetrators without a lifetime history of mental illness more often received a non-custodial sentence if they were aged 55–64 years (5, 7% v. 49, 2%, P<0.01), or killed an elderly victim 65–74 years (5, 7% v. 74, 3%, P=0.03). The same was also the case when men had a lifetime history of mental illness, non-custodial sentences were more likely in those aged 55 or older (5, 15% v. 45, 4%, P<0.01), or the victim was aged 65–74 (6, 18% v. 72, 6, P<0.01), the victim was a spouse or other family member (27, 82% v. 476, 40%, P<0.01), and where strangulation or suffocation was used as a method of homicide (14, 42% v. 132, 11%, P<0.01). Odds ratios are not reported as the numbers were small, making the model unstable.

4. Discussion

In a large contemporary national cohort of consecutively collected cases, we report on the relationship between mental illness and homicide in women and men. Our main finding is that over a half of women convicted of homicide had previously been diagnosed with a mental disorder compared to a quarter of men; more than a quarter of women were experiencing symptoms at the time of the offence,
significantly more than men. We also found that women were significantly more likely to raise mental illness as a defence with the introduction of psychiatric evaluations into evidence. This could suggest that there may be a bias toward women in both the ordering of psychiatric assessments by the court and also that clinicians are biased toward making more psychiatric diagnoses in women who seriously offend. The high prevalence of mental illness in female homicide perpetrators is consistent with findings from a population study in Finland by Eronen (1995). Of the 127 female homicide offenders between 1980 and 1992, psychiatric assessments were analysed on 93 (73%). Our study and the Finnish data report that approximately 7% of female offenders have a diagnosis of

**Fig. 1.** Disposal from court for women and men, by relationship to victim. Of the remaining victims of the female perpetrators (n = 68) and victims of the male perpetrators (n = 1161), the relationship between victim and offender were either other family members, persons known to the offender through their occupation or unknown.

**Fig. 2.** Disposal from court for women and men convicted of homicide, by court outcome.
schizophrenia; however the composition of diagnoses differs. Eronen reported higher personality disorder (39%) but lower alcohol dependence (2%) than our data. The Finnish data also revealed a lower proportion of perpetrators with an affective disorder (5.5%) compared to our findings (Eronen, 1995). Other studies including the current study find higher rates of depression in women who have killed, particularly where there victims were their children (Resnick, 1969) and infants (Flynn et al., 2007).

4.1. Mental illness

Gender appears to be a determinant of outcome for individuals recognised as experiencing symptoms of serious mental illness at the time of offence, and more women received community based sentences compared to men. Reporting of mental illness may explain some of the differences in the way women and men convicted of homicide fare in the judicial system. In our sample, as a proportion of all perpetrators, women were significantly more likely than men to have a recorded lifetime history of mental illness, and significantly more women were also reported as having mental disorder at the time of offence. However, although both women and men who did so, received similar rates of prison and hospital disposals, women received significantly more non-custodial sentences. It could be that, at the time of sentencing, the woman’s mental state was no longer serious enough to warrant hospital treatment, or there may have been mitigating circumstances such as domestic abuse, and as such the individual did not pose a significant danger to the public. Furthermore, the woman’s caring responsibilities for elderly relatives or children may also explain the gender effect on disposal.

When the broader concept of ‘any lifetime mental illness’ (with or without presence of active symptoms at the offence) was used, women still received more lenient sentences and disposals than men. In these cases, men were more commonly convicted of murder and women manslaughter; men more often went to prison whilst women more commonly received a non-custodial sentence. In these cases, victim characteristics may have influenced the court outcome. Significantly more of these women killed their own children, whereas more men killed their spouse and evidence suggests that the courts are more lenient in cases where women kill children (Wilczynski, 1997).

Contrary to our hypothesis, pathways to care were the same for those with accepted pleas for diminished responsibility for prison and hospital disposal. As one might expect, the factors associated with hospital disposal included, having a mental illness at the time of offence, a diagnosis of schizophrenia and having had recent contact with mental health services, rather than gender.

In our national sample, women are significantly more likely than men to have a psychiatric report prepared for court. This could also explain, in part, the apparent higher reported rate of mental illness in our female sample and the difference in court outcome following homicide. Allen (1987) analysed court reports prepared by psychiatrists and probation officers and found that on average a fifth of the women’s reports concentrated on psychological aspects of the offence. Conversely, in reports written for male offenders, previous offending and lifestyle were more central. Allen suggested that the courts disproportionately ‘medicalised’ murders committed by women. We found significantly more male than female perpetrators had a history of violence, drug misuse and personality disorder, which are risk factors for violence. With more psychiatric reports prepared on women, this may represent a bias by the courts in the perception of mental illness in women compared to men.

4.2. Filicide

Armstrong (1999) stated that if women killed in circumstances similar to men (for revenge or during confrontation rather than emotion) they received a similar outcome. By predominantly killing family members, the circumstances of women’s killing are considered by the court to be different. For example, significantly more women kill their children compared to men. We found that when women killed their own child, over a third received a non-custodial sentence compared to only 3% of men. Wilczynski (1997) examined 48 cases of child homicide using records from the Director of Public Prosecutions in London, and found that 88% of filicidal women receive hospital order or non-custodial sentence, whereas 84% of men went to prison. She reported that 64% of women filicide offenders, compared to 30% of men, used a psychiatric plea. This discrepancy may, in part, be due to the recognition of high rates of mental illness, particularly postnatal depression, amongst mothers who kill their children (Flynn et al., 2007), or to greater recognition of mental illness in women than men (Borowsky et al., 2001).

4.3. Intimate-partner homicide

Consistent with other research, we found that court disposal differed between women and men when the victim was an intimate partner. Swatt and He (2006) suggest that violence by women is more likely to be (perceived as) reactive and defensive, for example in response to a sudden loss or threat to life. The notion that women are more likely to be provoked or ‘driven to kill’ (also referred to as ‘victim precipitated murder’) (Wilbanks, 1983), may be relevant to these findings. However, MacKay (2004) studied 71 homicide perpetrators (1997–2001) who raised a provocation plea in their trial, only 15% of which were female. The defence of battered person syndrome (a form of post traumatic stress disorder classified in ICD-9 code 998.84 and DSM-IV), was accepted in R v Ahiulwalla (1992) setting a legal precedent in the UK. The perpetrator’s conviction of murder was reduced to diminished responsibility following evidence of previous domestic abuse. The role, and responsibility, of victims in the incident may be important factors in determining the perpetrator’s culpability.

Table 3

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Hospital disposal</th>
<th>Univariate analysis</th>
<th>Multivariate analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 282</td>
<td>OR (95% CI) P-value</td>
<td>OR (95% CI) P-value</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>185 66</td>
<td>100.2 72.0–139.6</td>
<td>24.8 15.5–39.7</td>
</tr>
<tr>
<td>Mental health court outcome</td>
<td>155 55</td>
<td>36.9 27.7–49.4</td>
<td>16.6 10.7–25.9</td>
</tr>
<tr>
<td>Mentally ill at time of homicide</td>
<td>209 81</td>
<td>27.9 19.9–39.2</td>
<td>4.5 2.9–7.2</td>
</tr>
<tr>
<td>Recent contact with mental health services</td>
<td>119 42</td>
<td>3.2 2.1–4.9</td>
<td>2.5 1.6–3.9</td>
</tr>
<tr>
<td>Black or minority ethnic group</td>
<td>92 33</td>
<td>1.9 1.4–2.4</td>
<td>2.0 1.3–3.2</td>
</tr>
<tr>
<td>Previous conviction for violence</td>
<td>64 24</td>
<td>0.5 0.4–0.6</td>
<td>0.5 0.3–0.8</td>
</tr>
<tr>
<td>Victim aged over 75 years</td>
<td>29 10</td>
<td>2.9 2.0–4.5</td>
<td>3.0 1.5–6.2</td>
</tr>
<tr>
<td>Female gender</td>
<td>446 141</td>
<td>1.8 1.3–2.5</td>
<td>4^</td>
</tr>
<tr>
<td>Lifetime history of mental illness</td>
<td>267 95</td>
<td>46.8 27.7–79.1</td>
<td>4^</td>
</tr>
<tr>
<td>Victim was spouse or family</td>
<td>171 61</td>
<td>3.9 3.0–5.0</td>
<td>4^</td>
</tr>
</tbody>
</table>

^ These variables were not significant in the final multivariate model.
4.4. Leniency in outcome and disposal in court

We have shown that there is a propensity for women to receive fewer custodial sentences, and outcomes such as probation were common in women who killed a child, as found in other studies (Mann, 1996). Some authors have suggested that the relative leniency in sentencing for women is based on notions of paternalism and chivalry (Crew, 1991) where stereotypical views of women lead to beliefs that women require protection rather than punishment (Curry et al., 2004), and that this is evident throughout the criminal justice system, from the preparation of psychiatric defence to judicial leniency (Allen, 1987; Armstrong, 1999).

The disparity in sentencing between women and men becomes less apparent when other types of female offending are analysed. Steffensmeier et al. (1993) analysed Pennsylvania sentencing data 1985–1987 to examine whether judges’ decisions regarding imprisonment were influenced by gender. The data included a wide range of offences. They reported only a moderate difference in sentences and outcomes by gender, and an increase in women in custody when less serious offences were analysed. When legally relevant considerations were taken into account, e.g. previous criminal history, domestic responsibility, and physical–mental health, the authors suggest that the moderate gender disparity be eliminated.

Evidence suggests that it is the victim, rather than the gender of the perpetrator, that may influence sentencing outcomes (Crew, 1991). Baumer et al. (2000) examined how the attribution of blame toward the victim affected the outcomes in murder cases. They reported that juries were influenced by non-legal attributes of the victim. For example, if the victims’ character was considered disreputable by the jury, the offence was treated more leniently as the offender was considered to have caused less harm.

Our data suggest that courts should ensure that all homicide perpetrators have psychiatric assessments, and that psychiatrists providing psychiatric reports for use as evidence in court rate risk objectively, and in a gender blind way. Authors of psychiatric reports should also be aware of possible bias towards leniency for women offenders.

We believe that our findings have implications not only for women who commit homicide, but also for those who commit other serious violent offences. The vast majority of homicide is committed by people who do not have a record of a current mental disorder. Indeed, people with mental illness are more likely to be a danger to themselves (Hiroeh et al., 2001).

This study provides high quality population data on the relationship between mental illness and homicide. It suggests that, except in the context of recorded concurrent mental illness, women kill in very different circumstances and with very different outcomes compared to men. Findings also suggest that women are treated differently to men when children and partners are the victims and in cases where the perpetrators have a recorded lifetime history of mental illness. Further research, currently being undertaken by the National Confidential Inquiry, will examine psychiatric reports on female perpetrators considering possible risk factors in women who have killed. An examination of childhood and adult experiences, including violence and abuse, substance misuse, family history of mental disorder, chaotic lifestyle and events leading to the homicide, will enable greater insight into the circumstances and motivation for these crimes. Future development of structured risk assessment might help distinguish which women are at risk of committing homicide.

4.5. Study limitations

Psychiatric reports were unavailable in around a half of cases. The production of psychiatric court reports in homicide cases is no longer mandatory in England and Wales; consequently there has been a propensity for reports to be written on those with serious mental illness only. Therefore using psychiatric reports may introduce bias towards serious mental illness. More reports were obtained for women, which may represent a bias by clinicians undertaking psychiatric assessments. There may also be a bias in court system reflected in the number of women receiving a hospital disposal and other non-custodial sentences. It is not possible for us to distinguish the causal mechanism of these associations. We are unable to measure some potential confounders which may have a significant impact on the outcome and disposal, particularly judicial discretion with sentencing guidelines, mitigating circumstances, response to the offence, remorse, and responsibility for dependents, demeanour and presentation in court, adjudged risk of reoffending, and whether the perpetrator was considered a danger to the public.

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