

A MIXED METHODS STUDY OF HOMICIDE FOLLOWED BY SUICIDE

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SCHOOL OF MEDICINE

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LIST OF ABBREVIATIONS

ABH	Actual Bodily Harm
A&E	Accident and Emergency
ACPO	Association of Chief Police Officers
CI	Confidence Interval
CMHT	Community Mental Health Team
CPA	Care Programme Approach
CPN	Community Psychiatric Nurse
CPRD	Clinical Practice Research Datalink
DASH	Domestic Abuse, Stalking and Honour-Based Violence
DSM-III-R	Diagnostic and Statistical Manual of Mental Disorders, 3 rd revision
EHSS	European Homicide-Suicide Study
GBH	Grievous Bodily Harm
GP	General Practitioner
IPCC	Independent Police Complaints Commission
MHA	Mental Health Act
NVDRS	National Violent Death Reporting System
NCISH	National Confidential Inquiry into Suicide and Homicide by People with Mental Illness
NICE	National Institute for Clinical Excellence
NIGB	National Information Governance Board
NIHR	National Institute for Health Research
NHS	National Health Service
PCT	Primary Care Trust
PTSD	Post Traumatic Stress Disorder

HQIP	Healthcare Quality Improvement Partnership
IAPT	Improving Access to Psychological Therapies
ICD-10	International Classification of Diseases, 10 th revision
MAPPa	Multi-Agency Public Protection Arrangement
MARAC	Multi-Agency Risk Assessment Conference
ONS	Office for National Statistics
OR	Odds Ratio
PTSD	Post Traumatic Stress Disorder
PIAG	Patient Information Advisory Group
RM&G	Research Management and Governance
SDVC	Specialist Domestic Violence Courts
SMR	Standardised Mortality Ratios
SNRI	Serotonin Norepinephrine Reuptake Inhibitor
SSRI	Selective Serotonin Reuptake Inhibitor
VPC	Violence Policy Centre
WHO	World Health Organisation

University of Manchester – Sandra Flynn - Degree of Doctor of Philosophy in the Faculty of Medical and Human Sciences – March 2013

A mixed methods study of homicide followed by suicide

Background

Homicide-suicides are rare events in which an individual commits a homicide and then takes his or her own life. Despite extensive media coverage and a recent increase in research in this field, our understanding of these events is limited as most studies are descriptive. There is little reliable evidence regarding mental disorder in individuals who commit homicide-suicide.

Aims

The central aim of this study was to examine the role of mental illness in cases of homicide-suicide. The objectives were to: (1) determine the prevalence of mental illness; (2) describe the characteristics of perpetrators and victims, and the circumstances of the offence; (3) examine the psychopathology of perpetrators prior to the offence.

Method

The research design was a mixed methods study of homicide-suicide. Quantitative and qualitative techniques were used to examine a national consecutive case series, in England and Wales, between 1st January 2006 and 31st December 2008. The sample contained 60 cases. Descriptive statistical analysis and a thematic framework analysis were undertaken on documents obtained from coroners, the police, GP medical records, records of mental health services contact and newspaper articles. The social, behavioural, offence and clinical characteristics of these incidents were reported.

Results

Most of these offences were committed by men (53, 88%). The average age of perpetrators was 44 years (range 18-85). The overwhelming majority of these incidents involved close family members, mainly current or former intimate partners and/or the children of the perpetrator. Over half of the perpetrators had previously been diagnosed with mental health problems by a GP, most commonly depression. The incident was, in most cases, preceded by an actual separation from an intimate partner, or the perpetrator perceived separation to be imminent. The emotional responses to the loss of the relationship included: anger; frustration; humiliation; jealousy; desire for revenge; hopelessness, guilt and remorse. Poor coping strategies were observed, with many having a history of previous self-harm or suicide attempts, and difficulty controlling their aggression. Despite the high proportion of lifetime mental illness, few had been in recent contact with their GP for psychological problems prior to the incident. In the majority of cases, incidents involving mentally ill perpetrators were reported responsibly in newspapers. However, there were instances in which journalists sensationalised the incidents and provided stereotypical portrayals of the perpetrator.

Conclusion

The findings from this study add valuable empirical qualitative data to the literature. These incidents occur in the context of existing and challenging common social issues, such as intimate partner violence, child custody disputes, an ageing population, and mental disorder. The evidence from this study shows that these perpetrators had an extreme reaction to an interpersonal crisis resulting in severe emotional distress. Perpetrators from vulnerable groups had complex needs and exhibited previous poor coping strategies that may put them at increased risk. However, prevention is difficult as these are rare events and though under distress, these individuals were less likely to seek help from services. More research is required to identify risk factors in targeted sub-groups of homicide-suicide, such as intimate partner, filicide-suicide and elderly homicide-suicide, in the context of social, economic and clinical problems.

DECLARATION

I declare that no portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

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THE AUTHOR

I have an undergraduate degree from De Montfort University and a Master degree from The University of Manchester. I have been a researcher for the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness since 2001. My role involves the management, analysis and interpretation of data on a national consecutive case series on homicides in the UK. Central to my role, is the dissemination of findings via peer reviewed journal publications, annual reports, presentations at national and international conferences and via social media such as Facebook and Twitter. I have published several papers as first author in peer-reviewed journals throughout my PhD candidature. A summary of the most relevant publications is presented below and a full list is available in Appendix 7. A list of previous oral presentations of this research has also been provided.

PUBLICATIONS

Oram, S., Flynn S., Shaw, J., Appleby, L., & Howard, L.M. (2013). Mental illness and adult domestic homicide: a population-based descriptive study. *Psychiatric Services* (in press).

Flynn, S., Shaw, J., & Abel, K.M. (2013). Filicide: mental illness in those who kill their children. *PLoS ONE* **8**(4): e58981. doi:10.1371/journal.pone.0058981.

Overshott, R., Rodway, C., Roscoe, A., Flynn, S., Hunt, I.M., Swinson, N., Appleby, L., & Shaw, J. Homicide perpetrated by older people (2012). *International Journal of Geriatric Psychiatry* **27**, 1099-1105.

Flynn, S., Abel, K., While, D., Mehta, H., & Shaw, J. (2011). Mental illness, gender and homicide: a population-based descriptive study. *Psychiatry Research* **185**, 368-75.

Kalucy, M., Rodway, C., Finn, J., Pearson, A., Flynn, S., Swinson, N., Roscoe, A., Da Cruz., D., Appleby., L., & Shaw, J. (2011). Comparison of British national newspaper coverage of homicide committed by those with and without prior contact with mental health services. *Australian & New Zealand Journal of Psychiatry* **45**, 539-48.

Swinson, N., Flynn, S., While, D., Roscoe, A., Kapur, N., Appleby, L., & Shaw, J. (2011). Trends in rates of mental illness in homicide perpetrators. *British Journal of Psychiatry* **198**, 485-489.

Flynn, S. M., Swinson, N., While, D., Hunt, I. M., Roscoe, A., Rodway, C., Windfuhr, K., Kapur, N., Appleby, L., & Shaw, J. (2009). Homicide followed by suicide: a cross-sectional study. *Journal of Forensic Psychiatry & Psychology* **20**, 306-321.

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ORAL PRESENTATION OF THESIS

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Flynn, S., Gask, L., & Shaw J. Homicide followed by suicide.

Presented at: AGM of the National Register of Hypnotherapists and Psychotherapists. May 2011, Crewe, UK.

Flynn, S., Gask, L., & Shaw J. Homicide followed by suicide.

Presented at: Primary Care Mental Health Team Away-day, Salford Primary Care Trust. December 2010, Salford, UK.

CHAPTER 1: BACKGROUND HOMICIDE

1.1 CHAPTER PREFACE

The background for this thesis will be presented over three chapters. I will begin by providing an overview of the literature on homicide. In the chapter 2, I will examine the literature pertaining to suicide, in chapter 3 I will examine the current state of knowledge on homicide followed by suicide.

The term homicide will be defined and the incidence rates both in the UK and internationally will be provided. A description of the socio-demographic characteristics of perpetrators, offence details and risk factors, including mental disorder and specific diagnoses will be discussed. An overview of the current knowledge on homicide provides context for our understanding of homicide-suicide cases. A detailed description of the literature search strategy can be found in Appendix 1.

1.2 DEFINITION OF HOMICIDE

Homicide is the act of killing one human being by another human being (Crown Prosecution Service). In England and Wales the term homicide categorises 3 offences; murder, manslaughter, and infanticide. These are common law offences that have never been defined by statute. Firstly, to be convicted of murder, it must be demonstrated that a person of sound mind had the intent to kill or cause grievous bodily harm. Secondly, there are two forms of manslaughter, voluntary and involuntary. Voluntary manslaughter applies where there is a partial defence. These defences include (i) diminished responsibility where it can be demonstrated that the perpetrator was suffering from an abnormality of mind that impaired responsibility for his/her actions; (ii) provocation, in which an individual is provoked to lose their self-control to the extent that any 'reasonable man' would have done so and; (iii) killing pursuant to a suicide pact. Involuntary manslaughter relies on the absence of the requisite intent found in murder and includes gross negligence manslaughter, and unlawful and dangerous act manslaughter, in which the victim was placed at risk of physical harm. The third form of homicide is infanticide. Infanticide is a court outcome solely applicable to women who kill a child under 12 months old, where at the time of the offence the balance of her mind was disturbed, due to the effects of childbirth or lactation. Homicide research can also include perpetrators found not guilty by reason of insanity or unfit to plead.

1.3 RATES OF HOMICIDE IN THE GENERAL POPULATION

1.3.1 UK HOMICIDE RATE

The official statistics on homicide rates are usually calculated by counting the number of victims or offences, rather than individual perpetrators. In England and Wales the homicide rate has been

recorded as 1.35 per 100000 population (Taveres & Thomas, 2010). Information for England and Wales is compiled by the Homicide Index at the Home Office. The Homicide Index was established in 1967 to record every homicide notified to the Home Office by police forces across England and Wales. The number of homicides has been steadily increasing over the past 50 years with approximately 300 cases in the 1960's compared to over 800 in 2006/07. Recent data has suggested this trend may not be continuing, data published in 2013 reported homicide being at the lowest level for over 20 years (Office for National Statistics, 2013).

1.3.2 INTERNATIONAL HOMICIDE RATES

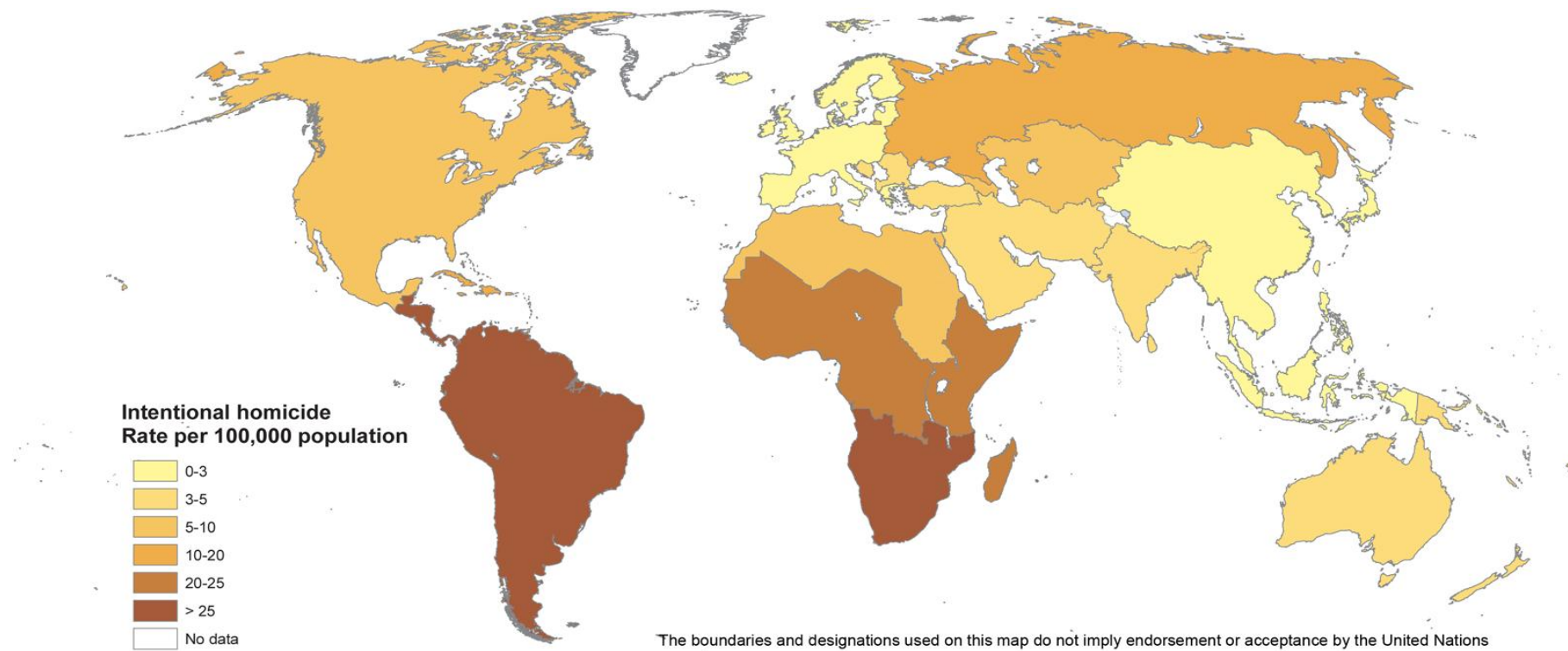
Caution should be exercised when comparing international crime statistics, due to the variation in definitions and counting rules used by different nations. However, the figures on homicide are more comparable than other crimes due to the seriousness of the offence and the high levels of reporting and detection. Figures published by the United Nations Office on Drugs and Crime presented in Figure 1 provide a visual illustration of homicide rates worldwide, with the highest rate recorded in Columbia at 61.1 homicides per 100,000 population, in stark contrast to the lowest reported rate of 0.39 in Singapore (United Nations Office on Drugs and Crime, 2010). The data presented show Europe and South East Asia have the lowest homicide rates compared to other regions. Cross-national data on homicide are more readily available for developed countries where data has been systematically recorded. Consequently, data derived from western countries dominate the literature.

1.4 METHOD OF HOMICIDE

The use of a sharp instrument is the most common method of homicide in England and Wales (Home Office, 2011b). Data for 2009/10 has shown 210 (34%) homicide offences involved a sharp instrument, followed by hitting or kicking without a weapon (131 offences, 21%). Firearms were used in 41 offences (7%). Compared to the U.S., the use of firearms in homicide in the UK is low. A recent report by the U.S. Department of Justice (2011) reported the most common method of homicide in the U.S. involved firearms, especially handguns.

The methods used in homicide also vary according to the relationship between victim and perpetrator. Data from the UK and Scandinavia have shown intimate partner homicide more often involves personal contact such as stabbing and strangulation/suffocation. Whereas firearms, blunt instruments and hitting and kicking are commonly used in stranger homicides and homicides between acquaintances (Brookman & McGuire, 2003; Rogde, Hougen, & Poulsen, 2000).

FIGURE 1: INTERNATIONAL HOMICIDE RATE PER 100,000 POPULATION, 2004¹.



¹ Reproduction of map originally published by United Nations Office on Drugs and Crime (2010)

1.5 SOCIO-DEMOGRAPHIC CHARACTERISTICS

1.5.1 GENDER

Evidence has consistently shown that homicide is predominately committed by men. This unequal gender distribution has been observed throughout western countries, and has been reported in the official statistics. Most countries reported between 85% and 90% of homicides are committed by men. In the UK, 91% of suspects for 2009/2010 were male (Home Office, 2011b) (Home Office, 2011b). Likewise, Fox & Zawitz (2007) reported data from the U.S. Bureau of Justice Statistics in 2005, and found males were almost 10 times more likely to commit murder than females, accounting for 88% of homicides. In Australia 93% of homicides were attributed to male perpetrators (Dearden & Jones, 2010) and a similar proportion was observed in Canada (Beattie & Cotter, 2010).

There is limited understanding of the difference in rates of homicide offending between men and women. Recent research examined offence characteristics and crime scene behaviour in a recent Finnish homicide sample by Hakkanen-Nyholm et al., (2009). The researchers concluded that the characteristics of a homicide offence were associated with the gender of the perpetrator, including the victim killed. There is consistent evidence to suggest the importance of situational factors in female offending, such as being a victim of domestic abuse and mental illness. Several studies have shown that women more often kill a family member such as an intimate partner or child (Flynn et al, 2011; Jurik & Winn 1990; Swatt & He, 2006). Men more often resort to physical violence to resolve conflict, often involving acquaintances and strangers (Jensen, 2001; NCISH, 2006). The risk of becoming a victim of homicide is 3 times higher in males in the U.S. than females (11.6 v 3.4 per 100,000 population) (U.S. Department of Justice, 2011). It is only in intimate partner homicide where the rate of female offending approaches that of men (Haynie & Armstrong, 2006).

1.5.2 AGE

The age distribution of homicide perpetrators in England and Wales is similar to that of other western countries. In England and Wales the median age of offenders was 27 years (NCISH, 2006); in the U.S. in 2005 the mean age of offenders was 28.5 years (Bureau of Justice Statistics, 2010). In Australia there was a peak in homicides committed by men in their mid twenties followed by a gradual decline, whereas female offending rates remained stable through ages 20-50 years (Dearden et al., 2010).

The age of criminal responsibility for homicide is 10 years in England and Wales, Scotland and Northern Ireland. The proportion of homicide by juveniles is relatively small. A recent study by Rodway and colleagues (2011) reported 6% of convicted offenders in England and Wales were aged under 18. In contrast, in the U.S. there was a dramatic upsurge in the rate of homicide by 14-17 year

olds in 1993 to 30.7 per 100,000 U.S. residents. This rate fell to its lowest level in 2000 to 9.5 per 100,000 (U.S. Department of Justice, 2011).

The literature on older perpetrators of homicide is relatively sparse compared with studies on elderly victimisation, also known as 'eldercide' (Ahmed & Menzies, 2002; Chu & Kraus, 2004; Collins & Presnell, 2006; Shields, Hunsaker, & Hunsaker, 2004). Earlier studies highlighted the vulnerability of older people to homicide by strangers through acts of robbery and burglary, however attention has recently moved toward 'intrafamilial' homicide. Fazel et al., (2007) compared a sample of offenders (n=433) aged 60 and over with younger perpetrators (n=24,066) in a Chicago sample, over a 31 year period. They found that older perpetrators were more likely to commit suicide following the homicide, and their victims were more likely to be women of similar age (over 60), commonly a spouse. The average age of the sample was 66, 89% were male, 77% were Black (a similar proportion to the younger group) and the victims were more likely to be spouses (24% v 11%). Firearms were the most common method used. One of the strengths of this study was the large sample size and the generalisability of the findings. However, the authors suggested the data source used (police files) may have underestimated the rate of mental illness and alcohol misuse in this group.

A recent Finnish national study of homicides examined psychiatric illness in offenders between 1995 and 2004 (Putkonen et al., 2010). Of the 1046 individuals prosecuted, 749 (71%) were referred for forensic psychiatric examination, 25 were aged over 60. Of these 25 elderly offenders, over half (14, 56%) had previously received psychiatric treatment and the diagnoses included; dementia 20%; alcohol misuse/dependence 52%, and personality disorder 44%. Surprisingly, none of the perpetrators were diagnosed with depression. Although the sample size was small, one of the strengths was that the sample was representative. In a larger study Overshott et al., (2012) analysed 47 people convicted of homicide aged 60 and over, from a 5 year sample of homicides in England and Wales. Of the 36 (77%) cases with psychiatric reports, 11 (31%) were found to have had depression, 8 (22%) personality disorder and 5 (14%) dementia. This nationally representative sample reported the high prevalence of psychiatric morbidity in older homicide perpetrators, particularly depression. In both these studies, a similar proportion had undergone psychiatric assessment, but the results differed considerably. This may be a methodological issue as the sample from England and Wales underrepresented personality disorder, however, the absence of affective disorder in the Finnish study requires further explanation.

Homicide by the elderly has been explained in the context of the routine activity approach (Cohen & Felson, 1979). The theory suggests there are fewer opportunities for criminal activity and subsequently being involved in violence between strangers becomes more unlikely than for younger age groups. Homicide is therefore more likely to involve family members as the elderly spend more time in their own home and have less interaction with strangers or engage in risky criminal activity, which may bring

them into violent conflict with others. Shichor & Kobrin (1978, p. 215) quoted by Fazel et al., 2007 observed:

“...as the range of social interaction contracts with advancing age, interpersonal primary relationships become intense, with a resulting increase in opportunities for conflict.”

1.5.3 MARITAL STATUS

King & South (2011) reported that marriage for males ‘suppresses criminal offending’. The NCISH (2006) found 58% of homicide offenders were unmarried. However, studies primarily reference marital status in the context of intimate partner homicide therefore data on marital status for homicide perpetrators as a whole group are not consistently reported. For example, research on intimate partner violence focuses on factors such as estrangement and the breakdown of a marriage/relationship as a causal factor in the offence.

Reporting on homicide victimisation, Kposowa et al., (1994) found unmarried men were more commonly victims; compared to married men the risk was 1.9 times higher for single people, and 1.7 times higher for divorced, separated or widowed persons. For women, Breault et al., (1997) reported the risk of becoming a victim of homicide was highest among divorced women (55.3%) compared to married women, with no difference for single women. Notably, women who were widowed were significantly less likely to be homicide victims than married women.

1.5.4 ETHNICITY

Research on homicide by ethnic groups is both important and inherently sensitive, and is often fraught with difficulty. The quality and validity of data has been criticised with respect to inconsistencies in how data are coded, and by whom. Problems particularly arise with ambiguous racial classifications that can have a detrimental effect on the accuracy of data (Maltz, 1999; Messner & Golden, 1992; Riedel, 1999).

UK census data for 2011 showed that ethnic minority groups represented 14% of the population. In England and Wales this comprised of 7.5% Asian, 3.4% Black, 2.2% mixed race and 1% other ethnic group (Office for National Statistics, 2012a). Numerous studies have examined the relationship between race and the criminal justice system, notably the overrepresentation of ethnic minority groups at various stages of the process including stop and search, cautions and convictions (Bowling & Phillips, 2007; Feilzer & Hood, 2004; Shute, Hood, & Seemungal, 2005). A similar overrepresentation of ethnic minority groups was reported in homicide studies. The NCISH (2006) reported 18% of perpetrators convicted of homicide were from an ethnic minority group. In the U.S. in 2008 the homicide rate among Blacks was substantially higher than Whites at 24.7 per 100,000 per population

(U.S. Department of Justice, 2011). Although the homicide rate is higher among ethnic minority groups compared to Whites, there is no evidence to suggest people from minority groups are more violent. Researchers have argued that economic inequality rather than race is responsible for the disaggregated rate of homicide by ethnic minorities, which is compounded by residence in urban areas, where homicide rates are higher (Richards, 1999). The literature suggests the predictors of homicide are associated with 'concentrated' disadvantage characterised by racial segregation, family disruption, gang violence, drug markets and poverty (Krivo & Peterson, 2000; Messner et al., 1992).

1.5.5 UNEMPLOYMENT

Socio-economic status is commonly reported in the literature measured by employment status. Brookman (2005) reported between 1995 and 2001, a quarter of homicide victims were classed as unemployed, this increased to over half (53%) with the inclusion of the 'economically inactive' such as the retired, children or students. In a study of male homicide perpetrators in Britain, 61% of perpetrators were unemployed (Dobash et al., 2001).

1.5.6 ALCOHOL AND DRUG MISUSE

There is substantial evidence to support an association between intoxication and violence. Felson & Staff (2010) in a national study of 16,698 inmates found that compared to offences such as burglary and robbery, alcohol had a stronger role in violent offending such as homicide, and physical and sexual assaults. The association was stronger amongst those where violence occurred from disputes or conflict rather than 'predatory violence'. Felson & Staff (2010) concluded that:

"The results suggest that one of the reasons offender intoxication is more strongly associated with dispute-related violence than predatory violence is that the victims are intoxicated as well."

The measurement of intoxication in this study however, limits the conclusions. Offenders were asked to self-report the amount of alcohol consumed prior to the offence, and the level of intoxication was estimated based on body weight (at interview). In some cases offenders were unable to record the exact amount of alcohol consumed. Food consumption and body weight at the time of the offence would also affect the level of intoxication; therefore, the results are based on estimates rather than accurately recorded blood alcohol levels at the time of offence. However, the evidence is consistent with an earlier study in which Luckenbill (1977) described dispute-related violence being linked to social occasions where alcohol is consumed. He also concluded that an important role in alcohol related homicide is the victims' intoxication.

In Scotland, Brookman (2005) examined the extent to which alcohol was involved in homicide offences. Data from the Scottish Executive, 2001 revealed (where data were available), 52% of accused homicide offenders were recorded as 'drunk', 13% on drugs, and 9% were drunk and on

drugs at the time of offence. In 86% of cases where the accused was intoxicated, the victim was also under the influence of alcohol and/or drugs. In a British prison sample, Dobash et al., (2001) reported over a third of male homicide offenders had consumed alcohol and were considered drunk at the time of offence, and 14% had been using drugs.

Murdoch et al., (1990) in a review of violent crimes concluded that 50% of offenders committing homicide and assaults were intoxicated at the time of the incident, significantly more than those committing non-violent offences. The authors also stated that homicides are most often preceded by arguments and altercations and the level of intoxication increases the 'viciousness' of attack. Although the association is evident, the lack of studies using a comparison group makes it difficult to establish a causal link between alcohol and homicide. Furthermore, there are no studies examining the blood alcohol levels or drug screening of perpetrators at the time of the offence. Some explanations of why alcohol is a contributing factor in violence offences and homicide include its dis-inhibiting effects, altering the individual's perception of risk (Bushman, 1997).

1.6 MENTAL ILLNESS AND HOMICIDE

Taylor (1986) examined the rate of homicide by the mentally ill in England and Wales. By investigating the number of homicides in Greater London and the Home Counties, the author found that 11% of individuals with homicide convictions were diagnosed with schizophrenia. However, the sample size was small consisting of 46 convicted homicide offenders and it also included perpetrators convicted of attempted homicide. In a later study, Taylor & Gunn (1999) suggested that this rate was consistent with other countries with comparable data for psychosis; the rates did not change over time. They also reported on the rate of homicide attributed to the broader definition of mental disorder. Over a 40 year period in England and Wales, mental health court outcomes were collated (diminished responsibility, not guilty by reason of insanity, unfit to plead and infanticide). As the number of homicides had increased, the number of diminished responsibility verdicts remained constant, which meant a decline in the proportion of homicide by people with mental disorder. However, Shaw et al., (2006) demonstrated that the rate of mental disorder in those convicted of homicides can vary depending on how it is defined. Shaw et al (2006) reported the rate of schizophrenia to be lower than that previously reported by Taylor & Gunn at 5%. Furthermore, the use of different measurements of mental illness produced a variation, for example, the proportion of perpetrators receiving a disposal to hospital (opposed to prison) was 7%; manslaughter on the grounds of diminished responsibility (9%), recent contact with services (9%) abnormal mental state at the time of offence (10%) and lifetime history of mental disorder (34%). Although the proportion found to have diminished responsibility at trial has fallen over recent years, this does not reflect a fall in the rate of homicide attributed to those with serious mental illness (Swinson et al., 2011). Therefore, using court outcome data to define mental illness is problematic.

The rate of homicide by people with mental illness has been compared internationally. Coid (1983) found the rate of mentally abnormal offenders was the same in different countries despite differences in the overall rates of homicide, which ranged considerably (0.8 - 2.2, per million population). Studies have also examined factors that may be associated with increased risk of homicide by people with mental illness such as de-institutionalisation programmes. However, following these policies no associated increase in homicide was reported in Denmark (Gottlieb, Gabrielson, & Kramp, 1987), in England and Wales (Taylor & Gunn, 1999) or in New Zealand (Simpson et al., 2004).

The relationship between mental disorder and homicide has been explored using a number of study designs. The variation in rates can be explained by the methodology used, the sample size, and the sample population. The definition of mental illness may be broad and include all mental illness and mental disorders, or may focus on specific diagnoses or serious mental illness such as schizophrenia and psychosis. There are inherent difficulties in measuring mental illness and the relationship with homicide. Research has shown a relationship between mental illness and homicide using different samples. These include samples derived from convicted homicide perpetrators within prison populations (Côté & Hodgins, 1992), examining pre-trial psychiatric evaluations of homicide perpetrators (Gottlieb et al., 1987), national samples of homicide perpetrators and their 'mental health' court verdict or disposal (Taylor & Gunn, 1999) or previous contact with mental health services (NCISH et al., 2006). All of these measures of mental illness are flawed and are likely to produce results that would either overestimate or underestimate prevalence rates. Schanda et al., (2004) also criticised previous research for failing to provide evidence of a direct association between the symptoms of mental illness and the offence. The confounding social, economic and interpersonal factors would be difficult to control for, and thus difficult to achieve a large samples. Furthermore, randomised control trials are difficult to undertake on this population and, consequently studies presenting association and risk prediction are more prevalent.

1.6.1 AFFECTIVE DISORDER

There is a lack of robust data examining the links between affective disorder and violence. Previous research of major mental disorder and homicide has consistently reported a low rate of depression and affective disorder. Fazel & Grann's (2004) Swedish psychiatric morbidity study recorded 2.3% of all homicide offenders had a diagnosis of non-psychotic depressive disorders, a further 2.5% with bipolar affective disorder. Gottlieb et al's 1987 Danish homicide study of cases from 1959-1983, found 3.3% of males and 28% of females had depression.

Wallace et al., (1998) reported that people with affective disorder had over a 5-fold increased risk of perpetrating homicide than the general population. They also reported an overrepresentation of psychiatric disorder in female homicide perpetrators. One limitation of these findings is the small sample size and wide confidence intervals. Using a larger national sample Flynn et al., (2011) reported

the relationship between gender, homicide and mental illness. Affective disorder was found to be significantly higher in women (64, 14% v 225, 5%), similar to the previous findings of Gottlieb (1987). A higher rate of mental disorder was found in women who commit homicide, particularly where the victim was their own child (Flynn, Shaw, & Abel, 2007).

The association between affective disorder and violence has been under researched compared to other diagnoses such as schizophrenia, and few studies make the distinction between bipolar disorder and depression. However, in a study of affective disorder patients formerly admitted for in-patient treatment in Germany, Graz et al., (2009) compared the 1,561 patients with the national crime register to record violent and non-violent behaviour post discharge. Of all patients with affective disorder 1.35% committed a violent criminal act between 7-12 years following discharge. The proportion with bipolar disorder and mania was higher at 5.6% each. Only 1 patient committed homicide. The authors acknowledge a limitation of the study was that cases from a university hospital may have underestimated the number of violent patients, as these were usually treated in state hospitals. The role of co-morbidity and other social and environment factors may also have confounded the findings over the follow up period. Methodological limitations therefore apply to these studies in relation to sample size, and the definition used, i.e. all common mental disorder or bipolar disorder.

1.6.2 SCHIZOPHRENIA

The rate of schizophrenia across nationally comparable samples has been shown to be variable; 9.7% in a Swedish study of 176 homicide offenders (Lindqvist, 1989), 6.5% in a Danish study of 251 male offenders (Gottlieb et al., 1987), 12.6% in a sample of 87 inmates in Canada (Côté et al., 1992), 5% in a study of 1,594 convicted homicide perpetrators in England and Wales (Meehan et al., 2006), 4% in an Austrian study of 961 convicted male offenders, and 13% of 126 women had been diagnosed with schizophrenia and schizophreniform disorder respectively (Schanda et al., 2004).

In a consecutive case-series study, Bennett et al., (2011) linked databases containing mental health service contact information and contact with the police across two Australian States. Of the 435 homicide offenders analysed, the authors reported 9% had a diagnosis of schizophrenia. They found compared to the general population, people with schizophrenia were more likely to commit homicide. In addition, the authors reported rates of substance abuse and previous offending were similar among homicide offenders with or without schizophrenia. By using contact with mental health services (public health only) the study may underestimate the number of perpetrators by excluding those who may have been treated privately, and more importantly those not under the care of service at all at the time of the homicide. Meehan et al., (2006) have previously shown 28% of people with schizophrenia who committed homicide had never been in contact with mental health services.

There is conflicting empirical evidence as to whether schizophrenia is a predictor of future violence. Elbogen & Johnson (2009) reported findings from 34,653 subject interviews conducted by the National

Institute on Alcohol Abuse and Alcoholism. The findings from bivariate analysis revealed a significant association between severe mental illness and violence, only where there was co-morbid substance abuse and/or dependence. In addition, multivariate analysis showed severe mental illness, independent of other factors, was not a predictor of future violence. Co-existing features for example historical, clinical, dispositional and contextual features such as previous violence, substance abuse, age and recent divorce, in conjunction with severe mental illness increased the risk of violence. Therefore, Elbogen & Johnson (2009) concluded that it is these wider factors that are associated with violence that increase risk, rather than mental illness per se.

In contrast, other studies have shown schizophrenia to increase the risk of violence between 2 and 7 times compared to the general population (Tiihonen et al., 1997; Arseneault et al., 2000). Kooyaman et al., (2007) in a review of the literature measured 6 adverse outcomes in schizophrenia; violence, victimisation, suicide/self-harm, substance use, homelessness and unemployment. A strong association was reported in each outcome. In a recent systematic review and meta analysis Fazel et al., (2009) reported 4 main findings. Firstly, the risk of violence was higher in people with schizophrenia/psychosis compared to the general population; secondly the risk was 8 times higher when combined with co-morbid substance abuse disorder; thirdly, there was no significant differences in risk estimates based on study design; and fourthly, the risk in people with schizophrenia/psychosis and co-morbid substance disorder was not found to be significantly different from violence risk in substance disorder only. Therefore, the risk of violence is higher in people with schizophrenia/psychosis and this is markedly elevated where there is substance dependence co-morbidity.

Similarly, in a meta-analysis of 204 studies, Douglas, Guy & Hart (2009) investigated the association between psychosis and violence. They reported a 49%-68% increase risk of violence by people with psychosis. However, in contrast to Fazel et al's findings, they commented that there were substantial differences in risk depending on the methodology of the studies (community v institutional samples); by how psychosis was defined and measured; and the type of comparator used. The findings from Meta analysis studies need to be critically examined for the robustness of the research selected for inclusion in the analysis, to assess the validity of the results.

1.6.3 PERSONALITY DISORDER

An increased risk of violence has been previously shown in people with personality disorder (Nestor, 2002). In relation to homicide, the prevalence of personality disorder has been inconsistently reported. In a national cross-sectional study, NCISH (2006) reported the proportion of homicides committed by people with personality disorder as a primary diagnosis was 5%. This data relied on diagnosis from previous contact with mental health services and psychiatric reports undertaken to inform the court of mental state at the time of the offence. The proportion of perpetrators undergoing psychiatric

assessment *might* be reduced due to belief that these perpetrators were not mentally ill, were responsible for their actions, and therefore do not need psychiatric assessment to determine their outcome and disposal. Therefore, the proportion of perpetrators with personality disorder reported by NCISH et al., (2006) is likely to be an underestimate.

Using a similarly large sample, Fazel et al., (2004) reported on a Swedish population study of 2,005 homicides. The study found 5.8% of perpetrators had a principal diagnosis of personality disorder, which rose to 11.3% with the inclusion of secondary diagnoses. Co-morbidity in anti-social personality disorder was not uncommon, particularly substance misuse, mania and schizophrenia (Regier et al., 1990). Taylor et al., (1998) in a patient records study of homicide perpetrators in a high security hospital reported 25% of the sample had psychosis with independent personality disorder, described as “evidence of a longstanding emotional or conduct disorder prior to the onset of psychosis” (page 218). Putkonen et al., (2004) reported 47% of psychotic homicide offenders had antisocial personality disorder. However, these studies were limited by small sample sizes, and they are particularly problematic when reporting subgroup analysis, as they are not representative samples.

Studies examining the association between anti-social personality disorder and homicide have reported substantially higher rates with 55.2% in a study of inmates convicted of homicide in Quebec (Côté et al., 1992). Eronen and colleagues (1996) found an increased risk (age-adjusted) of over 50-fold in women and 10-fold in men for antisocial personality disorder in an 8 year national study in Finland.

Diagnosing individuals with personality disorder is difficult. The prevalence of borderline personality disorder in homicide is difficult to measure due to what Malmqvist et al., (2006) described as the “etiologic and pathogenesis of these individuals’ violent behaviours” page 130. In other words, individuals with this diagnosis may be violent due to other factors such as co-morbidity (affective disorder or substance abuse). Johnson et al., (2000) in a 10 year follow up study of 700 adolescents, reported that the rate of violence was 14.4% higher in those with DSM-IV criteria personality disorder. However, they observed that the symptoms of personality disorder were key predictors of violence, rather than the actual diagnosis itself. Inevitably, samples from forensic settings will include severe cases that may overinflate the risk of violence. The lack of representative empirically robust data limits our understanding of the association between personality disorder and homicide. Firstly, the standard definition of personality disorder does not account for the heterogeneity within this diagnostic group, and the increased risk posed by some people with dangerous and severe personality disorder or psychopathy compared to others on the spectrum. Secondly, procedures used to assess personality disorder in past research are variable and sample size also affects the validity and generalisability of previous research.

1.6.4 SUBSTANCE DEPENDENCE/MISUSE

The relationship between violence and substance misuse has been reported extensively (Boles & Miotto, 2003). However, the contribution of alcohol and drugs to homicide is hampered by methodological limitations. In a Swedish population study, 2,005 homicide offenders (included attempted homicide) from 1988-2001 were linked with hospital registers to examine psychiatric morbidity (Fazel & Grann, 2004). Of those with information from the psychiatric register, 24% had a principle diagnosis of substance abuse disorder. Nearly half the offenders (48%) had a principal or secondary diagnosis of substance use disorder. The NCISH has examined substance misuse in perpetrators of homicide in England and Wales with 42% of perpetrators having a history of alcohol misuse and/or dependence and 40% with drug misuse and/or dependence.

A definition of substance misuse is rarely provided in the literature and it can be difficult to distinguish whether reference is being made to 'hazardous misuse', recreational or behaviour misuse, or a misuse disorders including dependence, which limits our interpretation of these results. In addition, how misuse is assessed is problematic, reliance on self-report could bias the outcome in psychiatric assessment by either underestimating or exaggerating use prior to the offence.

The relationship between substance abuse and violence is complex and is mediated by social, environmental, and individual factors. An association between alcohol use in particular and violence has been consistently asserted, but a causal relationship has proved more difficult to establish. The direct contribution of these substances to the offence, as opposed to the presence of intoxicants is complicated by personal characteristic such as gender, physiology and psychological factors (Collins, 1993) in addition to level of consumption and frequency of use. Alcohol has been particularly associated with homicide resulting from conflicts, arguments and disputes (Bradford, Greenberg, & Motayne, 1992; Pernanen, 1991). Psychoactive substance use and violence, particularly chronic amphetamine and methamphetamine use, has been associated with systemic violence and increased impulsive and risk taking behavior (Kosten & Singha, 1999). However, the complexity of confounding factors such as social, economic, environmental and individual factors make it difficult to reliably establish a causal relationship.

1.6.5 CONTACT WITH MENTAL HEALTH SERVICES

Data from NCISH showed that 10% of homicide offenders had previously received care from mental health services within 12 months of the offence (NCISH, 2010). Five percent of homicides were committed by a patient with schizophrenia. A substantial proportion of individuals with mental disorder were not being cared for by mental health services before the offence. For example, 35% of people with schizophrenia, and 43% with personality disorder, had not been under the care of mental health

services before the offence (NCISH, 2006). Data were not available to determine whether the perpetrators had been assessed and diagnosed with a mental disorder by their GP.

In a similar study from New Zealand, Simpson et al., (2004) reported on 1,498 homicide perpetrators over a 30 year period. One hundred and thirty (9%) were considered to be mentally abnormal homicides, however only 65 had a prior psychiatric admission, 4% of all homicides (Simpson et al., 2004).

In a 3 year study (1993-1995) in Victoria, Australia, Wallace et al., (1998) linked a state-wide psychiatric register with individuals convicted of serious offences. Of the 168 cases of murder and manslaughter, 62 (39%) had previous contact with public out-patient, community or in-patient psychiatric services. Furthermore, 7.2% of those convicted of homicide had been diagnosed with schizophrenia. The proportion was higher than other studies. However, one limitation of the Australian study was that the authors did not state when the contact occurred (i.e. within a year) or the duration of the patient's illness, therefore there was no indication as to whether they experienced symptoms at the time of the homicide (Wallace et al., 1998).

1.7 HOMICIDE PREVENTION IN THE GENERAL POPULATION

Brookman (2005) commented on a notable shift in discourse by criminal justice agencies from crime prevention to crime reduction. The Home Office published a report in 2003 that focused on the reduction of homicide in areas where evidence suggested action may be effective in reducing the number of fatalities (Brookman & McGuire, 2003). The key areas under consideration were; intimate partner homicide; infanticide; alcohol related homicide (fights); and homicides involving guns and knives. The publication *'Cutting Crime: A New Partnership 2008-11'* (Home Office, 2007) presented a framework for tackling crime. Detailed proposals for targeting violence were subsequently presented in *'Saving lives, reducing harm, protecting the public: an action plan for tackling violence 2008-11'* (Home Office, 2008). The crimes prioritised included gun and gang-related crime, knife crime, and sexual and domestic violence. The key objectives in the plan were to:

- reduce gun crime and gang-related violence
- reduce knife crime particularly involving young people
- continue work on sexual violence, with a particular focus on improving the investigation and prosecution of rape and protecting children from sex offenders.

The increase in the number of violent crimes involving alcohol was addressed in *'Safe. Sensible. Social. The next steps in the National Alcohol Strategy'* in which proposals are outlined to reduce the harm that alcohol causes to individuals, families and communities (Department of Health, 2007).

Domestic violence laws have also been strengthened, giving police greater powers to intervene in domestic disputes. The use of 'DASH' (a domestic abuse, stalking and honour based violence risk identification questionnaire) has improved the assessment and management, and training and awareness among police services and related agencies regarding risk. Furthermore, the introduction of the Specialist Domestic Violence Courts (SDVCs) has proved to be successful in increasing the rate of prosecutions. Further work in this area is planned. In 2011, the Government published an report identifying actions to be taken which will tackle violence against women and girls (Home Office, 2011a).

1.8 HOMICIDE PREVENTION IN MENTAL HEALTH PATIENTS

Preventing homicide and reducing the risk of violence by mental health patients has been a priority for successive governments over the past 3 decades. A number of mechanisms have been established to improve our understanding of these incidents, and help to provide strategies for intervention. Independent Inquiries are routinely undertaken following a homicide by a mental health patient. The aim is to examine the management and care provided to the patient prior to the homicide and to learn lessons from the incident. The focus of these investigations is to identify whether there were systematic failings by NHS Trusts and clinicians in the care provided to the individual. The Inquiries have been criticised for being expensive, intrusive and time-consuming (Munro, 2007), and for being 'naive' to assume generalisations can be made from a single case review (Reiss, 2001).

In response to such criticisms about Independent Inquiries, The National Confidential Inquiry into Suicide and Homicide by People with Mental illness was established to investigate all homicides by people with mental illness in the UK. The NCISH makes recommendations for changes in clinical practice, based on the evidence from the research. It has been argued that this approach to examining cases is more effective in identifying areas for service improvement than Independent Inquiries as it is based on a national sample of cases.

Action to address the risk of harm to self and others identified through the Inquiries and other evidence-based research was written into the Mental Health Act 2007. The new Act introduced Community Treatment Orders for patients previously detained in hospital. In certain circumstances where the relevant criteria have been met, patients can be recalled to hospital when they are non-compliant with treatment or have disengaged from services. The rationale behind this measure was to reduce the number of readmissions by avoid the patients' health deteriorating if they decided to discontinue their treatment when discharged back to the community.

The focus for prevention of homicide by people with mental illness therefore has been intrinsically linked with mental health services ability to manage risk. The Department of Health published guidelines in *'Developing Positive Practice to Support the Safe and Therapeutic Management of*

Aggression and Violence in Mental Health Inpatient Settings: Mental Health Policy' (2004) and published subsequent detailed guidance on the short-term management of disturbed/violent behaviour in in-patient psychiatric settings and emergency departments (NICE, 2005).

1.9 CHAPTER SUMMARY

The most recent figures from the Office for National Statistics have shown that homicide numbers in England and Wales are at their lowest for over 20 years. Compared to other nations, the UK has a relatively low homicide rate at 1.35 per 100,000 population. It has been consistently shown, both in the UK and internationally, that these offences are predominantly committed by young males, and the victims are commonly acquaintances. The relationship between homicide and mental disorder has been explored and it has been now been accepted that people with mental disorder do have an increased risk of violence. The association between violence and clinical groups has shown that people with schizophrenia and people with personality disorder have significant increased risk of violence compared with the general population. This is often compounded by co-morbid substance use. The proportion of homicide perpetrators who had been in contact with mental health services before the offence suggests that not all of those people who experienced symptoms of mental illness at the time of offence were receiving care from mental health services. For homicide prevention measures to be successful, it is important to identify the risk factors within the patient population, but also to adopt a wider public health approach to tackle the culture of violence in our society, particularly knife crime and domestic violence.

CHAPTER 2: BACKGROUND ON SUICIDE

2.1 CHAPTER PREFACE

Suicide is known to be one of the leading causes of death throughout the world (World Health Organisation, 2000). Reducing the number of self-inflicted deaths is a major public health concern. The following chapter provides an overview of the literature on suicide. A definition will be provided and the incidence rates both in the UK and internationally will be provided. A description of the characteristics of individuals who died by suicide and the risk factors for suicide (including mental disorder and specific diagnoses) will be discussed. Presenting an overview of the current knowledge on suicide provides important context for our understanding of homicide-suicide cases.

2.2 DEFINITION OF SUICIDE

Suicide is the act of deliberately killing oneself (World Health Organisation, 2011). In England and Wales, an inquests is held to inquire into the death of a person following a sudden, unnatural or violent death. Coroners are governed by The Coroners Rules 1984, (SI 1984 No 552) under which, procedures and practices are stated. Before reaching a verdict of suicide, a coroner needs to be convinced beyond reasonable doubt that an individual intended to take his or her own life, and this needs to be proven in accordance with guidance provided in the Coroners Handbook. The standards for determining suicide differ internationally. Countries such as Luxembourg have a tighter definition that requires a note to be left specifying suicidal intent (Chishti, 2003), whereas in other countries, suicide is recorded when it is considered to be the most 'probable explanation' (Pounder, 1992).

Where there is insufficient evidence that an individual had the intent to take their life, the coroner has the discretion to return an alternative verdict. It is standard practice to include open verdicts in academic research on suicide, as they are considered to be 'probable suicides' (Linsley, Schapira, & Kelly, 2001). Research that excludes open verdicts has been criticised by academics due to the potential under-estimation of numbers and rates (O'Donnell & Farmer, 1995; Rockett & Smith, 1989).

2.3 RATES OF SUICIDE IN THE GENERAL POPULATION

Suicide is a major public health concern both in the UK and globally. The World Health Organisation estimated that approximately one million people per year take their own life, a population rate of 16 per 100,000 worldwide, subsequently suicide is among the leading causes of death in most countries (World Health Organisation, 2011).

The reliability of suicide rates for international comparison has been questioned due to the variance in death registration practices. As stated earlier, in England and Wales the coronial system is used,

whereas in other countries such as Germany, suicides are recorded by General Practitioners (Cantor, 2000). The measurements used and data collection practices must be taken into consideration for accurate interpretation of rates when international comparisons are made. However, Ohberg & Lonnqvist (1998) estimated the variance between rates to be approximately 10%, which should not prohibit international comparisons.

2.3.1 UK SUICIDE RATE

There were 5670 recorded suicides in the UK in 2009 (Office for National Statistics, 2011b). The rate among males was 17.5 per 100,000 and 5.2 per 100,000 among females. The rate was highest amongst males aged 15-44 at 18.0 per 100,000 population and 5.8 per 100,000 among females aged 45-74 years. Although the rates have shown a year on year decline since 2000, there was a slight upturn in 2008. Despite this, suicide among the elderly has shown a marked decrease. Data from the Office of National Statistics published in Social Trends (Office for National Statistics, 2010) showed a 50% decrease in male and 74% decrease in female deaths aged 65 and over between 1971 and 2008. However, suicide rates among men aged 15-24 and 25-44 years increased over this period.

2.3.2 INTERNATIONAL SUICIDE RATES

Suicide is among the three leading causes of death in people aged 15-44, and top two leading causes in 10-24 year olds in some countries (World Health Organisation, 2011). The most recent data from the World Health Organisation for 2009 showed the highest rates among males in former Eastern bloc countries. For example, in Belarus the male rate was 63.3 per 100,000, followed by Russia and Lithuania both at 53.9 per 100,000 (World Health Organisation, 2011). In females the rate was highest in Sri Lanka (16.8) followed by China (14.8). Bailey et al., (2011) note that in the past 50 years the suicide rate in Sri Lanka has risen to the highest in the world at 118 per 100,000 population. Furthermore, China, India and Japan combined recorded almost half of the world's suicides. There are inherent difficulties in comparing suicide rates as mentioned earlier, due to different coding and classification systems employed on a national level (Chishti et al., 2003). A complete global comparison is not possible as data from African nations is sparse. Phillips et al., (2002) commented that when rates are used for comparison, the underlying numbers of deaths are often lost. The authors used the example of average rates in China, which due to the large population do not appear considerable however, China had the highest number of deaths, approximately 287,000 per year. Figure 2 illustrates the global variation in suicide rates.

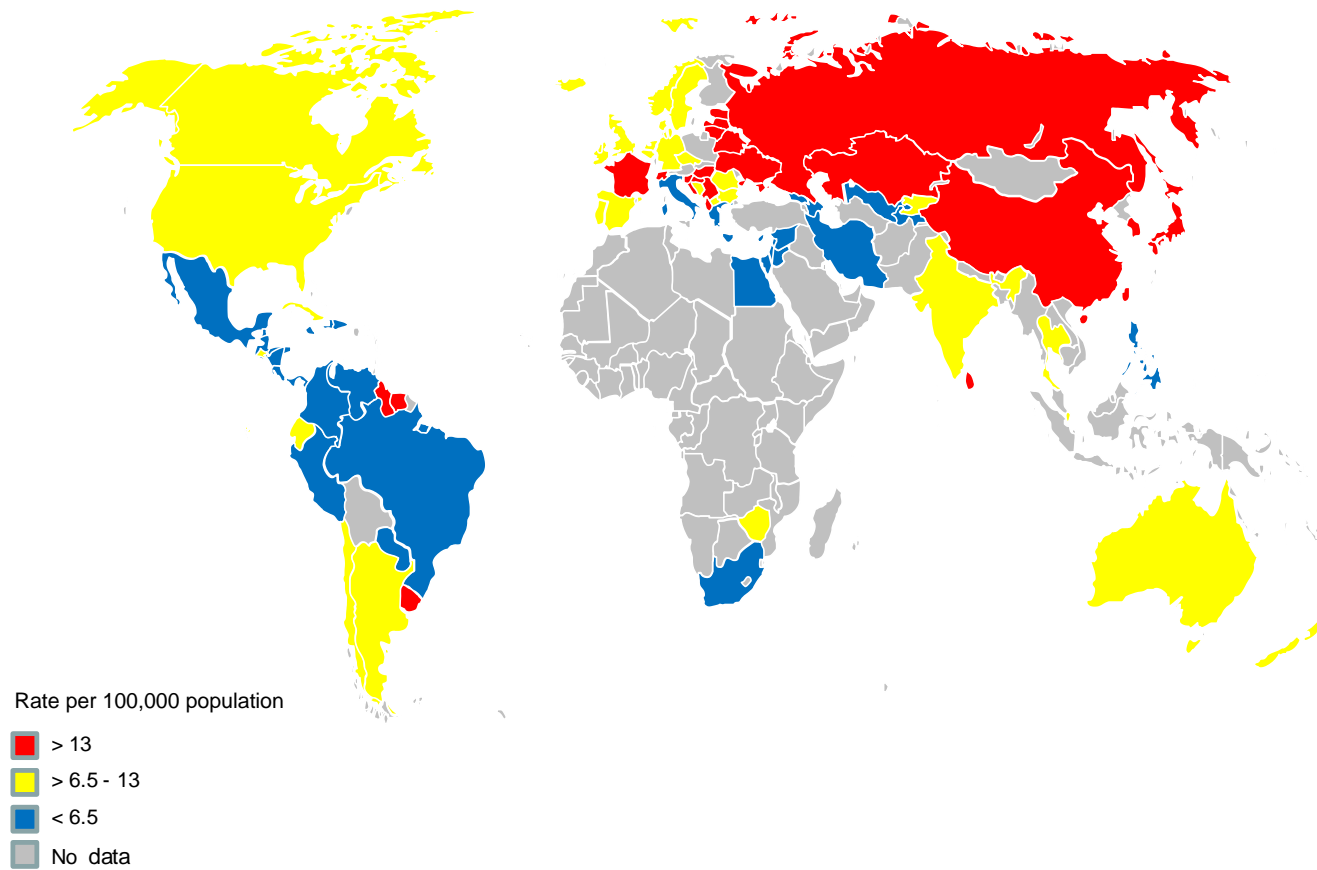
2.4 METHOD OF SUICIDE

Hanging is usually reported to be the most common method of suicide. However, there is some international variation. In the U.S. suicide by firearm is the commonest method. Other variations can

be seen across Asia and Central and South America where self poisoning via the use of pesticides are common, as are other forms of self poisoning in Canada and the UK, particularly among women (Ajdacic-Gross et al., 2008). The gender difference in preferred method has been recognised for many years. Male suicides are considered to be more violent or 'active' involving methods such as hanging, jumping from a height or in front of a moving vehicle, use of firearms, and burning. 'Passive' methods are more prevalent among women, for example, self-poisoning, drowning, and carbon monoxide poisoning via exhaust fumes.

Intuitively the 'lethality' of method can make the difference from attempted to completed suicide. Studies have shown that by restricting access to more lethal methods, this can have a positive effect in reducing the number of deaths. Consequently, this is usually a key feature of prevention strategies. For example, a reduction in death by exhaust fumes was recorded following a change in EU legislation requiring cars to be fitted with catalytic converters (Brock & Griffiths, 2003; McClure, 2000). Similarly, a reduction in the carbon monoxide content of the domestic gas supply resulted in a reduction of suicide by this method (Farmer & Rhode, 1984; Kreitman, 1976). Whilst reducing access to lethal methods may result in a decrease in the prevalence of certain methods of suicide, it can also result in a shift towards other methods. Method substitution was illustrated by Amos et al., (2001) who reported a fall in the use of carbon monoxide poisoning but a corresponding increase in other methods including hanging in younger age groups.

FIGURE 2: MAP OF SUICIDE RATES PER 100,000 POPULATION²



² Reproduction of map originally published by WHO (2011)

2.5 SOCIO-DEMOGRAPHIC CHARACTERISTICS

2.5.1 GENDER

The suicide rate is consistently found to be higher in males than females throughout the world and in all age groups, with the exception of China (in selected rural and urban areas) (WHO, 2011). The ratio of male to female suicide in England and Wales was found to be 3:1 (NCISH, 2006). Researchers have proposed explanations for the difference in suicidal behaviour between the sexes. Canetto & Lester (1995) suggested that in part this was due to the lethality of method used, men choosing more 'lethal' methods such as hanging and firearms. The higher ratio of male suicide has also been associated with help seeking behaviour. Men seek help less frequently for physical and emotional problems compared to women, which can be seen in the pattern of contact with health services (Biddle et al., 2004; Oliver et al., 2005). It has also been asserted that women have stronger social ties, support networks and coping mechanisms (McClure, 2001). Likewise parenthood, particularly for mothers of young children, is also considered to be a protective factor (Qin, Agerbo, & Mortensen, 2002). In contrast, Loewenthal et al., (1995) suggested that to reduce stress, men commonly engage in 'distracting' behaviours. For example, the use of alcohol is a strategy used to mask the symptoms of depression. Courtenay (2000) suggested that risk taking and impulsivity are associated with masculinity, which is also reflected in the violent methods used by men compared to women. Evidence suggests that there are higher rates of suicidal ideation and behaviour in females than males but these acts are usually less likely to be fatal (Canetto, 2008; Payne, Swami, & Stanistreet, 2008).

2.5.2 AGE

Age is considered to be an important risk factor for suicide, and is associated with vulnerability and the ability to cope with stressful life events. Historically suicide rates have been highest among the elderly, particularly those aged 75 and above. Recently, the marked decline in suicide rates among the elderly in England and Wales has contributed to the overall decrease in suicide rates. In 2009, the lowest rate was in those over 75 years (Office for National Statistics, 2011b). However, high rates in suicide in young men have been observed. Figures from ONS have shown that suicide among people aged 15-44 increased by 64% between 1971 and 2008 (Office for National Statistics, 2010). However, recent data from the NCISH (2012) reported that over the past 10 years general population suicide rates had fallen in all age groups with the exception of those aged 45-64, where although the rate remained constant, an increase in the frequency of suicides was observed. The recent Suicide Prevention Strategy also singled out middle-aged men as a particularly vulnerable group (Department of Health, 2012).

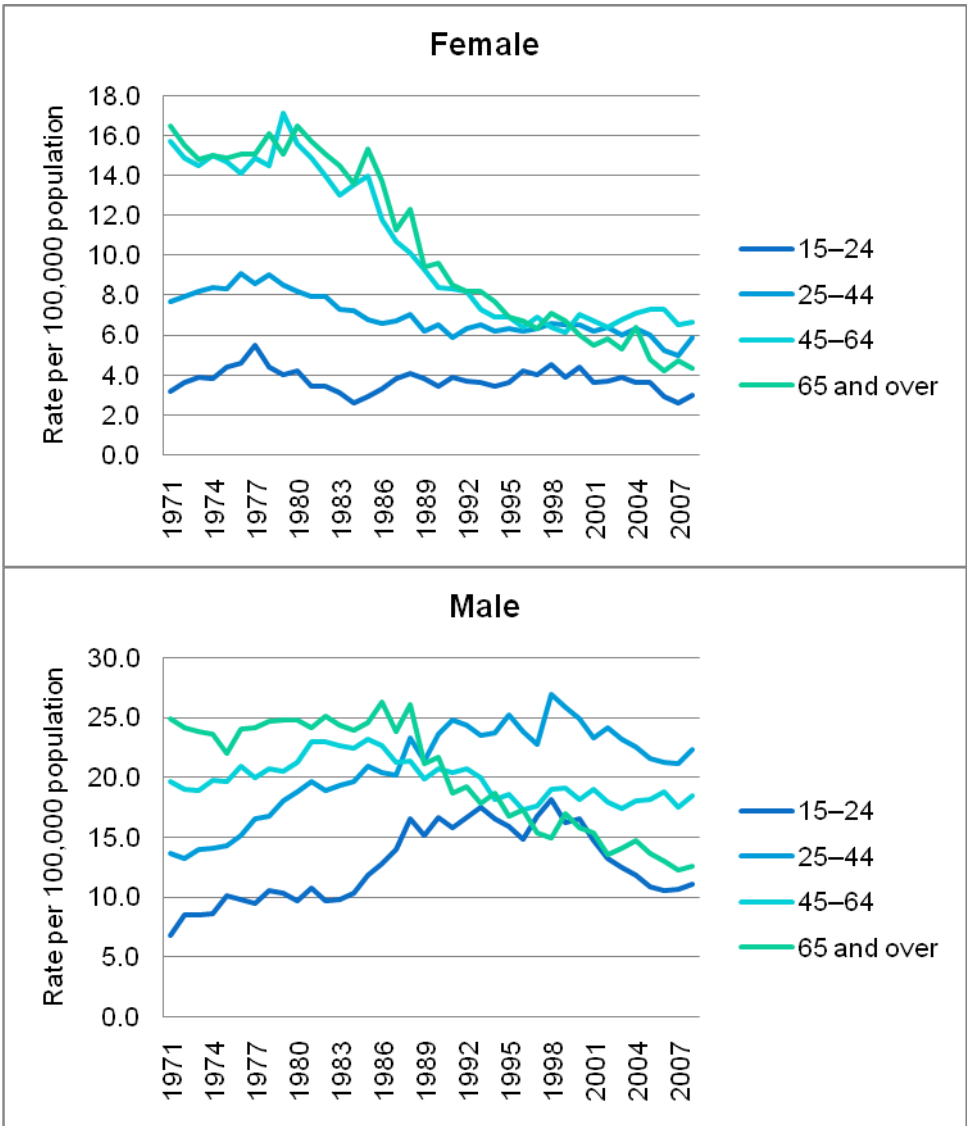
Gunnell et al., (2003) stated that overall 'social change' was as an important feature of the divergence in suicide rates between age groups, but there was no single factor was associated with these trends.

Although rates are highest among men aged 15-44, there has been an overall decline over the last 10 years (figure 3). Biddle et al., (2008) considered these decreases in the context of social change and found influential markers such as unemployment, alcohol misuse and divorce rates in conjunction with government policy initiatives on suicide prevention were associated with the decrease.

The markers associated with suicide among the young have been identified as suicidal ideation (planning), previous suicide attempts, childhood abuse, history of mental illness, substance abuse, access to lethal methods, social isolation, and personal loss (loss of relationship, job, financial security) (Beautrais, 1997; Lewinsohn, Rohde, Seeley, & Baldwin, 2001; Rutter & Behrendt, 2004; Swahn & Bossarte, 2007). Whilst, in the older age groups, depression, previous suicide attempts, being unmarried, living alone and loneliness have been established as important risk factors (Conwell et al., 1996; Waern et al., 2002; Wiktorsson, Runeson, Skoog, Ostling, & Waern, 2010). The use of more lethal methods has also been noted among the elderly (Spicer & Miller, 2000). In a Swedish case-control study Waern et al., (2003) compared the 'young' elderly (65-74 years) (n=47) with the 'older' elderly (n=38) (75 and above) and identified several risk factors including physical illness, conflict within the family, loneliness, and depression. One limitation of the study was the small sample size.

The different age bands used in the reporting of suicide makes comparisons of national statistics and research studies problematic, leading to difficulty in drawing conclusions. Furthermore, the allocated age bands are less meaningful when broad ranges are used. For instance, in England and Wales a coroner can rule a verdict of suicide in persons aged 10 years and above, yet these deaths are often not included in ONS statistics, instead age group analysis begins from a baseline of 15 years. This data should be presented in the official statistic to improve accuracy in reporting. In national statistics teen and adolescent suicides are difficult to delineate. Windfuhr et al., (2008) reported a significant decline in suicides aged 10-19, a 28% reduction in the rate from 1997-2003. The risk factors for these young people were different from those defined as "young" suicides using a 15-25 age band. Adolescent suicide has been more specifically associated with a number of factors: physical or sexual abuse (Fergusson, Woodward, & Horwood, 2000; Silverman, Reinherz, & Giaconia, 1996); being under the care of local authority children's services (Cousins, McGowan, & Milner, 2008); academic pressure; family disruption/breakdown; educational difficulties; and substance abuse (Beautrais, 2001); previous suicide attempts (Beautrais, 1997); and mental health problems (Gould, Greenberg, Velting, & Shaffer, 2003).

FIGURE 3: SUICIDE RATE BY SEX AND AGE, PER 100,000 POPULATION IN ENGLAND AND WALES, BY YEAR³



³ Reproduction of original data published by the Office for National Statistics (2010)

2.5.3 MARITAL STATUS

The 'social integration' experienced by married people has been purported to be a protective factor against suicide (Durkheim, 1897; Morselli, 1881). In a study of suicide and marital status in England and Wales, Griffiths et al., (2008) used population data on people aged 25 and over to examine the link between marital status and registered suicides. The authors found a lower risk of suicide among married people, whereas the risk was approximately 3-fold in single and divorced men and women.

The protective effect of marriage has also been found in other European studies. A study in Finland by Heikkinen et al., (1995) reported that living alone was more commonly associated with cases of suicide compared with the general population. In a national register based study in Denmark (1981-1997) suicide risk was found to be associated with being single (3-fold increase risk) compared to those who were married (Qin, Agerbo, & Mortensen, 2003). Recent separation was associated with increased risk in urban areas of Finland (Isometsa et al., 1997). These findings have been consistent over many years, despite the fluctuations in marriage rates and the increasing number of people choosing to cohabit. Data on population co-habitation status are not available and are not recorded on death certificates in England and Wales. However, evidence from Denmark suggests co-habitation poses a higher risk than seen in those who were married, but this finding has not been fully understood (Qin, Agerbo & Mortensen, 2003).

Explanations for the protective status of marriage, alongside Durkheim's theory of social integration, have been identified as not experiencing relationship breakdown and divorce, dissolution of the family unit, bereavement and living alone, all of which have been shown to have a negative impact on psychopathology. Richards et al., (1997) in a UK birth cohort study found an association between suicide, and anxiety, depression and alcohol misuse and divorce/separation. Griffiths et al., (2008) also pointed to the increased income of married people and their possible higher socio-economic status as a speculative factor that may protect against suicide.

2.5.4 ETHNICITY

Data on ethnicity is not routinely collated on death certificates in the UK and therefore this lack of data limits the accuracy of suicide rates by different ethnic groups. Furthermore, due to the small number, analysis of data on ethnicity is often aggregated and presented under the generic term 'ethnic minority group'. Therefore, there is a lack of comparative analysis on a national level. Where the literature does provide detail of suicides among minority groups, the sample sizes are often small or regional, making it difficult to generalise these findings to the whole population.

Despite the shortcomings of the official statistics, research has been undertaken in this area. The existing literature suggests that there are higher suicide rates in specific ethnic minority groups in the UK. Higher rates have been found in South Asian women from India, Pakistan and Bangladesh,

compared to other women (Neeleman, Mak, & Wessely, 1997). In contrast, males from the Indian subcontinent and East Africa were found to have lower suicide rates than White British men (Soni Raleigh, 1996). More recent data confirm low rates among men and only a marginal risk among women McKenzie et al., (2008). Soni Raleigh & Balarajan (1992) reported an increase in suicide among young Caribbean men.

Divergent rates have also been observed within ethnic groups, making the picture more complex. Rates also vary by age and sex of particular ethnicity groups. The differences in culture, religion and adapting to host societies may help explain the variation in ethnic minority groups (Khan & Waheed, 2006). McKenzie et al., (2003) reported that the different trends among ethnic groups are associated with factors commonly experienced by recent migrants such as establishing oneself in a new environment, integration and accessing health care, as well as exposure to the overall socio-economic deprivation within a community or country. There is a cultural diversity in suicide, and the risks are not solely among those who recently migrate, but also in people integrated in a community.

In relation to mental illness, Hunt et al., (2003) found 6% of patients who died by suicide had been in contact with mental health services within 12 months of their death were from an ethnic minority group. Within this sample of 262 ethnic minority patient suicides, a diagnosis of schizophrenia was higher among Black Caribbean patients (74%) compared to Whites (18%). Depression was most common among patients from the South Asian community (46%). A culturally sensitive approach to the treatment of mental illness and the implementation of suicide prevention strategies has been raised. For example, refusal to take prescribed medication or change dosage in South Asian communities while fasting, for example may have a consequence for treatment outcome for a range of medical conditions (Fazel, 1998). However, research from Jordon has shown that the rate of parasuicide fell during Ramadan, possibly due to increased family contact and the awareness that self-destructive behaviour is forbidden in the Muslim religion (Daradkeh, 1992).

2.5.5 UNEMPLOYMENT

There are consistent findings to support an association between suicide and unemployment/socio-economic status. Hawton et al., (2001a) examined the influence of economic and social environment in a 10 year sample of suicides aged 15 and over in Oxfordshire. Socio-economic deprivation was found to be associated with suicide in males, although this effect lessened after controlling for social fragmentation. The findings were consistent with previous research that controlled for social factors with a 2-fold increased risk of suicide reported among the unemployed (Lewis & Sloggett, 1998). A similar association has also been found internationally (Johansson & Sundquist, 1997; Qin et al., 2003).

The relationship between suicide and unemployment is complex, and the pathways linking these factors are uncertain (Platt & Hawton, 2000). Platt & Kreitmann (1984) examined the risk by length of

time individuals were unemployed compared to those in employment. The risk was 6 times greater at 6 months unemployed and rose to 19 times when individuals had been employed for 12 months. Warr (1987) explained the higher risk stating that people are defined by their work and unemployment triggers low self esteem, low self worth and depression. Pritchard (1995) also concurred that unemployment has negative psychosocial implications. The rates therefore, may be higher due to other confounding factors, such as psychiatric disorder or substance misuse that may contribute to the higher rates of suicide observed in the unemployed. It may be that those with mental illness are more likely to be unemployed or that unemployment increases the risk of psychiatric morbidity and subsequent suicide risk. In a record linkage cohort study in New Zealand, Blakely et al., (2003) found that being unemployed was associated with a 2-to-3-fold increased risk of suicide compared with those in employment.

There is also the possibility of health selection confounding, that is, poor health precedes or predicts unemployment and death causing a spurious association between unemployment and suicide. There are difficulties in establishing unemployment and social deprivation as casual factors in suicide. Defining unemployment is problematic, and there are too many confounding factors to control for. Despite these difficulties, overall there appears to be an association, with research showing a 2-3 fold increase risk of suicide.

2.6 PREVIOUS SUICIDE ATTEMPTS

The risk of completed suicide has been associated with previous suicide attempts (Barraclough et al., 1974; Foster et al., 1999). Between 10-15% of those with a history of suicide attempt died by suicide (Cullberg, Wasserman, & Stefansson, 1988; Rudd, Joiner, & Rajab, 1996). Scoliers et al., (2009) in a 5 year follow-up study of 874 patients who attempted suicide, reported that 29% of the patients repeated their suicidal behaviour, with increased risk in females. The risk of completion increased with the number of repetitious acts. Hawton & Zahl (2003) found a 66-fold increased risk of suicide in a 20 year follow up study of people who were previously treated for self-harm within a 12 month period. The risk was greater in females rising to 99 times that of the general population. The risk was found to diminish with the time since the self-harm incidents. The greatest risk of completed suicide has been shown to be within 6 months following the suicide attempt (Cooper et al., 2005; Nordström, Samuelsson, & Åsberg, 1995).

Suicide attempts account for approximately 170,000 hospital attendances per year (Kapur et al., 1998). Diekstra (1993) suggested the incident rate may be much higher than estimated as medical treatment is not always sought following self-harm. Frequency and repetitious self-harm behaviour is also considered an important risk factor for completed suicide. Zahl & Hawton (2004) in a study of

11,000 patients presenting to hospital following an episode of self-harm, reported a 2-fold increased risk of completed suicide compared to patients with a single-episode.

2.7 FAMILIAL SUICIDE

Previous experience of familial suicide behaviour, both completed and attempted, has been shown to increase the risk of suicide in offspring (Brent, 1995; Gould, Fisher, Parides, Flory, & Shaffer, 1996). A history of psychiatric illness in family members also elevates the risk of suicide, but the risk of suicide has also been shown to be independent of mental disorder (Qin et al., 2002). Suicidal behaviour by parents or siblings strongly suggests a genetic susceptibility. Mittendorfer-Rutz et al., (2008) examined familial clustering in young suicide attempters and found a strong association with parental psychopathology. Brent (2002) examined the risk factors for familial suicide in 2 groups of mood disordered patients, with and without a history of suicide attempts. They found the increased risk in the offspring of suicide attempters was 6-fold of that in the offspring of non-attempters. The authors concluded for suicidal behaviour to be transmitted within the family, other features such as mood disorders, sexual abuse and impulsive aggression also need to be present.

2.8 ADVERSE LIFE EVENTS

Adversities occurring shortly before death have been considered to be causal factors in suicide, particularly where there have been a cluster of events within 3 months. Typical life events associated with suicide have been cited as serious arguments with a spouse (interpersonal problems); serious illness of a family member; serious personal physical injury; and appearing in court for an offence (Heikkinen et al., 1995; Heila et al., 1999). The timing and culmination of stressful life events has been shown to be associated with suicide. Paykel et al., (1975) found completed suicides had experienced a higher number of adverse events compared to the general population and compared with a control group of people with depression. However, the study did not establish causation and was unable to show risk factors, only associations. Comparative studies have shown that although these adverse events are common in the general population, after controlling for mental disorder, recent adverse events are experienced more often in suicides (Appleby et al., 1999; Foster et al., 1999; Cavanagh et al., 1999). Cooper et al., (2002) have shown an association between age and life events and the risk of suicide in those aged 60 and over. This group have also been shown to experience more physical illness and personal loss (bereavement) than other age groups (Harwood et al., 2006), whereas those aged 35 and under more commonly experience relationship problems and problems resulting from criminal activity.

2.9 MENTAL ILLNESS AND SUICIDE

2.9.1 PREVALENCE OF MENTAL ILLNESS IN SUICIDE

Mental illness has been considered to be the most important risk factor in suicide (Cavanagh et al., 2003). The prevalence of mental illness in suicide has been shown to be particularly high in studies using a psychological autopsy method. These studies have reported nearly 90% of suicides experienced mental illness prior to taking their own life (Arsenault-Lapierre, Kim, & Turecki, 2004; Tanney, 2000). The high rates could be a consequence of recall bias associated with this methodology (BarracloUGH et al., 1974). However, epidemiological studies have also reported elevated rates of mental illness in suicide. Qin et al's (2003) Danish case-control study examined over 21,000 suicides and over 400,000 controls and found 40% of the suicides had at least one previous psychiatric admission.

Suicide has also been analysed by diagnostic group. Harris & BarracloUGH (1997) in a meta analysis of 249 suicide studies, analysed 44 disorders consistent with DSM-III-R and ICD-9 psychiatric diagnostic criteria. They reported that 39 disorders had a significantly raised standardised mortality ratio (SMR) for suicide. Affective disorders, alcohol misuse, and schizophrenia were considered the most significantly associated diagnoses. They concluded:

"If these results can be generalised, then virtually all mental disorders have an increased risk of suicide excepting mental retardation and possibly dementia and agoraphobia" (page 222).

Suicide in the most common diagnostic groups will be briefly summarised below.

2.9.2 AFFECTIVE DISORDER

Compared to other diagnostic groups, affective disorder presents the highest suicide risk. Over half of people who die by suicide are thought to be clinically depressed (Cavanagh et al., 2003; Lesage et al., 1994). The distinction between unipolar and bipolar disorders has exposed differing levels of risk. Individuals with unipolar depression have been shown to have a significantly higher risk in a national study of patients hospitalised for affective disorder in Denmark (Høyer & Lund, 1993). Harris & BarracloUGH (1997) in a meta-analysis also found the risk to be higher in unipolar depression with a 20-fold increased risk compared to 15-fold in bipolar patients. However, contradictory results emerged when in-patient samples were examined. Krupinski et al., (1998) reported a similar rate of risks in both types of depression, likewise Bottlender et al., (2000) in a study of 37 in-patient suicides also found the risks to be consistent in unipolar and bipolar patients.

Severity of illness has been observed as an important risk factor in patients with affective disorder. Kessing's (2004) national sample of in-patients used ICD-10 criteria to categorise patients with mild,

moderate and severe depression. Patients were followed up over a period of 6 years, and the findings illustrated increased risk with severity of illness.

The risk of suicide in patients with major depression has been shown to be elevated by other clinical characteristics. Fawcett et al., (1990) demonstrated how clinical characteristic such as previous suicide attempts, feelings of hopelessness, and suicidal ideation were associated with patients who took their own life between 2-10 years following clinical assessment, whereas suicides occurring within a year were more commonly associated with substance abuse, anhedonia and insomnia. Recurrent depression has also been shown to increase the risk of suicide compared to single episodes (Waern et al., 2002). McGirr et al., (2007) in a case-control study assessed the symptoms of patients with major depression to identify clinical risk factors for suicide. Recurrent suicide ideation, insomnia and feelings of worthlessness were the most prevalent among completed suicides.

In a case-control study of males with major depressive disorder, Dumais et al., (2005a) found substance abuse and personality traits such as aggression and impulsivity increased the risk of suicide, particularly in those aged 18-40. These findings are consistent with previous research (Corruble, Damy, & Guelfi, 1999; Pendse, Westrin, & Engström, 1999).

2.9.3 SCHIZOPHRENIA

The risk of suicide in people diagnosed with schizophrenia has been estimated by Harris & Barraclough (1997) to be 8.5 times higher than the general population, and 13 times greater in a study by Pinikahana et al., (2003). Suicide has been reported as the most common cause of premature mortality within this diagnostic group (Cohen, Test, & Brown, 1990; Fenton, 2000). Palmer et al., (2005) estimated the risk of mortality from suicide to be 4.9% in people with schizophrenia. The prevalence of co-existing risk factors in this population has been suggested as an explanation for the increased mortality. Additional clinical features such as co-morbidity (depression, substance misuse), previous suicide attempts and social factors including being unemployed, young and unmarried also increased risk (Caldwell & Gottesman, 1990; Hawton et al., 2005).

2.9.4 PERSONALITY DISORDER

The estimated lifetime risk of suicide has been shown to be between 4% and 10% (American Psychiatric Association, 2001; Foster et al., 1999). However, the association between personality disorder and suicide has been difficult to establish due to problems with diagnoses. Zimmerman (1994) questioned the reliability of assessments, and how personality is measured, and the change in behaviour traits over a person's lifetime. Furthermore, patients with personality disorders often have co-morbid diagnoses such as depression and substance misuse, which may confound the findings. However, studies have shown an elevated risk of suicide has been shown for individuals diagnosed with personality disorder, especially anti-social and borderline personality disorders (Allebeck &

Allgulander, 1990; Duberstein & Conwell, 1997; Lieb, Zanarini, Schmahl, Linehan, & Bohus, 2004). Personality disorders are characterised by impulsivity and aggression, and this combination of traits has been shown to increase risk (Dumais et al., 2005b). A recent case-control study by McGirr et al., (2007) analysed suicides by patients with borderline personality disorder. They found a differentiation between those who died by suicide and other borderline personality patients, with completed suicides having fewer suicide attempts and episodes of hospitalisation but demonstrating higher levels of hostility and impulsivity. The study was limited by the use of proxy-based information for suicides and controls, and the predominantly male sample.

2.9.5 SUBSTANCE MISUSE AND DEPENDENCE

Alcohol dependence has been shown to have a strong association with suicide (Pirkola, Isometsa, Heikkinen, & Lonnqvist, 2000; Preuss et al., 2003; Suokas & Lonnqvist, 1991). Inskip & Harris (1998) in a meta-analysis estimated an increased risk of suicide of 7% in people with alcohol dependence. Pirkola et al., (2000) in a Finnish population study of suicides found 35% had a lifetime history of alcohol misuse. Alcohol misuse has been shown to be higher in male compared with female suicides (Ohberg et al., 1996). However, the proportion of males misusing alcohol is also higher in the general population. This may reflect the greater propensity for alcohol misuse in men, rather than a 'true' gender effect. Indeed, Ramstedt (2001) has shown a higher relative risk for suicide in female alcohol abusers compared to general population females, than in male abuses compared to the male general population.

The risk of suicide among alcohol dependent individuals has been shown to be higher when complicated by co-morbidity, and adverse life events. Alcohol dependence has been shown to predispose individuals to depression (Chignon, Cortes, Martin, & Chabannes, 1998) and increases the likelihood of adverse life events and social effects such as marital breakdown, unemployment, low self-esteem, which in turn increases the risk of suicide (Lester, 1992). Alcohol has also been shown to precipitate suicide. Alcohol consumption immediately prior to suicide has been associated with suicidal ideation and unplanned attempts, and has been argued to be more significant than a history of long term alcohol dependence (Borges, Walters, & Kessler, 2000). Excessive alcohol consumption leads to impaired problem solving, particularly in young people, and exacerbates impulsivity and aggressive traits leading to an increase in suicide risk (Hawton 1994; Horesh et al., 1999).

2.9.6 CONTACT WITH MENTAL HEALTH SERVICES

Previous research has shown similar rates of contact with mental health services prior to suicide. In a psychological autopsy study of 100 suicides Barraclough & Harris (1974) reported 24% had previous contact within 12 months, and 18% within a month of their death. More recently, a study by the NCISH observed 27% of suicides had been in contact within a year of death (NCISH, 2006). This proportion

has remained consistent with the latest figures showing 27% for England (NCISH, 2012). Luoma et al., (2002) in a review of 40 studies, reported rates of contact with mental health services prior to suicide. The authors concluded that approximately a third had been in contact with services before their death. The rates varied by age. Service contact was found to be higher among those under the age of 35 compared to those aged 55 and over. Gender differences in service engagement were also found, with more contact observed in female suicide (average 58% women, 35% men).

The proportion of patient suicides in recent contact who had previously been admitted for in-patient treatment in England and Wales was recorded as 73% by NCISH (2006), 15% of whom had more than 5 admissions. Previous studies have also shown similar high findings, with proportions ranging from 57% to 89% (Black, Warrack, & Winokur, 1985; Roy, 1982).

Foster et al., (1999) in a case-control psychological autopsy study reported the findings of previous contact with mental health services and GP's comparing 115 suicides and 115 deceased community controls. They found suicides were significantly more likely to have had previous mental health service contact ever, within 12 months, and at the time of death, and to have visited their GP within 26 weeks of death. Furthermore, Andersen et al., (2001) reported 71% of suicides had contact with a health care professional before their death, and 66% had consulted a GP within a month of suicide.

2.10 SUICIDE PREVENTION IN THE GENERAL POPULATION

A marked decrease in the rate of suicide in the general population has been reported for England and Wales over recent years (ONS, 2011, NCISH, 2012). The fall can be attributed to a number of societal changes, such as lower unemployment and divorce rates. Evidence has also shown that during periods of economic prosperity rates of suicide decline. Stability in personal relationships measured by the rate of divorce have also been correlated with lower suicide rates (Biddle et al., 2008; Waern et al., 2003). However, recent reports suggest the downward trend in rates may not be continuing.

A government White Paper *Saving Lives: Our Healthier Nation* prioritised four areas in healthcare where mortality rates could be reduced. The National Service Framework for Mental Health defined delivery targets required to be met to achieve a reduction in suicide by 20% by 2010. The National Suicide Prevention Strategy for England was launched in 2002 as a coherent strategy document, which targeted areas for prevention (Department of Health, 2002). The strategy called for a collaborative approach across organisations and individuals to meet these targets. The goals provided in the document included promoting well being in the general population; reducing the availability and lethality of suicide methods; improving the reporting of suicide in the media; and reducing the risk in high risk and vulnerable groups. The groups targeted for risk reduction were:

- People bereaved by suicide
- People who died by suicides in the year following deliberate self-harm
- People who were currently or have recently been in contact with mental health services.

A review of progress found that suicide rates had fallen over the period but the target set of 20% reduction was not achieved. However, progress has been evident. For example, legislation to restrict access to methods has been associated with a reduction in accidental poisoning involving paracetamol and co-proxamol (Hawton et al., 2009; Hawton et al., 2001b).

Risk factors for suicide include both social and health factors. Although causality for the reduction in rates is difficult to determine, the evidence suggests a coordinated approach from all health and welfare sectors has been effective. The national suicide prevention strategy was conceived as an evolving programme and a recent consultation document outlined proposed plans to improve information and support to family and friends, both when there is concern for someone who might take their own life and support following bereavement.

The 2002 document was superseded by the recent publication of the new suicide prevention strategy '*Preventing Suicide in England*' (Department of Health, 2012). In addition to the high risk groups previously mentioned, new groups were identified:

- Middle aged men (the highest overall suicide rates reported in those aged 35-49 years)
- People in contact with the criminal justice system

The challenge at this time for policy makers is to address the recent upturn in suicide, which may be associated with the economic climate and increased financial and social difficulties currently being experienced by vulnerable groups across society.

2.11 CHAPTER SUMMARY

Research has shown that rate of suicide has decreased over the last decade in England and Wales, but the trend may be reversing, a recent upward trend has been recorded for the last 2 years. Overall, compared to other nations, the suicide rate in the UK is relatively low. There are international similarities in terms of the demographic characteristics of suicide. Men more commonly die by suicide than women, a ratio of 3:1, and marital status has been shown to be a protective factor. Suicides have recently decreased in the elderly, but there has been a marked rise in the number of middle-aged suicides, particularly in males. The significant risk factors for suicide were shown to be previous suicide attempts and a history of mental illness. The highest risk has been shown to be in those with a diagnosis of depression. Despite the high prevalence of mental illness reported in psychological autopsy studies, the proportion of people in contact with mental health services is comparatively low.

Policies designed to reduce suicide have identified and targeted vulnerable groups such as those with a history of self-harm and those recently bereaved by suicide. Middle aged men and those in contact with the criminal justice system have also been recognised as high risk groups.

CHAPTER 3: BACKGROUND ON HOMICIDE-SUICIDE

3.1 CHAPTER PREFACE

In this chapter I will outline the literature pertaining to homicide followed by suicide, referred to as homicide-suicide throughout this thesis. A description of the demographic characteristics of the perpetrator and victim, the offence, and risk factors including mental illness will be provided. The similarities to suicide cases and homicide cases will also be discussed along with the theories underpinning our understanding of the phenomenon will be presented.

3.2 DEFINITION OF HOMICIDE-SUICIDE

The term homicide-suicide refers to an incident where an individual commits homicide and then takes his or her life. It is also referred to in the literature as 'murder-suicide', 'extended-suicide' or 'dyadic death' as it involves the loss of at least two lives. There is no legal definition of these incidents as a singular act. The convergence of two well-defined legal terms, suicide and homicide results in a unique entity. Although no criminal trial is conducted or conviction secured, a legal process is applied to officially consider the deaths. An inquest is a judicial process through which unnatural or sudden and unexplained deaths are examined to determine the causes and circumstances of a death. The inquests are heard in HM Coroner's Courts, in an official legal hearing. A jury can be also be convened if required. In each case, a high level of proof is required to determine the cause and circumstances surrounding the death. Where homicide-suicide is suspected the criterion requires firstly, that there is sufficient evidence of a homicide or 'unlawful killing', and secondly that the suspected perpetrator then took his or her own life. The evidence is presented to the coroner via a police investigation file that contains witness statements and post-mortem examinations. The coroner subsequently requests further information during the course of his/her investigation such as medical history, and any other information deemed necessary to determine cause of death. Once this information has been acquired and considered, a verdict can be reached.

The second element in defining homicide-suicide relates to the time between homicide and the suicide. Typically these are dual acts that occur within a short time frame, often within 24 hours of each other. However, researchers have interpreted the time period differently. The variance between studies can have important implications for the interpretation of motivation and resulting typologies. The lack of cohesion renders comparison between studies problematic. Notably, Marzuk et al., (1992) addressed this point stating the importance of distinguishing this group from other murderers who may have 'ultimately' died by suicide, and suggested that the two events were not necessarily connected. Cases where the suspect is apprehended, and those that result in a conviction are normally excluded from study samples. However, a lack of clarity as to the timing between incidents in the majority of studies

make it difficult to interpret whether individuals who were charged and remanded in custody were included or excluded. Marzuk et al., (1992) recommend a restriction of one week between events should be used. However, Barraclough & Harris (2002) found in their research that suicides occurring more than 3 days after the homicide may not be linked to the offence and therefore may not be recorded by official sources as a homicide-suicide event, but recorded as two separate incidents. Shaw & Flynn (2003) also recommended a 3 day cut off point, as the perpetrators mental state and motivation for suicide may change over a longer period of time. For example, a suicide which occurred over 3 days after the homicide, perhaps following arrest and incarceration, may be motivated by fear of facing life imprisonment or feelings of guilt, remorse or shame as a result of their actions. Therefore, it is important to establish an appropriate and clinically meaningful definition across the topic.

3.3 UK HOMICIDE-SUICIDE RATE

Each year in England and Wales around 20-30 people kill someone and then take their own life (Appleby et al., 2001; Barraclough & Harris 2002). Official statistics published by the Home Office (Home Office, 2011b; 2012) show the outcome for homicide suspects covering the study period for this research 2005/2006 – 2010/2011 (Table 1). In the majority of homicide-suicide cases the suspect is not indicted and takes their life immediately after the homicide, before any contact with the police. It has been claimed that the proportion of homicide-suicides is related to the number of homicides occurring in a country (Coid 1983).

Danson & Soothill (1996) in a study of murders reported in the London Times newspaper (1887–1990) revealed a total incidence of 6% of homicides in the United Kingdom which resulted in the perpetrators suicide. Historically the prevalence was much higher with approximately 1 in 3 cases being classed as 'murder-suicides' around the turn of the 20th century (West, 1965). However, the rate of homicide-suicide incidents has remained constant over a number of decades with 0.06 per 100,000 population per year recorded in England and Wales (Barraclough & Harris 2002).

3.4 INTERNATIONAL HOMICIDE-SUICIDE RATES

Marzuk et al., (1992) estimated that in the U.S. between 1,000 and 1,500 acts of homicide-suicide occur annually. The authors found that studies conducted within the U.S. reported the proportion of homicides ending in suicide ranged from 1% - 20% with an average at 5%. The rate of homicide-suicides occurring around the world ranges from 0.02 to 0.46 per 100,000 population. The rates not only vary between countries, but within countries with regional variations in Japan ranging from 0.02 to 0.38 and likewise within the U.S. (Table 2).

A recent European Homicide-Suicide Study (EHSS) has combined data from national familial homicide-suicide samples in seven European countries. The combined information included over 2000 cases between 1996-2005, and aimed to provide empirical evidence on offender victim relationship,

socio-demographic information, motivation and will look at regional variations (Liem & Oberwittler, 2012).

TABLE 1: OUTCOME OF PEOPLE SUSPECTED OF HOMICIDE IN ENGLAND AND WALES, BY YEAR (INCLUDING PEOPLE INDICTED AND NOT INDICTED) ⁴

	[†] 2005/ 2006	^{††} 2006/ 2007	^{††} 2007/ 2008	^{††} 2008/ 2009	^{††} 2009/ 2010	^{††} 2010/ 2011
Convicted of homicide	575	568	622	514	395	185
Convicted of lesser offence	38	62	44	47	46	10
Unfit to plead	3	4	8	5	1	1
Acquitted/discontinued etc.	159	167	181	146	87	24
Proceedings concluded other outcome	4	6	6	6	3	1
Committed suicide or died	20	27	30	22	27	24
No proceedings taken	6	7	15	9	6	5
Proceedings pending	103	121	121	126	226	455
Total	808	962	1027	875	761	705

⁴ [†]Source: Home Office (2011b); ^{††} Home Office (2012)

TABLE 2: RATE OF HOMICIDE-SUICIDE PER 100,000 POPULATION, BY COUNTRY AND REGION

Region/Country	Rate per 100,000 population	Years	Study reference
Australia	0.11	1989-1996	Carcach & Grabosky (1998)
Canada	0.20	1988-1989	Buteau et al., (1993)
England (Yorkshire & Humberside)	0.07	1980-1990	Milroy (1993)
England & Wales	0.05	1996-2005	Flynn et al., (2009)
Fiji	0.12	1982-1992	Adinkrah (2003)
Finland	0.16	1998-2000	Kivivuori & Lehti (2003)
France (Indre-et-Loire)	0.16	2000-2003	Saint-Martin et al., (2006)
Greece	0.07	1998-2005	Vougiouklakis & Tsiligianni (2006)
Hong Kong	0.09	1989-1998	Chan et al., (2003)
Japan (Ibaraki)	0.02	1990-1996	Hata et al., (2001)
Japan (Saporro)	0.06	1985-1995	Hata et al., (2001)
Japan (Toyama)	0.38	1985-1999	Hata et al., (2001)
Netherlands	0.05	1992-2006	Liem et al., (2011)
New Zealand	0.08	1991-2002	Moskowitz et al., (2006)
Switzerland	0.09	1992-2004	Liem et al., (2011)
U.S. (13 States)	0.22	2004-2006	Liem et al., (2011)
U.S. (13 States)	0.21	2003-2004	Bossarte (2006)
U.S. (Oklahoma)	0.27	1994-2001	Comstock (2005)
U.S. (Central Virginia)	0.38	1990-1994	Hannah et al., (1998)
U.S. (Fulton County, Georgia)	0.46	1988-1991	Hanzlick & Koponen (1994)

3.5 METHOD OF HOMICIDE AND SUICIDE

Researcher using data from the Violence Policy Center examined news clippings and internet reports of homicide-suicide cases across the U.S. during a 6 month period (1st January 2005 – 30th June 2005) (Violence Policy Center, 2006). The findings revealed 92% of incidents involved handguns, shotguns, and rifles. The author's hypothesis for the prevalence of firearms as a method was that it was easier to use the same method for both the homicide and suicide. Likewise, the availability of firearms in countries such as the U.S. will inevitably result in wider usage in homicide. In countries with tighter gun control legislation, the pattern of weapon use is more diverse. In Hong Kong for example, strangulation/suffocation was found to be the most common method (26%), followed by stabbing/chopping (24%), with a firearm used in only 1 case from a sample of 133 homicides (Chan, Beh, & Broadburst, 2004). Flynn et al., (2009) in a national cohort of 203 perpetrators in England and Wales reported the most frequent method of homicide was the use of a sharp instrument, followed by strangulation, and firearms. In terms of the method of suicide, hanging, firearms and carbon monoxide poisoning were the most common. Less than half of the perpetrators used the same method in both the homicide and suicide. However, where firearms were used in the homicide, 90% used this method to take their own life, and a similar proportion used carbon monoxide poisoning in both incidents (82%).

3.6 LOCATION OF HOMICIDE AND SUICIDE

There is little data available on the location of homicide-suicide incidents. The Violence Policy Centre study (2006) in the U.S. reported that most incidents occurred in the home (75%). Berman (1979) reported that the most common room for the homicide-suicide was the bedroom, this was also confirmed in a review by Felthous & Hemple (1995). Furthermore, in a study of firearm deaths in Yorkshire and the Humber, Chapman and Milroy (1992) also concluded that of the 24 cases of homicide-suicide, 77% of the bodies were found in the home, most commonly the bedroom.

3.7 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF HOMICIDE-SUICIDE OFFENDERS

3.7.1 GENDER

Homicide-suicide is predominantly committed by men. Carcach & Grabosky (1998) in an Australian study found 91.4% of perpetrators were male. Similar proportions have been reported in the U.S., 93-97% (Marzuk et al., 1992) and in England and Wales, 86% (Flynn et al., 2009). These findings on gender contrast with West's study in 1965. West reported 40% of homicide-suicide in Greater London were perpetrated by females. Milroy (1995) proposed an explanation for this dramatic reduction in female suspects. He suggested that since the removal of carbon monoxide from the domestic gas

supply the number of female homicide-suicides has fallen. There is evidence to support a significant fall in suicide by this method (Farmer & Rhode 1984; Kreitman 1976), which may also have impacted on homicide-suicide rates. However, cultural, societal and economic changes affecting women over the past 50 years could be considered more relevant.

3.7.2 AGE

Studies on homicide only have found perpetrators with a median age of 27 years (Appleby et al., 2001). Evidence suggests males under 30 tend to kill unrelated victims (Silverman & Mukkherjee, 1987) whereas those over 30 kill close relatives (Dawson & Lanagan, 1994). As homicide-suicides most commonly occur between intimate partners and family members, age has consistently been reported as a factor in these acts (Felthouse & Hemple, 1995). The median age of homicide-suicide perpetrators has been reported as 40 years by several studies (Barracough & Harris 2002; Carcach & Grabosky 1998) which is significantly older than homicide only perpetrators (Flynn et al., 2009).

A study collating data from two medical examiner districts in Florida focused on homicide-suicide in elderly populations (Cohen, Llorente, & Eisdorfer, 1998). The authors reported a homicide-suicide rate of 0.62 per 100,000 in older perpetrators compared to 0.34 for younger age groups (less than 55 years). Therefore, the rate was twice that in the elderly population. However, the generalisation of Cohen and colleagues findings is questionable. Demographically Florida has the highest elderly population of all states in the U.S. at 19% (U.S. Bureau of Census, 1993) and therefore, the same rates may not be applicable to the rest of the U.S. or internationally. Furthermore, as few other studies have reported rates of homicide-suicide in older populations, comparisons are difficult.

3.7.3 ETHNICITY

There is little information on ethnic origin of perpetrators or victims in the literature, and where it is reported, the findings vary markedly. Two studies in the U.S. observed White and Black minority ethnic groups in equal proportion, 50% White and 50% Black in Philadelphia (Wolfgang, 1958), and 50% Whites and 50% Hispanic in Albuquerque (Rosenbaum, 1990). Other evidence suggests that White males predominately commit homicide-suicides (Allen, 1983; Palmer & Humphrey, 1980). In a review of U.S. studies, Felthous & Hemple (1995) concluded that Whites more commonly commit homicide-suicides. In a study in New Zealand, the ethnicity of the perpetrators was similar to that of the general population, with 18% of the Pacific Islands or Maori origin (Moskowitz et al., 2006). The findings on ethnicity should be treated with caution, as methodologies and sample selection used in these studies can skew the results. For example, Rosenbaum's sample of only 12 homicide-suicide were derived from a population in New Mexico, where the Hispanic population is high, thus the findings on ethnicity are not representative of the U.S. as a whole. Information on ethnicity was lacking in most non-U.S. studies.

3.8 CHARACTERISTICS OF VICTIMS

In cases of homicide only, the range of victimisation is extensive. The NCISH (2006) reported that less than a third (31%) of homicide victims in England and Wales were family members or current or former spouse/partners (NCISH, 2006). In contrast, the victims in cases of homicide-suicide are predominantly familial, commonly the perpetrator kills an intimate partner or ex-partner (Barber, 2008; Bossarte et al., 2006; Comstock et al., 2005; Saleva, Putkonen, Kiviruusu, & Lonnqvist, 2007). The circumstances of intimate partner homicides are wide ranging, and have been sub-divided into further categories. For instance, Marzuk et al., (1992) noted intimate partner homicide by older couples tended to occur in the context of ill health or enforced separation, whereas in younger couples jealousy and possessiveness were more pivotal. Men almost exclusively commit intimate partner homicide-suicide. It is rare for a woman to kill a partner and take her own life (Belfrage & Rying, 2004; Bourget, Gagne, & Moamai, 2000; Dawson, 1994). It has been suggested that female perpetrators who kill a partner following a prolonged period of abuse, do not experience the same depth of guilt after the act, but experience a sense of liberation and therefore, do not feel compelled to take their own life (Swatt & He, 2006). However, any discussion with regard motivation in homicide-suicide must be treated cautiously. As the perpetrator is deceased, there is no robust method of determining motivation for these acts. Although parallels can be made with similar homicides, reports on motivation is less reliable.

The second most frequent group of victims are the perpetrator's own children. In cases of paternal filicide the root cause of the perpetrators anger is usually conflict with an intimate partner. Hatters Friedman et al., (2005) found two-thirds of fathers who killed their child attempted to kill their wives also (also known as familicide), whereas none of the mothers who killed a son or daughter attempted to kill their partners. Whilst the risk of filicide is highest in infants (Overpeck et al., 1998), in filicide-suicide cases the average age of the victim is older. For example, the average age of child victims was reorded to be 6.5 years in Sweden (Sommander & Rammer, 1991) and 6.8 years in the U.S. (Hatters Friedman et al., 2005).

3.9 MENTAL ILLNESS AND HOMICIDE-SUICIDE

The literature on suicide and homicide has provided strong evidence supporting an association between mental illness and violence both towards oneself and others. However, the role of mental illness in homicide-suicide is less understood. Some researchers have suggested that all homicide-suicides are 'abnormal homicides' as the suicide itself is an indication of mental illness (Landau, 1975; Wong & Singer, 1973). Others studies have not considered mental illness in their analysis, or have made a cursory reference in relation to motivation. However, a number of studies have assessed mental illness more rigorously. A selection of studies reporting a range of prevalence rates of mental illness are presented in Table 3. The variance in rates (18% - 75%) can be explained by the study

design and methodology used to define and measure mental illness and by sample selection. Mental disorder has been measured using the following definitions:

- mental illness at the time of the offence
- mental health treatment (contact with mental health services)
- current use of antidepressants

3.9.1 MENTAL ILLNESS AT THE TIME OF THE OFFENCE

There is often insufficient diagnostic information recorded in case files to inform a reliable diagnosis of mental state at the time of the offence. Reporting of mental illness may be underestimated if the medical examiner or investigating police officers do not ask about a history of mental illness from witnesses, or request medical records for their investigation. Logan et al., (2008) suggested that it may be more or less likely for officers to request information such as history of depression depending on the type of incident i.e. homicide-suicide, suicide only or homicide-only, the authors suggested there may be a bias in seeking mental health data when the victims were children. In their study of 408 homicide-suicides across 17 U.S. states, Logan et al., (2008) observed higher rates of mental illness in cases involving children (filicide-suicide) compared with intimate partner homicide-suicide. They speculated that where violence against children had been committed, investigators were more inclined to examine the link to mental illness.

Several studies have recorded the presence of mental illness based on descriptions of 'despondency' or 'depressed mood' provided in statements by family members or friends. Studies that have based their reports of mental illness on witness testimony only, may overestimate the role of mental illness, and may incorrectly record emotional distress rather than clinical illness. Allen (1983), for example, originally intended to study the role of depression but data recorded in police files was deemed insufficient and unreliable. The psychological autopsy method used by Rosenbaum (1990) utilised reports from family and friends to inform the portrayal of the perpetrator. The additional verification through other sources such as the assessment of medical records provided more validity to the findings.

From a total sample of 148 cases, West undertook a comprehensive case review of 78 cases (West, 1965). In these cases, police files and coroners reports were sought, as well as records from family doctors and, if the offender had been treated by mental health services, their psychiatric records were examined. West cited depression as the most prevalent psychiatric disorder in 36% of his sample. He stated:

"The greatest risk of murder-suicide would occur among paranoids especially those in whom emotional distress takes a depressive form".

West observed that the majority of homicide-suicide offenders were not mentally ill at the time of the offence. West's case series in 1965 was the first to provide detailed descriptive clinical data using a wide range of data sources. However, the diagnostic criteria used are now outdated and not comparable with ICD-10 diagnostic criteria.

A second study by Rosenbaum used a psychological autopsy method to examine 12 spousal homicide-suicide cases compared with 24 spousal homicides (Rosenbaum, 1990). This method involved interviewing relatives and reviewing medical records in addition to examining coroners' reports and police files. The combination of the medical findings and the behavior described by witnesses produced a retrospective diagnosis. Rosenbaum reported 75% of the homicide-suicide sample had depression as defined by DSM III, but none of the homicide only perpetrators were depressed (Rosenbaum, 1990). Although the method used in this study is perhaps the most appropriate for furthering our understanding of the subject matter, the small sample size limits the generalisability of the findings. The data is descriptive and with such small numbers sub group analysis is limited. The addition of a qualitative examination of motivation and explanation of why these events occurred would have contributed to a greater understanding of homicide-suicide.

Bossarte et al., (2006) and Logan et al., (2008) accessed data from the U.S. National Violent Death Reporting System (NVDRS). The NVDRS compiles a comprehensive database from numerous sources including coroners and medical examiners reports, toxicology reports, death certificates, law enforcement records, and supplementary homicide reports. Other data can be integrated into the system where relevant, such as child fatality reviews. Bossarte et al., (2006) observed 11% of the 65 homicide-suicide cases studies had a documented mental health condition; approximately 30% were intoxicated at the time of the incident. Logan et al., (2008), in a study of 408 incidents, found approximately 15% of perpetrators were considered to be depressed or have had a 'mental health condition' by family or friends. Few had substance abuse problems (6%), 3.4% had a recorded previous suicide attempt. Ten percent had previous contact with mental health services. The findings from both of these studies are informative as they measure mental illness based on different definitions. One limitation is that the NVDRS define homicide-suicide as separate acts within 24 hours, which makes comparisons with studies using wider definitions more problematic.

The difficulty in determining whether the perpetrator was mentally ill at the time of the offence, is primarily caused by the lack of robust data. Unless an individual has undergone a psychiatric assessment by a clinician or mental health professional just before the offence, then information on symptomology is unavailable. Without data to provide a clinical evaluation of mental state, reports of symptoms of mental illness at the time of offence are less reliable. Furthermore, psychological autopsy studies have shown that using contact with services as a measure of mental illness is likely to underestimate or miss cases (Hawton et al., 1998). The best available method of discerning diagnoses would be by using a combination of diagnoses in case notes and/or information from informants.

Witness testimonies in psychological autopsy studies include mental state as described by family members or friends in recent contact with the deceased. Studies that have analysed coronial and medical examiners records are therefore more likely to represent mental state more accurately in homicide-suicide cases.

3.9.2 CONTACT WITH MENTAL HEALTH SERVICES

In a population study of 203 cases, Flynn et al., 2009 reported 20 (10%) cases had previous contact with mental health services, 14 (7%) within a year of the offence. Bourget & Gagne (2002) in a retrospective study of filicide identified 15 filicide-suicides, where the perpetrator killed their child and subsequently took their own life; the majority (91%) were diagnosed with serious mental illness and were under the care of mental health services.

Studies using 'prior hospitalisation' to define mental illness often record lower incidents of mental illness. The definition applied by Virkkunen (1974) included patients hospitalised for a psychotic disorder, and by this definition 15% of the sample were considered mentally ill. Rosenbaum (1990) reported a third of his sample had previously received treatment from psychiatric services, compared to 75% who, using an alternative measurement, were diagnosed retrospectively with a DSM-III-R illness. Similarly, Moskowitz et al., (2006) identified 33 cases of homicide-suicide over a 10 year period (1991-2000) in a population study in New Zealand. Of these, 11 (33%) had previously been diagnosed with mental illness, 8 (24%) of whom had received treatment from services. An additional 3 cases were described as experiencing psychotic symptoms at the time of the offence, but had not previously been seen by services. The researchers concluded that in total 42% of the homicide-suicide perpetrators were mentally ill. This is almost twice the proportion in contact with mental health services. Therefore, although considered more robust, contact with mental health services and prior treatment used as a definition, has been shown to significantly underestimate mental illness in these perpetrators.

3.9.3 PRESCRIBED ANTIDEPRESSANT MEDICATION

Barber et al., (2008) examined the toxicology reports of homicide, suicide, and homicide-suicide cases recorded in 4 U.S. states and 4 U.S. counties (2001-2002). In this study, the aim of the analysis was not to determine the prevalence of mental illness but to examine whether antidepressant treatment itself contributed to violent and suicidal behaviour. Of the 54 homicide-suicide cases screened for antidepressant use, a positive result was found in 15%. When compared to homicide and suicide, no significant difference was found. Along with other measures Logan et al., (2008) examined the toxicology reports of 408 homicide-suicides and found 12% had been taking antidepressant medication prior to the incident. In a study of 171 homicide-suicide events in older perpetrators in Florida, U.S., Cohen et al., (1998) reported most of the perpetrators had mental health problems. In two samples, central Florida and south eastern Florida, depression was found in 37% and 19% respectively.

However, of the total 171 cases only 2 had positive findings for antidepressant use. Malphurs & Cohen (2002) reported 65% of their sample was depressed; however, none of these cases tested positive for antidepressants at post-mortem. The limitation of using psychotropic medication and antidepressant use in particular as an indication of mental disorder, is that although it suggests the perpetrators had experienced some emotional distress to warrant the prescription, the duration and severity of symptoms is unknown. In addition the antidepressant may have been prescribed for conditions other than depression, e.g. anxiety or migraine. Using medical records to define mental illness via a diagnosis or indication of mental state at last contact would be more reliable than prescribing data.

3.10 ALCOHOL AND DRUG USE

Previous research has shown that alcohol and drug use is associated with homicide. Findings from the NCISH have recently shown that 50% of homicide perpetrators in England and Wales had a history of alcohol misuse and 50% a history of drug use. Likewise, patients in contact with services who died by suicide also had high rates (alcohol misuse, 44% and drug misuse, 30%) (NCISH, 2006). Dobash et al., (2001) in a prison study of male homicide perpetrators found 38% were intoxicated at the time of the homicide. However, in cases of homicide-suicide, Felthous & Hemple (1995) did not find a significant difference in the use of alcohol and drugs compared to cases of homicide or suicide. Marzuk et al., (1992) reported from a number of homicide-suicide studies that alcohol was present at autopsy in 12-50% of the perpetrators and 14-29% of victims. Rosenbaum (1990) found detectable blood alcohol levels in 33% of homicide-suicide cases. More recently Martin & Bachman (1997) reported that it was less common for both the victim and perpetrator in intimate partner violence to have consumed alcohol, but quite common for just the perpetrator to have been intoxicated. Bossarte et al., (2006) reported approximately 30% of offenders were intoxicated at the time of offence, and Logan et al., (2008) reported 22%. The use of blood alcohol levels as an indication of intoxication should be treated with caution, as concentrations of ethanol can be found in the body post-mortem due to endogenous production after death (Gilliland & Bost, 1993).

In homicide only cases, the evidence for intoxication can either be self-reported in psychiatric assessment for homicide, or in suicide and homicide-suicide recorded post-mortem in toxicology reports. The evidence has shown that 20-30% of homicide-suicide perpetrators were intoxicated at the time of the death. However, it is not possible to determine whether alcohol was a contributory factor in the offence, as it would be almost impossible to determine whether the alcohol was consumed directly before or after offence. Substances may have been consumed prior to the suicide only. Therefore, the findings are inconclusive.

TABLE 3: STUDIES REPORTING MENTAL ILLNESS IN HOMICIDE-SUICIDE OFFENDERS

Study	Region	Time period	N=	Data sources	Definition of mental illness	Percentage with mental illness
Allen (1983)	Los Angeles	1970-1979	104	Police files	Not defined	18%
Rosenbaum (1990)	Albuquerque New Mexico	1978-1987	12	Police files, hospital records, interview with family and friends	DSM-III-R diagnosis	75%
Buteau et al., (1993)	Quebec	1988-1990	39	Coroners files	Any reference made in records	67%
West (1965)	Greater London	1954-1961	78	Police files, coroners files, medical records, other professional agencies	Diagnosis made by medical professionals	58%
Lindqvist & Gustafsson (1995)	Sweden	1970-1981	16	Police, medical examiner and medical records	DSM-III-R diagnosis and prior treatment	63%
Moskowitz et al., (2006)	New Zealand	1991-2000	33	Coroners files (containing medical reports and witness reports)	Prior treatment/ diagnosis made by medical professionals/witness statements	42%
Virkkunen (1974)	Finland	1955-1970	126	Hospital records	Prior hospitalisation	15%
Milroy et al., (1997)	Victoria, Australia	1985-1989	39	Coroners files	Not defined	18%

Flynn et al., (2009)	England and Wales	1996-2006	203	Hospital records	Any lifetime treatment by mental health services	10%
Lecomte & Fornes (1998)	Paris and suburbs	1991-1996	56	Police and court files	DSM-IV	75%
Bourget & Gagne (2002)	Quebec	1991-1998	11	Coroners files	Prior treatment	91%
Logan et al., (2008)	17 U.S. states	2003-2005	408	National Violent Death Reporting System	Current depressed mood Current MH problem Current MH treatment Current use of antidepressants Suspected intoxication	13% 14% 10% 12% 22%
Bourget, Gagne & Whitehirst (2010)	In Quebec	1992-2007	19 (65+ yrs)	Coroner's files	Major depression Other psychiatric disorder Other psychosis	87% 6% 6%
Bossarte et al., (2006)	U.S. states	2003-2004	65	National Violent Death Reporting System	Current mental illness History of mental illness Current depression History of alcohol/drug misuse/dependency	11% 7.2% 9% 9%

3.11 CIRCUMSTANCES OF HOMICIDE-SUICIDE

Most studies of homicide-suicide are descriptive, and few researchers have provided a theory to explain why the events occurred. Where attempts have been made, authors such as Wallace categorised four kinds of homicide-suicide: conflict; altruism; mental abnormality; and miscellaneous (Wallace, 1986). Conflict cases encompass domestic violence, described as the most frequent form. Altruistic cases included elderly perpetrators and those in poor health, mental abnormality referred to cases in which the perpetrator had been diagnosed with mental illness; and the miscellaneous category recorded all other cases. Advancing this classification Marzuk et al., (1992) developed a typology for clinicians to provide a simple mental construct which could also be used as an evaluation tool. The typology is presented in Table 4 and consists of three relationship groups: spousal, familial and extra-familial. Within these categories the explanation for homicide-suicide were classed as 'amorous jealousy', 'mercy killing', 'altruistic or extended suicide', 'family, financial or social stress' and 'retaliation'. However, the author highlighted the need for empirical validation and for aetiological factors to be taken into consideration when interpreting the classification.

Hanzlick & Koponen (1994) revised Marzuk and colleague's typology. In their revision, the list of cofactors was extended to provide a broader categorisation of the motives for homicide-suicide. This classification system has been used as a guide in subsequent research (Hannah, Turf, & Fierro, 1998). The authors intended it to be used to detect trends and changes in the epidemiology and demographics of these events, ideally via a surveillance system (Table 5). More recently Wood Harper & Voigt in a qualitative analysis of 42 homicide-suicide cases in New Orleans suggested the addition of typologies from the literature on mass-murder including felony, terrorist and cult mass murder homicide-suicide and public killing spree-suicide (Harper & Voigt, 2007).

The classifications provided by both Marzuk et al., (1992) and Hanzlick & Koponen (1994) are useful as they group similar homicide-suicides into identifiable categories. They facilitate the comparison of events but they are also limited, as they fail to capture the complexity of these cases. Although the typologies generate groupings with common characteristics, these cases are often multi-faceted; consequently there is a danger that typologies are too one-dimensional. The validity of any typology based on motivation determined by a researcher post-mortem has its flaws and relies on the robustness of data and the integrity and experience of the rater. Without robust data to base these classifications on, it may not be valid to discuss motivation at all. Critics of the FBI's profiling of sexual homicide perpetrators suggest that the methodology used, and researchers preconceptions and experience may affect the interpretation of motivation and therefore, generate different profiles (Beauregard & Proulx, 2002). Thus, the same applies with typologies in homicide-suicide, which are subjective interpretations of motivation. The classifications demonstrate that these tools have limited use for data collection and surveillance, but can be useful as a general guide.

TABLE 4: MARZUK ET AL'S PROPOSED CLASSIFICATION OF MURDER-SUICIDE (1992)⁵

Type of Relationship	
I. Spousal or Consortial	
Perpetrator	
1. Spouse	
2. Consort	
Type of Homicide	
i. Uxoricial (spouse-killing)	
ii. Consortial (murder of lover)	
II. Familial	
Perpetrator	
1. Mother	
2. Father	
3. Child (under 16 y)	
4. Other adult family member (over 16 y)	
Type of Homicide	
i. Neonaticide (child <24 h)	
ii. Infanticide (child >1 d, <1 y)	
iii. Pesticide (child 1 through 16 y)	
iv. Adult family member (>16 y)	
III. Extra familial	
Class	
A.	Amorous jealousy
B.	"Mercy killing" (because of declining health of victim or offender)
C.	"Altruistic or extended suicides" (includes salvation fantasies of rescue and escape from problems)

⁵ Reproduction from the original publication by Marzuk et al., (1992)

D.	Family financial or social stressors
E.	Retaliation
F.	Other
G.	Unspecified

TABLE 5: HANZLICK & KOPONEN'S PROPOSED CLASSIFICATION SYSTEM FOR MURDER-SUICIDE (1994)⁶

Relationship of victim to perpetrator		Victim							
		Adult		Child		Infant		Neonate	
		M	F	M	F	M	F	M	F
		1	2	3	4	5	6	7	8
A	Spouse by marriage								
B	Common-law spouse								
C	Unmarried partner in a relationship								
D	Extramartial consort								
E	Real or perceived love rival								
F	Parent								
G	Offspring								
H	Sibling								
I	Grandparent								
J	Grandchild								
K	Niece/nephew								
L	Aunt/uncle								
M	Cousin								
N	Family member other than those listed								
O	Acquaintance								
P	Stranger								
Q	Same gender as perpetrator								

⁶ Reproduction from the original publication by Hanzlick & Koponen (1994)

R	Opposite gender of perpetrator
S	Same race as perpetrator
T	Different race than perpetrator
U	Lives in the same household
V	Lives in different household
W	No living witness(es)
X	Living witness(es)
Y	Shot
Z	Stabbed/cut
AA	Beaten
BB	Other (asphyxia, drugged, etc.)
Co-factors	
a	Impending divorce
b	Previously divorced
c	Real or perceived loss of non-marital partner in a relationship (boyfriend, lover etc)
d	Jealousy or retaliation for partner's real or perceived involvement with another person
e	Retaliation against real or perceived rival lover
f	Mercy killing
g	Altruism (to save from "evils of the world")
h	Financial stressors
i	Family stress or dysfunction
j	Perpetrator intoxicated with alcohol
k	Perpetrator intoxicated with drug(s) other than alcohol
l	Perpetrator had known history of psychiatric illness
m	Unspecified, other, or unknown factor
Special classification	
Family annihilator	
Dyadic	
Triadic	
Followed a mass murder or serial murders committed by the perpetrator	

3.12 HOMICIDE OR SUICIDE?

To understand the motivation behind homicide-suicide previous research has focused on two dominant themes, whether homicide-suicides are more closely related to homicide or more akin to suicide. Durkheim (1897) proposed that suicide and homicide were distinct and separate acts. It is perhaps not surprising that researchers have attempted to align homicide-suicide to existing theories underpinning the suicide and homicide literature. Liem (2010) considered the theoretical base of our understanding of homicide-suicide, and stated:

“Homicide and suicide have been perceived as fundamentally different in nature. Given the difference, both homicide and suicide have been studied independently... compared to the studies performed on homicide and suicide alone, our theoretical understandings of homicide-suicide are considerably limited” (Liem, 2010 page 2).

Early work by Enrico Ferri and Enrico Morselli in the 19th Century had suggested that these actions were alternative responses to the same cause. Consequently, aggression and violence are either directed internally (suicide) or externally (homicide). Henry & Short (1954) and Stack (1997) suggested that both ‘attributable styles’ (i.e. internal and external violence) are evident in cases of homicide-suicide.

3.12.1 SIMILARITIES WITH SUICIDE

Palmer & Humphrey (1980) analysed 90 cases of homicide-suicide over a 5 year period in North Carolina, U.S., and compared the cases with 994 perpetrators of homicide who did not commit suicide. The relationship between offender and victim, age, sex, and race were analysed using data collected from the Department of Corrections and the Chief Medical Examiner. In contrast to homicide only, homicide-suicide incidents involved White married males aged 30 and over, whose victim was usually their wife. Apart from marriage, which is considered a protective factor in suicide (Palmer, 1972), the authors stated that the characteristics of homicide-suicide perpetrators were congruent to those of suicides and dissimilar to homicide only offenders. However, the authors did not study the circumstances and motivation for these incidents. Their conclusions were based on three major assumptions. Firstly, that the marital relationship was one of conflict and discord. Previous studies have described the relationship between the victim and perpetrator in intimate partner homicide-suicide as chaotic with frequent separations, jealousy and discord (Rosenbaum, 1990; Buteau et al., 1993), factors commonly associated with violence, which conversely suggests the act would be more akin to homicide. Secondly, they claimed in homicide-suicide cases, killing a spouse or close family member was an evolving process of suicide. Without a thorough exploration of motive in this study, this statement is conjecture and not based on any evidence. Thirdly, the authors asserted that being responsible for the death of a loved one would lead the offender to take his or her own life. Research has indeed shown the risk of suicide increased if the victim of the homicide was a current or former

intimate partner (Stack, 1997). The realisation of their action, loss of their loved one and subsequent guilt may increase the risk of suicide, which would suggest the incident was more akin to homicide, with subsequent suicidal ideation, contradicting Palmer & Humphrey's conclusion.

Palermo's (1994) review of homicide-suicide studies focused on cases involving jealous paranoid personality types. Based on psychoanalytical, sociological and psychiatric theories, Palermo suggested these cases should be referred to as extended suicides.

"In the extended suicide, using a romantic and archaic definition of the representation of strong emotions and passions, the motive is in the heart of the jealous, depressed, or paranoid perpetrator... It is obvious that at that time his feelings are not those of killing an autonomous entity – mother person – but, rather, an extension of himself. The murder-suicide then becomes the expression of an extended suicide" (Palermo, 1994) (page 214).

The concept proposes that suicide is the primary motivation as opposed to the final outcome. Extended suicide or altruism is commonly reported in mothers who kill their children (Hanzlick & Koponen, 1994). Milroy (1995) described the motivation for homicide by females as 'misplaced altruism'. This originates from the supposition that women particularly feel their children's lives have in some way been destroyed and therefore the killing occurs out of a sense of protection, believing the children would be better off dead (Selkin, 1976). In a recent study by Hatters Friedman et al., (2005), the authors reviewed 30 cases from 1958 – 2002 using data obtained from Cuyahoga County coroner and police files (Cleveland and Ohio). The authors concluded that 90% of the mothers who killed their children and later killed themselves were motivated by altruism, to alleviate the suffering of the child, compared to 60% of fathers (Hatters Friedman et al., 2005). When women do commit homicide-suicide, it rarely involves other adults (Daly & Wilson, 1988). It is also claimed that women rarely kill their husbands and children in a domestic dispute (Goldney, 1977), invariably they are trying to free themselves and their children from their male partner. The 'female rescue fantasy' does not involve the spouse partner. Victims are tragically more often their own children (Selkin, 1976).

Van Wormer (2008) introduced the term suicide-murder to describe cases driven by suicide (Van Wormer, 2008). These cases include elderly homicide-suicide characterised by imminent separation due to infirmity; mass shootings and spree killings; and intimate violence. Van Wormer speculated that suicidal murderers are anti-social and have "little regard for the lives of other people". She added that the offenders are so dependent on their partners that they cannot live without them; therefore, they would rather be dead than live a life separated from their partner. In addition to these cases earlier research by the same author identified 20 cases where offenders admitted committing homicide with the specific intention of receiving the death penalty (Van Wormer & Odiah, 1999). These individuals wanted to kill themselves but for some reason were unable to go through with it. A case cited by the authors involved a man who deliberately engaged in 'murder-for-hire' as he knew the crime carried a

mandatory death penalty. When charged he admitted that 'I'm too much of a coward to commit suicide', therefore the death penalty was used as a form of suicide by proxy.

Suicide attempts are a known risk factor for completed suicide, however previous attempts and suicidal ideation is not frequently reported in the homicide-suicide literature. In one study, Logan et al., (2008) reported 3.4% of their 408 cases had a history of suicide attempts. Further research into the time between a previous suicide attempt or self-harm incident and completed homicide-suicide may provide insight into the level of suicide ideation in perpetrators at the time of the offence, which may give more weight to the suggestion that homicide-suicides are more strongly associated with suicide rather than homicide.

Liem & Roberts (2009) found in intimate partner homicide-suicide, "a high prevalence of unemployment, depression, suicide threats and suicide plans" and they consider this to be more "in line with suicide victims" suggesting that in these cases they were similar to suicide.

3.12.2 SIMILARITIES WITH HOMICIDE

In contrast to the 'suicide-homicide' proposition, several authors have stated that homicide-suicide offenders have characteristics more analogous to homicide offenders. Berman (1979) pointed to the degree of premeditation, planning, lethality of weapon, and communication of intent to commit homicide to the victims as evidence that these incidents are more closely associated with homicide. Previous violence and threats to kill were also shown to be an important feature in school shootings, which are almost always followed by suicide (Fritzon & Brun, 2005). Koziol-McLain et al., (2006) reported that threats, particularly when they escalated in frequency and specificity, were strongly associated with homicide-suicide. The term 'murder-suicide' used by some research also implies intent and premeditation.

Intimate partner homicide-suicides are often motivated by jealousy and the deaths frequently occur as a result of a intense argument and passionate rage (Easteal, 1994). It has been asserted that in these instances suicide becomes a secondary outcome. In a study of 104 homicide-suicides in Los Angeles, Allen analysed case summaries from the Los Angeles Police Department (Allen, 1983). The author concluded that the suicidal act was borne out of despair. The homicide was commonly committed due to impulsive hostility, jealousy and rage, and the suicide from remorse and guilt. Wallace (1986) also theorised that homicide-suicides resulting from conflict were more frequently associated with homicide. The degree of positive attachment was considered an important factor in these incidents. The level of nurturing or responsibility toward the victim increased the risk of suicide. Suicide follows out of feelings of guilt, shame, or fear of consequences relating to the homicide (Henry & Short, 1954). Stack's multivariate analysis of 265 homicide-suicide cases has shown a 12-fold increased risk of suicide

following the homicide of a spouse or ex-spouse, over 10-fold for a child, compared to an odds ratio of 1.9 for a friend. The author considered homicide-suicide to be a subclass of homicide (Stack 1997).

Daly & Wilson (1988) commented that in cases involving intimate partners these homicides were premeditated as the victim had been pursued for some time. Although the relationship may have broken down, the male proprietary nature prevented him from letting his wife go. In a recent study Dawson (2005) examined over 700 femicides (intimate-partner homicides) in Ontario, comparing those that resulted in the offender's suicide with those that did not. Using descriptive statistics and multivariate analysis, the author found that premeditation was common. The degree to which premeditation was found was dependant on the type of 'suicidal killer'; those motivated by ill health or life stressors were 7 times more likely to commit suicide, whereas those motivated by jealousy were twice as likely to commit suicide compared to other perpetrators of intimate femicide. The relationship between victim and offender was also important. Where the victim was a common law partner the risk of suicide was higher than with estranged couples.

3.12.3 A UNIQUE FORM OF LETHAL VIOLENCE

To characterise all cases of homicide-suicides as either comparable to homicide only or all being an extension of suicide would be too simplistic. The evidence presented in typologies suggests a range of complex motivations, some individuals having features commonly found in homicide, others with characteristics resembling suicide. The distinction is valuable for the construction of intervention and prevention strategies and for the identification of potential risk factors. However, the outcome of the debate is inconclusive. Using the generic term 'homicide' as a comparison is in itself problematic, as homicide is motivated by a wide spectrum of factors from altruism in the form of mercy killing, sexually motivated homicide, gang related violence, drugs related violence and extreme acts of violence caused by psychosis. The comparison groups need to be like for like and authors tend to select certain 'types' of homicide to support their hypothesis.

Our theoretical understanding of homicide-suicide has been based on classical criminological theory, summaries in 3 mainstream constructs; firstly, the origin of aggression (strain theory); secondly, the direction of aggression (stream analogy), and thirdly, psychodynamic theory. Agnew (1992) adapted Merton's 1968 theory and applied it to homicide-suicide. The author referred to relationships and described 'noxious' situations in which individual's actions may prevent an achievement, threaten or remove positive stimuli or threaten or present noxious stimuli. These actions result in negative emotions such as depression, fear and anger, which culminate in violent behaviour. The direction of aggression was considered by Henry & Short (1954) who described two important features; (i) how the violence is enacted (how lethal) and (ii) the direction or stream this takes, either directed inward or outward. The 'attribution' theory suggests the perpetrator considers who is to blame, if it is another party then this may result in homicide, however, if it is the self then the aggression is directed inward

leading to suicide (Batton, 1999). Stack (1997) suggested that homicide-suicide acts contained both inward and outward attribution, external blame and inward blame, particularly where the individual felt they could not live with or without the victim. Therefore, is it not necessarily one stream or the other, both can apply. Thirdly, psychodynamic theory considers the outcome of aggression. Menninger (1938) adapted Freud's theory of aggression, proposing that in acts of homicide-suicide, the homicide is a wish to destroy, followed by a wish to be killed, and a wish to die. Henry & Short (1954) considered frustration to be the underlying cause of aggression and homicide, particularly homicide-suicide. The frustration derives from domestic and social situations and economic and financial difficulties. In a relationship, the victim is the source of the frustration and, but also of nurturance, and by killing the source of frustration, this also creates immense personal loss leading to increased frustration, triggering a reactive suicide.

There is a lack of theoretical debate on homicide-suicide in the literature. The theories described above capture differing stages of the homicide-suicide process. They add to our understanding of these complex events, but do not fully explain the phenomenon. The extant literature has successfully detailed the source of individuals' aggression but there remains a theoretical gap in our understanding of why some individuals commit homicide-suicide rather than homicide or suicide only. There is a case for homicide-suicide to be considered as a unique form of lethal violence, distinct from suicide and homicide. Wood Harper & Voigt (2007) suggest that these three elements of "conflict intensity, social-stress-strain and dominance or control" can be assimilated into one unique theory of homicide-suicide, which would help our understanding.

3.13 CHAPTER SUMMARY

The divergent definitions of homicide-suicide used across the literature make comparisons problematic. Despite these difficulties, there are many similarities in these incidents reported throughout the international literature. The rates have been shown to have remained relatively constant within nations. Higher rates have been recorded in the U.S. which may be associated with less restrictive access to firearms compared to European countries. Similar to homicide and suicide these offences were predominantly committed by men. However, contrary to other types of homicide the age of the perpetrator is significantly older. The overwhelming majority of these incidents were familial involving intimate partners and children. The motivation for homicide-suicide has been classified. The most dominant typologies are; a jealous partner seeking retaliation for a relationship breakdown or; 'mercy' killing involving children or partners with deteriorating health. Mental illness has consistently been reported as a feature of these acts, with the most common diagnoses being depression rather than psychosis. Despite the prevalence of lifetime mental disorder, the proportion receiving treatment at the time of the offence has been shown to be low. Our theoretical understanding of these incidents is limited and many authors have called for further research to fill these gaps.

CHAPTER 4: AIMS AND RESEARCH QUESTIONS

4.1 RESEARCH AIMS

The aims of the study were:

- To examine the role of mental illness in homicide-suicide
- To explore the events and circumstances that lead to these incidents
- To examine the psychopathology of perpetrators at the time of the incident
- To consider pre-existing suicidal behaviour and propensity for violence in these perpetrators
- To examine the portrayal of homicide-suicide in newspaper articles

4.2 RESEARCH QUESTIONS

To achieve these aims the research asked the following questions:

- What is the prevalence of mental disorder in the perpetrators of homicide-suicide?
- What are the psychiatric conditions associated with perpetrators of homicide-suicide, and do any predominate?
- Was there evidence of abnormal mental state in the perpetrator at the time of the offence?
- Was there evidence of help-seeking behaviour for any mental health problem (contact with GP or mental health services)?
- What life events caused mental distress prior to the homicide-suicide?
- Did the perpetrators have pre-existing suicidal or violent propensities (i.e. a history of self-harm, suicide attempts, history of violence)
- How are perpetrators of homicide-suicide reported in newspaper articles?

CHAPTER 5: METHODOLOGY

5.1 CHAPTER PREFACE

This chapter focuses on the purpose of the study, the conceptual framework, and methodology proposed. The aim of this chapter is to provide transparency in the epistemology and theoretical reasoning for approaching this research from a mixed methods perspective, and provide justification for its use. I will briefly discuss the debate on the divergent views on qualitative and quantitative methods and the emergence of mixed methods as a new paradigm; I will provide examples of how mixed methods designs have been used and give examples of studies in which this approach has been used successfully. The limitations of this research design will be considered later in the discussion.

5.2 PURPOSE OF THE STUDY

The proposal for this study originated from research undertaken by the NCISH. Evidence from this national dataset provided a national description of cases of homicide-suicide (Appleby et al., 2001). The proportion of perpetrators in contact with mental health services within a year of the offence was shown to be low (7%) compared to cases of suicide and homicide (24% and 18% respectively). Contact with mental health services was used as a measure of mental illness; however, this method was thought to underestimate the true prevalence of mental disorder in this population. Barraclough et al., (1974) in a study of 100 suicides found 93% were mentally ill but only 24% had been receiving care from a psychiatrist. Also NCISH reported 30% of homicide perpetrator had a lifetime history of mental illness, only 9% had been in contact with services in the year before the homicide (NCISH, 2006). Therefore, research that incorporates contact with primary care services would increase our understanding of the role mental illness in these events. Studies of this nature have been undertaken previously, but are limited methodologically by samples from selective geographical area, which have not been representative. Furthermore, such studies have quantified mental illness by assigning diagnoses but have not fully examined the psychological factors preceding the event in depth. This study therefore set out to examine the role of mental illness in these incidents and provide a context for an understanding of the events that led to these tragedies. I aim to increase knowledge on this phenomena by examining a smaller national case-series in-depth, applying both an interpretive and descriptive approach.

5.3 RESEARCH DESIGN

Conventional approaches to the study of homicide-suicide have their foundation in the positivist tradition. Most previous studies have applied quantitative methodology and methods in the investigation of this phenomenon. Consequently, our knowledge and understanding of these incidents

is based on the findings of descriptive studies. The most common designs have been case studies (Easteal, 1994; Scheinin, 2011), descriptive epidemiological studies (Milroy, 1995; Hannah et al., 1998; Krulewitch 2009); and comparative studies (Malphurs & Cohen, 2005; Koziol-McLain et al., 2006).

The limited range of research strategies is a consequence of the phenomenon of homicide-suicide itself, which provides a number of challenges to researchers. Firstly, homicide-suicide has a low incidence rate and case-registers are not easily available for systematic study. Most research in this area has been conducted on small samples available from medical examiners and coroners in districts and cities (Milroy, 1993; Rosenbaum, 1990) and often over long time periods (West, 1965). Other researchers have relied on newspaper surveillance to obtain a sample (Liem et al., 2009). Secondly, the subject under investigation is deceased. The lines of inquiry are limited to a retrospective analysis of documentary evidence collated by police and coroners. These studies have been successful in generating descriptive generalisable knowledge about the pattern and characteristics of homicide-suicide. The findings have shown a remarkable consistency in prevalence, rates, and the characteristics of perpetrators and victims over an extensive time period and across international populations.

As discussed in chapter 3, researchers such as Marzuk et al., (1992) and Hanzlick & Koponen (1994) attempted to further our understanding by generating typologies from the data. The typologies were designed for the purpose of identifying individuals at risk. Marzuk et al., (1992) aimed to provide clinicians with a *“simple mental construct for assessing the risk of this type of violence”* and categorised significant co-factors and classes into which individuals could be assigned. The researchers acknowledged the shortcomings of their typology, essentially it does not *“address the complex aetiology of these events”*. For instance mental illness is often associated with these crimes and is highlighted as an important co-factor. However, although many studies have alluded to mental illness as an integral factor in homicide-suicide, few studies have been able to study the role of mental illness systematically.

By applying a mixed method approach to the study of homicide-suicide our understanding of these incidents can be advanced beyond the descriptive conclusions from previous studies. In this study, the low incident rate enables a detailed qualitative analysis on a national representative sample examining the adverse personal events and psychological factors leading to the homicide-suicide, and can explore the complex aetiology of these cases.

5.4 THE MIXED METHOD PARADIGM

Bergman (2008) in discussing the justification for the use of mixed methods stated that researchers should avoid, expanding upon the virtues and limitations of using qualitative and quantitative methods

(unless necessary for an argument). Instead he urged researchers to promote and expound upon the selection of mixed methods as a justifiable model to address the research question, design and data to be analysed. This should be the theoretical basis for the research strategy employed. However, for the purpose of this thesis I felt it was important to briefly define the paradigms that are to be 'mixed' in relation to their epistemological positions.

The nature of knowledge and knowing, underpin social research and the way in which researchers view the social world (Bryman, 2001). The philosophical arguments as to the nature of knowledge (epistemology) and the nature of being (ontology) have dictated how research should be conducted. For many decades there has been a clear division between two distinctive research paradigms, or belief systems. During the 1980's and 1990's a debate, which became known as the 'paradigm wars', focused on the fundamental differences between these perspectives and concluded that the two paradigms were incompatible as they represented different approaches to thinking and explanation (Bergman, 2008).

These epistemological assumptions represent two opposing positions on how research should be conducted and interpreted. Numerous terms have been used to describe the two camps. Firstly, I will outline the positivist tradition, also referred to as the scientific approach. The positivist perspective is based in the belief that the world exists independently of us. The rationale for this approach is to investigate phenomenon objectively without imposing any values or biases upon the subject, and to study the subject as it exists. Research is conducted using a rigorous scientific and objective approach whereby findings can be quantified and measured by means of standardised assessment (Denzin & Lincoln, 2005). Quantitative methodology and methods fall within the positivism and post-positivist traditions. Both natural and social scientists attempt to explain phenomena, seek explanatory laws in a measurable and replicable way. Researchers strive to test hypotheses objectively and to maintain impartiality and not impose themselves on the research in any way that may affect the outcome. The data collection methods used in this approach include the use of official statistics, surveys, structured interviews and experiments.

Secondly, constructivism theory (also known as naturalistic/interpretism) purport that there is no single reality, each individual's perception and experience are different and therefore should be studied accordingly. A constructivist approach advocates qualitative methodologies and methods of research, by which the researchers takes a subjective approach to the research question, reaching for an in-depth analysis of human behaviour that does not intend to be representative. The subject is studied in the context in which the phenomena occur, with researchers immersing themselves to gain a unique perspective on the research area. The investigation should not be restricted by a definitive set of questions, as unexpected issues may arise amid the research process. It should be more iterative and not self-limiting. The techniques used for data collection include observation, focus groups and in-

depth interviews and examination of texts or artifacts. By conducting research in this manner, the researcher will gain a better understanding of factors that motivate our behaviour. In essence, it is deemed a more explanatory approach to research.

5.5 THEORY OF MIXED METHOD APPROACH

The positivism versus constructivism debate resulted in the dominance of so called 'mono-methods' in social research. Quantitative and qualitative approaches represented different paradigms that were viewed as distinct and incompatible. A third paradigm emerged, attributed to Campbell & Fiske's 1959 influential paper which supported the use of mixed methods as a means of providing more than one perspective on a phenomenon and as an important method of checking validity. It was fully embraced in the 1990's and undermined the fixed assumptions previously espoused. The mixed-model was defined by Creswell et al., (2003):

"Mixed method research employs strategies of inquiry that involve collecting data either simultaneously or sequentially to best understand research problems. The data collection also involves gathering both numeric information (e.g. on instruments) as well as text information (e.g., on interviews) so that the final database represents both quantitative and qualitative information".

This perspective applies a more pragmatic approach to research with a new set of assumptions. The mixed-model presents the view that despite their differing epistemological perspectives, quantitative and qualitative methodologies can be complementary, and a fusion between the two paradigms is possible. Bergman (2008) (page 16) argued that in reality researchers cannot be too rigid in their epistemology. He states:

"From a methodological perspective; it does not make sense to declare one approach more or less valid or valuable, scientific, etc. Instead, how to understand and analyse data must be based to a large extent on the consistency formed between how to understand data in conjunction with the specific research question, rationale, aims etc. Only in connection with the specificities of the research goals does it make sense to delimit the nature of reality. Thus, in the context of their research undertaking, researchers decide (usually without being aware of it), which truth claims they make in relation to their data and findings. In other words, the research focus may well delineate ontological and epistemological constraints".

It is often difficult to strictly adhere to a single epistemology in practical research. Researchers from both traditions encounter numbers and text. Positivists have used qualitative techniques, and constructionists have used quantitative techniques. Therefore, both research methods can be used in a complementary mixed method approach. Das (1983) stated:

"...qualitative and quantitative methodologies are not antithetic or divergent, rather they focus on the different dimensions of the same phenomenon. Sometimes, these dimensions may appear to be confluent: but even in these instances, where they apparently diverge, the underlying unity may become visible on deeper penetration... The situational contingencies and objectives of the researcher would seem to play a decisive role in the design and execution of the study."

The growth of mixed methodology studies has heralded a new wave in social research that questions the dichotomy of qualitative or quantitative approaches. Mixed methodologists place themselves at the centre of the continuum, bridging the divide. The aim of a mixed method approach therefore is to exploit the strengths of both quantitative and qualitative methods to combine these into a research design of a single study. It aims to investigate the same phenomena from different perspectives, both in terms of 'measurement' and understanding the 'lived experience'. Philosophical assumptions in reality are often a secondary consideration in research strategies, more commonly the decision on methodology is based on which best suit the purpose, be it quantitative and qualitative. Brannen (2008) stated that from a researchers standpoint the most important considerations are:

"...their own biographies, skills, interests and research environment, the kinds of research questions they seek to address, together with the kinds of analyses they expect to generate from the data" (page 63).

Furthermore, exploring gaps in the literature and identifying a research question pragmatically determines the method, is the overriding principal of the mixed method approach (Bayley, 1978).

5.6 MIXED METHODS IN PRACTICE

The emergent literature on mixed method research has focused on the design of mixed methods studies with particular attention directed to how studies should be designed to accommodate quantitative and qualitative thinking and techniques. A number of theorists have proposed strategies for how data should be classified and organised (Creswell et al., 2003; Tashakkori & Teddlie, 1998). Caracelli & Green (1997) stated that there are two types of mixed methods studies 'component' and 'integrated'. This was also supported by Creswell & Plano Clark (2007) in a review of mixed methods designs the authors described these designs as concurrent and sequential.

5.6.1 CONCURRENT MIXED METHOD OF INVESTIGATION

In concurrent (or component) studies, the methods remain distinct throughout. This view stresses that it is crucial in a mixed method study to clarify and label which method is used to examine the

phenomenon. Opponents argue that this form of mixed methods study is not mixed at all, as the two elements are practically kept completely separate throughout the study. The strengths of concurrent studies include:

- (1) Triangulation: This involves collecting quantitative and qualitative data separately, analysing the data separately, and merging the results either to compare the findings, or to enhance understanding by providing a more complete picture or understanding of the results.
- (2) Embedded: This design primarily focuses on one approach, usually quantitative methods. The study is subsequently enhanced by including a secondary dataset, usually qualitative data. Quantitative methods can be used again (post-testing) to explore any theories or questions arising from the qualitative analysis. The design provides the measurement of specified outcomes and a greater understanding of the experience.

5.6.2 SEQUENTIAL MIXED METHOD OF INVESTIGATION

Secondly, the sequential (or integrated) model applies more integrated methods whereby both qualitative and quantitative techniques are used simultaneously.

- (1) Explanatory: In this design the researcher starts with a quantitative approach and the qualitative methods are subsequently employed to explain the results. Maruna & King (2009) surveyed a random sample of 940 people in the UK via a postal survey regarding criminal justice issues. Following the analysis, 40 respondents were selected for interview and were asked to explain their responses in more detail, giving 'meaning' to the statistically significant themes raised by the earlier quantitative analysis.
- (2) Exploratory: Researchers begin by exploring a topic using qualitative methods, then test the emerging themes and hypotheses using quantitative methods in order to generalise the results. An example of this can be seen in the work of Mayring (2007) who employed a grounded theory approach to interview adolescent to examine their definition of "cool". The theories were tested via questionnaires on a much larger sample of 223 students and analysed quantitatively.

- (3) Embedded: This approach involves qualitative methods prior to an intervention, followed by a quantitative approach (intervention). This is followed up with more qualitative data collection to explain the outcome of the intervention.

There are numerous combinations that can be used in mixed methods studies too many to detail here, Tashakkori & Teddlie (1998) outlined nine potential models. The authors stressed the importance of distinguishing where these methods have been applied throughout the research. There are three critical stages in the research where this should be made explicit; in the selection of a mixed method design; in the methods of data collection; and in the method of data analysis.

5.7 EXAMPLES OF EXISTING MIXED METHODS STUDIES

Shiner et al., (2009) used a mixed methods design in a study of gender and suicide across life-course, which was qualitatively driven. The researchers examined official statistics on suicide (intentional self-harm) to provide rates for suicide in the general population. This was followed by a qualitative sociological autopsy of 100 suicides from a single region in the UK. The suicides occurred between 2001 and 2004. The coroner's case files on all 100 cases were thematically coded. Additional analysis was conducted on cases where relationship breakdown was specified to devise two typologies: 1) where there was evidence that relationship breakdown was an important factor in the suicide; and 2) where the research team judged this breakdown to be the main trigger. The coding profile emerging from the coroner's files was exported into a statistical data analysis package to identify patterns and relationships between the variables. The experimental exploratory design examined social bonds throughout life course and the protective value of personal attachment, and how this can evolve into tension rather than support. Although successfully demonstrating how qualitative and quantitative data analysis techniques were mixed, the study is not without limitations. The authors acknowledged that the qualitative analysis could have been more in-depth and the sample of 100 cases was too small for generalisations to be made to the wider population. However, Shiner et al., (2009) presented both statistics and quotations in their paper to illustrate their findings, providing both quantitative and qualitative perspectives to the same source of data.

Groleua et al., (2007) used a sequential transformative design to investigate mental health in a culturally diverse community. Two thousand four hundred individuals were surveyed using telephone interviews conducted in Montreal for the 'Barriers to Pathways and Mental Health' Survey. This data was collated quantitatively. The findings suggested the under use of mental health services by immigrants when in distress. In the second phase of the study, participants were selected from ethnic groups who had not used services and the researchers explored how the behaviour was mitigated by social and cultural factors. Two qualitative studies were undertaken with ethnic groups using the McGill Illness Narrative Interview Schedule (MINIS), a semi-structured, qualitative interview protocol. Data

were analysed using thematic analysis of the narratives. The first phase of the study helped to understand health behaviours in the community i.e. who does and does not access services, however the second qualitative phase provided detailed information on the context and motivation of why some communities do not access the care available to them.

5.8 CRITERIA FOR QUALITY IN MIXED METHODS RESEARCH

Yardley & Bishop (2007) considered the fundamental characteristics of good research to be; commitment and rigor in execution; analytical sensitivity to theory and data; transparency and coherence in presentation and importance to future human activity. Yardley & Bishop (2007) provided a succinct table to illustrate methods of enhancing validity in quantitative and qualitative studies, reproduced in Table 6⁷.

TABLE 6: ENHANCING VALIDITY IN QUALITATIVE AND QUANTITATIVE RESEARCH

Quantitative studies	Qualitative studies
Clear testable hypotheses specified, derived from relevant theoretical models and empirical literature	Study informed by in-depth knowledge of context (e.g. from immersion in context, socio-cultural theory, theoretical relevant qualitative research)
Sample is statistically representative of population to which researchers wish to generalise findings	Sample represents range of people whose views and experiences are important to fully understand the phenomenon
Appropriate procedures are used to reduce systematic bias in observations (e.g. blind and/or automated data collection; standardised measures and measurement procedures)	The possible influences of the researcher on the data generated are reflexively considered and appropriately managed (e.g. setting for interviews; age, gender of interviewer relative to interviewee)
Internal validity is maximised (e.g. reliability of measures established; extraneous sources of error controlled)	External validity is maximised (e.g. interview schedule encourages unconstrained responses; real world data collection)
Statistical analysis performed with appropriate attention to meeting assumptions (e.g. distributions of data; power of analyses; treatment of missing data and outliers).	In-depth analysis carried out using rigorous, transparent procedures (e.g. negative case analysis; comparisons between different coders; respondent validation)

⁷ Source: Yardley & Bishop (2007) (page 362): Table 20.1 Different methods of enhancing validity in qualitative and quantitative studies.

In contrast to quantitative research particularly, and to a lesser extent qualitative research, little has been written on validity and quality criteria in mixed methods designs. A theoretical challenge of mixed methods research is to demonstrate quality and validity in both the qualitative and quantitative phases. The requirements are different within each phase, consistent with the philosophical positioning. The opposing paradigms place different emphasis on validity, quantitative research is more rigorous and objective, whereas the qualitative tradition is more flexible and subjective.

Creswell (2008) identified the seven main methodological challenges within mixed method research; contradictory evidence; data integration; sampling; participant selection; skills of researcher; priority given to one method and introducing bias across quantitative and qualitative samples. In the current study I have addressed these as follows:

- Contradictory evidence from quantitative and qualitative results
In this study the same data sources were used in the quantitative and qualitative analyses. The mixed method approach was applied in the analysis of the data; therefore, there was no contradiction in the evidence collected.
- Data integration
The data were analysed and presented separately.
- Sampling (different samples, sizes)
The same sample was used for both the quantitative and qualitative phases of the study.
- Participant selection
The subjects were identified as a consecutive case series of homicide-suicides in England and Wales. The inclusion and exclusion criteria was configured in line with previous studies.
- Skills of researcher
It was important to have expertise in both quantitative and qualitative methods. I have over a decade of experience in quantitative research methods, and have undertaken training in qualitative methods. The combined expertise and experience of my supervisors in both methods ensured that I was supported through the qualitative phase.
- Priority given to one method
Although the small numbers have limited the extent of quantitative analysis, no method was considered to have priority in this study.
- Introducing bias across quantitative and qualitative samples

As the sample was the same in both the phases of the research, any bias applied to the whole sample. Therefore, using different methods did not confound the results.

5.9 REFLEXIVITY

Reflexivity is an essential component of qualitative research. The subjectivity of qualitative research is integral in generating themes and for the interpretation of the subject matter. Quantitative researchers consider this 'bias' an element of the research that needs to be controlled. However, in qualitative research the recognition that the researcher has a role in producing data and interpreting meaning is used as a means of producing practical insights on the phenomena. The process is used to enhance the research by providing methodological transparency, theoretical transparency, awareness of researcher's interaction with the social setting and awareness of the wider social context (Green & Thorogood, 2009). The theoretical positioning and methodology outlined in this chapter demonstrates the transparency prescribed. The impact of the researchers' interaction with the subjects described by most observers refers to participator methods such as interviewing and observations. However, the preconceptions the researcher brings to the analysis of narratives and the interpretation of documents is just as relevant. In the context of this research, there is an emotional aspect of the content of the documents and the response the researcher has to the narratives can challenge preconceptions and assumptions. This will be discussed in more detail in chapter 10. Seale (1999) stressed the importance of striking a balance between a simplistic approach to reflexivity (i.e. reporting the interplay of gender and ethnicity) to the confessional approach whereby the research reveals too much, overshadowing the subject. He states that there are also limitations to the researchers' awareness of how our assumptions can subconsciously influence the research. This is not only relevant to qualitative research but also for researchers employing a qualitative approach in a mixed methods design.

5.10 A CHANGE IN RESEARCH STRATEGY

To advance our understanding of this complex phenomenon, Marzuk et al., (1992) recommended the use of a psychological autopsy method "to assess the role of ante-mortem diagnosis, psychosocial precipitants, medical illnesses, and a history of suicidality and violence". The psychological autopsy method has been used in the study of suicide for many years and has provided a mechanism to examine psychiatric and psychosocial characteristics of victims (Arato, Demeter, Rimmer, & Somogyi, 1988; Barraclough et al., 1974; Robins, 1959). With this method of study it is possible to reconstruct the lifestyle and personality of the deceased (Schneidman, 1957), piecing together the sequence of events leading to suicide. The process involves collecting detailed information from a number of different sources, such as records held by coroners following an inquest, medical records both from general practitioners and contact with mental health services and interviews conducted with the relatives or friends of the deceased.

The original research strategy for this study was to apply a psychological autopsy method to the investigation of homicide-suicide. To my knowledge, this had never been undertaken before in England and Wales on a national sample of perpetrators. However, at an early stage, I encountered practical challenges with data collection, and it became apparent that it would be almost impossible to undertake a psychological autopsy study on this population. Due to the sensitive nature of the subject matter, the ethics committee ruled that relatives and friends of the deceased could not be approached directly to invite them to participate in the study. It was agreed an approach would be made via the police family liaison officer directly involved with the next of kin at the time of the incident. A considerable amount of time was spent trying to identify who the family liaison officer was in each case. The advice given by the ethics committee was to wait at least 12 months after the event before any approach was made. The family liaison officers would ultimately decide whether the next of kin should be invited to participate, as they would be making the approach. In essence, they became the gatekeeper. Of the family liaison officers approached, 5 advised against approaching the family, 7 invitation letters were sent, but unfortunately no relatives were receptive. One family member volunteered to be interviewed having heard about the study via the coroner. Due to the poor response rate and the considerable amount of time spent trying to recruit interviewees, it was decided that it was not feasible to continue to pursue this line of enquiry.

The difficulty in undertaking research with relatives of homicide offenders was described by May (2000) who labelled them a “hidden population”. Permission was required from the convicted offender to allow May to conduct the interview. It took nearly 2 years to secure permission and undertake 15 interviews on 8 convicted murderers of the 100 initially approached. The selection bias toward those offenders who had a good relationship with their family members, was acknowledged by the researcher. Condry (2007) also experienced similar difficulties in engaging family members in a study of serious violent offenders. Within the NCISH, a pilot study by Pearson et al., (unpublished) encountered the same challenges in undertaking a psychological autopsy when trying to recruit relatives of homicide perpetrators for interview. Of the 16 perpetrators who granted consent for their relatives to be approached, only one agreed to participate.

In this study, approaches were made to 23 GP to discuss their patient’s physical and mental health prior to the incident. Only 4 consented to be interviewed. Of these, 3 did not remember the patient and answered the question by referring to the medical records. As the medical records had already been obtained in the majority of cases, it was felt that the information required could be extracted without interviewing the GP.

The inherent difficulties in using a psychological autopsy method to study homicide-suicide, though recommended in the literature, make the execution of these studies almost impossible in practice. After evaluating the methodological problems in obtaining interviews with GP’s and relatives of the

deceased, it was evident that the study could no longer acquire this data. The decision to discontinue the psychological autopsy was supported by both academic supervisors. The mixed method employed remains an intensive approach to the study of homicide-suicide. The design enables the reconstruction of homicide-suicide cases in a way that is rarely achieved by other research methods. Combining data from a number of different sources increases the validity of the research by using collaborative evidence. Utilising data from numerous sources and individuals provides an objective account of events preceding the deaths and also increases reliability of the findings. It also uses techniques to examine the behavioural characteristics and the psychopathology of individuals, often unreported in the official documentation, and not achievable through conventional descriptive epidemiological designs.

5.11 CHAPTER SUMMARY

To gain a detailed understanding of homicide-suicide, a mixed methods approach was considered to be the most appropriate method to investigate this phenomenon. The low incidence of homicide-suicide and the inherent difficulties in data collection have resulted in a wealth of descriptive studies on small regional samples. The lack of qualitative evidence in the literature was the key rationale for employing a mixed method design. Quantitative and qualitative techniques have been utilised throughout the data collection and analysis, and equal weight was placed on the importance of both approaches.

CHAPTER 6: METHODS

6.1 CHAPTER PREFACE

This chapter outlines the methods used to address the research questions. Firstly, the definition of mental disorder will be discussed, and the process by which it was measured in this study will be outlined. The design of the study; research setting; research sample; data sources; data collection strategy; and data analysis will be discussed.

6.2 DEFINITION OF MENTAL DISORDER

There is no single definition of mental illness or mental disorder. However, the World Health Organisation report *'Mental Health: New Understanding. New Hope stated the following'*:

"Mental and behavioural disorders are understood as clinically significant conditions characterized by alterations in thinking, mood (emotions) or behaviour associated with personal distress and/or impaired functioning. Mental and behavioural disorders are not just variations within the range of "normal", but are clearly abnormal or pathological phenomena. One incidence of abnormal behaviour or a short period of abnormal mood does not, of itself, signify the presence of a mental or behavioural disorder. In order to be categorized as disorders, such abnormalities must be sustained or recurring and they must result in some personal distress or impaired functioning in one or more areas of life. Mental and behavioural disorders are also characterized by specific symptoms and signs, and usually follow a more or less predictable natural course, unless interventions are made. Not all human distress is mental disorder. Individuals may be distressed because of personal or social circumstances; unless all the essential criteria for a particular disorder are satisfied, such distress is not a mental disorder. There is a difference, for example, between depressed mood and diagnosable depression." (World Health Organisation, 2001) (page 21).

In addition, the World Health Organisation and the American Psychiatric Association have classified psychiatric illness in the International Classification of Disease (ICD-10) and the Diagnostic and Statistic manual of Mental Disorders (DSM-IV). These classifications provide clinical descriptions of disorders and diagnostic criteria used by psychiatrists and researchers (World Health Organization, 1993; American Psychiatric Association., 1994).

The legal definition of mental disorder was recently defined in Section 1(2) of the Mental Health Act (2007), an amendment to the previous Mental Health Act (1983). The act no longer distinguishes mental illness, mental impairment, or psychopathy but defines mental disorder as "any disorder or disability of the mind."

In criminal offences such as homicide, under section 52 of the Coroners and Justice Act 2009, (replacing section 2 of The Homicide Act (1957)), an individual can be found guilty of manslaughter rather than murder, if an abnormality of mental functioning due to a recognisable mental condition (as described in ICD-10 and DSM-IV) has been proven. This must be a substantial impairment in order to diminish the individual's responsibility for the act. A verdict of infanticide for women can be passed:

"Where a woman by any wilful act or omission causes the death of her child being a child under the age of twelve months, but at the time of the act or omission the balance of her mind was disturbed by reason of her not having fully recovered from the effect of her giving birth to the child or by reason of the effect of lactation consequent upon the birth of the child, then notwithstanding that the circumstances were such that but for this act the offence would have amounted to murder, she shall be guilty of felony, to wit infanticide, and may for such offence be dealt with and punished as if she had been guilty of the offence of manslaughter of the child". (The Infanticide Act 1938, section 1(1)).

This charge can be applied instead a verdict of murder. The M'Naughton rules define the verdict of not guilty by reason of insanity, whereby the House of Lords stated:

"...the jurors ought to be told in all cases that every man is to be presumed to be sane, and to possess a sufficient degree of reason to be responsible for his crimes, until the contrary be proved to their satisfaction; and that to establish a defence on the ground of insanity, it must be clearly proved that, at the time of the committing of the act, the party accused was labouring under such a defect of reason, from disease of the mind, as not to know the nature and quality of the act he was doing; or, if he did know it, that he did not know he was doing what was wrong." (United Kingdom House of Lords Decisions, 1843)

In homicide-suicide cases, there is no legal culpability for the perpetrator. Therefore, these legal principals are never applied to determine mental health status at the time of the homicide. Commonly a suicide verdict is returned and it states the person 'killed themselves whilst the balance of his or her mind was disturbed'. However, this does not mean the person was mentally ill when they died. Alternatively, the coroner can return a verdict that the person 'killed him or herself whilst suffering from a psychiatric illness' which explicitly states they were mentally ill at the time of the offence, but this is rarely used.

In the homicide-suicide literature, the definitions of mental disorder vary widely. Prior hospitalisation has been used as a measure of mental illness by Virkkunen (1974) in a study of homicide-suicide in Finland. This was specifically hospital admission for a 'psychotic' illness. This is a particularly restrictive definition which limits the findings to those with serious mental illness. Previous contact with

mental health services was used as a measurement by Moskowitz et al., (2006) and Flynn et al., (2009) and Gudjonsson & Petursson (1982) also used prior assessment as well as treatment in a small Icelandic study. This method has its shortcomings as again, it is restrictive and would underestimate the prevalence of mental illness in these perpetrators. Alternatively using a previous diagnoses recorded by a clinician would be a more reliable method of measuring mental illness (Lecomte & Fornes, 1998; Rosenbaum, 1990).

6.3 ORIGINAL RESEARCH DESIGN

The original design for the research was a psychological autopsy study. This type of investigation, most often used in suicide research, relies on evidence from relatives and close friends of the deceased. It also involves the collection of data from numerous sources to validate these narratives. In this study, a number of difficulties in recruiting relatives were encountered. The sensitivity of the subject matter required approaching relatives via police family liaison officers, which was problematic and the response rate was low. Due to these difficulties, informant interviews were not pursued. A decision was taken to address the original aims and research questions using a mixed method design. The mixed method design was essentially the same as a psychological autopsy without informant interviews. The design enabled data collected from multiple sources to be analysed both quantitatively and qualitatively. The quantitative phase provides descriptive information on the socio-demographic, offence and clinical characteristics of the deceased. The qualitative phase provided an in-depth examination of the antecedents and psychological factors of the perpetrator prior to the homicide-suicide.

6.4 RESEARCH SETTING

Official data from the Home Office (Home Office, 2011) and previous research (Flynn et al., 2009) have shown that there are approximately 20-30 cases of homicide-suicide in England and Wales each year. When designing the study two options were considered for the setting. Firstly, the study could have been based in the North West of England, which would have been convenient for the researcher with less time and expense spent travelling to collect data. However, to achieve a good sample size, cases would have to be selected over 10-15 years. It was considered that it could be potentially more difficult to access archived coronial and medical records dating back 15 years, which may limit the availability of data on some cases. Furthermore, as the study was originally conceived as a psychological autopsy, tracing and contacting relatives of the people involved in the case would be more problematic. There would also be a possibility for causing new distress, so long after the incident, and a greater potential of recall bias. In addition changes over time in police investigative practices (particularly in relation to domestic violence) and medical practice regarding prescribing (typical and atypical antipsychotics/SSRI and SNRI), may skew the results. The second option was to examine cases

occurring across the population of England and Wales over a shorter time period. The strengths of this approach include easier access to records, (as these are recently compiled files), and the availability of computer printouts from electronic medical records. A national study would also produce generalisable findings on a whole population sample. As the cases would be widely dispersed across England and Wales, we anticipated that they would include people from all socio-economic groups, and the results would be based on a consecutive case-series. There were strengths and limitations for both approaches, but it was decided that a 'snapshot' of these events across a whole population would be a stronger design. Furthermore, if any policy recommendations were to arise; these would be based on the most recent data. Following discussions with statistician Dr. David While (NCISH) and academic supervisors, it was agreed that a 3 year period would yield a sufficient number of cases across England and Wales, an estimated 60-90 cases.

6.5 RESEARCH SAMPLE

The cases formed a consecutive case series of homicide-suicide occurring in England and Wales between 1st January 2006 and 31st December 2008. The study began in 2006, therefore we were anticipating data on prospective cases for 2 prospective years. Incidents continued to be identified and inquests were held throughout the period of study.

6.5.1 THE NATIONAL CONFIDENTIAL INQUIRY INTO SUICIDE AND HOMICIDE BY PEOPLE WITH MENTAL ILLNESS

The data recorded by the NCISH includes on all known cases of homicide-suicide in England and Wales and is a complete national survey of cases. The methodology for the NCISH has previously been described (NCISH et al., 2006), however as this is a fundamental part of case ascertainment, I will outline the method below as it applies to cases of homicide-suicide. There were 4 stages to the data collection process:

- The collection of data on all recorded homicide perpetrators provided by the Homicide Index at the Home Office. Individuals whose outcome was recorded as 'died by suicide' by the Homicide Index were extracted from this case register.
- The NCISH were also notified of all suspected cases of homicide-suicide from Police Forces in England and Wales.
- Cases reported by both of the above sources are cross referenced with the NCISH's national register of suicides provided by the Office for National Statistics.
- Clinical data are collected via questionnaires from psychiatrists and mental health teams involved in the individuals' care if they had been in contact with mental health services any time prior to the homicide (i.e. lifetime contact).

6.5.2 THE HOMICIDE INDEX

Launched in 1967, the Homicide Index was established to record every homicide notified to the Home Office by police forces. Each force is required to supply the Home Office with monthly figures for suspected homicide offences. A “homicide suspect” is someone who has been arrested and has been charged with homicide or a person who is suspected by the police of having committed the offence, but is known to have died or taken their own life prior to arrest. The Homicide Index does not include corporate homicides or deaths caused by dangerous driving. All suspects will remain classified on the Homicide Index until the police, Crown Prosecution Service or the Courts notify them that cases should be removed. This would occur for example if it was determined that no homicide occurred, the courts quashed a conviction or the conviction was overturned on appeal. The Homicide Index contains data on victims and suspects, the method, relationship and circumstance of the offence, the outcome and disposal. Data are received by the NCISH on an annual basis from the Homicide Index. Cases where the final outcome was recorded as “died by suicide” are extracted to form the homicide-suicide sample. A full list of the variables obtained from the Homicide Index has been provided in Appendix 2.

6.5.3 NCISH DATA FROM POLICE FORCES

There are 43 police forces in England & Wales. The police forces notify the Homicide Index on a regular basis of all individuals suspected of homicide. In addition to receiving this information from the Homicide Index, the NCISH annually contacts police forces requesting information on cases classified as homicide followed by suicide. Data are collected via a pro-forma, which requests information on perpetrators and victims including: name, age, sex, address and relationship to the perpetrator and method of homicide (Appendix 3). This additional step is undertaken as a safeguard to ensure all cases are captured. The NCISH were aware that police forces do not always inform the Homicide Index of cases where the perpetrator died by suicide. This is particularly the case where the two events happened in quick succession. As this study only focuses on cases of homicide-suicide occurring within a short time period, there is the potential that cases could have been missed by the Homicide Index. The NCISH’s dataset suggest overall police notifications not recorded by the Homicide Index account an estimated 8% of all homicide-suicides cases (personal communication).

6.5.4 NCISH DATA ON SUICIDES AND OPEN VERDICTS

The NCISH receives notification from the Office for National Statistics (ONS) of all people who died by suicide or who received an open verdict at coroner’s inquest in England and Wales. The ONS is the government department responsible for collecting and publishing official statistics on mortality, social trends and the economy.

Cases of homicide-suicide identified via the Homicide Index and police forces were cross matched with the NCISH suicide database to confirm whether the individuals received a suicide or open verdict at an

inquest. This was an important stage in the verification of cases. Cases initially thought to be suicides by the police could subsequently receive a verdict of accidental death, or death by misadventure or narrative verdict from the coroner.

A decision was made to include narrative verdicts in this study, where suicide was referred to in the narrative. Recent evidence suggests that the increase in narrative verdicts may have led to an underestimation of suicide (Gunnell, et al., 2011). Narrative verdicts are generally used where an issue of public concern is raised at an inquest. The coroner produces a summary 'narrative' as opposed to a short verdict to provide more detail about the circumstances of the death. The ONS coding may record these cases as accidents if suicidal intent was not mentioned in the summary. However, in the cases included in this study suicide intent was clearly implied. In these circumstances, it was felt that there was a legitimate reason to include these incidents, even though their outcome was not recorded as suicide or open verdict by ONS. The increasing use of narrative verdicts over the past decade is noteworthy, particularly over the study period, in which time the numbers increased by over a thousand between 2006 and 2008 (Hill & Cook, 2011). If these cases were to be excluded from the study, the sample would suffer from bias. There would be an underestimation of homicide-suicide incidents, resulting in inaccurate reporting of the national rate. In general, the existing literature on homicide-suicide does not define suicide specifically. Therefore, there is no existing literature (to my knowledge) which discusses the inclusion of narrative verdicts in this field of research. Overall, explicit inclusion and exclusion criteria for homicide-suicide across the international literature are lacking.

There are often lengthy delays between the date of death and the date an inquest is concluded. This is because there is a comprehensive investigation prior to the hearing and in some cases this can take years before the case is examined in court and a verdict reached. Once a verdict has been reached, this has to be processed by ONS before the NCISH receive notification of the outcome. There are also inherent delays from the date the offence occurred to being registered on the Homicide Index and the NCISH receiving notification of these homicide cases. Taking these factors into consideration, only cases whose inquest had been completed by the time data analysis began were included.

6.5.5 CLINICAL DATA

The NCISH identify all perpetrators of homicide followed by suicide who had been in contact with mental health services before the incident. Contact is determined with the assistance of NHS Trusts, Independent Hospitals, Forensic Units and Special Hospitals throughout England and Wales. Once details of previous contact were established, a consultant psychiatrist or other members of the mental health team were asked to complete a questionnaire providing demographic and clinical data. Examples of the questionnaire are available on the NCISH website:

<http://www.bbmh.manchester.ac.uk/cmhr/centreforsuicideprevention/nci/>

The NCISH database of homicide-suicide cases therefore contains information on the demographic characteristics of the perpetrator, victim, the offence and clinical data (where identified). This unique dataset contains comprehensive information on these incidents. This is the only available data source of its kind in England and Wales.

6.6 CASE RECRUITMENT

6.6.1 INCLUSION CRITERIA

Cases of homicide-suicide recorded on the NCISH database were included, subject to the following criteria:

- (i) The homicide-suicide offence occurred between 1st January 2006 and 31st December 2008 in England and Wales
- (ii) Death from suicide occurred within 3 days of the homicide, or
- (iii) Death resulting from injuries sustained from a suicide 'attempt' made within 3 days of the homicide. (E.g. the effects of fire, smoke inhalation, burning or ingestion of poisonous substances).

6.6.2 EXCLUSION CRITERIA

Cases were excluded from the study if they had not been given a suicide, open verdict or narrative verdict (where suicide intent was implied) at the coroner's inquest. The initial notification of 83 cases was filtered down to 60 cases following the application of a number of criteria. A detailed breakdown of the case selection process is presented in Table 7.

TABLE 7: CASE SELECTION

Homicide-suicide cases	N
Cases on the NCISH database with date of offence between 1 st January 2006 and 31 st December 2008	83
Suicide occurred in custody >3 days after homicide:	
on remand	8
following conviction	5
Cases originally recorded as homicide-suicide but different verdict recorded at inquest (i.e. not suicide or unlawful killing)	4
Cases where time between homicide and suicide attempt was >3 days	5
Inquest not held at time of final analysis	1
Total cases remaining	60

6.7 OVERVIEW OF DATA COLLECTION STRATEGY

Having selected the cases, the first phase of the study was to determine the sources of data to be used to answer the research questions. The data sources selected to provide the best information on these cases were; coroner's case files, police case files, medical records and newspaper articles. Data were collected between October 2007 and April 2012 by one researcher (the author). No other researcher was involved in the collection of data from any of the sources. A pro-forma was used as the primary instrument of data collection. The pro-forma was adapted from a previous study, for extracting data from coroner's files and GP medical records (Pearson et al., 2009). This was a structured instrument used to provide comparability across all documents (coroners/police), to generate categorical data. The researcher had previous experience of using this method. The pro-forma's are provided in Appendix 4 and 5. The collection of qualitative data was achieved by obtaining original records and transcripts from coroners and police files. In some instances, the records could not be removed or photocopied from the coroner's office. It was important in these circumstances to accurately record the text for later analysis, to ensure analysis could be undertaken using inductive techniques for the development of theories and themes from the data. The data collection strategy is discussed in more detail in relation to each data source.

6.8 DATA SOURCES

To achieve an overall picture of the offender and the incident, multiple data sources were used. These included coroner's records; police files; GP medical records; and newspaper accounts of the incident.

6.8.1 CORONERS' RECORDS

In England and Wales the role of a coroner was established in 1194 and it has been adapted over 8 centuries from being a medieval tax gatherer to an independent judicial officer charged with investigating sudden, unexplained, violent or unnatural deaths. Their modern day role is to determine the circumstances and medical reason associated with unnatural deaths and their duties include:

- Conducting forensic investigations
- Conducting medical investigations
- Administration
- Family liaison
- Statement taking and evidence gathering
- Public relations

An inquest is required to establish the facts before a death can be officially registered. This is a public hearing held in an open court. The coroner is empowered to form a jury, call witnesses and solicit documents, which may provide evidence to the court. Access to records is discretionary and these documents are not in the public domain. Under rule 57 of the Coroners Rules 1984, disclosure of information will only be authorised to those people, who in the opinion of the coroner, are considered be a 'properly interested person'. However, the inquest is usually conducted as an open hearing permitting members of the public and press to attend.

The coroner will conduct an inquest in cases where a suspicious death has occurred in their catchment area, and not where the deceased was resident. Cases of homicide-suicide usually occur within a single residence, and therefore the coroners presiding over the cases in this study were identified by the perpetrators district of residence. However, where suicides occurred outside the district of residence, online newspaper reports were used to identify the coroner who presided over the inquest.

Once the coroner had been identified, the coroner's office was contacted to determine if inquests had been concluded. A letter and a copy of the study protocol was forwarded by mail asking permission to view the files. In the majority of cases the researcher was required to attend the coroner's office and extract the data manually from the file. In these circumstances, documents could not be photocopied or removed from the premises. For the quantitative phase of the study, data were extracted from the file using a pro-forma. The pro-forma consisted of sections on demographic variables (perpetrator and

victim), the events leading to incident, the incident itself, and contact with anyone after the offence. Behavioural features such as self-harm and suicidal ideation/attempts, alcohol and drug use/misuse were also examined. Furthermore, general physical and mental health history was extracted. The information contained in the files varied however all contained evidence from police the police investigation such as witness statements, incident reports and crime scene photographs, reports from forensic pathologists, including post mortem, and toxicology reports.

The data collection pro-forma was completed using text copied verbatim from the files. These included descriptions of the events leading to the incidents, descriptions of the incident, summary of witness statements (where provided), or verbatim copies of pertinent sections of the witness statement, suicide note(s) and the coroners summary statement.

Data were requested from 55 coroners' offices across England and Wales, with 9 having more than one homicide-suicides occurring in their district during the study period. Information was provided by coroners on 47 cases (78%).

6.8.2 POLICE FILES

In the 13 cases where access to the coroner records was not possible, the information was sought directly from the police, and obtained in 4 cases (number with data = 51). Although not required for a criminal prosecution, a full investigation of the incident is undertaken to rule out any third party involvement. The police investigation file was also contained within the coroners file, this usually contained the following documents:

- Covering report (brief overview of the investigation)
- Report of sudden death, short incident report
- Witness statements (eye witnesses, family, friends)
- Autopsy report (perpetrator and victim)
- Coroners liaison officer statement
- Suicide note
- Other notes or pertinent documents found at the scene
- Photographs of the homicide-suicide scene(s)
- Police operator log (procedures and action taken).

The police force was identified through the Homicide Index, which records this information routinely. Permission to review the case files was initially sought from the Chief Constable of the Police Force in question.

In cases where copies of the files could not be forwarded, I visited the police station to extract the data using the same pro-forma as used in the Coroners' visits where data were available. Therefore, both quantitative data in the form of categorical variables and qualitative descriptive text were obtained.

6.8.3 GP MEDICAL RECORDS

Information from General Practice (GP) medical records was obtained in 53 (88%) cases. In 21 cases the coroners' files contained medical records and details of previous consultations and any medication prescribed. There were also written letters from the GP to the coroner detailing the patient's previous consultations and physical or mental health problems. The letters also summarised the GPs opinion on the incident. However, this was not standard practice. Where information on medical history was not contained in coroners' records, GP records were requested from the Primary Care Trust (PCT) where the perpetrator was resident. Full medical records were received on 31 cases. In 1 case, data were included based on evidence provided by the GP at an inquest which was subsequently reported in newspaper articles. In other cases medical records or electronic prints detailing appointments, prescribing and notes were forwarded by mail to the NCISH office. One PCT (2 cases) requested that the medical records be analysed on the premises; pertinent information was photocopied once the data had been anonymised. In 4 cases no GP registration was found, and 1 PCT did not provide research governance approval access to medical records. In a further 2 cases the notes were requested but the file was not found by the PCT.

As stated earlier, previous studies assessing mental illness in homicide-suicide perpetrators have applied different definitions resulting in a variation in prevalence rates. The most important factor when coding mental illness from the documentary evidence is ensuring the reliability of that evidence. In this study only clinical diagnosis made by a GP or mental health clinician from medical records (using ICD-10 diagnostic criteria) was used.

A pro-forma was used to obtain data from a retrospective review of the GP records (Appendix 5). The information obtained focused on the patient's physical health and mental health history, consultations in the year before the homicide-suicide, and details of the final contact. Table 8 details the source of the clinical information collected on the cases.

TABLE 8: MEDICAL RECORDS RECEIVED

Data source	Medical records received (N)
Medical records or letters from GP summarizing contact found in the coroners file	21
Full GP medical record obtained from PCT	31
Information reported from inquest	1
⁸ No information available	7
Total with medical records	53

6.8.4 NEWSPAPER ARTICLES

The purpose of using newspaper articles was to provide additional information from the friends and family of the deceased on events leading to the offence. If the context of the article was in relation to other peripheral matters, such as revision of policy and procedures or criticism of agencies and organisations, these articles were discarded. Articles were filtered, duplicate articles (repeated in different editions), and other irrelevant articles were removed from the analysis.

UK newspaper output from 1st January 2006 to the day of download was collated. Information was gathered on articles listed on the LexisNexis database using the criteria “ALL UK newspapers”. Generic search terms such as ‘homicide-suicide’, ‘murder-suicide’ or homicide followed by suicide’ were not used. These terms are too broad and are more commonly used in literature searches for academic articles. Instead, the articles were obtained using the perpetrators and/or victims name. In instances where the results yielded hundreds of returns, an additional search term of ‘suicide or homicide’ was used to narrow the search. In instances where there were no returns or the count was low, alternative spellings, shortened version of forenames or known aliases were used. In 4 cases where no articles were found in Lexis-Nexis an additional search using Google was undertaken. For each case, articles were filtered to ensure the content of the piece was relevant to the study.

⁸ Information was unavailable as registration with a GP was not found, or the medical records were unavailable

Hodder (2003) made the distinction between the terms 'records' and 'documents'. He described records as being produced for official use and access to these is often restricted due to confidentiality issues. Documents are defined as texts such as diaries and reports. Burgess (1984) made the distinction between primary and secondary sources. Primary sources are gathered first hand and have a:

"...direct relationship with the people, situations or events that are studied" (page 124).

Burgess included court reports as primary sources. In this study, the data from coroners files are official court records and are reports, however they also contain witness statements that are first-hand accounts of events and reports, therefore are also 'documents'. I shall refer to all data as 'documents'. A second distinction when analysing written text is to recognise the difference between public and private documents. The data sources used in this study include court reports, newspaper reports and police records, all classed by Burgess (1984) as public documents, medical records are private documents. However, access to inquest records is still restricted, and there is a 75 year closure on inquest files therefore, permission is required from the coroner to access the inquest file, and the coroner must determine whether the researcher is a 'properly interested person', therefore access is discretionary. Details of inquests are often published in the media, as the inquest itself is held in open court; therefore this is an alternative method of obtaining information on the case. However, these media reports will inevitably be less detailed.

Both Hodder (2003) and Burgess (1984) stated the importance of understanding the context in which these documents are produced and the implication for the research. The coroners file contains an official judicial account of the circumstance and cause of unnatural or sudden and unexplained deaths. They contain factual descriptions of the event, and the scope is limited to answering how the deceased came to his/her death and not the question of why or apportioning blame. Therefore, they are unsolicited documents, not produced for research purposes. The evidence collected in the investigation that leads the coroner to reach their verdict may contain the answers to these wider questions, but this will inevitably be subject to interpretation and will vary from case to case. Newspapers reports following the inquest may provide an additional interpretation, however the context of these articles requires consideration when used as a data source. The case could be reported in the context of public policy or procedural failures e.g. child protection, police protection and welfare services, and articles may be produced to further a political agenda. By utilising different sources, these biases can be identified and understood.

Hodder (2003) stated that written text:

“can be understood only as what they are – a form of artefact produced under certain material conditions” (page 157).

Therefore, it is important to acknowledge these documents for what they are and the purpose for which they were produced. Documents contain their own bias that is different from the analysis of the ‘spoken word’ such as interviews. The subjects in this research cannot respond to my interpretation of the incident and their lived experience. However, as documents endure, the research findings can continue to be ‘re-observed, reanalysed and reinterpreted’ (Hodder, 2003).

6.9.1 JUSTIFICATION FOR THE USE OF DOCUMENTS

Information was not available in spoken form from the perpetrator, and it proved very difficult to access relatives and friends due to their reluctance to participate in the research. The difficulties in recruiting relatives to be interviewed means that the statements they made to the police were the main record available containing their perspective of the perpetrator and incident. Consequently, newspapers were used as an additional source of data to provide an reaction to the incident from family, friends and neighbours. It is possible that articles written shortly after the incident will provide insight into the circumstances where the interviewees may be more candid with reporters than to police officers. The presence of the media may of course have the opposite effect, and individuals might also be more guarded when talking to journalists.

6.10 BIAS

The use of archival information to research events such as homicide-suicide is essential. However, the data is subject to a number of biases.

6.10.1 OBSERVER BIAS

The study was limited by having one researcher undertake all the data collection, as this introduced systematic observer bias. Other researchers did not concurrently rate the data. In retrospect, this issue could have been addressed, if all the data that had been extracted from the coroner’s files had been checked for consistency. When files were forwarded to the research office, an independent researcher could have been asked to extract the data to verify that important information was not missed. However, measures were put in place to counteract potential problems, such as the use of a pro-forma (scheduled instrument) to extract the data and clearly defined “parameters” and definitions prior to starting data collection. Multiple data sources were used to triangulate the data. Conversely, it could be argued that one researcher undertaking all of the data collection was a strength, as the data was systematically compiled, and as such, the interpretation of the data remained consistent.

6.10.2 RESPONDENT BIAS

The current study used witness statements taken by the police investigating the incident, and evidence of witnesses questioned by the coroner at the inquest. There was potential for respondent bias in these documents, as evidence given to the police following such a traumatic event may be subject to distortion. Canter & Alison (2003) commented that the information provided by witnesses in their statements, for example, will be influenced not only by the investigator but by the environment and the circumstances they find themselves in. In cases of homicide-suicide some witnesses may provide contradictory evidence, for example, they may wish to protect the perpetrator; they may have different perceptions of the event; add their own theories (not necessarily factual); they may have some interest in the outcome, or may not wish to reveal previous criminal or abusive behaviour to the police. Although the standard of proof that the victim was 'unlawfully killed' is high, and the police need to ensure that the deceased was the perpetrator however the burden of proof is not the same as proving the perpetrator was guilty in a court of law. Ultimately it is the coroner's role is to determine cause of death rather than who was responsible.

6.10.3 RECALL BIAS

Recall bias affects research when an information is requested some time after an event. The quality of information can potentially be affected by the time lapse between the event and the date of research. This is not an issue in this study as the time between the deaths and the police taking statements was usually very short, therefore the quality of recall should not be an issue. Where inquests have taken place, (in some cases years after the incident), the coroner generally asks the witness to read from statements made at the time of the incident. There may be a recall issue if additional clarification is required, as to the interpretation of why people said something or acted the way they did.

There will inevitably be inaccuracies and inconsistencies in the data reported between witnesses. For example, the role of mental illness may be over or underestimated in these cases as witnesses try and comprehend what has happened. The theory of "effort after meaning" (Bartlett 1932) suggests the accuracy of the information given to an interviewer could be distorted by the respondent's efforts to make sense of the incident. Recall and memory may also be altered by guilt, blame, anger, or shame. In an attempt to address this, multiple data sources were used to verify the accuracy of information. The coroner's files contained multiple witness statements, which were checked for consistency.

6.10.4 RESEARCHER BIAS

Public archives are unobtrusive and non-reactive to the presence of the researcher. The behaviour of individuals and data analysed are not influenced by interaction with the researcher, as the data is used as a secondary source, thus removing potential 'researcher bias' (Lee, 2000). This is the case with

quantitative data collection, which is factual and categorical. However, using qualitative techniques requires an interpretation by the researcher that can introduce bias (see section 10.15).

6.10.5 BIAS FROM MISSING DATA

There are inherent methodological issues attached to each of the data collection methods used in this study. For example, of the 60 cases in this sample, there were 13 cases on whom the coroner's record was not obtained. In total, data could not be obtained from ten coroners (3 coroners had 2 cases each in their jurisdiction over the study period). The potential for bias and inaccuracy was reduced by collecting data from a number of sources. This enabled triangulation and the provision of the supplementary data from additional sources, which reduced the number of missing variables. For instance, demographic information for the perpetrator and victim and offence details were provided by the Homicide Index as well as in the coroner's files. Furthermore, official reports and police files were used to redress missing data related to the circumstance leading to the incident. Therefore, every attempt was made to minimise the amount of missing data so not to introduce bias and ensure the findings remain generalisable.

Data from GP medical records were retrieved in 53 cases. In 4 cases the individual was not registered with a GP practice; these were still treated as missing, as the absence of data did not confirm the absence of mental illness. As with the coroner's records, in cases where GP records were unavailable, other data sources were cross-referenced to provide evidence of contact with GP or mental health services to determine prior assessment or treatment for mental disorder. Evidence of a previous suicide attempt, contact with Mental Health services, and whether the person was seen by a psychiatrist and assessed in regard to a previous offence, and reference to relevant medical history were found either in the coroner or police reports. In one case GP evidence at the inquest was reported in newspaper articles. Therefore, the problem of missing clinical data was minimised by the use of a number of data sources.

6.11 THE DATA ANALYSIS PROCEDURE

6.11.1 QUANTITATIVE ANALYSIS

The quantitative analysis undertaken was deductive in nature. Data collected using the pro-forma were categorised into variables that were subject to statistical tests to describe the cases, explore patterns and test hypotheses.

Data analysis was conducted using Stata version 11. Rates were calculated using ONS mid-year population estimates. Pearson correlation coefficient and Spearman's Rho correlation coefficient were used to examine the relationship between the rate of homicide-suicide and the rate of suicide and

homicide (only). Results are reported using 95% confidence intervals, the chi square statistic, and the P values. Parametric and non-parametric tests were used. Tests for association i.e. Pearson's chi square and two-tailed t-test with significance levels set at 5% were used. Where numbers in cells were less than 5, Fisher's exact test was used. If an item of information was not known for a case, the case was removed from the analysis of that item; the denominator in all estimates is the number of valid cases for each item and indicates the number of missing cases per item. Kruskal-Wallis test was used on parametric data, such as age.

6.11.2 QUALITATIVE ANALYSIS

The qualitative analysis was undertaken using framework analysis. Framework analysis was developed by Richie & Spence (1994) at the National Centre for Social Policy Research. The approach was developed to utilise the findings of qualitative studies to further our understanding of social behaviour and inform health and crime policy in an efficient and systematic way. The process is transparent and enables a reviewer to follow the process from original concept to the final interpretation of themes. This systematic and comprehensive approach is undertaken in 5 key stages; familiarisation; identifying a thematic framework; indexing; charting; mapping and interpretation. The approach differs from other qualitative analysis methods in stages 4 and 5 as it enables the data to be managed into a series of matrices whereby the data can be explored by theme and by case (Furber, 2010). Briefly, the stages for this study involved:

1. FAMILIARISATION

All documents including coroner's records, police files, reports, medical records and newspaper reports relating to each case of homicide-suicide were read repeatedly, transcribed and additional memos and field notes were made. Through this process an overview of the key concepts was developed.

2. THEORETICAL FRAMEWORK

Having been immersed in the data and referring back to the original aims and objectives and research questions, which focused on factors known to be associated with mental illness, suicide and homicide, a theoretical framework emerged. This was an iterative process whereby themes and sub-themes were coded based on the a priori research questions. The framework was modified and changed several times throughout the process of analysing 60 cases. The coding was discussed with my academic supervisor (Prof. Linda Gask) and further refined. The theoretical framework is provided in the result chapter.

3. INDEXING

Data on all 60 cases were coded to the framework during this indexing stage. MaxQDA 10 was used to manage and store the data, which enabled easy reflection on the indexed items to ensure that the data continually fit the themes. At this stage further refinement of the framework was undertaken. The

emerging themes were noted as each case was read. The themes were kept or rejected depending on the importance. The selection and indexing of narratives both speak for themselves (i.e. quotations) and have been interpreted by the researcher.

4. CHARTING

To assist with the interpretation of the data, the themes were organised into charts containing quotations and pertinent sections of the data. Data were grouped and ordered by theme and specific patterns emerged in relation to for example, emotional distress.

5. MAPPING AND INTERPRETATION

The charts, which consisted of spreadsheets, were used to describe the data and interpret the key themes in these cases.

There was a potential for researcher bias due to pre-existing knowledge of the subject matter through the literature. To balance this and provide a wider context for interpretation, data were discussed with my academic supervisors and reanalysed where appropriate within the thematic framework to interpret the results.

Alternative methods for analysing the qualitative data were considered such as applying grounded theory and thematic content analysis. Due to the volume of data compiled on each case, it was felt that a structured 'framework' approach would be the most effective and efficient means of conveying the key concepts and provide visibility on how the findings were obtained (Appendix 6).

6.11.3 PRESENTATION OF SENSITIVE DATA

Authorisation to use the data collected from coroner's records, police files and medical records was provided under the strict condition that the individuals involved in the incident were not identifiable. Therefore, the findings were anonymised in the results and the data are presented via themes rather than the detail of particular cases. Every effort was made to ensure the identity of all the subjects in the study remained anonymous.

6.12 REFLEXIVITY

I have previously undertaken research on homicide-suicide using a large national dataset, and presented descriptive analysis of the perpetrators involved in these incidents (Flynn et al., 2009; Shaw & Flynn, 2003). My research interest in familial homicide and violence has also lead to publications of infant homicide (Flynn et al., 2007) and filicide and filicide-suicide (Flynn, Shaw, & Abel, 2013). The quantitative analysis raised a number research questions that could only be addressed using a qualitative approach.

Collecting data from records and documents provided a new challenge and required reflection and understanding of how researcher bias affected the interpretation of the data. Having read the documents on each case for the first time, I recorded field notes that contained my own interpretation of the event, the subjects involved, and my feelings towards the perpetrator, and any particular aspect of the incident I found to be poignant or pertinent. I reflected on the individual's personal circumstances and tried to imagine myself in their situation. The memo presented in Box 1 was taken shortly after a visit to a coroner's office where the case file was reviewed. This reflection was documented during my train journey home and it records my initial interpretation of the incident.

Box 1: Extract from researcher memo

There was a suggestion of problems within the relationship. He had difficulties holding down a job and had recently become unemployed. His partner had suggested that he was a financial burden. It would seem they regularly went to the local pub, but there was no suggestion that he had a drinking problem, nor indication of mental illness. After an afternoon drinking session (3 hours) they returned home and argued. It looks like she wanted him to leave, removing his clothes from the wardrobe and throwing them out the window. He lashed out and stabbed her. There was one fatal stab wound, and no evidence of prolonged fight or struggle. His behaviour after the incident suggested a degree of remorse and also denial. Firstly, he undressed and cleaned the body and laid her out on the bed. He applied tape to the wound, suggesting an attempt to 'fix' or heal in some way. I think he was quite distraught and tried to make things better or seem normal by cleaning the scene; he slept downstairs, possibly to avoid being faced with what he had done. Curiously he went back to the pub that same evening and said she was unwell and carried on as normal. This may seem a callous thing to do, but perhaps he had disassociated himself from what had happened. He concealed the truth and continued to lie to those concerned for her welfare, perhaps also trying to convince himself that nothing had actually happened. By the end of the weekend, he must have realised that he could no longer carry on this way. The body was beginning to decompose and he had no way to hide what had happened, the reality was finally beginning to sink in. Suicide did not appear to be his immediate reaction; otherwise wouldn't he have done it sooner? He had two obvious courses of action after the incident, to own up and call the police or to dispose of the body and cover it up, he did neither – was he expecting things to automatically get better? There were no reports that he was acting strangely in the pub, so was he in denial? He must have come to the conclusion that time was running out. The police would soon become involved because she was missing, and everyone would find out what he had done. Was it guilt that had finally overwhelmed him, leading to suicide, or the thought of facing everyone (family & friends) or the going to prison?

The first phase of reflexivity as shown in Box 1 occurred immediately after reading through the files for the first time. The second phase of reflexivity occurred when I began to re-familiarize myself with the data in the data processing and analysis stage. The data had been collected from coroners' records by reading through the case files and making hand written notes of the content. Typing up these notes provided another opportunity to reflect on my original interpretation. This phase stimulated reflection and provided a period to consider the issues and themes I thought were relevant. I consequently challenged the assumptions I had made in the early stage of data collection (Box 2 and Box 3).

BOX 2: FIRST REFLECTION OF A CASE FOLLOWING INITIAL DATA COLLECTION

First reflection:

He had separated from his girlfriend and knew there was no chance of reconciliation. He had been living with another man and this was a violent sexual relationship. On the night of the incident he had sent a text message to his ex-girlfriend and another friend saying that he had stabbed the man, and he'd gone too far. He said he had taken an overdose of tablets. He asked her not to tell anyone. Friends told her to call the police, but she was afraid of wasting police time, it was new years eve and she also thought it might be a 'wind up' and that he was attention seeking. Another friend switched off the phone because his texts were driving her mad. It seems strange that neither of the friends took his messages seriously, he'd confessed to seriously hurting someone and of his own suicidal feelings, but yet they chose to ignore this. They didn't call the police for 11 days after the incident. They knew he was violent and had hurt the man before, but either they didn't believe he was capable of this, or they simply didn't want to get involved and chose to ignore him, was this lack of compassion? Why didn't anyone take him seriously? It seems obvious from the outside that something bad was going to happen given the events leading to the incident.

The example presented in Box 2 revealed my initial interpretation of the data was bias towards an intervention/prevention perspective. I have 10 years experience in homicide and suicide research, primarily in the identification of risk factors to provide recommendations for intervention to reduce risk. This case particularly illustrates that the recognition of risk is much greater with the benefit of hindsight and having all the circumstantial information available at one time. A secondary factor is the positioning and experience I bring to the research. This is value laden and in many of these cases I am less able to relate to the lives of the individuals (i.e. chaotic lifestyles characterised by substance abuse and domestic violence). In Box 3, I address this by attempting to understand the incident from the perpetrators friends' perspective. The interpersonal dynamics of these relationships are complex and

required me to be more reflective, and recognise my preconceptions of victims and perpetrators of domestic violence.

BOX 3: SECOND REFLECTION OF A CASE AT THE DATA ANALYSIS STAGE

Second reflection:

He had a history of violence and aggression, he manipulated his friends, and they had heard his problems and troubles before, perhaps they had reached saturation point with him, and felt this was another incident in a long line. It was new years eve and they wanted to have fun, maybe they thought he was deliberately trying to sabotage this and there was only so much time you can give to people who constantly drain you emotionally. The friends had reached a point where though they were concerned, they ignored him as they were no longer prepared to deal with his problems – particularly on New Year's eve. Both men had fought a few weeks earlier and ended up with black-eyes, was this just another bust up between them? Involving the police would cause trouble for both parties and perhaps they didn't believe that someone would die, and so it would be better for them to sort it out between themselves as they had done previously. They didn't recognise how much distress he was actually in, and that he would take his own life.

I acknowledge that in planning and conducting this research, my understanding of homicide-suicide has been framed by 'literature based theorising'. This inevitably influenced the qualitative study as I have brought preconceived assumptions, beliefs and biases to the analysing of the data.

6.13 DESIGN QUALITY AND INTERPRETIVE RIGOR

Tashakkori & Teddlie (2008) provided a framework for ensuring mixed methods studies meet the standards in design quality and interpretive rigor of other methodologies (table 7.3, page 113). The components detailed by Tashakkori & Teddlie (2008) have been built into this study to improve validity. These are illustrated in Table 9. In addition to the criteria proposed by Tashakkori & Teddlie (2008) other components to ensure validity and rigor were taken into consideration throughout the research. These are discussed in chapter 10.

TABLE 9: DESIGN QUALITY AND INTERPRETIVE RIGOR

Aspects of Inference Quality	Research Criteria	Indicator or Audit
Design Quality	1. Design Suitability	The study design is appropriate both to describe the characteristic of these events and provide a deeper understanding of the psychopathology of the perpetrators.
	2. Design Adequacy/Fidelity	The method of data collection, analysis and interpretation have been implemented with quality and rigor.
	3. Within Design Consistency	The components of the quantitative and qualitative phases fit together to provide context in the descriptive account of the individuals and provide meaning through the richer exploratory themes emerging from the documentary analysis undertaken.
	4. Analytic Adequacy	The data analysis strategies are appropriate in answering the research questions, firstly by frequencies, cross tabulations and tests for significance provide detailed descriptions of the study population. Secondly, by using a framework analysis answers to the research questions were sought from the text and new themes emerged and were captured.

TABLE 9: DESIGN QUALITY AND INTERPRETIVE RIGOR (continued)⁹

Aspects of Inference Quality	Research Criteria	Indicator or Audit
Interpretive Rigor	5. Interpretive Consistency	The inferences from this study are consistent with the findings.
	6. Theoretical Consistency	The inferences are consistent with the extant literature.
	7. Interpretive Agreement	There was peer agreement between the author and academic supervisors as to the inferences drawn from the findings.
	8. Interpretive Distinctiveness	The inferences are distinctively plausible than other possible conclusions from the same results.
	9. Integrative Efficacy (mixed and multiple methods)	The inferences are consistent from both the quantitative and qualitative phases of the study.

⁹ Reproduction from original table published by Tashakkori & Teddlie (2008) (page 113).

6.14 ETHICS AND RESEARCH GOVERNANCE APPROVALS

There were three stages of acquiring approval to conduct the research. Firstly, ethical approval for the study was sought through the National Research Ethics Service, under the remit of the National Patient Safety Agency. Final approval was granted on 9th April 2008.

Secondly, an application to access deceased patient's medical records without consent from their next of kin was made via the Patients Information Advisory Group now the National Information Governance Board (NIGB). The application was considered on 14th April 2008, final approval was granted on 23rd October 2008.

Thirdly, research governance approval was sought from forty-nine Primary Care Trusts. This proved to be a lengthy, time-consuming process due to the migration to the IRAS system. As the study had not been adopted as a portfolio study, individual applications to Primary Care Trusts were made, which required a duplication of documents at each stage. PCTs in Wales required information sheets and consent forms to be translated in the Welsh Language. One PCT refused to grant access to deceased patients' medical records. There was an inconsistent approach from R&D governance offices, resulted in different levels of approval from a letter of access to honorary contacts being issued.

As the study falls under the remit of the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness, the research complies with the stringent Information Security and Confidentiality protocols. The NCISH is registered under the Data Protection Act.

A supporting letter from the Association of Chief Police Officers was received enabling access to police files.

6.15 CONFIDENTIALITY AND ANONYMITY

The researcher made stringent effort to safeguarding confidentiality and anonymity of all data obtained in all cases in accordance with the standards and procedures outlined previously. The study was audited by Halton and Wigan Primary Care Trust in December 2008 to ensure data was held securely and processed in accord with the guidelines specified, meeting all the standards required. The study was also subject to regular reviews from NIGB, Primary Care Trust Research and Governance departments and academic supervisors.

6.16 CHAPTER SUMMARY

The mixed method design has been used to examine a consecutive case series of homicide-suicides in England and Wales between 2006 and 2008. The data used to analyse this phenomenon were collated from numerous sources these included; the Homicide Index, the NCISH databases; coroners'

records; police files; newspaper articles and GP medical records. The potential for bias attached to the use of these sources and the measures used to avoid or mediate the effects have been discussed.

CHAPTER 7: RESULTS - QUANTITATIVE ANALYSIS

In this chapter, I will provide a quantitative descriptive analysis of the homicide-suicide cases. The aim in this section is to provide a detailed descriptive account of the perpetrator, victim and the incident. The prevalence of mental illness in these perpetrators will be explored in detail.

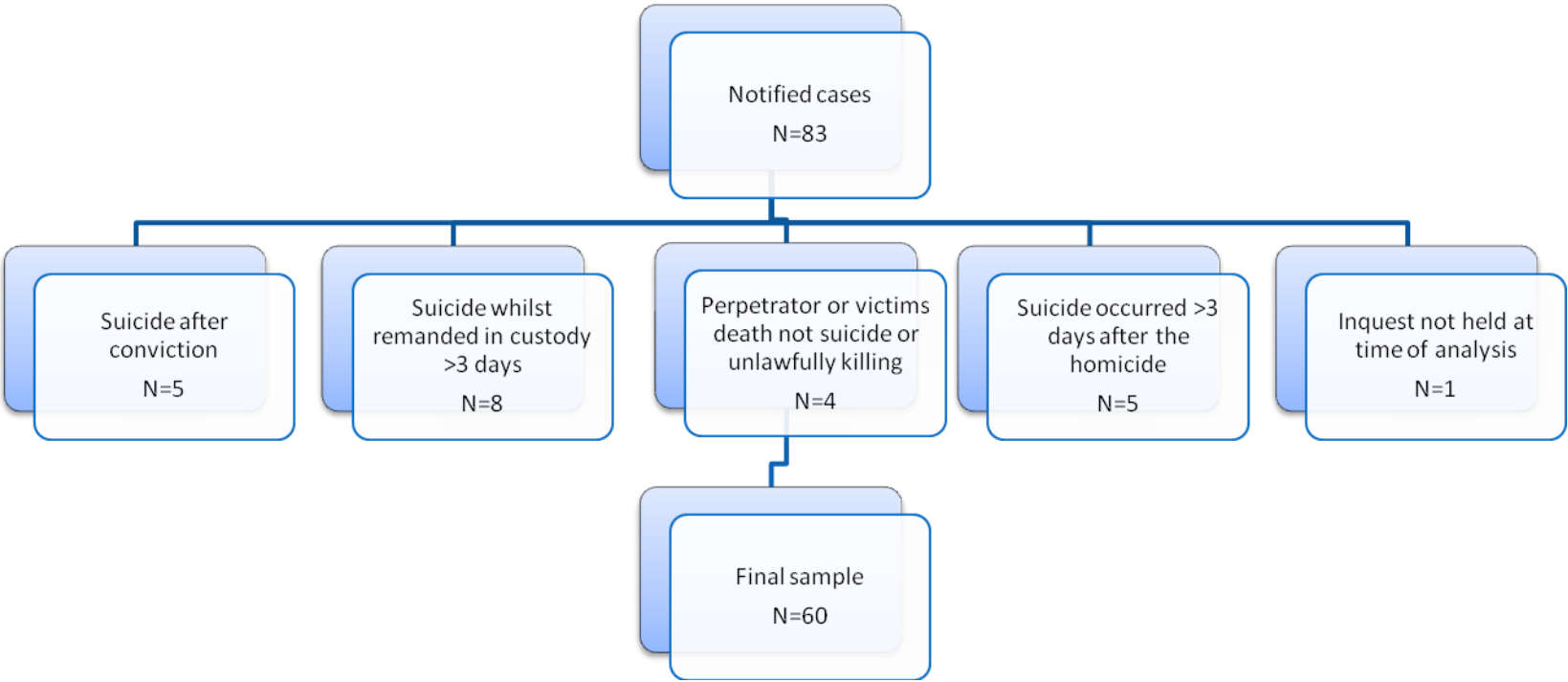
7.1 THE STUDY SAMPLE

Of the 83 suspected homicide-suicide perpetrators, 23 were excluded from this study as they did not meet the inclusion criteria (Figure 4). In 4 cases, the coroner did not find that either the victim had been unlawful killed or the perpetrator died by suicide, or a narrative verdict was returned that did not confirm suicide or unlawful killing. These cases will be briefly summarised in the next chapter. Five cases were excluded as the perpetrators suicide occurred more than three days after the homicide, but before an arrest (with the exception of instances where the perpetrator attempted suicide immediately after the homicide, but died from their injuries more than three days later). Eight cases were excluded as the suicide occurred whilst the perpetrator was remanded in custody (>3 days) and five were excluded because the perpetrator died by suicide following conviction (>3 days). In 1 suspected case, the inquest was not held at the time of analysis, though this was 6 years following the offence. The final sample consisted of 60 cases, an average of 20 per year. The highest number of incidents was recorded in 2007 (n=22) and lowest in 2008 (n=18) (Table 10).

TABLE 10: NUMBER OF PERPETRATORS AND VICTIMS, BY YEAR OF OFFENCE

Year	Number of perpetrators	Number of victims
2006	20	26
2007	22	23
2008	18	21
Total	60	70

FIGURE 4: CASES EXCLUDED FROM THE SAMPLE



7.2 DATA COLLECTION

Of the final sample of 60 cases, notification of these incidents was received from the Homicide Index in 55 cases (92%) an additional 5 cases were notified via police forces. Demographic and offence characteristics were available on all 60 cases. Information was obtained from coroner or police files in 52 (87%) cases. In addition to this data source, information pertaining to the incident was obtained from official reports such as Serious Case Reviews, Independent Police Complaints Commission (IPCC) independent investigations, local safeguarding Children's Board, or through correspondence directly with the investigating police officer on the case. In 6 cases where no information was obtained from official sources, factual data from the inquest reported in newspaper articles were used (quoting the coroner directly or evidence given in court). Medical records were obtained in 52 (87%) cases. In an additional 1 cases medical history and diagnoses were discussed during the inquest and this was reported in the press, these diagnoses have been included (n=53, 88%). The reasons for not obtaining medical records on 7 cases were; no record of GP registration (n=4), PCT refused R&D approval (n=1), records not found or currently held by another party (n=2).

7.3 PREVALENCE AND RATE OF HOMICIDE-SUICIDE IN ENGLAND AND WALES

During the study period (1st January 2006 to 31st December 2008), the NCISH was notified of 1845 people convicted of homicide, and 83 suspected of homicide-suicides in England and Wales. Five people in the homicide-suicide dataset were also in the homicide dataset, as the suicide occurred after conviction. The proportion of notified homicide perpetrators taking their own life was 4% (83 / 1923), a rate of 0.04 per 100,000 population. Cases of homicide-suicide occurred in all ten Strategic Health Authority areas in England and in two Health Boards in Wales. Figure 5 shows the distribution of cases by region. Over the 3 year study period the highest number of cases was recorded in the North West (n=10), and the lowest number in North Wales, North East, and the South West.

FIGURE 5: NUMBER OF HOMICIDE-SUICIDE EVENTS BY HEALTH BOARD AND STRATEGIC HEALTH AUTHORITY, ENGLAND AND WALES (2006-2008)

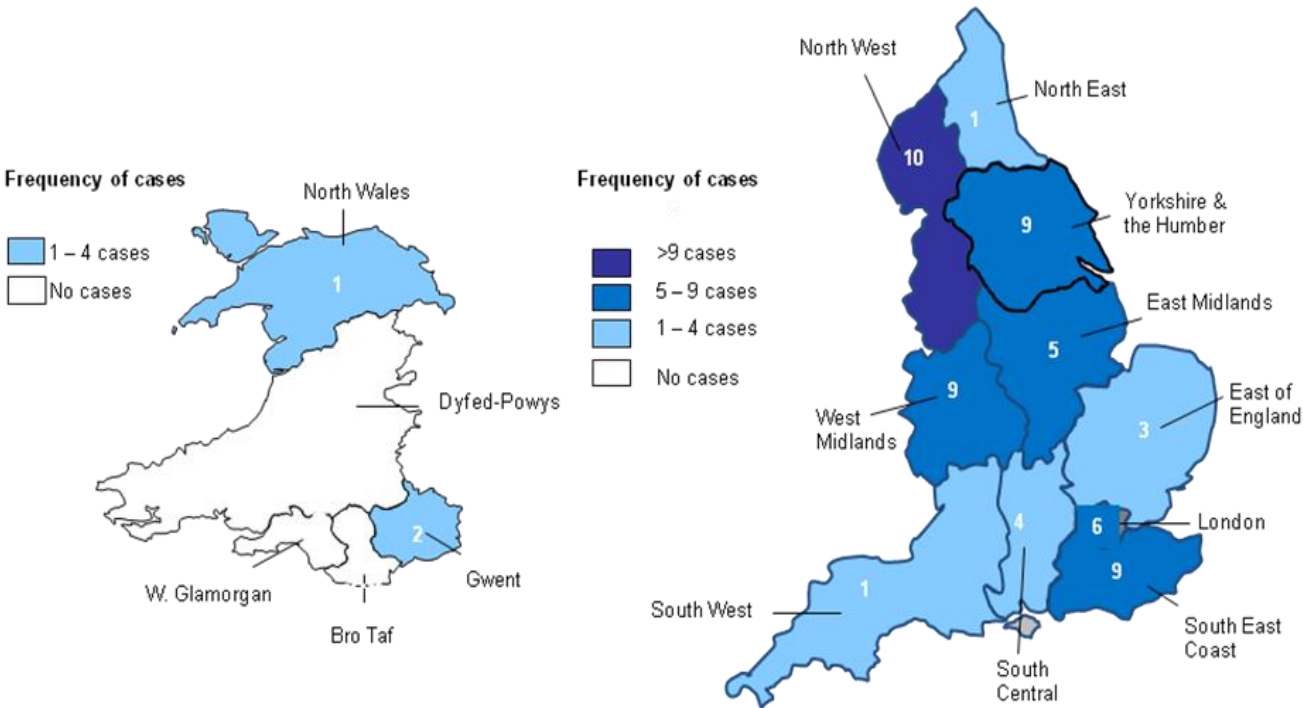


TABLE 11: RATE OF HOMICIDE-SUICIDE, SUICIDE AND HOMICIDE PER 100,000 POPULATION, BY STRATEGIC HEALTH AUTHORITY

Strategic Health Authority	Homicide-suicide Rate per 100,000 population 2006-2008	Suicide Rate per 100,000 population 2006-2008	Homicide Rate per 100,000 population ¹⁰ 2005-2007
North West	0.05	10.8	1.5
West Midlands	0.06	9.1	1.3
Yorkshire & the Humber	0.07	9.5	1.3
South East Coast	0.08	9.7	0.6
London	0.03	8.7	1.9
East Midlands	0.04	9.3	1.1
South Central	0.04	8.7	0.8
East of England	0.02	8.8	0.7
South West	0.01	10.1	0.8
North East	0.01	10.3	1.2
Total average rate	0.04	9.5	1.1

For England, the rate per 100,000 population of homicide-suicide in each region was calculated and compared with previously published rates of homicide and suicide (NCISH, 2011). Rates are presented in Table 11. The highest rate of homicide-suicide was recorded in South East Coast, followed by Yorkshire and the Humber and West Midlands. The three regions with the highest suicide rate were the North West, North East, and the South West. The highest rates of homicide were recorded in London, North West, Yorkshire & Humber and West Midlands.

Pearson's correlation coefficient (parametric) and Spearman Rho (non-parametric) correlation were calculated to examine whether there was a correlation between the rate of homicide-suicide and the rate of suicide-only or homicide-only. There was no significant correlation between homicide-suicide

¹⁰ Source NCISH (2011). Data for homicide rates over the study period 2006-2008 were not available.

and suicide ($r=0.0172$; $p=0.9625$). Similarly, there was no significant correlation between homicide-suicide and homicide rates ($r=0.0621$; $p=0.8647$). Scatter plots summarising the results are presented in Figure 6 and Figure 7. The findings suggest that suicide or homicide rates did not have a relationship to homicide-suicide in England.

FIGURE 6: SUICIDE AND HOMICIDE-SUICIDE RATE PER 100,000 POPULATION, BY REGION

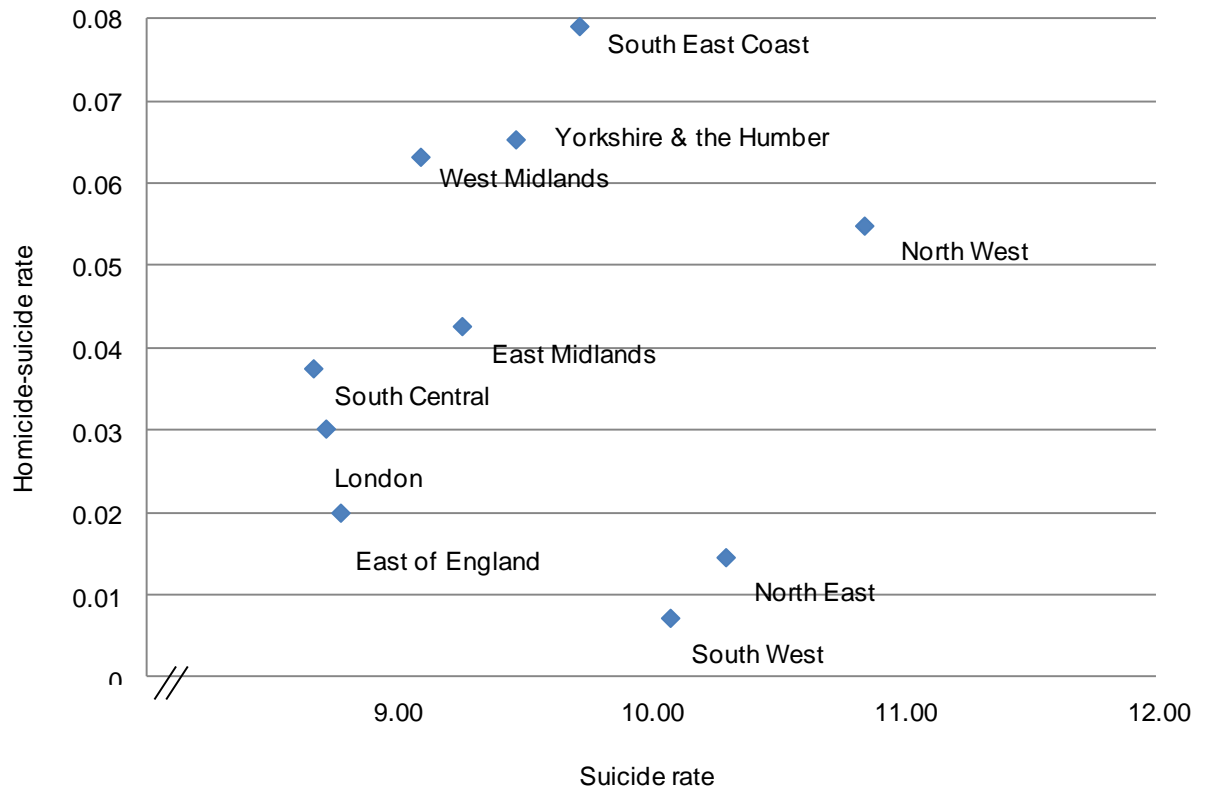
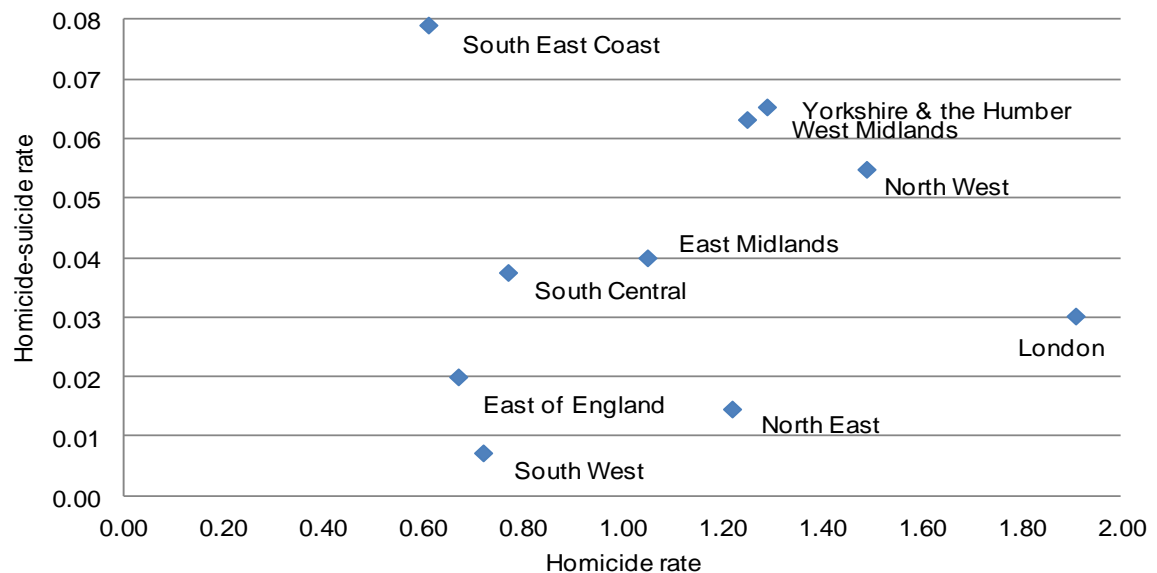


FIGURE 7: HOMICIDE-SUICIDE AND HOMICIDE RATE PER 100,000 POPULATION, BY REGION

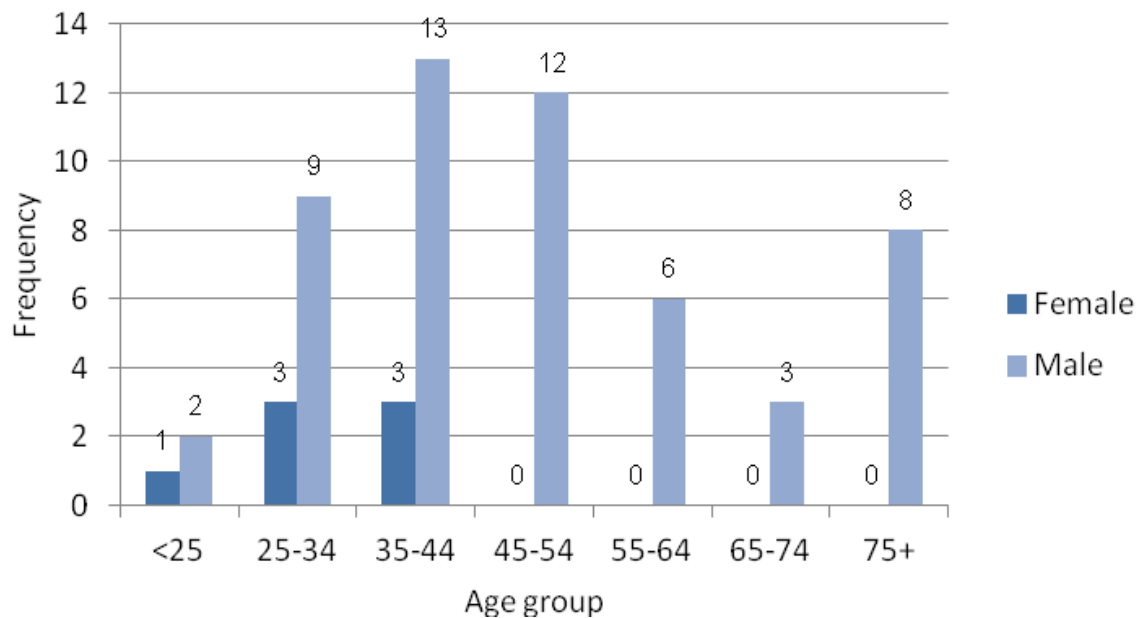


7.4 DEMOGRAPHIC CHARACTERISTICS OF PERPETRATORS

The demographic characteristics of perpetrators are presented in Table 12. Fifty-three (88%) perpetrators were male, giving a male to female ratio of 9:1. The median age of perpetrators was 44 years (range 18-85). Three (5%) were under the age of 25, 11 (18%) over 65 years. No females over the age of 44 committed homicide-suicide (Figure 9). Female perpetrators exclusively killed their own child (7, 100%); in 5 cases (71%) these were children aged 5 or under. Most perpetrators were married (24, 40%) or cohabiting (8, 13%). Seven (12%) were married but separated, 18 (30%) single and 3 (5%) single/divorced. Twenty (34%) were providing care for children. Thirty-five (59%) were living with a spouse/partner (with or without children), of these, 3 were separated and seeking alternative accommodation. Five (8%) lived with children only, 3 (5%) were sharing accommodation with others (friends or family members) and 9 (15%) lived alone. Most lived in a house or flat (59, 98%), none were classified as homeless. Twenty-two (39%) were in employment, 16 (28%) were unemployed, the remaining were “economically inactive”, 1 (2%) was engaged in family duties, 4 (9%) on sickness leave, 11 (19%) retired and 3 (5%) other. In 3 cases employment status was not known. The majority (41, 71%) were White, the remaining ethnic groups were; Black African or Black Caribbean (7, 12%), Asian (Indian, Pakistani, Bangladeshi) (4, 7%), mixed race (2, 3%), and other (4, 7%). In 2 cases the perpetrators ethnicity was unknown. Fourteen (24%) were born outside the UK; 3

(5%) Africa; 3 (5%) Asia (Pakistan, India, Bangladesh); 3 (5%) Europe; 2 (3%) Iraq; 1 (2%) Russia; 1 (2%) South East Asia; 1 (2%) Caribbean.

FIGURE 8: NUMBER OF PERPETRATORS BY AGE AND SEX



7.5 DEMOGRAPHIC CHARACTERISTICS OF VICTIMS

There were 70 victims in total. The highest number of victims was recorded in 2006 (n=26) Table 10. Table 12 presents the demographic characteristics of victims. Fifty-four (77%) victims were female. The median age of victims was 38 years (range 1-85). Fourteen (20%) were children under the age of 10, and 11 (16%) were over 65 years. Perpetrators were more often older than their victims. The average age difference between the victim and perpetrator was 5 years (range 25 years younger to 50 years older). For intimate partner cases, the median age difference was 3 years. Twenty victims (30%) were employed, the remainder were either unemployed (11, 16%), children under school age (12, 18%), students (11, 16%), retired (10, 15%) or “economically inactive” (3, 4%); in 3 cases employment status was unknown. Fifty-five (80%) were White; 3 (4%) Black African or Black Caribbean; 11 (16%) Asian (Indian, Pakistani, Bangladeshi); 1 (1%) other; and 1 ethnicity was unknown. The frequency of victims by age-group is shown in Figure 9.

In all but one case, the perpetrator knew the victim. The relationship of the victim and perpetrator is shown in Figure 10. Most were current or ex spouse/partners (45, 64%) who had been in a long term relationship. In 34 (60%) the victim and perpetrator knew each other for over 10 years. In intimate partner cases 19 (45%) had been in a relationship for over 20 years. Twenty victims (29%) were the

perpetrators own child. In 7 (10%) cases the perpetrator killed multiple victims. Two perpetrators killed a current or ex spouse/partner and a child or children (familicide); 4 perpetrators killed more than 1 child (e.g. siblings).

FIGURE 9: NUMBER OF VICTIMS BY AGE GROUP

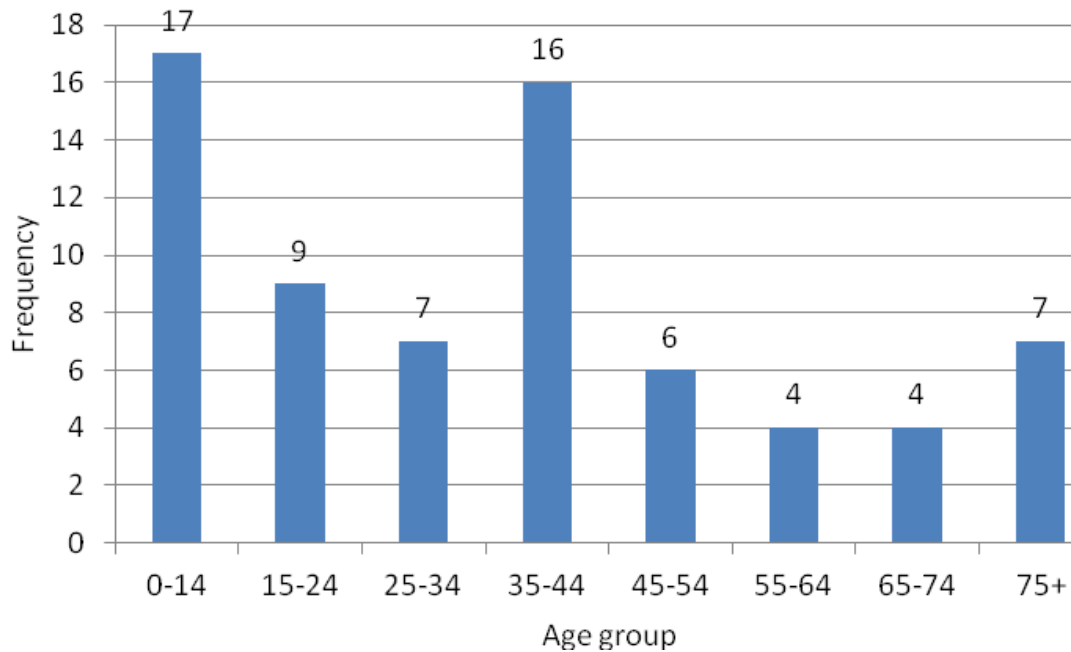


FIGURE 10: RELATIONSHIP BETWEEN THE VICTIM AND PERPETRATOR (N=70)

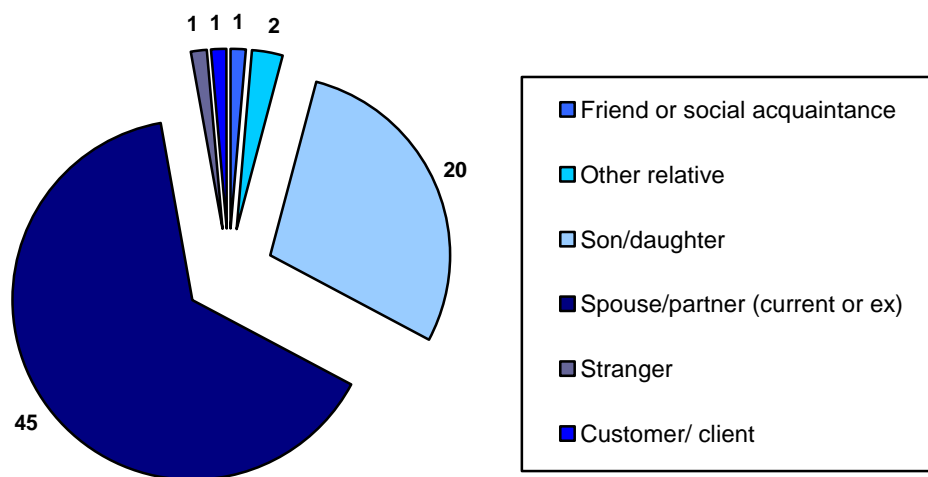


TABLE 12: DEMOGRAPHIC, BEHAVIOUR AND OFFENCE CHARACTERISTICS OF THE PERPETRATORS AND DEMOGRAPHIC CHARACTERISTICS OF VICTIMS

	N=60	(%)	95% CI
Demographic characteristics (perpetrator):			
Age of perpetrator: median (range)	44	(18-85)	
Male perpetrator	53	(88%)	80-97
Married / cohabiting	32	(53%)	40-66
Married but separated	7	(12%)	3-20
Unemployed	16	(28%)	16-40
Living alone	9	(15%)	9-25
Ethnic minority	17	(29%)	17-41
Behavioural features:			
History of alcohol misuse	15	(28%)	16-41
History of drug misuse	13	(23%)	12-35
Previous convictions for violence	18	(30%)	18-42
History of self-harm	8	(15%)	5-26
Previous suicide attempt	14	(26%)	14-38
Offence characteristics:			
Method of homicide: sharp instrument	22	(37%)	24-49
Homicide occurred in shared home	31	(52%)	39-65
Suicide occurred in shared home	25	(42%)	29-55
Suicide occurred <24 hours after homicide	51	(85%)	76-94
Demographic characteristics (victim):	N=70		
Age of victim: median (range)	38	(1-85)	
Female victim	54	(77%)	67-87
Unemployed	11	(16%)	7-26
Ethnic minority	15	(21%)	10-30

7.6 METHOD OF HOMICIDE AND METHOD OF SUICIDE

The most common method of homicide was by using a sharp instrument (22, 37%), followed by asphyxia (18, 30%) (e.g. strangulation, suffocation or smothering) see Figure 11. The same method was used in both homicide and suicide in 24 (40%) cases. This occurred most frequently with hanging/asphyxia (10 cases), firearm use (5 cases) and using a sharp instrument (5 cases). The most common method of suicide was hanging (20, 33%), followed by cutting and stabbing (10, 18%) (Figure 12).

FIGURE 11: METHOD OF HOMICIDE

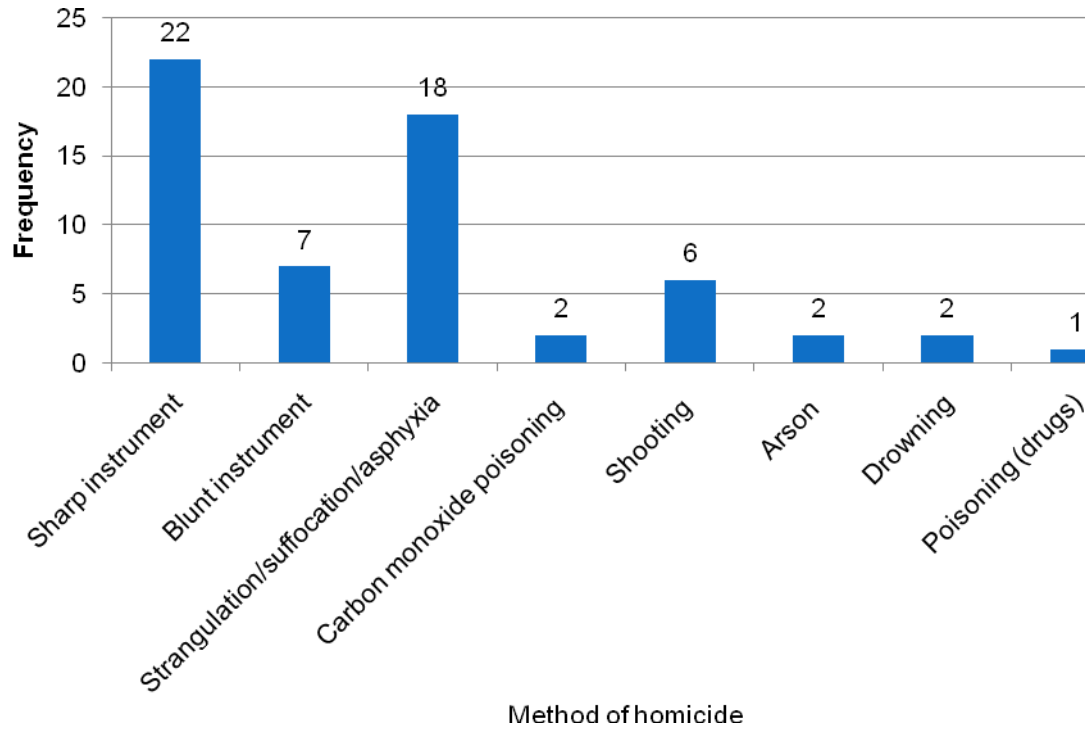
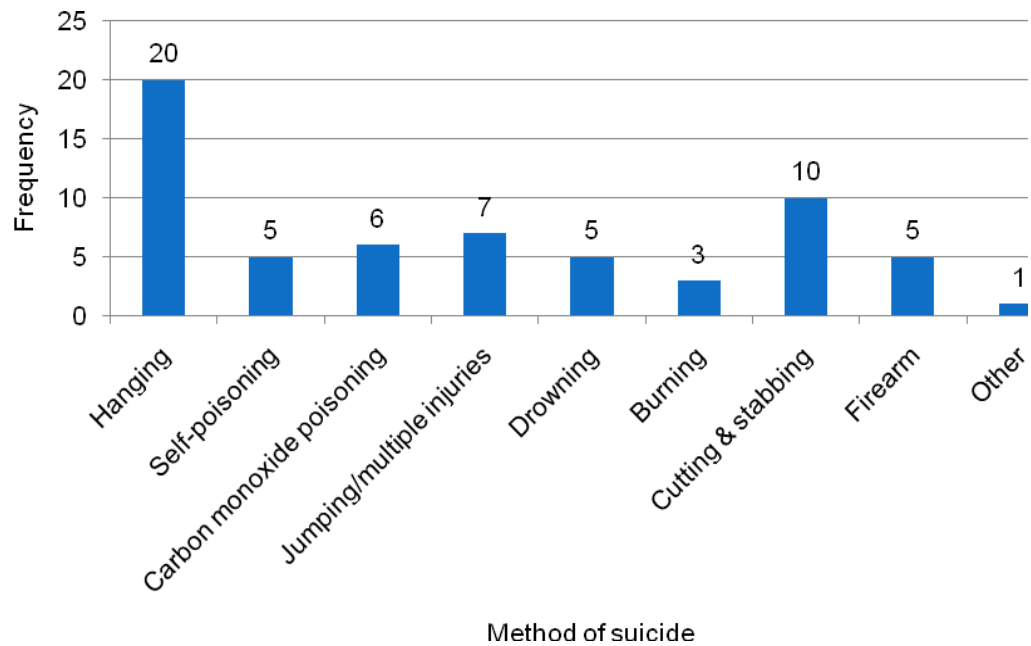


FIGURE 12: METHOD OF SUICIDE



7.7 TIMING BETWEEN HOMICIDE AND SUICIDE

There is no official temporal definition of homicide-suicide. In this study cases the homicide and suicide must have occurred within 3 days of each other. In this sample, the suicide was committed immediately after the homicide in 51 (85%) cases. Nine (15%) suicides occurred more than 24 hours but less than 3 days after the homicide.

7.8 LOCATION OF HOMICIDE AND SUICIDE

The majority of homicides occurred in the home shared by the victim and perpetrator (31, 52%). In 14 (23%) cases, it was in the victim's home, (not shared with perpetrator). The parties were brought together by regular family activity in 43 (72%) cases. In 7 (12%) cases a meeting was requested by the perpetrator. A small number of incidents occurred in a public place such as a park, etc. (6, 10%). Although the homicide was largely in a private home, 16 (27%) took their own life in a different location, most notably in a car, outdoors or in a remote area. Both acts of homicide and suicide were witnessed by a third party in only 1 case. The victim and perpetrator were most often found by the police on notification that one or both of the individuals were missing or not contactable by either family friends or neighbours.

It was rare that the perpetrator contacted anyone prior to taking their own life. In the 6 (10%) cases where this occurred it was either to inform a spouse/partner that he/she had killed their children (act of revenge) or as an attempt to explain what had happened to other relatives, or to apologise for what they had done and were about to do (suicide). Suicide notes were left in 25 (42%) cases.

7.9 PLANNING AND PREMEDITATION

Twenty-four (40%) homicides were considered to be premeditated i.e. had involved planning, acquisition of weapons or materials (rope) and the victim's movements had been monitored. Eight (13%) had put their affairs in order prior to the homicide-suicide, indicating suicide intent. Five (8%) referred to their intentions prior to the event.

7.10 ALCOHOL AND/OR DRUG MISUSE

Fifteen (28%) had a history of alcohol misuse, of whom 9 (69%) had been abusing alcohol for more than 2 years. A recent increase in alcohol use had been noted in 3 cases. Six had previously received treatment for their alcohol misuse. In 13 (27%), the perpetrator was under the influence of alcohol at the time of the offence.

Thirteen (23%) had a history of drug misuse, of whom 7 (78%) had been misusing drugs for more than 2 years. The most common drugs used were cannabis (3), crack/cocaine (2) and amphetamines (2).

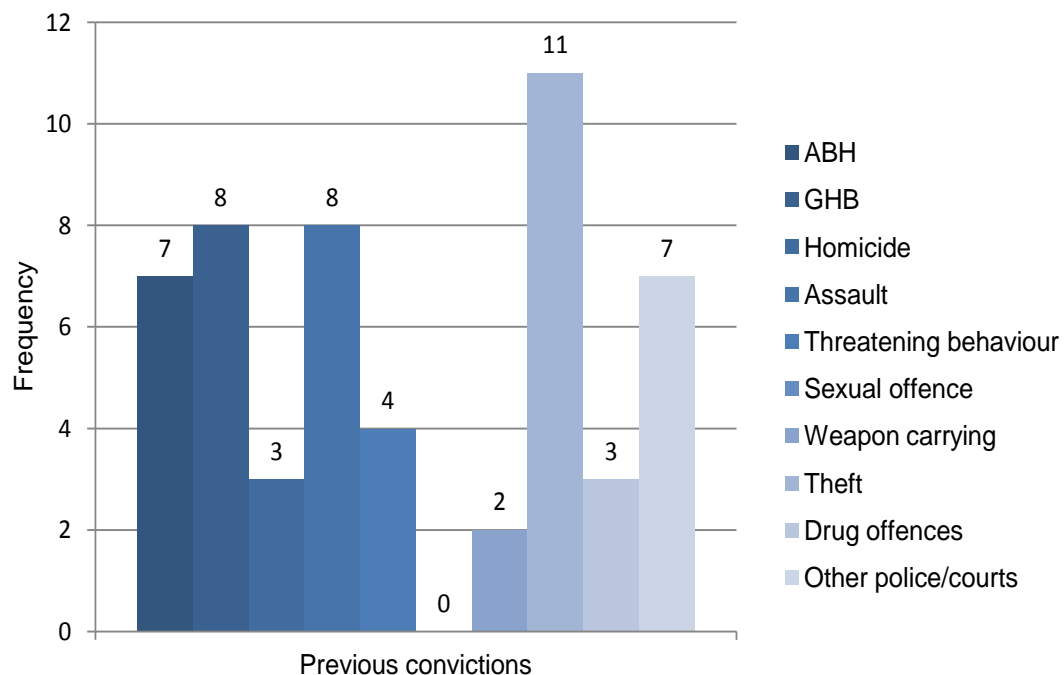
A recent increase in drug misuse had been noted in 2 cases. Five (63%) had received treatment (GP and/or alcohol and drug team). In 6 (67%) cases drugs were consumed on the day of the offence.

7.11 PREVIOUS RECORDED HISTORY OF OFFENDING

Twenty-seven (45%) had previous convictions. Eighteen (30%) had previous convictions for violence. Three (5%) had previously been convicted of homicide, 8 (13%) grievous bodily harm (GBH), 7 (12%) actual bodily harm (ABH), and 8 (13%) assault/battery/affray (these offences were not mutually exclusive, (Figure 13). It was not possible from the information available to identify if the victim in the homicide-suicide incident had also been the victim of these previous serious violence incidents. The circumstances of the offence are not recorded on the antecedent criminal history, only the type of conviction. However, evidence of domestic violence was recorded in 22 (39%) cases (Table 13). It was not known whether any of these incidents resulted in convictions.

In addition to convictions, the prevalence of cautions and warnings for violent acts were also recorded (2, 3%). One of the perpetrators had been convicted of harassment. In 7 (12%) complaints against the perpetrator for domestic violence/harassment were being investigated by the police or being processed through the courts at the time of the incident.

FIGURE 13: THE PERPETRATORS PREVIOUS CONVICTIONS



7.12 HISTORY OF SELF-HARM AND ATTEMPTED SUICIDE

Self-harm has been distinguished from attempted suicide on the basis of information provided in medical records. Self-harm is defined on the basis of frequency, non-lethal method (shallow cutting), the intention to relieve emotional pain rather than to end a life, and the perception that the act was non-life threatening by the individual and medical professionals. Eight perpetrators had a history of self-harm; in 6 cases this was for over 2 years or more, and the most common method was cutting (6 cases). In 14 cases (26%) the perpetrator a history of previous suicide attempts. The highest number of attempts by an individual was 4. Recent suicidal ideation had been noted by the perpetrators GP in 6 (12%) cases; in 5 cases this was recorded less than 1 month before the incident. Five perpetrators were previously been bereaved by suicide, experiencing the death of a family member or friend.

7.13 ADVERSE EVENTS OR PROBLEMS THAT LED TO THE INCIDENT

In all cases there were clear adverse events or personal problems that preceded the incident. This information was derived from the police and coroners files including witness statements from friends and family members. Mental illness presented in this table is based on the testimony of witnesses rather than evidence from medical professionals. These events are not mutually exclusive and it was not uncommon for individuals to have overlapping problems. These issues were categorised into 9 groups. The most common problems recorded were mental illness (27, 51%), personal rejection (22/53, 42%) and domestic abuse (22/56, 39%) (Table 13).

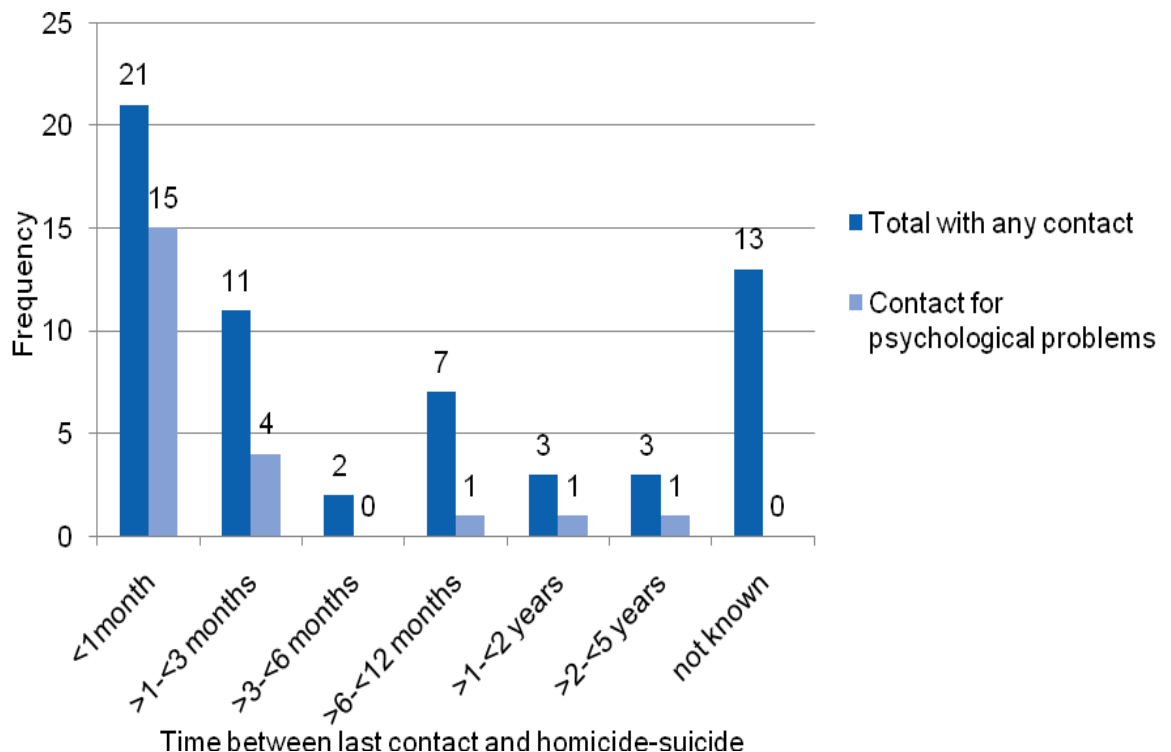
TABLE 13: ADVERSE EVENTS PRIOR TO THE HOMICIDE-SUICIDE

Problem / adverse events	Frequency		95% CI
	N	(%)	
Child custody dispute	10	(18%)	8-29
Infidelity or suspected infidelity	10	(18%)	8-29
Personal rejection	22	(42%)	28-55
Separation/divorce	22	(42%)	28-55
Financial/employment problems	10	(18%)	8-29
Possession of goods	4	(7%)	2-14
History of domestic abuse	22	(39%)	26-52
Lifetime mental illness/disorder	27	(51%)	37-65
Other problems	20	(36%)	23-49

7.14.1 CONTACT WITH GP SERVICES

Medical information regarding previous contact with primary care services were obtained in 53 (88%) cases. Forty-one (87%) perpetrators had a consultation with their GP within 12 months of the incident; in 21 (45%) this was within a month of the incident. The timing of last contact with a GP is presented in Figure 14. Of the 41 perpetrators seen by their GP within 12 months of the offence, the reason for the consultation at the last contact was for a physical complaint (only) in 19 (46%), a psychological reason (only) in 17 (41%), both physical and psychological in 3 (7%) or other reason in 2 (5%) i.e. request a sick note or signature. Of the 20 perpetrators who had visited their GP for psychological problems within 12 months of the incident, 4 had their last consultation with the GP within 1 week, 11 >1 week but <1 month of the offence; 4 between 1 and 3 months; and 1 between 6-12 months before the homicide-suicide. The majority of these recent contact cases (17, 89%) had been diagnosed with depression.

FIGURE 14: TIMING OF LAST CONTACT WITH A GP BEFORE THE HOMICIDE-SUICIDE



7.14.2 CONTACT WITH MENTAL HEALTH SERVICES

Information on contact with mental health service was received on all 60 cases. Fourteen (23%) perpetrators had been referred to mental health services and had been treated by a mental health team at some point in their life. Ten (19%) had previously been admitted as an in-patient; in 2 cases (22%) this was within a year of the incident. None of the perpetrators were psychiatric in-patients at the time of the offence. Seven (12%) perpetrators had been seen by mental health services within 12 months of the offence. For 4 perpetrators, contact occurred less than one month prior to the incident, and in 3 cases this contact occurred within 3 days of the offence (Table 14).

TABLE 14: EVIDENCE OF MENTAL DISORDER FROM MEDICAL RECORDS

Characteristics	Homicide-suicide perpetrators (n=53) N	(%)	95% CI	(%)	95% CI
Evidence of mental illness	N= 53	% total			
Diagnosis and prior treatment (lifetime)	33	(62%)	49-76		
Prescribed psychotropic medication at the time of the offence	14	(30%)	17-44		
Previous suicide attempts	14	(26%)	14-37		
Contact with GP for psychological problems	N=22	% sub group		N=53	
- <1 month prior	15	(68%)	47-89	(28%)	16-41
- >1 month prior but <1 yr	5	(23%)	4-42	(9%)	3-18
- >1 yr	2	(9%)	0-22	(4%)	1-18
Contact with mental health services	N=14	% sub group		¹¹ N=60	
- <1 month prior	4	(29%)	2-56	(7%)	0-13
- >1 month prior but <1 yr	3	(21%)	3-46	(5%)	0-11
- >1 yr	7	(50%)	20-80	(12%)	3-20

¹¹ Information on contact with mental health services was available on all cases, even where GP records were not obtained. The denominator in these cases is 60, and percentages have been rounded.

7.14.3 PRESCRIBED PSYCHOTROPIC MEDICATION

Of those on whom medical records were received, medication of any type had previously been prescribed in 33 (62%) cases. Twenty-three (47%) had previously been prescribed psychotropic medication in their lifetime, in 14 (30%) there was an active prescription at the time of death (Table 14). The most common medications were antidepressants (12, 86%) and sleeping tablets (2, 14%) (Table 15). Of the 14 perpetrators issued a recent prescription, 7 (50%) were thought to have been adherent.

TABLE 15: PSYCHOTROPIC MEDICATION PRESCRIBED AT THE TIME OF THE INCIDENT

Drugs prescribed	N=14
Antidepressants:	12
SSRIs	(10)
Tricyclic antidepressants	(2)
Hypnotics:	2
Total	14

7.14.4 HISTORY OF MENTAL DISORDER

Of the 53 cases whose medical information had been obtained, 33 (62%) had previously been diagnosed with a mental disorder and had been treated by their GP or mental health services at sometime prior to the offence. In 6 cases the perpetrator had first been diagnosed with a mental illness following marital separation or a specific adverse life event shortly before the incident. No prior history of mental disorder had been noted in the perpetrators medical records before the events linked to the offence. This was considered suggestive of situational depressive, a reaction to a stressful situation/personal crisis, rather than depressive disorder per se. The diagnoses are presented in Table 16. The most common diagnosis was depression. This was the primary diagnosis in 28 (53%) cases. Eleven had co-morbid depression with anxiety (8 cases) or personality disorder (3 cases). Only 1 person had previously been diagnosed with a delusional disorder. Depression was only recorded if it had been explicitly stated that the individual presented with depressed mood or had experienced depressive symptoms. Furthermore, unless explicitly stated as a diagnosis, personality disorder was not recorded, although many displayed abnormal personality traits.

TABLE 16: DIAGNOSES FROM GP MEDICAL RECORDS

Lifetime Diagnoses - Primary diagnosis	N=53		
	N	(%)	95% CI
Schizophrenia & other delusional disorders	1	(2%)	0-6
Depressive disorder	28	(53%)	39-67
- Situational depression	(6)	(12%)	4-23
Alcohol dependence	1	(2%)	0-6
Drug dependence	1	(2%)	0-6
Other diagnosis (stress/anxiety)	2	(4%)	0-9
No mental illness	20	(38%)	24-51

7.14.5 MENTAL ILLNESS DESCRIBED BY WITNESSES

In 27 cases (51%) witnesses described mental illness as an important factor leading to the offence (Table 13). Of these, 25 cases (96%) had a recorded lifetime history of mental illness in their notes. In 2 cases where mental illness was described by witnesses, this could not be corroborated because the individual's medical records were not obtained (n=1) or no evidence of mental illness was stated in the notes (n=1). Eighteen (69%) had been seen by their GP for psychological problems within 12 months of the offence, and 13 (48%) were seen within a month of the offence.

7.14.6 A COMPARISON OF PERPETRATORS WITH AND WITHOUT A HISTORY OF MENTAL DISORDER

To examine the role of mental disorder in homicide-suicide cases, a comparison of the demographic, behavioural and offence characteristics of perpetrators with and without a lifetime history of mental disorder as recorded in case notes is presented in Table 17. Overall, the characteristics of perpetrators were similar, with few significant differences. Perpetrators with a history of mental disorder were less likely to be living with a spouse/partner at the time of the incident. They were significantly more likely to have attempted suicide and have been in contact with their GP within 12 months, including a consultation for psychological problems. There was no difference in the behavioural or offence characteristics, method of homicide, circumstances leading to the incident, or victim-perpetrator relationship between those with and without mental illness.

TABLE 17: PERPETRATORS WITH AND WITHOUT MENTAL DISORDER

	No mental disorder N=20			Lifetime mental disorder N =33			P-value
	N	(%)	95% CI	N	(%)	95% CI	
Demographic characteristics (perpetrator):							
Age of perpetrator: median (range)	46	(18-81)	00-00	43	(21-84)	00-00	0.71
Male perpetrator	19	(95%)	75-100	27	(82%)	65-93	0.23
Female perpetrator	1	(5%)	0-25	6	(18%)	7-35	0.23
Married	14	(70%)	47-88	14	(42%)	25-61	0.42
Employed	8	(40%)	19-64	13	(41%)	24-59	0.96
Living with spouse/partner	16	(80%)	56-94	15	(45%)	28-64	0.02
Ethnic minority	8	(40%)	19-64	5	(16%)	5-34	0.06
Behavioural features: perpetrator:							
History of alcohol misuse	3	(15%)	3-38	12	(39%)	22-58	0.12
History of drug misuse	2	(10%)	1-32	9	(28%)	14-47	0.17
Previous convictions for violence	4	(20%)	6-44	13	(39%)	23-58	0.23
History of self-harm	1	(5%)	0-26	7	(23%)	10-41	0.13
Previous suicide attempt	0	(-)	0-0	13	(41%)	24-59	<0.01
Offence characteristics:							
Sharp instrument	5	(25%)	9-49	11	(33%)	18-52	0.52
Homicide occurred in shared home	13	(65%)	41-85	14	(33%)	25-61	0.11
Suicide occurred in shared home	11	(55%)	32-67	11	(33%)	18-52	0.12
Suicide occurred <24 hours after homicide	16	(80%)	56-94	28	(85%)	68-95	0.65
Problems described by witness:							
Custody of children	4	(20%)	6-44	6	(20%)	8-39	1.00
Infidelity or suspect infidelity	5	(25%)	9-49	4	(13%)	4-31	0.45
Personal rejection	9	(47%)	24-71	11	(38%)	21-58	0.52
Separation/divorce	8	(42%)	20-67	12	(41%)	24-61	0.96
Financial/employment stress & anxiety	3	(15%)	3-38	5	(17%)	6-35	1.00
Domestic abuse	11	(55%)	32-77	9	(29%)	14-48	0.06
Clinical characteristics:							
GP contact <1 month before homicide	2	(10%)	1-32	19	(58%)	39-75	<0.01
GP contact <1 month before homicide - for psychological reasons	0	(-)	0-17	13	(39%)	23-58	<0.01
Of the total number of victims (n=63)	No mental disorder N=25			Lifetime mental disorder N =38			P-value
	N	(%)	95% CI	N	(%)	95% CI	
Victim characteristics:							
Age of victim: median (range)	39	(1-85)		30	(1-82)		0.35
Male victim	4	(16%)	1-31	11	(29%)	14-44	0.37
Victim was a spouse/partner	17	(68%)	48-88	22	(58%)	41-74	0.42
Victim was a son/daughter	6	(24%)	6-42	14	(37%)	21-53	0.28

7.15 PERPETRATOR-VICTIM TYPOLOGY

Previous research has highlighted the three main types of relationship found in cases of homicide-suicide intimate partner, filicide and elderly homicide-suicide as detailed in Tables 18, 19 and 20. To take this further, the data has been analysed more specifically in relation to the victim-perpetrator relationship. Table 21 provides a brief overview of the clinical characteristics of these groups. The most common group were spousal/consortial homicide-suicide perpetrators (36, 60%). This group includes those who killed a partner or ex-partner only, and does not include the elderly who killed in the context of the victims declining health, or where the whole family was killed (e.g. familicide). Of these 36 perpetrators, 19 (61%) had a lifetime history of mental illness. Nearly half were seen by their GP for psychological problems within 12 months of the offence and over a third had been prescribed psychotropic medication. Depression was the most common diagnosis, but few were under the care of mental health services.

Almost half of the perpetrators committing filicide-suicide were male 4 (40%). Of the 10 perpetrators who killed a child(ren) only, almost all had a lifetime history of mental illness (9, 90%). Half had sought help for psychological problems with a year of the incident, and nearly a third had been in contact with mental health services within a month of the offence. Seventy percent were diagnosed with depression.

Of the 7 elderly perpetrators who killed their spouse/partner with declining health, a third had a lifetime history of mental illness, the lowest of all the groups. A quarter had consulted their GP for psychological problems prior to the incident and only one had been under the care of mental health services. There were 2 cases where the perpetrator killed both his spouse/partner and their children. In 1 case, the perpetrator had been previously diagnosed with depression. Three perpetrators killed a different family member, and 1 victim was not related to the perpetrator. Mental illness was not a feature of these cases.

7.15.1 INTIMATE-PARTNER HOMICIDE-SUICIDE

Intimate partner homicides are defined where the relationship between the perpetrator and victim was: boyfriend/girlfriend; common-law spouse or cohabiting partner; spouse (including civil partner); ex-boyfriend/ex-girlfriend; ex-common-law spouse or cohabiting partner or ex-spouse and (including ex-civil partner). The characteristics of these offences are presented in Table 18.

Homicide-suicide between intimate partners was exclusively perpetrated by males (45 (100%) whose median age was 45 years. Compared with other forms of homicide-suicide, these perpetrators were more commonly living with their spouse or partner at the time of the offence (4, 27% v 31, 70%; $p < 0.01$). There were no significant differences in their behavioural characteristics, although a quarter had previously misused alcohol (10, 26%) and a quarter had misused drugs (11, 27%); over a third had

been under the influence of alcohol or drugs at the time of the offence 14/37 (38%). A third had previous convictions for violent offences (15, 33%), including 2 previously convicted of homicide. The homicide was considered to be premeditated in 15/40 (38%), and the suicide premeditated/planned in 15/39 (38%). Sixteen of 38 (42%) had left a suicide note. A quarter had previously attempted suicide (10, 26%). Significantly more offenders used a sharp instrument in these offences compared to other homicide-suicides (2, 13% v 20, 44%; $p=0.04$).

The victims were of similar age to the perpetrator. In 2 cases (4%) the partners were in a same sex relationship. The most common problems described by witnesses were personal rejection (19/39, 49%), domestic abuse (19/41, 46%), mental disorder (18/38, 47%), and separation or divorce (18/39, 46%). Child custody disputes were less likely to have been a problem in these intimate partner homicides. There was also no significant difference in the clinical histories or prevalence of previous contact with mental health services. Twenty-three (56%) had a lifetime history of mental illness, of whom the most common diagnosis was depression (19, 83%). Nine (20%) had consulted their GP regarding psychological problem/emotional distress within a month of the homicide.

TABLE 18: NON-INTIMATE VS. INTIMATE PARTNER HOMICIDE-SUICIDE

	Non intimate partner			Intimate partner			P-value
	N =15	%	95% CI	N=45	%	95% CI	
Demographic characteristics (perpetrator):							
Age of perpetrator: median (range)	38	(21-85)		45	(18-85)		0.04
Male perpetrator	8	(53%)	25-82	45	(100%)	-	<0.01
Married/cohabiting	4	(27%)	1-52	28	(62%)	44-77	0.10
Employed	8	(53%)	25-82	14	(33%)	18-48	0.17
Living with spouse/partner	4	(27%)	1-52	31	(70%)	56-84	<0.01
Ethnic minority	3	(20%)	0-43	14	(33%)	18-47	0.51
Behavioural features of perpetrator:							
History of alcohol misuse	5	(33%)	6-60	10	(26%)	12-41	0.74
History of drug misuse	2	(13%)	0-33	11	(27%)	13-41	0.45
Previous convictions for violence	3	(20%)	0-43	15	(33%)	19-48	0.52
History of self-harm	4	(27%)	1-52	4	(11%)	0-21	0.21
Previous suicide attempt	4	(27%)	1-52	10	(26%)	11-40	1.00
Demographic characteristics (victim):							
Age of victim: median (range)	5	(1-70)		43	(15-85)		<0.01
Male victim	11	(73%)	48-99	2	(4%)	0-11	<0.01
Offence characteristics:							
Sharp instrument	2	(13%)	0-33	20	(44%)	29-60	0.04
Homicide occurred in shared home	5	(33%)	6-60	26	(58%)	43-73	0.10
Suicide occurred in shared home	4	(27%)	1-52	21	(47%)	32-62	0.23
Suicide occurred <24 hours after homicide	15	(100%)	-	36	(80%)	68-92	0.10
Problems described by witnesses:							
Custody of children	6	(40%)	12-68	4	(10%)	0-20	0.02
Infidelity or suspect infidelity	2	(13%)	0-33	8	(20%)	7-32	0.71
Personal rejection	3	(21%)	0-36	19	(49%)	32-65	0.85
Separation/divorce	4	(29%)	1-56	18	(46%)	30-63	0.35
Financial/employment stress & anxiety	1	(7%)	0-21	9	(23%)	9-36	0.26
Domestic abuse	3	(20%)	0-43	19	(46%)	30-62	0.12
Mental disorder	9	(60%)	32-88	18	(47%)	31-64	0.54
Clinical characteristics:							
Lifetime history of mental illness	11	(79%)	54-100	22	(56%)	40-73	0.36
MH medication prescribed	4	(29%)	2-56	10	(31%)	14-48	1.00
GP contact <1 month before homicide	7	(47%)	18-75	14	(31%)	17-45	0.27
GP contact <1 month before homicide - for psychological reasons	4	(27%)	1-52	9	(20%)	8-32	0.72

7.15.2 FILICIDE-SUICIDE

The definition of filicide-suicide is the killing of a child less than 18 years, by a parent, followed by the perpetrators suicide. Thirteen parents were responsible for killing their own child, in 12 cases the victim was under the age of 18 (2 were adult 'offspring'). In 10 cases the perpetrator killed a child/children only, 2 perpetrators killed their child/children and a current or ex spouse/partner, (referred to as 'familicide'). The characteristics of these incidents are shown in Table 19.

The median age of perpetrators was 41. Half were killed by a female perpetrator which was a significantly higher proportion than observed in other homicide-suicide incidents (47, 98% v. 6, 50%; $p<0.01$). Most filicide-suicide perpetrators were employed (14, 31% v. 8, 67%; $p=0.04$). A quarter had a history of alcohol misuse, over a third had a history of self-harm and a third had previously attempted suicide. The average age of the child victims was 3; the majority of victims were male. The most common method of homicide was asphyxia (strangulation/suffocation/hanging), the use of a sharp instrument was less likely in filicide-suicide cases. In 7 (58%) the homicide was considered to be premeditated/planned; a suicide note was left in 6 (50%) cases. The most common problems described by witnesses included mental disorder (10, 83%), separation/divorce (5/11, 45%) and child custody disputes (5/12, 42%). No significantly clinical characteristics were found between filicide-suicide and other homicide-suicides. Ten (83%) had a lifetime history of mental disorder, most commonly depression (8, 80%), and 7 (58%) had been in contact with their GP within a month of the incident.

TABLE 19: NON-FILICIDE-SUICIDE VS. FILICIDE-SUICIDE

	Non filicide-suicide			Filicide-suicide			P-value
	N=48	(%)	95% CI	N=12	(%)	95% CI	
Demographic characteristics (perpetrator):							
Age of perpetrator: median (range)	45	(18-85)		41	(21-53)		0.14
Male perpetrator	47	(98%)	94-100	6	(50%)	17-83	<0.01
Married	27	(56%)	42-71	7	(58%)	26-91	0.61
Employed	14	(31%)	17-45	8	(67%)	35-98	0.04
Living with spouse/partner	30	(64%)	50-78	5	(42%)	9-74	0.16
Ethnic minority	14	(30%)	17-44	3	(25%)	0-54	1.00
Behavioural features of perpetrator:							
History of alcohol misuse	12	(29%)	14-43	3	(27%)	0-59	1.00
History of drug misuse	11	(24%)	11-38	2	(18%)	0-45	1.00
Previous convictions for violence	16	(33%)	20-47	2	(17%)	0-41	0.32
History of self-harm	4	(10%)	3-19	4	(36%)	2-70	0.05
Previous suicide attempt	10	(24%)	10-37	4	(33%)	2-65	0.49
Demographic characteristics (victim):							
Age of victim: median (range)	43	(15-82)		3		(1-15)	<0.01
Male victim	4	(8%)	0-16	9	(75%)	46-100	<0.01
Offence characteristics:							
Sharp instrument	21	(44%)	29-58	1	(8%)	0-27	0.07
Homicide occurred in shared home	24	(50%)	35-65	7	(58%)	26-91	0.61
Suicide occurred in shared home	19	(40%)	25-54	6	(50%)	17-83	0.51
Suicide occurred <24 hours after homicide	40	(83%)	72-94	11	(92%)	73-100	0.67
Problems described by witnesses:							
Custody of children	5	(12%)	2-22	5	(42%)	9-74	0.03
Infidelity or suspect infidelity	9	(21%)	8-34	1	(8%)	0-27	0.43
Personal rejection	18	(43%)	27-58	4	(36%)	2-70	0.75
Separation/divorce	17	(40%)	25-56	5	(45%)	10-81	0.77
Financial/employment stress & anxiety	8	(19%)	6-31	2	(17%)	0-41	1.00
Domestic abuse	20	(45%)	30-61	2	(17%)	0-41	0.10
Mental disorder	17	(41%)	26-57	10	(83%)	59-100	0.02
Clinical characteristics:							
Lifetime history of mental illness	24	(56%)	40-72	10	(83%)	59-100	0.10
MH medication prescribed	10	(29%)	13-46	4	(33%)	2-65	1.00
GP contact <1 month before homicide	14	(29%)	16-43	7	(58%)	26-91	0.06
GP contact <1 month before homicide - for psychological reasons	10	(21%)	10-33	3	(25%)	0-54	0.71

7.15.3 ELDERLY HOMICIDE-SUICIDE

There were 14 (23%) homicide-suicides committed by people aged 60 or older. The median age was 76, the oldest perpetrator was 85 years. With the exception of 1 case, all these elderly perpetrators killed a spouse/partner and in all cases the offences were committed by males (14, 100%). Compared to other homicide-suicides, significantly more elderly perpetrators were married (20, 43% v. 12, 86%; $p<0.01$); 13 (93%) lived with their spouse partner. A quarter had a history of alcohol misuse (3, 23%), and a quarter had previously attempted suicide (3, 23%). The median age of the victim was 74 (range: 25-85); all victims were female. Most victims were killed in the home shared together (20, 43% v. 11 79%; $p=0.03$). The most common problems described by witnesses were mental disorder (8, 57%), separation/divorce (4, 29%), personal rejection (3, 21%) and domestic abuse (3, 21%). In 7 (50%) of cases the victim's health had declined and the perpetrator had feared separation was imminent. The majority of perpetrators had a lifetime history of mental disorder (8, 62%), most commonly a diagnoses of depression (6, 75%). A suicide note was left in 7 (58%), Table 20.

TABLE 20: NON-ELDERLY VS. ELDERLY CASES HOMICIDE-SUICIDE

	Non-elderly			Elderly			P-value
	N=46 (%)		95% CI	N=14 (%)		95% CI	
Demographic characteristics (perpetrator):							
Age of perpetrator: median (range)	40 (18-57)	-		76 (60-85)	-		<0.01
Male perpetrator	39 (85%)	74-96		14 (100%)	-		0.18
Married	20 (43%)	29-58		12 (86%)	65-100		<0.01
Employed	21 (48%)	32-63		1 (8%)	0-24		0.01
Living with spouse/partner	22 (49%)	34-64		13 (93%)	77-100		<0.01
Ethnic minority	16 (36%)	21-50		1 (8%)			0.05
Behavioural features of perpetrator:							
History of alcohol misuse	12 (30%)	15-45		3 (23%)	0-50		0.74
History of drug misuse	13 (30%)	16-45		0 -	-		0.03
Previous convictions for violence	16 (35%)	20-49		2 (14%)	0-35		0.19
History of self-harm	8 (20%)	7-33		0 -	-		0.17
Previous suicide attempt	11 (27%)	13-41		3 (23%)	0-50		1.00
Demographic characteristics (victim):							
Age of victim: median (range)	31 (1-70)	-		74 (25-85)			<0.01
Male victim	13 (28%)	15-42		0 -	-		0.03
Victim was a spouse/partner	32 (70%)	56-83		13 (93%)	77-100		0.16
Offence characteristics:							
Sharp instrument	17 (37%)	22-51		5 (36%)	7-64		0.84
Homicide occurred in shared home	20 (43%)	29-58		11 (79%)	54-100		0.03
Suicide occurred in shared home	17 (37%)	22-51		8 (57%)	27-87		0.18
Suicide occurred <24 hours after homicide	37 (80%)	69-92		14 (100%)	-		1.00
Problems described by witnesses:							
Custody of children	10 (24%)	11-38		0 -	-		0.05
Infidelity or suspect infidelity	8 (20%)	7-32		2 (14%)	6-35		1.00
Personal rejection	19 (49%)	32-65		3 (21%)	0-46		0.11
Separation/divorce	18 (46%)	30-63		4 (29%)	2-56		0.35
Financial/employment stress & anxiety	8 (20%)	7-32		2 (14%)	0-35		1.00
Domestic abuse	19 (45%)	30-61		3 (21%)	0-46		0.21
Mental disorder	19 (49%)	32-65		8 (57%)	27-87		0.59
Clinical characteristics:							
Lifetime history of mental illness	25 (61%)	45-77		8 (67%)	35-98		0.95
MH medication prescribed	10 (29%)	13-44		4 (36%)	2-70		0.71
GP contact <1 month before homicide	13 (28%)	15-42		8 (57%)	27-87		0.05
GP contact <1 month before homicide - for psychological reasons	7 (15%)	4-26		6 (43%)	13-73		0.03

There were 60 homicide-suicide incidents in England and Wales between 2006 and 2008, an average of 20 a year, a rate of 0.04 per 100,000 population. The findings show that these rates fluctuated by region within England, with the highest rate recorded in the South East Coast region. The demographic findings show that the majority of homicide-suicides are committed by men. The median age for perpetrators was 44 years. Victims were most commonly a current or former intimate partner or child. Behavioural characteristics such as a history of self-harm, attempted suicide, alcohol and drug misuse and previous offending were not uncommon. The findings from the medical records showed that over half of the perpetrators had a lifetime history of mental disorder. The most common diagnoses was depression, psychosis and personality disorder (as stated in medical records) was not a feature of these incidents. Despite the overrepresentation of mental disorder in this group, the number in contact with their GP for psychological problems before to the homicide or within a year of the offence was low.

TABLE 21: MENTAL HEALTH HISTORY BY PERPETRATOR-VICTIM RELATIONSHIP

	Spousal/ consortial	Declining health	Filicide-suicide	Familicide- Suicide	Other family	¹² Extra-familial
	N=36 %	N=7 %	N=10 %	N=2 %	N=3 %	N=1 %
Male perpetrator	36 (100%)	7 (100%)	4 (40%)	2 (100%)	2 (67%)	2 (100%)
Lifetime history of mental disorder	19 (61%)	2 (33%)	9 (90%)	1 (50%)	1 (50%)	0
Contact with GP for psychological problems (<12mths)	13 (42%)	1 (25%)	5 (50%)	0	0	0
Prescribed psychotropic medication at homicide	9 (36%)	1 (20%)	4 (40%)	0	0	0

¹² Figure 10 illustrates 2 extrafamilial homicide-suicides, 1 stranger and 1 customer/client. However, the customer/client relationship has been here as spousal/consortial, as this was a sexual relationship.

TABLE 21: MENTAL HEALTH HISTORY BY PERPETRATOR-VICTIM RELATIONSHIP (CONTINUED)

	Spouse/ Partner inc. ex	Declining health	Filicide-suicide	Familicide- Suicide	Other family	Extra-familial
	N=36 %	N=7 %	N=10 %	N=2 %	N=3 %	N=1 %
Contact with mental Health Services:						
<1 month	3 (8%)	0	3 (30%)	0	0	0
>1 month < 1year	2 (6%)	1 (14%)	0	0	0	0
> 1 year	4 (11%)	0	0	0	0	0
Schizophrenia	0	1 (14%)	0	0	0	0
/delusional disorder						
Depression	17 (55%)	1 (14%)	7 (70%)	1 (50%)	1 (33%)	0
Alcohol dependence	0	0	1 (10%)	0	0	0
Drug dependence	1 (3%)	0	0	0	0	0
Other diagnoses	1 (3%)	0	1 (10%)	0	0	0

CHAPTER 8: RESULTS - A THEMATIC ANALYSIS OF DOCUMENTS

The purpose of this chapter is to examine the data to gain a greater understanding of the role of mental illness in cases of homicide-suicide. The data includes coroners and police records, GP medical records and newspaper articles. To ensure that the data from the newspaper reports does not skew the official documentation, only direct quotations from witnesses have been used from this source.

Homicide-suicides are relatively rare, and the reason why people commit these acts is little understood. The incident is often considered to be so abhorrent and deviant that there is an automatic assumption that the person responsible must have been mentally ill. The causes of emotional distress, the emotions experienced, the mechanisms used to cope and the existence of mental health problems have been examined.

The key themes from the theoretical framework and the indexing of these initial concepts are presented in Table 22. The process by which the final themes emerged from this framework has been illustrated in Appendix 6.

TABLE 22: THEORETICAL FRAMEWORK AND EXAMPLES OF DATA INDEXING

Theme from theoretical framework		Indexing of data: Data extract
1	Self-harm or attempting suicide as a coping strategy	"His history was of poor impulse control leading to aggression towards others and episodes of self injury by overdose and wrist cutting." (Case 25)
2	Expressed suicidal ideation prior to the incident	"The week before Christmas both parents were at the house and her mother told her that her father was thinking of ending his life. She shook it off and later the same day they were sat in her lounge when out the blue her father said "I feel like topping myself." (Case 111)
3	Emotional distress expressed in suicide note or final communication	"God forgive me, my intention is to take my own life and the life of my wife. Too much health, agony, agro, cannot cope, nothing works, sorry for all, nothing matters, God Bless you all, you have all given your best." (Case 101)
4	History of violent behaviour	"There was a long history of domestic violence.

		Before her death, (she) had finally gathered the courage to end the abusive eight year relationship after (he) attacked their son." (Case 11)
5	Behavioural characteristics	He sent hundreds of abusive texts to (her). He said "you don't know what I am capable of." (Case 75)
6	History of mental disorder	"He had a long history of drug abuse, anxiety and depression." (Case 85)
7	GP notes about the patients mental state	"The couple were offered counselling via relate, but no referral was made. He was not prescribed antidepressants at this stage, but advised to return to the surgery in a few days. He was issued a sick note. The doctor noted that there was no indication of fear or odd behaviour." (Case 20)
8	Adverse life events	They finally broke up on June 3, a week before the shooting. Days before he had written a 20-page letter begging her to take him back and warned: "If I can't have you, nobody will." (Case 7)

The initial eight themes from the theoretical framework have been refined into four main themes, these were:

- Theme 1: Causes of emotional distress
- Theme 2: Emotional response to adverse incidents
- Theme 3: Coping with emotional distress
- Theme 4: Evidence of mental illness

8.1 THEME 1: CAUSES OF EMOTIONAL DISTRESS

Relationship breakdown was observed to be the most common cause of psychological distress. Whether the victim was a spouse or partner or a child, the root cause of the emotional problems in most cases was interpreted to be the adjustment to the loss of the relationship.

8.1.1 SEPARATION/DIVORCE

The ending of the marriage or relationship created high levels of emotional distress in these perpetrators. The impact of the separation on their life appeared to have had a profound psychological effect. Both emotional and social problems resulted from the separation, which caused great anguish. There appeared to be an acute feeling of loss in these people, which was manifest in a number of ways.

The ending of the relationship resulted in the loss of a spouse/partner as a friend, confidant, and sexual partner. The loss was intensified as many perpetrators felt that they were no longer wanted or needed, and being rejected by the person they spent most of their adult lives with was very upsetting.

He had confided that his wife had no interest in the marriage anymore. He said “She doesn’t want me there anyway.” (Case 37, witness statement)

The perpetrators role and identity as a husband and father had been lost, and in most cases they experienced great difficulty in letting go.

She was worried about him taking the children off her, applying for passport, and asserting control even though they were separated. He had threatened to kill her if she told anyone his business. He had followed her and told her where she had been, what she was wearing. The night he came over after going missing in the New Forest, he said he missed her and couldn’t handle another night not being able to cuddle her and that it was hard not seeing the girls when he wanted. (Case 78, ex-partners police statement).

The end of the relationship for the male perpetrators also resulted in loss of daily contact with their children. Some perpetrators sensed that their children had been taken from them and their role as a father had become diminished.

(She) had started a new relationship, it is not clear if (he) knew of this new relationship, but he had started asking questions over the issue to her mother. She stated that he was concerned that the child would have a ‘new dad’. (Case 25, coroner’s records)

The social implications of separation and the breakdown of a relationship also led to increased emotional distress. Inevitably, some of the perpetrators were asked to leave the family home. Moving house is stressful, but with financial constraints, some had to move into smaller, less comfortable accommodation. The disruption to their usual routine caused additional stress.

He recognised that the marriage was irretrievably broken down and that the house valuation was the confirmation and the final evidence. He felt he was being abandoned. His routine and

lifestyle had been taken away by this separation, and he was struggling to come to terms with this. There was no indication or fear for his welfare. (Case 20, medical records)

He stayed with his sister for 5 weeks after the incident at the party, she said it was the end of the marriage. She saw a solicitor and agreed he would move out and she and the kids would return to the family home. They returned to the house, and she compromised by letting him stay in a caravan at the bottom of the garden. (Case 17, witness statement)

The separation, therefore, had an immediate adverse impact on their lifestyle and status. There was evidence suggesting that the separation had a negative effect on the perpetrators image and self-esteem, in one case the perpetrator confided to a friend and his son:

"The G's never divorce" and, if she ever left him he would "run her over in the street".

"I'm not going to let her ruin me." (Case 86, witness statement)

In other cases, there were examples where couple had to continue living together, whilst the house was put up for sale. In these circumstances, additional distress arose from witnessing the partner moving on with their life. Often perpetrators found themselves in a situation where there was increasing frustration and anger that they could not get over the pain of separation as easily as their partner. By using delaying tactics and stalling on important decisions, some perpetrators attempted to prolong the couples time together. This could indicate that they had not fully accepted that the relationship was over; believing there may be hope of a reconciliation

She started to investigate the possibility of separation and what this would mean, but found it exhausting. In March 2006 she said she could not carry on and asked for a separation. He started looking at houses to buy, but was delaying making a decision whether to buy her out of the house, or to sell the property. His actions were delaying her from moving on with her life. (Case 20, police report)

It was also observed that violent offenders recently released from prison, often experienced a great deal of distress with relationships. Often forming a new relationship was problematic due to the requirement of disclosing their violent past, or trying to conceal it. As new relationships had been difficult to form, the breakdown and loss of these relationships had an acute psychological impact.

After his girlfriend became aware of his conviction the relationship ended. He reacted by taking an overdose in Aug 2003 and was admitted to hospital for 4 days. (Case 18, coroners file)

8.1.2 SPOUSE OR PARTNER ILL HEALTH

The loss of a personal relationship was not solely a consequence of a marital breakdown. In a number of cases impending separation was caused by the perpetrators infirmity. These cases are characterised by couples who had spent most of their lives together, often described by witnesses as 'inseparable'. There was a perceived dependency on each other for all their needs. Some were comfortable in a routine and had limited their social activity, and were only visited by close family members. There was unwillingness on behalf of the perpetrator to accept help from social care agencies, and even a reluctance to accept help from their own children.

"He appeared concerned over her health, this was the first time he discussed it. He was talking as if the problems that my mother was having were going to happen in the future. It was if he couldn't bear the thought that the health problems were occurring now. He was struggling with what was happening – but refused help. He was a very independent and proud man." (Case 104, witness statement)

In most of the cases involving older couples the victim had been diagnosed with dementia. The progression of the illness was making it increasingly difficult for the perpetrator to cope with their wife's personal needs, and also the running of the household. In some cases a sudden change in behaviour, and the use of aggressive and hostile language toward the perpetrator was perceived to increase the emotional stress.

The victim was known to have experienced a recent deterioration in her mental and physical state. She was housebound and was becoming extremely agitated and difficult to manage. This had put extreme pressure on her husband who was caring for her. (Case 105, coroner's report)

The perpetrator was experiencing loss; firstly by watching the person they loved change, and sometimes not even recognise them or remember the life shared together; and secondly the inability to care for that person due to their own frailty. The overwhelming concern for the perpetrators was perceived to be that the present circumstances would lead to the couple being physically separated, whereby the victim would ultimately be placed in a care home.

"Mum's brains 'went' last night – I'll spare you the details, I decided it's time to go. We both would hate going to a "home". I dread having a stroke and left to die – no food –no water for 10 days as what happened to my mother. This way it's quicker." (Case 104, suicide note)

In these situations, it is interpreted that the perpetrator was faced with their own mortality. There was a realisation that life was not going to get any better, only potentially worse for the victim and the

perpetrator. Again, the perpetrator reached a crisis point, a moment of recognition that change was imminent and their capacity to care for their partner was under scrutiny. Therefore, they were losing the power to control their own destiny. The belief that the victim's welfare was the perpetrators sole responsibility was a perceived to be very significant. Some of the perpetrators had made promises to each other, that they would not allow the other to be placed in a care home. There is a sense that the perpetrator believed this is what the victim would have wanted, if she had the capacity to consent, and it was the husbands duty to take matters into their own hands and fulfil this last wish. By ending their own life too, there would be no legal repercussions for the perpetrator.

"I had to make sure my wife was dead, I took all those tablets, about 50 odd". He added "I'm sure the wife asked me to call it a day, it's been a nightmare for months". (Case 31, statement by perpetrator to the police when taken to hospital)

In the majority of these cases the homicide-suicides were precipitated by actual or impending separation from a spouse or partner. However, there were examples where the 'spousal' relationship between the perpetrator and victim was perceived to be normal and no apparent problems were noted. The perpetrators were seen to have been experiencing other difficulties such as problems with their children, financial problems, adapting to a new social situation, and existing mental illness.

8.1.3 PROBLEMS WITH CHILDREN

Problems involving a child or children caused was the primary cause of emotional distress in some cases. The difficulties experienced by perpetrators were partly due to the perception that they were inadequate parents. These cases mainly involved female perpetrators who feared that they could no longer provide protection and care for their child.

In case 9 the perpetrators family discussed with a journalists their sister's difficulty in managing to care for her disabled son. She feared that due to her son's challenging behaviour he may need to be cared for in a residential care home, adding to the perception that she had failed as a parent.

"She felt like a prisoner in her own home due to the care (her son) demanded of her and his deteriorating behaviour." (Case 9, Daily Record)

In most cases, these feelings were complicated by existing mental illness.

It is clear that she suffered most of her life from depression, even through her childhood, this increased as her son's syndrome manifested itself to a point where his behaviour to her was very poor, sometimes verbally aggressive, she had high expectations of people, which led to

her feeling let down and expecting the worst all the time. She loved her son and only wanted the best for him. (Case 9, coroner's records)

Following a previous suicide attempt and threats to kill her children two years earlier, one perpetrator commented to her psychiatrist:

"I shouldn't have had kids... The children will be better off dead with me, than in an institution because nobody will look after them. I'm a bad mother." (Case 35, medical records)

In this case, the same feelings had resurfaced just before the homicide-suicide. The mother was feeling suicidal and blaming herself for not living up to her own expectations of what a mother should be. Rather than abandon the children by taking her own life, she perceived the best future for them was to die alongside her.

8.1.4 FINANCIAL PROBLEMS

The main reason for the deaths in 2 cases was financial problems. In 1, the extent of the debts had been concealed from the partner, and the impact of these liabilities would result in a major change in lifestyle for the family. The perpetrator kept up the facade as long as possible, but bankruptcy was imminent.

"He told me he would not put them through a degrading change of lifestyle. They had got used to a certain standard of living and they wouldn't have been able to cope if they had to take a few backward steps." (Case 91, witness statement)

In the second case, the perpetrator had shared the financial difficulty with immediate family who helped where they could, but the debt was too high to repay, and he was eventually unable to meet the payments on the house. The deaths occurred on the day the couple were due to be evicted.

He is described as a proud man who didn't openly discuss his financial situation but it is apparent that debts began to mount and eventually he was unable to keep up the mortgage payments on his home. This resulted in the building society making an application to the courts for the recovery of debts and a warrant being issued for repossession of the property. The warrant was in the process of being executed on (date) when the bodies were discovered. (Case 111, police report)

Despite the attempts to keep up a facade and confide their financial problems only with close family, in this case, a neighbour commented to the newspaper about the couple's financial situation. Concern was raised when they did not put up the usual lavish Christmas decorations:

"We were surprised this year when he didn't have a single light or decoration outside the house. It's terrible to think that they might have got themselves into debt. (He) used to have a well-paid job but he was made redundant." (Case 111, The Mirror)

In a third case, financial problems were among a number of stressful events experienced by the perpetrator and the family before the homicide-suicide. A newspaper reported a statement by the police, which suggested that there were growing tensions over the amount of money being spent by 1 of the victims.

"[It meant] the financial situation was bad," said Police. "A lot of money was being spent on presents for (son) as he was coming to the end of his life. They were spending a lot more than they earned - at (victims) will, not (the perpetrators)." (Case 37, The Independent)

8.1.5 ADJUSTING TO SOCIAL SITUATIONS

External pressures, predominantly connected to the perpetrator's social situation, were perceived to have caused emotional distress at the time of the homicide-suicide. Adjusting to new situations was proving difficult in a number of cases. This was observed in some immigrant perpetrators who, amongst other stressful events, were feeling socially isolated.

There was no evidence that she was suffering from mental illness, but she was very unhappy with her social situation. She was a victim of domestic violence and led a very isolated life and was controlled by her husband. She was afraid to go out on her own, she did not have a key to own home. She had no family in England or friends to confide in. She was a young woman 21 years. (Case 21, summary notes from inquest transcript)

Conflict also arose regarding the cultural or religious beliefs of the perpetrator. When victims failed to meet the standard of behaviour expected by the perpetrator, this caused the perpetrator a great deal of frustration and anguish.

It would appear that tension between the two brothers has escalated over the lifestyle adopted by the victim, in contrast with the hardworking perpetrator. It is strongly believed that the perpetrator committed suicide after the murder due to guilt at committing such an offence and the likely shame he would bring on himself, his family and the Community. (Case 43, police records)

In 1 case, the perpetrator came into conflict with his family because of the victim (and their children's) move towards a western lifestyle, and the rejection of traditional Muslim culture. The perpetrator's brother-in-law spoke to the media and, referring to the perpetrator, said:

"(he) was a very jealous and controlling person. He wanted everything his own way. He didn't want to adapt to a different way of life or anything to do with England." (Case 37, local paper)

Adjusting to new social circumstances was also difficult for ex-prisoners who were attempting to settle down in a community following release from prison. There are added complications with these perpetrators as they had the stress of trying not to let their previous crimes ostracise them and prevent them from building meaningful relationships. In 1 case, the victim's mother commented on how the perpetrator was concealing his previous homicide conviction from the victim in order to maintain the relationship.

"Their relationship had finished a couple of months before her death but she could not get rid of him. He should never have been let out of prison. I feel his behaviour is in his system, in his blood, that he was born with it. "(He) kept his past so quiet. He did that because a previous girlfriend had left him after he told the truth. He knew if (victim) found out it would be the same." (Case 18, local paper)

Trying to adjust to life outside of prison had proved stressful and 1 perpetrator had particular difficulty:

He had felt suicidal previously following release from prison and made 3 attempts by overdose. His mother stated that he had not talked of suicide for a long time, and it was not known if he had been taking his medication at the time of the offence. (Case 19, police records)

The loss of a partner either through marriage or relationship breakdown, or to severely debilitating illness such as dementia, has been seen to lead to other losses for the perpetrator. There are wider repercussions, which affect these perpetrator's lives. As the majority of intimate-partner homicide suicides had been together for an average of 10-20 years, their children, home, finances and identity were inextricably linked. The emotions experienced by the perpetrators are explored in the next theme.

8.2 THEME 2: EMOTIONAL RESPONSE TO LOSS OR ADVERSE INCIDENT

The psychological distress caused by the stressful life events resulted in 2 primary emotional responses from perpetrators, anger and hopelessness. The perpetrators initial reaction to the adverse event was either to externalise their feelings and express anger toward the victim, or internalise their feelings of hopelessness and fear about the future. However, these feelings were not mutually exclusive. For both acts of homicide and suicide to have occurred the individual experienced both emotions; however some were more dominant than others.

8.2.1 ANGER

Anger is a natural emotional response to a separation or divorce. In these cases, the anger was combined with a number of key emotions at the time of the offence. The feelings expressed by the perpetrators included humiliation, frustration, jealousy and rejection, which resulted in extremely hostile and negative feelings toward the victim.

8.2.1.1 HUMILIATION

A number of perpetrators appeared to have felt humiliated by the separation. In case 76, the perpetrator felt that his wife and his best friend, who had been having an affair, had made a fool of him.

"I have tried everything I could to get your mum to love me again. But what I didn't know is that they have been having an affair for a long time, well before mum and I fell out. They have rubbed my nose in it. They have tormented me when we have all been out together and even when I found out about it 3 weeks ago I was still willing to forgive and try and live with mum."
(Case 76 Suicide note)

Even having been willing to forgive his wife, he discovered the affair had continued and both people he trusted had lied to him. In some cases, the humiliation led to an overwhelming sense of embarrassment. The feelings were directed inward and the offenders were angry at themselves for not being able to cope.

Two days before the incident he said he was having a nervous breakdown, but was ashamed and embarrassed. (Case 20, coroner's records)

It was evident that losing face in front of peers was important:

He told friends he would rather kill himself than let his family be "degraded" by giving up the quality of life they were used to. (Case 91, notes from inquest)

8.2.1.2 FRUSTRATION

Frustration was another emotion experienced by the perpetrators following the adverse event. Frustration arose through the inability to change a situation and achieve their desired outcome. In 1 filicide case involving the deaths of a mother and child, the mother was convinced that her ex-partner had sexually abused her son. Their case had been investigated and no evidence of abuse had been found. Her behaviour was considered by the coroner to be "delusional". The perpetrator was

becoming increasingly frustrated and distressed because she was unable to get the police and social services to respond in the way she expected. She stated to her mother:

"Mum it's no good. No-one is going to help me, he will do something, I think he has set me up for something, but I don't know what it could be." (Case 6, witness statement)

In the above case, the police and social services did respond appropriately. Evidence of her delusional state was later found in several notebooks. She had believed that she had been abused by her father, said her father and her ex-partner were involved in an abuse conspiracy, and with other people were picking up local children. Her writings were preoccupied with sexual abuse, even linking her family to the moors murders.

There were other examples in which frustration grew towards external agencies, due to a lack of attention or help resolving their problems. The perceived failure of agencies to take appropriate action and protect the perpetrator (but more often the victim) was observed in a number of cases. One case involved the perpetrator and her 2 children, who both had learning difficulties. They were experiencing on-going harassment from local youths. The frustration felt by the perpetrator was documented in suicide notes found by the police. In a letter to her mother, she wrote:

"The street kids, well I have just given up... I am just not cut out to take this much harassment."

In a statement to the police, her mother said:

"She knew that because the trouble children knew (her daughter) had reported them to the Police, she was going to be a higher target" and she felt "(her daughter) was just brushed aside and classed as an attention seeker by the Police and Social Services and the Borough Council." (Case 42, witness statement)

As well as difficulties with outside agencies, there was additional frustration because the victim would not behave the way the perpetrator expected them to (i.e. continuing the relationship). In a number of cases, the perpetrators believed that their actions would not have been necessary if the other person had behaved as they had asked. They blamed the partner for making them act in such a way. In case 110, the perpetrator blamed their ex partner, but the victim in the cases was their own child. In a suicide note, the perpetrator said:

"I know what I am doing is wrong, and there is no excuse, but based on the way you've behaved over the last few weeks, I firmly believe that you showed no signs of working towards that... and there was no sign from you that you were willing to compromise for any other option. At least this way we know he (their son) had two very happy years and doesn't have to

go through the torture and unhappiness of coming from a broken home and you living to justify what you did.” (Case 110, suicide note)

Another form of frustration was the inability to overcome the acute hurt and pain they were experiencing. In cases where a couple had separated, they were angry and frustrated that their partner was moving on with their life, yet their pain was not subsiding. Witnessing their partner build a new life through getting a new job or making friends proved very distressing.

“(He) wanted to rekindle the relationship, but she was adamant that there was no way back. (She) went out and socialised more after the separation, whilst (he) stayed in. It was a noticeable role reversal.” (Case 97, coroner’s records)

The frustration led to anger because the perpetrator was no longer considered to be wanted or needed by the other person.

8.2.1.3 JEALOUSY

In the cases of intimate partner homicide-suicide, jealousy was a key emotion displayed by the perpetrator, both before and after a separation. In a number of cases the perpetrator’s jealousy was the cause of the breakup, which intensified after the separation. This emotional response often resulted in anger, aggression and violence. In case 18, the perpetrator had been seen previously by a consultant psychiatrist, his notes stated:

Feelings of insecurity, instability and jealousy appear to have characterised aspects of previous relationships and are present in current. Developed alcohol dependence as a adult, risk factors for future management. Engaged in psychologically based therapies dealing with domestic violence and enhanced thinking skills whilst in custody. Already shown difficulty in dealing with rejection in the context of current relationship: when it appeared to have broken down he could not cope with his emotional reaction and ended up taking an overdose (with alcohol) leading to hospital admission. Sensitive feelings about rejection and some indications of possible morbid jealousy. (Case 18, medical records)

In case 98, the perpetrator became obsessed with the victim. A friend of the victim said in witness statements:

“(He) seemed to be getting more possessive and obsessed with (her). He wouldn’t even let her go to bed one night.”

"He didn't work so was always at home. She was always anxious to get back to him, even when she visited friends; she was always on edge... They only had one key to the house and he would lock her in. (He) said this was to stop her from ever leaving." (Case 98, coroner's records)

A similar situation was observed in case 70:

Witnesses said it was common theme, she was living in fear of (him) he placed her under his control. He was extremely jealous and would drive her to and from work, he would call her constantly and interrupt her calls to see who she was speaking to. In the days before the incident she complained to friends and colleagues that his jealousy was becoming out of control. (Case 70, witness statement)

A victim's mother described the perpetrator's behaviour following the breakup of her daughter's relationship with him:

"She knew (he) was upset about everything. We all knew that. He'd been harassing her for months. He'd call all the time, at all hours of the day and night. He'd always been trying to convince her that they should be together." (Case 25, Daily Mail)

In some cases, the extreme jealousy manifest into stalking behaviour, the perpetrator obsessively wanting to know what the victim was doing. They also intimidated and harassed the victim, letting them know that they were being watched and instilled fear in them.

He stalked her and broke into the house, but she was complicit in allowing this. Over 25 calls to the police, but the complaints were never supported. He would stalk her but always disappeared before the police arrived "I can get you anywhere". He would break into the house and hide under the children's bed and in the loft. She awoke one night to find him at the end of the bed holding a hammer saying 'I can get you anytime'. (Case 39, coroners records)

The intimidation and threats were a result of their anger towards the victim because they had been rejected. By harassing the victim in this way, it could be interpreted that the perpetrator felt powerful and were in control when exacting revenge.

(She) left the house on 11th and 12th of September in fear of (her partner), who was still living in the caravan on site. On her return, she feared that he had been in the house. She contacted the police and filed a report. In her 10 page report she expressed concerns about his behaviour, which was under investigation at the time of the incident. He had made over 200 calls/texts and was harassing her. In the statement dated 16.09.06 she said he admitted

ejaculating in the soap and beauty products he made comments like “I’m closer to you than you think” and about her face ‘cumming along’. (Case 17, police report)

8.2.1.4 REVENGE

Feelings of rejection, anger and jealousy were seen to lead some perpetrators to seek revenge for the hurt the victim had caused them. Often the perpetrator felt like they had lost everything and it was all due to the victim and this act could not go unpunished.

“Now you can’t go on shitting on people... so goodnite but if (she) thinks that she will go on doing what she does (wrong), you are going too.” (Case 99, suicide note)

In case 76, the victim had been having an affair with the perpetrator’s best friend. When the perpetrator confronted his wife, she said it was over, and he subsequently forgave the infidelity. However, he later discovered she had continued the affair and he had been lied to. In his suicide note, he stated:

“Sorry but I had no other option I have been tracking my car this week and recording conversations being made in the x-trail – and physically following (wife) about. And I have found out they are seeing each other again (full on). This cannot go on. This is my only way out. They cannot be allowed to destroy our lives and then live happily ever after. Sorry again. Take care.” (Case 76, suicide note).

In one case, the perpetrator expressed his anger for being cheated out of his inheritance by his adopted father many years ago. He was devastated by this, and the feelings of resentment were merged with his anger towards the victim for ending the relationship.

“I’m no coward yet profiting our inheritance has robbed me of my will to live not to mention the orphan life you forced me to live. (Victim) I loved her dearly but her whoreing ways and dishonesty. A person who lies habitually and plays with men’s emotions, she led me on and maintained a love for me that was fake.” (Case 70, suicide note)

Using a third party to get revenge was rare in these homicide-suicide cases, but there were some examples of children being used as an instrument to exact revenge. Taking the life of a child will cause lifelong pain for the surviving parent. At the same time, the perpetrator can achieve satisfaction in knowing that no-one would ever take his/her child away from them.

In case 71, the perpetrator had threatened to take her own life and the life of her child on two occasions in an attempt to force her partner to return to the family home. On previous occasions it had

been successful. However, the relationship had ended and her ex-partner had begun a new relationship. She was distressed by the fact that the child would have a new family and she was not prepared to let this happen.

"If you're asking yourself why look no further than (ex-partner), a pathetic excuse for a dad. I couldn't die leaving (child) with that family, knowing there was little chance he would end up with them drove me to end his short life. I couldn't handle it anymore. The past two years were enough for me. I've been the only one there for (child) so it's only right he's with me. Now mom you sort everything out, don't give S anything of (child's) e.g. baby photos, videos his first Albion kit, nothing. I want him to know what it feels like to have nothing. You keep everything. I love you all very much and I'm so sorry." (Case 71, suicide note)

In perhaps the most disturbing and blatant act of revenge, the actions of one offender before the incident made it very explicit his intention was to cause as much pain to his ex-partner (the children's mother) as possible. Speaking to a newspaper journalist, his wife described the perpetrators intention:

"He had planned the whole thing for a spectacular few days of destruction. He wanted to blow me up in his house before murdering his own children. He also sent a bomb in the post to my son. He planned for it to arrive the day after Father's Day, when me, the kids and (him) should already have been dead. He wanted my poor family to have all this horror in the space of one weekend. He was sick." (Case 75, The Mirror)

His desire for revenge was reinforced via text messages to his ex-partner in which he had stated:

"I'll make the papers... just you wait" and "I will have my day."

8.2.2 HOPELESSNESS

The second major emotion was hopelessness, in the sense that the perpetrator was afraid and unable to face life without the other person. Often in these cases, it was observed that the feelings about the relationship breakdown, or other stressful life event were internalised and the perpetrators blamed themselves. They were viewed as having low self-esteem, feelings of worthlessness and expressed anxiety about the future.

Some of the perpetrators expressed their emotional distress saying that they could not live without their spouse/partner. This demonstrated their emotional dependence on their partner. The phrase 'I cannot live without you' was commonly stated.

The couple argued about taking the daughter from (home town), he was heartbroken, she said she had always forgiven him, but after 10 years, no more. The daughter said he killed her

because she wanted to go and live in London, but he wanted to keep the family together. The mother and daughter were due to travel to (another country) to see the victim's brother in less than a week before the homicide. She had packed and the clothes were found in a suitcase in the parents' bedroom. She overheard her father saying, if the mother went to London he 'could not live without her'. She knew her parents were having marital difficulties. (Case 73, coroner's records)

In case 65 the perpetrator's response to having committed a violent act against the victim was to immediately take an overdose. This was an impulsive response to his belief that he had irreparably damaged the relationship, and consequently he would not be able to cope without the other person in his life.

The enquiries when completed revealed that (perpetrator) had previously threatened his wife with a knife and held her hostage for a number of hours because he thought she had a 'fancy man'. This was not reported to the police. On this occasion, (the perpetrator's) wife was able to coax him round and he went downstairs. It was on this occasion that he took pills and went to hospital and was subject to a psychiatric assessment." (Case 65, police records)

In the above case, the perpetrator believed that his actions had destroyed his relationship and he was unable to see how he would live in the future with his spouse. Having suffered the loss of the relationship, in these cases hopelessness began to set in.

"Life seems pointless and it's all down to (her)." (Case 17, suicide note)

Being with the other person gave the perpetrator a sense of purpose. Once the relationship had ended, life seemed pointless. In case 41, the perpetrator said in a suicide note that he would have killed himself a year ago if it had not been for meeting the victim.

"...this was a year of fun, for both. Through (the victim), I lived a year longer than planned after my divorce. I enjoyed it. He was a fine boy. I lay down my life for (him). All things I did, I did for (him) only. I'm sorry." (Case 41, suicide note)

In situations where the perpetrator recognised that there was no chance of rekindling the relationship, feelings of hopelessness had set in and they decided to take their own life. In addition, they also had justified to themselves that committing the homicide was the right thing to do. This was observed for three reasons. Firstly, as seen earlier, the homicide was committed as an act of revenge, for example, in case 79, the perpetrator sent a text to a friend before the incident, which stated:

"I am sorry mate, but I can't go on. (He) came down on Sunday... I'm going to miss you all, I am sorry but the pain is too deep. I can't get rid of it. Life is not worth it now and there is no

way I accept (him) having a relationship with (wife). He has already told me that he will go out with her". (Case 79, suicide note)

Secondly, in cases involving elderly perpetrators, once they had reached the point where they could no longer cope with their partner's deteriorating health, hopelessness set in. However, it was observed in a number of cases that the perpetrator felt they had a duty not to let their partner suffer:

His letter to the police indicated that they had made promises to each other and she was too ill and it was now his responsibility. (Case 109, Coroners records)

Thirdly, in another case where the perpetrator was feeling suicidal following a marital separation, he was convinced that his child would be better off dead than to grow up without both parents, and for the child to later learn that his father had died by suicide. The perpetrator tried to justify his action.

"So, me taking my life would have left (child) to face a very poor and disturbed life... At least this way we know he had two very happy years and doesn't have to go through the torture and unhappiness of coming from a broken home and you living to justify what you did." (Case 110, suicide note)

Similarly, in another case, the perpetrator had a history of mental illness, and had reached a state of hopelessness and did not want the children to suffer. She believed what she was doing was best for her and the children. Her suicide note read:

"I am really sorry (about) what I have had to do, it has been so horrible for weeks now and it is unbearable to be like this. I love the children with all my heart but unfortunately I was unable to look after them. I should never have had them but if I leave them behind without a mother they would not cope. Please make sure they are buried together, they deserve a good funeral. They were beautiful to me and remember them with great pride." (Case 35, suicide note)

8.2.3 GUILT AND REMORSE

There were cases of domestic abuse where the perpetrator may not have intended to kill the victim. In these circumstances, the suicide may have been an impulsive reaction to having caused the death of a loved one. This scenario was observed in cases where the couple had a chaotic relationship and domestic violence was commonplace. The perpetrators were perhaps in shock and angry at themselves for what they had done, and therefore did not have the capacity to think rationally. Taking their own life could have been an impulsive reaction to the fact they had taken the life of the person they loved. In a telephone conversation after the event, one perpetrator confessed:

"I don't think I'm going to live anymore. I think I've stabbed (her). I've gone too far this time."
(Case 89, witness statement)

It was also evident that fear overcame them, and the realisation that they would be imprisoned for committing a homicide had begun to sink in.

(He) had also contacted a friend he had known for a number of years. During the night 21/22 he said to his friend "I've gone too far, I've really hurt her, she pushed me too far, I'm not in town, I'm going to finish my vodka, I've got a rope around my neck, I'm going to kill myself. I can't spend the rest of my life in prison". (Case 18, witness statement)

In some cases they made some sentimental gestures which could be interpreted as a sign of remorse toward the victim. Their emotional response after the homicide suggests they regretted their actions, or wanted to show the victim that they did love them.

Upon her body were some rose petals that he had sprinkled, and the note was tucked into her blouse. (Case 108, coroner's records)

He moved her on to the floor then stabbed himself in the chest as he knelt beside her. The couple were found dead together, their bodies locked in an embrace. (Case 72, newspaper report of the inquest)

Her body was found at the foot of the stairs, fully clothed, arms crossed over her body. A piece of paper was present on top of her body with a mobile phone. The note read "I love you". He was found at the back of the car with a photograph album and also left a handwritten note lying in the hands of (the victim). (Case 79, coroner's records)

8.3 THEME 3: COPING WITH DISTRESS

The ultimate method of coping with the emotional distress in these cases was to resort to homicide and suicide. However, by understanding the coping strategies used to manage previous emotional distress, we can try to gain insight and understanding of the perpetrators behaviour prior to the homicide-suicide. The perpetrators had previously displayed a range of mechanisms to cope with emotional distress, the key methods observed were; suicide attempt/self-harm; violence; and seeking help from GP or mental health services. Again, as stated previously, these are not mutually exclusive.

8.3.1 PREVIOUS SELF-HARM OR SUICIDE ATTEMPT

In some cases a habitual pattern of self-harm or attempted suicide was interpreted to be a possible coping strategy for stressful events and releasing tension. This behaviour was observed in the context of problems with previous relationships and adjusting to new circumstances.

After his girlfriend became aware of his conviction the relationship ended. He reacted by taking an overdose in Aug 2003 and was admitted to hospital for 4 days. (Case 18, medical records)

Also in case 99, the perpetrator had a history of attempted suicide, which occurred following separation from a previous partner.

(He) had some history of mental health issues, and although there is no evidence that he ever sought professional psychiatric help, records from the hospital show that he was admitted on 2 occasions in 1987 and 1993 as a result of suicide attempts. In 1987 (he) reportedly jumped out of a window of a first floor flat following domestic problems. He suffered back pain as a result. In 1993 he was again admitted to A&E having taken an overdose of paracetamol with two bottles of sherry. Again he stated that this was a result of domestic problems, as a girlfriend told him she was leaving. (Case 99, coroner's records)

There were also examples of suicide attempts following other domestic problems:

On the day of admission he made a serious suicide attempt, trying to asphyxiate himself with his car exhaust. This appears to have been precipitated by an argument with his wife earlier that day which led her revealing information about her sexual history prior to their marriage which had greatly upset (him). He therefore decided he had no wish to continue living and, leaving a suicide note, attempted to kill himself." (Case 86, medical records)

Thirteen cases had previously attempted suicide whilst suffering from mental disorder. In these cases the perpetrator had a history of serious mental illness. This had an effect on their ability to cope with emotionally distressing incidents. In case 106 a psychotic episode led to the previous suicide attempts.

Paranoid delusional beliefs evident. Two suicide attempts in one week. Possibly 3 attempts, left hospital before assessment to try again, was found by police. Liaison nurse following up with police and social services. (Case 106, medical records)

There was some indication that resorting to suicidal behaviour as a coping mechanism could have been a behaviour learned from other family members. In a number of cases the family member taking

their own life was a sibling or parent. The loss of a spouse via suicide may also be important in understanding the individual's susceptibility to suicide. Experiencing both spousal and parental suicide was considered to be an important factor in case 96, whose victim was her 1 year old son:

Her childhood was marked by a number of losses, the most traumatic being her father's suicide when she was aged eight... (The victim's) parents were apparently committed to parenting him jointly, despite not living together. However, in late September 2007, it is believed that his father "broke up" with his mother (the perpetrator). About two weeks later, father committed suicide by hanging in his flat. This tragic event was entirely unexpected both by his family and by agencies. Mother was said to be distraught at this loss. Two weeks later, she killed (victim) by smothering him, and herself by hanging. Her suicide note stated that she wanted them to be together as a family. (Case 96, coroner's records)

In cases such as the one above, being exposed to suicide previously, and perhaps predisposed to suicide through family history, may lead to suicidal ideation in the perpetrator as a means of coping with the stressful event. This is the only case from this study in which the homicide-suicide could be described as a response to grief. The temporal relationship between the family members suicide was evident in case 96, however in most cases it could be argued that the family suicide was not the 'causal' factor leading to the incident, but was still an important feature. Previous family suicide was observed in 3 other cases.

8.3.2 VIOLENCE AND AGGRESSION

The perpetrators past violent behaviour illustrated that they had used aggression as a mechanism for coping with stressful life events. The violence was seen as a method of venting anger and frustration. Violence and aggression were commonplace and a feature of these individual's lives, particularly in their close personal relationships before the homicide-suicide occurred.

In numerous cases, the perpetrator had instilled fear into a current or previous partner, so much so that they expressed their concern that the perpetrator may kill them. In certain instances where the perpetrators were failing to get their own way, and were unable to control a situation, they directed their anger toward a partner. This behaviour ensured the victim would be scared, believing their life was in danger, and they were forced to comply with the perpetrators demands, (usually not to end the relationship).

She told a friend "This man will kill me". She made arrangements to move out on Monday 26.11.07 and move in with a friend. She confided in this friend that (he) had forced her to have sex against her will but feared he would try and kill her if she left. Another friend said that she

was excited to be going out on Sat 24.11.07. It was discovered that (he) had made 120 calls between 06.42 on Sat and 10.21 on Sunday 25th – indicating that she had not come home that night. A former girlfriend of his told police that he had threatened her with a knife and then threatened suicide. (Case 70, coroner's records)

In another case, although the relationship was over, the couple were still in regular contact as they were joint business owners. The perpetrator vented his anger and jealousy towards the victim's new partner in an extreme act of violence.

Following the divorce she (the victim) started a new relationship. He (the perpetrator) found his ex-wife in bed with her new boyfriend in the flat above the business premises. He stabbed the boyfriend 11 times. He was convicted of Section 20 wounding and was sentenced for 21 months. He was sentenced, but released 3 months later, having served 6 months on remand, he was released from prison on license and social services and probation were involved with the family. (Case 2, coroner's records)

In case 65, taking out frustration by threatening violence did not have the desired effect of instilling fear in the victim, in fact her lack of response probably added to his sense of frustration:

On 20th November 2006 (the perpetrator's) wife received a card which resulted in (the perpetrator) confronting her and again threatening her with a knife which he produced from near the bed. His wife told him that he might as well kill her and (he) broke down crying. It is following these incidents that (his) wife decided to leave him. (Case 65, coroner's file)

In cases where there was a history of domestic violence, patterns of repeat victimisation were commonly observed. Domestic violence itself and the violence between some of the couples was not considered to be out of the ordinary by some witnesses.

The couple had 3 children together. Their daughter described 'shouting matches' which used to occur between her parents. She described him as being aggressive when drunk, but she never saw him hit her mother. This behaviour 'seemed like the norm in Kilmarnock'. He always drank to excess and verbally abused her, accusing her of having affairs. He was very jealous of her. (He left his first wife because she had an affair with his best friend. She retaliated and hit him on the head with a vase – he needed stitches). (Case 22, police report)

In cases where domestic violence was commonplace some victims had not engaged fully with services or accepted the protection they had been offered. A domestic violence advisor referring to 1 case explained why it was difficult for some women to leave abusive relationships:

“(She) was identified as a person in a high-risk situation and back-up and a support plan were put in place, but for whatever reason she did not want to use that service and we couldn’t force her” she said. “(She) chose to live her life the way she wanted despite everything we did to encourage and support her to change it.” She said “she was sure some people would read (her) story and say: “What a silly woman.” But for some women even an abusive relationship offers safety and security and they become so enmeshed they cannot see the true picture.” (Case 98, Evening Gazette)

Violence was often exacerbated by the victim’s attempts to end the relationship. As the perpetrators anger and frustration grew, their actions had become more threatening and dangerous:

He had a history of violence. He was unable to accept the breakup – so threatened violence, he made verbal threats to kill (her). When she changed the locks to the house he threw himself head first through a glass door and was violent. He constantly threatened to petrol bomb the house and kill the whole family. (Case 3, coroner’s records)

In 1 case the perpetrator continually breached court orders which prohibited him from contacting or approaching the victim:

A restraining order had been imposed in June 2006. But on September 9 2006, (he) attacked (her) at her home, forcing her to the ground and dragging her along, causing friction burns and bruising. (Child) suffered minor injuries. (5 days before). He pleaded guilty to common assault before magistrates. But despite a long history of domestic violence, he was given a conditional discharge at magistrate’s court on 12 September. Later that day he approached her in the street breaching a restraining order, he threatened to kill her, saying: “Someone is going to die and it’s not going to be me.” He was arrested again and held in custody overnight. There was a long history of domestic violence. (Case 11, police records)

In a particularly severe incident, there had been prior threats to kill which culminated in attempted murder.

Prior to attending the police station in 2006, she had made 3 calls to the police over domestic violence by the perpetrator, including forced entry. When the report was made 2 specific incidents were reported where he had violently assaulted her and threatened to kill her and her children. On 3 Nov 2006 he had attacked her by punching her and hitting her across the head with a crow bar. On 5th Nov 2006 he attacked her and made threats to kill. On this occasion he punched her, put a knife to her throat and a pillow over her face. She stated that he forced the pillow on her until she

passed out. When she regained consciousness (he) apparently said in surprise “I thought you were dead.” (Case 62, coroner’s records)

A history of violence was common in these perpetrators; this was largely in the context of domestic violence. However, there was a surprisingly high proportion of offenders who had previously committed an act of serious violence such as GBH, attempted murder or a homicide prior to the homicide-suicide incident (23%). In the cases where the perpetrator had been charged or convicted for a previous homicide, the victims were predominantly a wife or former partner.

Aged 28 he met a girl, after 12 months the relationship ended. A couple of months later he killed her. He had waited at the victim’s next door neighbour’s house, when she returned home, we went inside and attacked her. He had previous convictions for ABH and GBH. He was convicted of her murder in 1988 and received a life sentence. He served 15 years in prison. (Case 18, coroner’s records)

8.3.3 CONFIDING IN FAMILY AND FRIENDS

In 19 cases, the perpetrator had expressed suicidal thoughts to close family members or friends shortly before the incident. This could be interpreted as the perpetrator reaching out for help.

(He) spoke to his friends and talked about killing himself. He never spoke about killing (the victim), he spoke about harming himself. (Case 7, statement from police officer)

Suicidal thoughts had been communicated in case 25, but again there was no threat made against the victim:

“At 03.30am on Sunday 26th Nov 2006, he contacted her (the victim’s) mother by telephone looking for her (the victim). He sounded as if he had been drinking and during the course of the conversation he said “I’m gonna run away, I’m gonna find somewhere high, and I’m gonna jump off, I’m gonna kill myself.” (Case 25, coroner’s records)

Family members or friends did not take previous threats of suicide seriously. In some instances, the threat to take their own life was considered attention seeking behaviour or a just a dramatic gesture. In a conversation with his daughter, one perpetrator explained his feelings:

He commented to her that (he) had all the control referring to the house. He told his daughter that he had intended to drive to the cliffs to see if he had the courage to commit suicide. Both (the victim) and their daughter were annoyed at (the perpetrator’s) “attention seeking behaviour.” (Case 20, coroner’s records)

Another perpetrator shared his emotional distress with a family member but later retracted it, as if he was ashamed of having such feelings:

After the incident, he said to his sister "I've lost (her), life's not worth living, I'm going to hang myself". The next day he laughed it off saying he wouldn't have the bollocks to do it. His sister did not take his threat seriously. (Case 17, coroner's records)

8.4 THEME 4: EVIDENCE OF MENTAL DISORDER

There was evidence to suggest all the perpetrators within the study sample experienced acute psychological distress. However, not all of the perpetrators had a recorded history of mental illness or mental disorder. It is acknowledged that a lack of engagement with services or absence of a formal diagnosis did not mean that people were not experiencing symptoms associated with mental disorder. However, for the purpose of this analysis, the role of mental disorder could only be examined if it was documented in the records. The most common psychiatric condition associated with perpetrators of homicide-suicide was depression. Psychosis was rare.

8.4.1 HISTORY OF MENTAL DISORDER

Over half of the perpetrators had received previous diagnoses and treatment for mental illness. In 19 cases, the duration of mental illness was over 5 years before the offence. In one case, a GP sent a letter to the prison medical officer about the perpetrator following his incarceration for the homicide of his wife and mother-in-law, 20 years before the homicide-suicide incident:

He has been a patient of mine for the last 12 years and I have been involved in inter-family violence that has gone on since I have cared for them. He saw Dr X, Consultant Psychiatrist in 1985 who concluded he had a conduct disorder, basically impulse led and that he was very difficult to handle and I regret to say there is a dreadful inevitability about this man's subsequent history, and that his problems clearly signalled as early as the age of 2 years. He has received no medical treatment from me and I am just so sorry that what happened happened." (Case 108, medical records)

The perpetrator had longstanding behavioural problems and was clearly dangerous and violent. In other cases, suicide attempts and self-harm were more common. Case 9 had been diagnosed with mental illness from an early age, culminating in several previous suicide attempts:

At age 11, following a family move, she was profoundly upset and she wrote a distressing letter to her mother expressing suicidal thoughts, culminating in her cutting her wrists (not life threatening). She was admitted to hospital aged 16/17. (Two main suicide attempts in addition

to the one when age 11. In 1985 she walked into the sea fully clothed and 1986 she went to Beachy head). In 1994 she had a further breakdown and she was sectioned under the Mental Health Act. In 1996 her relationship ended. She moved around a lot during this period. (Her son) had developmental problems and following tests was diagnosed a learning disability linked to autism. In 2003, she suffered another breakdown and was admitted; she was discharged and given anti-depressants. (Case 9, summary of mothers witness statement)

8.4.2 MENTAL ILLNESS AT THE TIME OF THE OFFENCE

This section will examine how the symptoms of mental illness were reported in the coroner's files, police files and newspaper articles, and the subsequent treatment and care provided by medical professionals.

8.4.2.1 SYMPTOMS OF MENTAL ILLNESS BUT NO RISK

Fifteen perpetrators actively sought assistance from a GP for their deteriorating mental health within a month of the offence. During the course of these consultations, suicidal thoughts were recorded in 4 cases. In one case, the last contact between the perpetrator and the GP had been within a week of the incident, the report stated:

Psychiatrist (x), who visited (the perpetrator) four days before his death, explained how he may have been suffering from acute organic brain syndrome which causes delirium from the effects of surgery and is more common in elderly people. The incident provoked the family GP to insist (the perpetrator) underwent a thorough psychiatric assessment at his home. (The psychiatrist) carried out the examination on May 13 but told the inquest he had not sectioned (him) because he had been 'appropriate and rational' and had no history of mental illness. (Case 88, coroner's records)

In case 107, the perpetrator had visited his GP and had begun taking medication for depression. It had been noted that he had thoughts of drowning himself in a river or canal. Because of these suicidal thoughts, a referral was made to a consultant psychiatrist. Follow up care by the Community Mental Health Team (CMHT) was arranged. A member of the CMHT last visited the perpetrator 5 days before the homicide-suicide. An appointment was due on the day of the incident. He had a previous episode of situational depression (adjustment disorder). An entry in the medical records commented:

He was suffering from depression, he talked about fatigue, lack of drive, lack of motivation, not sleeping, feeling very low and having thoughts of taking his own life. If there had been any concerns expressed at that time (re wife's safety) we could have done something. (Case 107, medical records)

On later evaluation of the perpetrators mental state, it was noted that mental illness did have an important role in this particular case, but the extent of risk was not recognised.

He was looking for work, planning holidays, walking the dog. The psychiatrist and CPN said this was not the behaviour of someone experiencing hopelessness. The assessment of hopelessness is not rooted in behaviour, it is cognitive in origin. Therefore, hopelessness was underestimated. (Case 107, coroner's records)

There were also cases where perpetrators had attended the GP for a consultation and had been prescribed anti-depressants but had been non-adherent with their medication at the time of the incident.

Although (she) had been prescribed antidepressants, she did not take them regularly. (Case 9, coroner's records)

(The perpetrator) had suffered from depression and was prescribed anti-depressant tablets, which he did not take in the days before his death. (Case 28, coroner's records)

For those perpetrators who had a history of mental disorder and were under the care of their GP or mental health services, recent changes in mood in which the perpetrator expressed suicide ideation had raised concerns. In all of these cases the perpetrator was not considered to be a danger to themselves or others, or have been seriously ill requiring detention under the Mental Health Act.

In case 63, the perpetrator visited the GP on the morning of the incident and described suicidal thoughts. He had been angry and depressed following plans for a redevelopment on his land. He gave no indication that he would harm his wife or that his thoughts of taking his own life had progressed. His death was very sudden and unexpected.

He saw his GP on the morning and described trouble with builders. He admitted suicidal ideation, but no plans. He was given Temazepam to help him sleep and a questionnaire and asked to return the next day. He appeared anxious/depressed but not severe enough for admission. In the early afternoon a developer delivered plans, a letter was found opened. Toxicology was negative. (Case 63, coroner's records)

8.4.2.2 NO SYMPTOMS OF MENTAL ILLNESS

It has been observed in this study that the offender's mental health can change quickly. Patients presented to a GP with no active symptomology, but had already planned the homicide and suicide.

People can appear perfectly rational when about to commit an irrational act. In one case, evidence from the patient's GP and witnesses who spent the day with the perpetrator said had not acted out of the ordinary:

The GP saw him for a final time but said he appeared rational and was making plans for the future and did not express an intention to harm anyone else. (Case 91, coroner's records)

In case 93 the coroner in his summing up, described the perpetrator as having his last contact with mental health services over a month before the offence, but he was not unwell enough to be detained under the Mental Health Act. The perpetrator had told a nurse about suicidal thoughts and thoughts to harm others, and she considered him a significant risk. The coroner stated that in the preceding month before the offence he was "becoming more chaotic and stressful, displaying signs of anger and agitation, he was disengaged from psychiatric services." In contrast to this description of the perpetrator, he was seen on the day of the homicide-suicide by his GP, and in a letter to the coroner, the GP concluded that he did not appear to be experiencing symptoms at that time:

"He was happy with the consultation and said he was feeling better. There were no real signs of mental illness in my opinion. He was not withdrawn, preoccupied, unusually agitated or aggressive. For these reasons I firmly believed what happened was totally unplanned and spontaneous... Whether the couple had a disagreement which sparked his behaviour will never be known but it was certainly unexpected and I believe could not have been predicted based on the facts at our disposal." (Case 93, GP letter to coroner)

Predicting risk is even more problematic when former mental health patients either have disengaged, or are no longer under the care of services. This makes the role of mental illness in the offence difficult to assess. A psychiatrist was asked by the press to defend his decision regarding the assessment and release of a perpetrator on bail, 6 months before the homicide-suicide. He said:

"I was asked to assess if he would take his life immediately on leaving the court. At no stage was I asked to comment if he would commit further offences... My role was to see if he was an imminent risk of suicide. What he went on to do six months later... this was not the result of impulsive suicide." (Case 82, The Daily Telegraph)

When the individual has not been under the care of services for some time, an adverse outcome is even more difficult to predict. In one case, a woman had previously been considered to be high risk, but had been discharged from care at the time of the homicide-suicide. She had a previous conviction for homicide. Agencies were criticised for not continuing to monitor such a high risk patient by a 'whistleblower' who attended the Serious Case Review:

"Sirens should have been ringing as loud and clear over this case as possible. The review suggested there should have been greater risk assessments and that they should have looked more closely at the history of the parents. If two killer parents with a history of drug and alcohol problems aren't a risk, I don't know what is. Baby S's death was completely preventable - no ifs or buts. The social services, the police and mental-health professionals all have blood on their hands. There were so many agencies involved that they could have looked after a whole kindergarten full of kids - never mind just one. But they failed to communicate with each other. There's a culture of looking on the bright side, so professionals can sign off on a case and move on to the next. When the father committed suicide, alarm bells should have rung and the agencies should have been talking to each other and gone back to see the mother." (Case 96, Sunday Mirror)

Even where the individual was not deemed to be dangerous by mental health professionals, there were some cases where family members were increasingly concerned by the perpetrators behaviour. In an email to the responsible clinician two weeks before the offence, the victim and perpetrators daughter expressed her fear over her parents' wellbeing:

"I do not want this to be another front page news story of everyone trying to warn doctors of the danger and the patient being allowed to commit murder and suicide." (Case 86)

The perpetrators sister also stated her concerns following the incident

"All I can say is that I'm surprised that my brother was not sectioned, having made a threat to kill his wife." (Case 86, local paper)

In contrast, there are also cases where despite a long history of contact with mental health services, the event was totally unexpected. At the inquest the coroner questioned the perpetrators psychiatrist regarding their mental state:

Coroner: "How could a man be reasonable a few days before and then do something so terrible".

Psychiatrist: "When a person suffering from mental disorder, then obviously the ability to control emotions and react to situation is clearly compromised and things can occur when we wouldn't normally expect it." (Case 107, inquest records)

Likewise, another psychiatrist giving evidence at an inquest explained the difficulty in trying to predict a patient's behaviour. He saw the perpetrator five days before the incident and said:

"I had no fear she would be harmed by (him) or that he would do what he indicated. If there had been any concerns expressed at that time we could have done something." (Case 11, coroner's records)

People can appear rational and calm once they have made a decision to take their own life, and therefore, an abnormal mental state and the risk of harm to either themselves or others is not always recognised. Therefore, the role of mental illness/disorder in these cases is unclear. Although over half of the perpetrators had a lifetime history of mental disorder, the evidence for active mental disorder at the time of the offence is difficult to determine from the documents.

8.4.3 EMOTIONAL DISTRESS AT THE TIME OF THE OFFENCE

Making the distinction between emotional distress and common mental health disorder is important in assessing the role of mental illness in homicide-suicide perpetrators. In case 20, the perpetrators last contact with the GP was on the day before the incident and he displayed symptoms of acute emotional distress. He had been described as depressed by his daughter in her witness statement; however, depression was not diagnosed by the GP. The following summary was recorded in the coroner's records:

On the day before the incident, (the perpetrator and victim) attended the surgery together. Initially he came in alone and said he was very embarrassed and was visibly shocked about the marriage failing. He was prescribed Trazodone 50mg, 1 tab twice daily. An urgent referral to a counsellor was made. Follow up was arranged for 4 days later. He was in an anxious state so he was told that antidepressants and sedatives would help him to sleep. He recognised that the marriage was irretrievably broken down and that the house valuation was the confirmation and the final evidence. He felt he was being abandoned. His routine and lifestyle had been taken away by this separation, and he was struggling to come to terms with this. There was no indication or fear for his welfare. (Case 20, coroner's summary of medical records)

Therefore, the individual was emotionally distressed by the breakup of his relationship, the GP noted his distress, and prescribed medication to ease this, but did not record a mental disorder. It could be suggested that the GP considered this to be a normal emotional reaction to the adversity, rather than evidence of mental illness.

Although it is conjecture, if some of the perpetrators had been seen by a GP before the offence, it is possible that they would have received a diagnosis for anxiety or depression. It would appear that a number of perpetrators were extremely distressed prior to the event, but no action was taken. In one case, family and friends of the perpetrator were aware of his heightened emotional state with regard to

the separation from his wife and access arrangements to see his children, but had not informed his wife of the threats he had made towards her. She said:

"Apparently (he) was really down and said to people he was going to do something awful. He said he was going to kill himself. He also told people he wanted to stab me. I'm so shocked. Why didn't anyone tell me? If I'd known he was thinking such terrible things I wouldn't have let the girls near him. Losing the girls was so, so terrible. But to think that it could have been avoided in any way is excruciating." (Case 78, *The Mirror*)

It was not unusual for the perpetrators to exhibit signs of distress that affected their behaviour before the homicide-suicide. Witnesses overall did not consider this to be a major concern. Perhaps friends perceived this to be a normal response to be expected when relationships breakdown, particularly when there are disputes related to the custody of children. There were cases where, although the perpetrator had experienced emotional distress, there seemed to have been an improvement in their outlook, and consequently no longer gave cause for concern. For example, a close friend said:

"The last time we spoke, a few days ago, he seemed quite positive about getting access to the kids and they had been spending several days a week with him. He seemed quite resigned to the fact he was going to lose the house. I thought he had accepted it and he was going to get on with his life." (Case 75, *The Daily Record*)

8.4.4 PSYCHIATRIC DIAGNOSIS POST-MORTEM

The coroner requested a written psychiatric assessment on the mental state of two perpetrators who had not previously been under the care of mental health services before their deaths. This is not a usual request. However, in case 6, a psychiatrist was asked to review the background evidence on the perpetrators behaviour before the incident. The perpetrator had believed her son had been sexually abused by his father. In a letter to the coroner, the psychiatrist concluded:

I am of the opinion that it is probable that these beliefs represent a complex delusional system, and that (she) was suffering from a psychotic illness at the time of death. I consider it likely that she was acting under the influence of these ideas when she brought about the deaths of herself and her son' she probably believed that she was sparing both of them considerable pain and suffering. I would add that it is highly likely that such an illness would have been worsened by cannabis use. (Case 6, *psychiatric report commissioned by coroner*)

In another case involving the death of a child, a psychiatrist reviewed the evidence to determine the role of mental illness and concluded:

On 8th November 2007 (she) was prescribed Citalopram. A further prescription was issued on 22 November 2007. She was taking anti-depressants but there was no evidence of active symptoms, possibly underlying personality problems. She had told everyone she had been diagnosed with cancer and had 6-18 months to live. This was attention seeking behaviour. The suicide note strongly suggests she was seeking revenge on her boyfriend by killing their son. (Case 71, psychiatric report commissioned by coroner)

The perpetrator was experiencing emotional distress; however, the absence of evidence for abnormal symptoms would suggest that the perpetrator was not experiencing symptoms of mental illness at the time of the homicide.

8.5 ADDITIONAL INFORMATION ON EXCLUDED CASES FOLLOWING INQUEST VERDICT

As stated earlier, 23 cases were removed from the sample as they did not meet the inclusion criteria. Most were excluded because the suicide occurred over 3 days after the homicide; 13 perpetrators took their own life whilst remanded in custody or following conviction.

There were four cases in which the incident was suspected of being a homicide-suicide. However, having reviewed the coroner's files these cases were also excluded. The cause of death for victim was either considered to be unascertainable or an open verdict rather than an unlawful killing, or the coroner did not explicitly state the case was a homicide-suicide in the narrative.

CASE 1: UNLAWFUL KILLING NOT FOUND

In the first case, a young child was found dead in a burning house, while the father was found hanging in the garage. The pathologist providing the evidence concluded, "there was no pathological evidence to confirm asphyxiation, but the most probable cause of death was smothering with a pillow." The coroner reiterated these findings but stated that a lack of definitive evidence had led to the cause of death being recorded as "unascertained". He could not be sure beyond a reasonable doubt that the death was not caused by "another natural cause". He said "There is undoubtedly circumstantial evidence that (the victims) death was not from natural causes. I've considered a verdict of unlawful killing, but rejected it. The evidence leaves a reasonable doubt."

The mother of the deceased child said "In my heart of hearts, I know my son was smothered by his father. How much more evidence do you need? There wasn't another person there at the time." (This is Bristol, 4th December, 2009)

CASE 2: UNLAWFUL KILLING NOT FOUND

This case involved a couple who had a troubled relationship with a history of domestic violence. Following a party at the couple's home, the victim had been doused in petrol whilst lying down on a bed. The petrol was ignited and both she and the perpetrator suffered extensive burns that lead to their deaths. In conversations with paramedics at the scene, both parties blamed each other for igniting the fire, but forensic evidence showed that the victims pattern of injuries were consistent with her lying down, contradicting the perpetrators claim that she had set fire to him. An open verdict was recorded for both the parties. The coroner stated, "I don't think that this was an accident but I don't think the evidence that has been available allows me to reach any other conclusion than the one I have given." (Yourlocalguardian.co.uk Croydon double death by fire 4th November 2006)

CASE 3: NARRATIVE VERDICT

This case involved a wife who following a road traffic accident was totally dependent on others for all aspects of her care including nutrition, hydration and mobility. Her husband found it difficult to cope and legal proceedings were underway to terminate her treatment under the Mental Capacity Act.

The coroner stated:

"(The perpetrator) was undoubtedly responsible for the circumstances that ended both of their lives. I have no doubt about that, but similarly have no doubt in my mind that those actions were solely motivated by his continued devotion to, and love of his wife and his desire to relieve her of her perceived suffering that he was witnessing on a daily basis. And even in that act he clearly did not wish to be separated from his wife and ensured that they died together on that day. So in all of those circumstances it would be perfectly permissible of me to return what would be fairly obvious and different short form verdicts for the "victim and perpetrator". In my judgement that would be a wrong approach and an insensitive approach. It's a matter for my discretion how my factual conclusions are expressed and given what I find to be the clear desire of "victim and perpetrator" not to be separated in life it seems appropriate to me that the circumstances relating to their deaths should be reflected in a joint narrative verdict that's a brief factual non judgmental statement of the facts as I find them".

That statement read as follows:

"(The victim) was a patient at Rookwood Hospital in Cardiff. She was in a persistent vegetative state and was totally dependent for all aspects of her care. She was visited on a daily basis by her devoted husband (the perpetrator). On 5.12.08 (the perpetrator) took his wife home in a wheel chair accessible vehicle. He parked the vehicle in their garage and placed pipes from a petrol lawnmower into the vehicle. Later that day (the victim and

perpetrator) were found deceased in the vehicle and had died as a result of the inhalation of exhaust fumes.”

The circumstances of this case are fundamentally different from other homicide-suicides in that the ‘victim’ would never have been able to regain consciousness. In addition, the narrative verdict does imply an ‘intentional’ unlawful killing or suicide but it was not explicitly stated.

CASE 4: NARRATIVE VERDICT

In this case, a mother of 2 children (aged 5 and 3 years) was found dead in their home following a house fire.

The coroner stated:

“The multiple seats of fire indicates that the fire was not started accidentally and it’s more likely than not that the fires were started by (the perpetrator) rather than one or both of the children”. He continued, “The exact sequence of events which led up to the commencement of the fires and the subsequent deaths of (the perpetrator) and her children cannot be determined from the evidence to indicate (the perpetrator’s) state of mind at the time the fires commenced.”

CASE 5: TIME DELAYS

One case was identified from 2006 by the police force and the Homicide Index as a suspected homicide-suicide. The inquest touching the deaths of the two individuals has not taken place to date, some 6 years following the offence. The case involves a young man who was a mental health patient. He was granted leave from a psychiatric in-patient ward for one night, into the care of his father. He was suspected of killing his father and then taking his own life. The inquest was expected to be complex due to allegations of negligence by the mental health trust. The parties involved have delayed proceedings considerably and the inquest had not started at the time of data analysis.

8.6 CHAPTER SUMMARY

Four themes emerged from the analysis of these cases; the cause of emotional distress; the emotional response to adverse incidents; coping with emotional distress; and evidence of mental illness. Actual and imminent separation from an intimate partner, through either a relationship breakup or ill health, was the main causes of emotional distress. The emotions associated with the loss in these cases were seen to be anger and hopelessness, which included frustration, jealousy, and remorse. Past suicidal and violent behaviours illustrated how perpetrators coped with similar distressing episodes, providing an insight into how they reacted previously to interpersonal crises. The role of mental illness in these cases is less clear. Though it was evident that all the individuals were experiencing emotional distress

leading to the homicide-suicide, there was insufficient reliable information to determine whether there were abnormal symptoms at the time of the offence, constituting a mental illness or disorder as previously defined.

CHAPTER 9: RESULTS - A THEMATIC ANALYSIS OF NEWSPAPER REPORTS OF HOMICIDE-SUICIDE

In the previous chapter, the role of mental illness in cases of homicide-suicide was explored using data from coroners, police, GP medical records and newspaper articles. The narratives contained within the newspaper reports were treated cautiously as they are potentially subject to a number of biases. In this chapter, the findings from an analysis of the newspaper articles are explored separately. There is a limit to what can be learnt with regards to answering the research questions from this data source alone. The potentially unreliable nature of newspaper reporting requires careful interpretation, as the narratives have already been subject to a degree of distortion by journalists and editors in accordance with the newspapers own agenda. However, whilst acknowledging these constraints, it is recognised that newspapers articles can still be used to further our understanding of these incidents.

Prior to analysis, it was anticipated that data, particularly articles published immediately after the incident, would provide direct quotations from those closest to the perpetrator about their behaviour and mental health at the time of the offence. Aside from obvious agenda based reports, in the majority of cases the articles gave a factual account of the offence, but focused heavily on the victim. The articles often included statements thanking people for their support and provided a brief tribute to the deceased victim. Neighbours often expressed the shock of such an events happening in their community:

"It's the last thing you expect in somewhere like this. It's a nice place. It's not Hackney, for God's sake." (Case 88, neighbour)

In some cases, witnesses were reluctant to talk about the perpetrator:

She added: 'I knew her boyfriend when they were together. It was her who ended it. I don't want to say anything about him after what has happened.' (Case 7, friend of the victim)

This chapter builds on the findings in chapter 8 by identifying additional themes specific to our understanding of these events as portrayed through the written media. The themes that emerged from the data were; the characteristics that make homicide-suicide newsworthy; how homicide-suicides are reported and; the contrast between reports of mental illness in the official documents and the newspaper reports.

9.1 THEME 1: WHAT MAKES HOMICIDE-SUICIDE NEWSWORTHY?

Newspaper reports were obtained on 54 (90%) cases, either from national or local papers. Therefore, these cases were considered by journalists and editors to be highly newsworthy. The factors in the narrative that make these cases newsworthy have been identified and categories into sub-themes.

9.1.1 FASCINATION WITH EXTREME VIOLENCE AND PERSONAL TRAGEDY

These cases epitomise the extremes of human emotion, and often involve acts of violence that are rare. When they do occur, they attract a lot of attention as the public have a fascination with the real life drama of other people's lives. The reports instill sympathy with the victim's family for their loss. In one case, the newspaper featured a follow up story on a mother of two children killed by their father. The report discussed how she coped with her grief and had now started a new family.

There was a fascination with violence, particularly in tabloid newspapers where graphic descriptions of the incident were used in their headlines, in an attempt to shock and draw readers in:

CRAZED; EXCLUSIVE: DAD HACKS TODDLER SON TO DEATH AND THEN KILLS HIMSELF (Case 8, The Mirror)

AN explosion of violence turned an elderly couple's neat home into a house of horror. (Case 107, local paper)

This type of headline illustrates the sensationalist nature of the reporting in some of these cases, with newspapers presumably believing that the more macabre the story, the more public interest is generated.

9.1.2 CHARACTERISTICS OF VICTIMS AND PERPETRATORS

The newsworthiness of these cases is also increased by the number of cases that involve multiple victims, especially where the victims are considered to be vulnerable, such as children and the elderly. The murder of 'innocent' or 'vulnerable individuals added another dimension to an already dramatic story. In addition, although more commonly a feature of tabloid newspapers, reporters often attempted to make a distinction between the perpetrator and their 'average' reader. This was observed, for example, through several references to the value of the perpetrators home:

The bodies of (victim), and her 67 year old husband were discovered last Friday evening in a car at the garage of their £300,000 detached home... after an apparent double suicide. (Case 102, local paper)

In January 2007, (his) wife, 44, a nurse, had been found dead in the garage of the couple's £450,000 detached home... (Case 82, Daily Mail)

He then changed out of his blood-spattered clothes and drove to Beachy Head in East Sussex, leaving his wife's butchered body in a pool of blood at their £700,000 home... (Case 20, The Sun)

The wording used in this article insinuated that this perpetrator was different from the average reader due to his lifestyle, suggesting they were wealthy and privileged. The reporter may be suggesting that the readers should have less sympathy for the perpetrator as his socio-economic status sets him apart from 'ordinary' people.

9.1.3 HAVING SOMEONE TO BLAME

The amount of newspaper coverage a case received increased when the details of the case were used in another context. For example, the newspapers highlighted the failures of social services or public protection agencies in many of the cases in this study. These agencies included; the police; the judiciary; child protection services; social care for the elderly; and mental health services. These were also used to support a specific policy issue such as the availability of firearms and reinforce the dangers. It is important to acknowledge the context in which these reports were written and to recognise the newspapers own political agenda when interpreting the content of these reports. The cases occurred during the Labour party's third term in office, and included Gordon Brown's premiership. During this period, a major tabloid newspaper switched their allegiance to the opposition Conservative party. Therefore, these events were often used to attack policies and agencies in order to make a political point.

For example, the journalist in this case attacked the Prime Minister, the government and social services with regard to one case of homicide-suicide involving an elderly couple.

Perhaps our PM and members of his government might like to imagine some inept social services bod bursting into THEIR home uninvited and removing their partner by force, saying: "It'll be better for everyone." What's better for old people is that they feel safe and secure, and how the hell can they feel that when social-services Nazis tear them away from the one person left in the world who loves and understands them? The only person who remembers them as they were-strong and vibrant-not dependent on a state that doesn't give a stuff about them? (Case 104, News of the World)

It is the role of the coroner to determine whether an agency or institution has been negligent and whether their actions or inactions contributed to either party's death. Where failings were found, the

newsworthiness of the case grew as it increased the number of angles in which the case can be cited. In one example, an article targeted institutional failings and was less interested in the individuals involved.

The day before, he visited his GP and his solicitor to make a will. But he was not receiving any specialist treatment for his PTSD. This time bomb even told social workers he had been suicidal for two to three years. A psychiatric nurse identified him as posing a significant risk of violence to others and of suicide. Warning bells could not have been clanging more loudly. But then the mental health services failed abjectly and (he) was not detained because, on more than one occasion, a social worker was "not available" to approve it. (Case 93, local paper)

Criticism from the coroner and the press can lead to policy reviews and the implementation of reforms to improve communication and service delivery. However, in one case the reaction of the police force following an intimate partner homicide-suicide involving a firearm was perhaps a little excessive and unnecessary, and was arguably undertaken to make a political statement of their own.

Chief Superintendent Kevin Mulligan, commander of Salford police, added that extra police would be on patrol in Salford, in order to re-assure the public. (Case 7, local paper)

Other agencies were proactive in their defence and stated from the outset that they had provided their services to the required standard:

"Some people are already playing the blame game, but I knew (victim) and know everything that could be done, was done. In this case we cannot go down the route of anyone not doing their job properly - because it was. She simply refused to accept any of it and there was nothing we could do. She was a grown woman making a choice." (Case 98, local paper)

9.2 THEME 2: HOW HOMICIDE-SUICIDE IS REPORTED

A distinction in the style of reporting by different newspapers has been observed. By filtering information prior to publication, reporters dictate how they would like the cases to be perceived and interpreted by the public. Therefore, the journalistic interpretation of the cases of homicide-suicide could be considered an important theme emerging from the analysis of these articles.

9.2.1 PERPETRATOR STEREOTYPES

The newspaper articles used in this study include national and local papers, broadsheets and tabloids and consequently encapsulated a range of journalistic styles. In most cases, the reports were factually based with few embellishments. However, in some cases, tabloid newspapers in particular, enhanced

the text to dramatic effect. This was most evident when journalists characterised the victim and perpetrator as good and evil. In this study, two victims were police officers, one was killed in a personal domestic incident, and the other was killed while on duty. In the case of the officer killed on duty, the narrative instantly elevates the status of the victim whilst simultaneously attacking the actions of the perpetrator:

HERO cop (victim) was shot dead yesterday when a gunman went berserk during a furious row with his girlfriend. (The victim) was part of a police armed response unit called out to a domestic dispute after crazed (perpetrator) armed himself with a hunting rifle. (Case 95, The Sun)

The emphasis on victims as innocent, good, likeable etc. is often in stark contrast to the description of the perpetrator. Therefore, this sets the tone for our understanding of events and convinces the reader that the perpetrator was “bad”. Family members and close friends will understandably want to promote a virtuous image of the victim out of respect for the deceased, but also because it will reflect on them. When, in one case, the image of the victim was attacked, the family members reacted strongly to try to protect the public perception of victim:

The family are upset about reports in national newspapers that (she) was killed by her junkie lover and that she too took drugs. Brother (name) said: "It's all lies. She loved her husband, he was her first boyfriend. She was a deeply religious girl. She never smoked or drank. She was a lady. We knew she wasn't on drugs. This man in the flat was not her boyfriend. She was waiting for her husband to come out of prison." (Case 62, local paper)

In reality, the official police records show that media reports were accurate. The victim’s husband was in prison and she was having a relationship and had a child by the perpetrator. They were both using drugs and lived a very chaotic lifestyle. The depiction of the victim in this case may have been less sympathetic compared to other victims of intimate partner homicide-suicides because of her lifestyle and the fact that her child also died in the incident having been exposed to such an unstable environment. Nonetheless, she was subject to repeated serious violence from her partner, had engaged with services and had tried to change her life.

9.2.2 TYPOLOGY

Academic typologies that are evidence-based, offer a detailed conceptualisation of the perpetrator and the incident. Typologies are used as a guide to enhance our understanding of these cases, but are to be treated with caution. Their usefulness has been criticised due to the assumptions made when categorising offenders, particularly when attempting to interpret the motivations of deceased perpetrators. Newspaper reports commonly revert to typologies in an effort to describe the

characteristics of homicide-suicide cases. Journalists use the typology labels in an oversimplified way, this can reinforce stereotypes and can mislead readers. Therefore, it could be argued that the way some cases are portrayed in the media serves to reinforce certain stereotypes, and oversimplify the characteristics of these cases.

In cases where the victim's health was declining, statements from witnesses commonly focused on the fact that the couples were "devoted" to each other. The reporters subsequently tell the story from a largely sympathetic perspective toward the perpetrator and his emotional distress due to his inability to cope. The reporters often frame these cases as "mercy killings".

A community care worker who oversaw the care of (the victim) said: "She was bed-ridden and had very little speech in the later stages of her life." Despite recommendations that (she) should be housed in a care home, (the perpetrator) refused. She added: "(the perpetrator) found it hard to come to terms that she couldn't communicate with him. He had the added disadvantage of a hearing problem. He was absolutely devoted to her and never wanted to be apart from her." (Case 31, local paper)

The image of a mercy killing was reinforced by the narrative that the perpetrator was devotion to his sick wife and was unable to cope with the possibility of separation. This appears to suggest that the motive for the murder is somehow more understandable. Similarly, and consistent with the mercy killing typology, are cases in which the perpetrators killed their children because they were struggling to cope with a disability or feared for the child's future. Reporters also portrayed these individuals in a sympathetic manner, as family and friends described the altruistic motives for the perpetrators actions. In the interview with the newspaper, the perpetrators family was perhaps trying to reconcile the events, not only to the public and wider community, but also on a personal level. They were trying to come to terms with what happened and this may be a way of processing such a traumatic event. They described the actions of their sister:

"This was an act of love," says (sister). "She was calm and decisive about this. She was focused and had figured it all out. She didn't want to be a burden on anybody and for (her son) to be a burden." "It was the ultimate sacrifice... How brave is that?" (Case 9, The Sunday Times)

In circumstances where a child or children were the victims following a relationship breakup, even when they were killed for seemingly similar 'altruistic' motives, the way in which these cases were reported contrasted significantly. The reporter set the tone of the article by implying that such acts are unforgivable. An example of quotations used in these articles included:

'I condemn the callous betrayal of a trusting child and loving son. There will be no forgiving or forgetting - how can there be?' (Case 110, Daily Mail)

The distress experienced by male perpetrators did not receive the same level of sympathy from the newspapers as mothers who killed for similar “altruistic” reasons. The journalist perhaps did not believe the father’s altruistic motives to be comparable to a mother’s. The concept of misplaced altruism was reported differently for mothers and fathers in cases of filicide, in that the female perpetrators were reported with sympathy whereas the male actions were reported with incredulity.

In cases where altruism was not a factor, the notion of compassion for fathers who killed their children was rejected even more vigorously. In another article, the reporter quoted a mother who was defending her son, but immediately rebukes the mother’s sentiment, ensuring the readers have no sympathy for the perpetrator.

This week, (the perpetrators) mother sprang to his defence, saying: "Personally, I think it took a lot of guts to do what he did. He must have been tortured. I hope he's at peace with the girls now." (He) had told her he couldn't live without his children, yet as they were staying with him for the weekend, he clearly wasn't being deprived of contact anyway. If he wanted to kill himself, then that's his choice. But wilfully taking the life of two innocents who trusted him isn't a courageous act. It's murder." (Case 78, The Sun)

The interpretation of these cases by the media influences the public’s perception of the victims and perpetrators in these cases.

9.2.3 THE PERPETRATOR’S PERSONALITY

The newspapers used interviews with friends, neighbours, acquaintances and family members to generate an overall impression of the perpetrator. The use of these quotations provides a valuable insight into how the person was perceived and regarded by their peers, and consequently the image that was created of them in the media. Perhaps unsurprising given the nature of the incident the published comments were largely negative. In case 91 the victim’s sister described her brother-in-law:

"He had a huge ego and was a Mr Know-All. I couldn't stand the sight of him and was stunned when (she) fell for him. He was false and flash - and the only person he cared about was himself. He was a horrible, worthless, nasty man." (Case 91, The People)

Again, from the perspective of the victim’s family, a relative described the perpetrator:

"(He) was pure evil. He should have been locked up a long time ago. The police knew he was a danger but he was still able to do this. He was arrested after kicking the child only a few days ago but they let him out and now he's destroyed the family." (Case 11, The Sun)

A potentially less biased view of another perpetrator came from the girlfriend of the perpetrators former housemate. She stated:

"If ever I was in (her boyfriend's) room there on my own, I used to make sure the door was always locked, because (the perpetrator) used to give me the creeps. There was just something about him, I don't know. He just never seemed right in the head." (Case 18, local paper)

Each case of homicide-suicide generated numerous articles. Within the newspaper reports there were quotations from witnesses that provided contrasting descriptions of the perpetrator. They illustrate potential bias from the respondent witnesses. If read in isolation from other reports this could skew the data and our overall impression of the perpetrator.

Below are examples of how perpetrators are described by informants in different newspapers. The descriptions of the deceased varied in some cases according to the relationship to the witness. In one case a close friend stated:

"I have known him for about 15 years and you would never see him causing trouble. He was into fishing and shooting, and he was very quiet. I just can't believe what has happened." (Case 95, The Times)

The above article did not report any negative description of the perpetrator at all. In contrast, the report below was more disparaging, using a quotation from a neighbour who portrayed the perpetrator quite differently:

Residents in the area described (him) as a 'druggie and a bit of a troublemaker' and that drug users were always hanging around outside his one bed roomed flat. A school friend of (his) said he was 'into guns' and would wear camouflage gear to go hunting in the hills around Shrewsbury.

"... a pub regular, described (him) as an "oddball" who had previously been questioned by the police concerning allegations of arson. He was known for the hassle that followed him around. He was unemployed and used to carry a rifle in a case down by the river." (Case 95, The Mail)

The description alludes to a profile of a "mass murderer". The journalist included a quote from the perpetrators friend who described him as a placid person, but overall the article was heavily outweighed by the imagery created in the main text. In fact, The News of the World used another quote from a friend closely linked to the incident, and suggested in their headline that a 'massacre' had been prevented:

"It was awful, horrible. If it wasn't for (victim) I would not be here today. Neither would (X), the two police officers who first attended the incident and probably some of the neighbours." (Case 95, The News of the World)

The use of such contrasting statements about the perpetrator is illustrated further in case 78, in which firstly a friend stated:

"Everyone is stunned and no one can believe it. He was such a nice bloke, he'd do anything for anyone and was very helpful and he absolutely loved his children." (Case 78, The Daily Telegraph)

In contrast, a tabloid newspaper interviewed the perpetrators ex-girlfriend who depicted the perpetrator in a rather different light:

"There was something weird about him. I knew (he) wasn't right in the head. He was an attention-seeking control freak who had a thing about teenage girls." (Case 78, The News of the World)

The information from the interview was used to set the tone of the whole article, and the opening line read:

MONSTER (name), who killed his two tiny daughters then hanged himself, was a sick fantasist who preyed on underage girls, the News of the World can reveal. (Case 78, The News of the World)

This type of reporting instantly skews the reader's perception of the perpetrator.

9.2.4 MENTAL ILLNESS

The majority of the homicide-suicide cases with a history of mental illness were reported factually by reporters, with less obvious negative connotations than one might have anticipated. The perpetrators who had mental illness were often described in the newspaper article using a diagnostic label:

Depressed ex-factory owner killed wife (Case 107, local paper)

Therefore, this is descriptive, accurate and less disparaging, although it does suggest mental illness was a prominent feature in the incident. Further, it was observed that in a case where the perpetrator had recently been discharged from mental health services, the content of the articles was focused on system failures, (as discussed earlier), rather than the individual's mental health, (though this was also detailed). The headlines in these cases were less personal and centred on the family being let down:

WIFE KILLER 'FAILED BY SYSTEM' (Case 86, The Mirror)

However, there were exceptions to this trend. A newspaper headline is important as it immediately grabs the reader's attention, and sets the tone of an article. The actual body of the article may then go

on to mitigate the sensationalist start, but the headline of a story was noted to be particularly derogatory towards perpetrators with mental illness:

Nut free to kill for 3rd time (Case 108, The Sun)

CRAZY COP WANTED TO WIPE OUT FAMILY; Killer was plotting a massacre (ID 82, Daily Star)

Understandably, following the crimes that had been committed, there may be a tendency to either exaggerate mental health problems or use clinical terms quite loosely. The reporters in some of the newspaper articles selected quotations by family members or associates that would conjure up an unfavourable image of the perpetrator:

"I would describe him as a psychopath. I saw him attack his brother with a hammer then run after him with a knife in the street." (Case 28, neighbour)

Even when perpetrators did have a history of mental health problems, there was a danger that journalists would exploit a description, such as the one above. When observations such as these were inaccurate, they were highly disparaging and distressful for the perpetrators family. In this particular case, I witnessed the family's disdain for the media first hand at the inquest. Despite the perpetrators brothers objecting to the press being present at the inquest one local newspaper lead with the following headline in that evenings newspaper:

'Psychopath' partner strangled mum of 4 in her bedroom (Case 28, local paper)

A similar headline was subsequently used the next morning in a national newspaper:

PSYCHO DADDY; FATHER STRANGLED MUM OF HIS 4 KIDS THEN HUNG HIMSELF AT HOME (Case 28, The Mirror)

In another case, the victim's mother described her daughter's ex-partner:

I thought he was a bit of a loser, to be honest, and quite odd. I wish I'd listened to my instincts that he was trouble.' She cannot pinpoint exactly why she was uneasy about (him), but his coldness worried her. 'He was a strange and withdrawn person, wary of everyone. Now, I realise he was clinically paranoid.' (Case 25, Daily Mail)

The description of the perpetrator alludes to him having either a psychotic illness or personality disorder, neither were accurate. Therefore, by choosing to publish this quotation, the newspaper was misrepresenting the perpetrators mental health status at the time of the offence and therefore skewing our understanding of mental illness in these cases. In addition to the inaccuracies in diagnoses,

reporters often selected quotations from witnesses that tended to reflect a default explanation, when no-one can explain why the homicide-suicide happened:

"This is an utter tragedy. It looks like (he) has just cracked and gone berserk." (Case 82, Daily Star)

"(He) had been depressed about things at work and not all was well at home. I understand (she) told him that she wanted a divorce and he must have flipped." (Case 20, The Sun)

"It seems she sank deeper into depression until finally she snapped with the most awful consequences." (Case 21, The Sun)

These are common descriptions of people reaching breaking point, and the reproduction of these descriptions in newspaper articles serves to reinforce the notion that mental illness plays an important role in these offences. Even where the evidence is lacking, reporter chose to reinforce the notion that there is no alternative explanation but mental illness. The media's attitude to perpetrators with mental illness is inconsistent and variable depending on the victims characteristics (age, sex), and the relationship between the perpetrator and victim (son/daughter/ or spouse/partner).

9.3 THEME 3: COMPARISON WITH DATA FROM THE CORONER AND POLICE FILES

The documents used in this study were generated for their own specific purpose. They were written for a specific audience and have their own style. Documents created for official use are more formal and factual whereas newspaper reports are more interpretive. Newspaper reporters are storytellers and the articles often provide an alternative angle on cases of homicide-suicide with additional information not found in the official documents.

Tabloid newspapers appeared to have a particular way of reporting on homicide perpetrated by people with mental illness. It was beyond the scope of this thesis to undertake a full comparison of data in newspaper articles and the official files, but some distinctions were noted. In the newspaper reports analysed in this study, it was observed that some articles insinuated that the perpetrator was mentally ill, when there was no evidence in the other data sources to support this. If these articles were read in isolation, they would provide the reader with a distorted impression of the perpetrator. Although the newspaper may not have been factually incorrect, by relying on the 'opinions' of witnesses, this created an image of the perpetrator which contrasts with the information in their medical records. This illustrates how people may confuse emotional distress and acute unhappiness with mental illness, and how people may be unable to reconcile the actions of the perpetrator by any other explanation.

"We thought it was depression because of the way he talked. He said to me once, 'But for (wife) I would end it all now.' But then people do say those things at times. (He) could not cope with caring for (her) but could not cope when she went into hospital. (He) would not have willingly done anything to (her). I think he wanted to go but couldn't leave (her) behind. They were a lovely couple. When we first knew them they used to go out lots and walk hand in hand along the promenade." (Case 87, neighbour)

Similarly, in this quote from a police officer, the officer assumes that mental illness was a major contributory factor:

"She must have had a very troubled mind to do what she did. We can't imagine why she has said to people that she had cancer, but she may have been suffering from some sort of mental illness. We are not aware of any mental health issues but that is something we shall be looking into. (Case 71, police officer)

9.4 CHAPTER SUMMARY

Reporters and newspaper editors have filtered stories in advance of publication, and they are usually written with a journalistic slant according to a paper's stance on certain issues. Therefore, the articles used in this research had been subject to a number of distortions before publication. Information used from this source must be interpreted within this context. The newspapers are ultimately trying to tell the story they want to tell, which can have a huge impact on public understanding of these events and the role of mental illness. The key themes that emerged from the analysis were firstly; reporters tend to sensationalise these incidents to make them more newsworthy and make political points by apportioning blame to organisations involved with the deceased's care. Secondly, the cases are reported in a stereotypical way. They often report archetypal good versus evil characters and oversimplify cases by reverting to general typologies. Thirdly, describing mental illness based on conjecture rather than with the recorded "facts" in the official documents, which can result in a misleading portrayal of the perpetrator. Therefore, the use of newspaper reports as a source of data in homicide-suicide research has strengths and weaknesses. Newspaper reports can provide information on the perpetrators' mental health prior to the incident. In cases where the perpetrator may be mentally ill but did not see their GP, or have a diagnosis recorded in medical records, they provide insight into state of mind at the time of the offence. Journalists may also interview numerous family members and friends and therefore get at the "truth". However, this needs to be balanced with the potential for bias and the stigmatisation of some perpetrators in the media.

CHAPTER 10: DISCUSSION

10.1 CHAPTER PREFACE

This study applied a mixed method approach to the investigation of homicide-suicide. The aims were to examine the role of mental illness; explore the events and circumstances that lead to these incidents; examine the psychopathology of perpetrators at the time of the incident; consider previous suicidal behaviour and propensity for violence in the perpetrator; and evaluate how these cases were portrayed in newspaper articles. In this chapter, the major findings of this study are discussed. A critique of the study's limitations along with directions for future research will also be considered.

10.2 SUMMARY OF KEY FINDINGS

There are a number of important findings arising from this study. A low rate of homicide-suicide was identified compared to previous studies, and rates were variable across regions in England and Wales. Similar to previous findings, men committed the majority of the offences and the victims were usually a spouse/partner or child who was killed as a consequence of an impending or actual separation, (a known high risk time for intimate partner violence). The average age of perpetrators was 44, which is significantly older than other homicide perpetrators. Mental illness was found to be a key feature in these incidents, with a lifetime history of mental illness recorded in over half of the perpetrators. Therefore, this group of perpetrators had evidence of existing vulnerabilities prior to the adverse event, which triggered the incident. The perpetrators were most commonly diagnosed with depression, and experienced symptoms of emotional distress, anger and hopelessness. Few had been in contact with their GP for psychosocial problems within a year of the incident.

10.3 RATES OF HOMICIDE-SUICIDE

The pattern of homicide-suicide is similar internationally, with most countries reporting a rate of less than 1 per 100,000 population. The findings of this study show that there are on average 20 cases each year in England and Wales, a rate of 0.04 per 100,000 population. This is consistent with rates of 0.05 from the Netherlands (Liem et al., 2011) and 0.06 Saporro, Japan (Hata et al., 2001) reported previously. Thirty years ago Coid reviewed 17 studies from 10 countries and found rates of 0.2-0.3 per 100,000 (Coid, 1983). He concluded that countries with low homicide rates had high homicide-suicide rates and vice versa. Large et al., (2009) in a systematic review of 49 studies comparing homicide, suicide and homicide-suicide rates from 17 countries, reported that only studies from the U.S. showed a significant correlation between homicide and homicide-suicide rates. This was linked to firearm use in the U.S. In other countries, an association between suicide rates and homicide-suicide was found,

but the correlation was moderate. Multivariate analysis showed a decline in homicide-suicide in the second half of the 20th century, which the authors attribute to an improvement in social conditions (Large et al., 2009). In England and Wales, however, the rate has reportedly remained constant over the last 50 years (Travis, Johnson, & Milroy, 2007).

Recent data indicate that both suicides and homicides have shown a downward trend in England and Wales over the past decade (Home Office, 2012; Office for National Statistics, 2012b). However, the number of offences of homicide-suicides fluctuated between 20 and 40 the same period (Home Office 2007, 2012). As changes in suicide and homicide rates in the general population were not reflected in the homicide-suicide rates, the relationship between these events is unclear. Government policies for the reduction of homicide and suicide rates such as targeting mental illness, vulnerable groups, access to methods and weapons may not have had an impact in reducing the homicide-suicide rate. Findings of this study have shown no relationship between the rate of homicide-suicide and homicide and suicide only. However, a more detailed comparative analysis of homicide, suicide and homicide-suicide in England and Wales may provide a better understanding of this. Using longitudinal data would help identify trends over time. In addition, with larger datasets comparisons could be made with different types of homicide-suicides, for example domestic violence homicide-suicide rates could be compared to intimate partner homicide rates, and elderly homicide-suicide rates could be compared to suicide rates. The rates could also be considered in context with social, economic, and health reforms. As these types of comparisons have not been undertaken, there is no current evidence to indicate that public health policies targeting suicide and homicide would have a positive effect on the overall homicide-suicide rate. Consequently, further research is needed to establish or disprove the link.

10.4 DEMOGRAPHIC CHARACTERISTICS

The findings in this study are consistent with previous research, in that the majority of perpetrators were male and most victims were female (Eliason, 2009; Liem, 2010). Most men committing these acts were aged 30-40 years, older than the median age of homicide-only perpetrators (28 years) (NCISH, 2006). The difference between the average age of homicide and homicide-suicide perpetrators is due to the familial nature of homicide-suicides. These cases involve intimate partners who often have been together for a long time and have a family. The proportion of cases involving the elderly will also elevate the median age. Age is considered to be an important risk factor for suicide. Recent evidence from the NCISH (2012) has shown that the downward trend in most age groups, but this was not observed in those aged 45-64. Likewise Hue et al., (2008) reported a sustained upward trend in suicide by white people, both males and females aged 40-64 years (1999-2005) and Phillips et al., (2010) found a similar trend in a U.S. national study of suicides 1979-2005. Knox & Cain (2005) commented on the public health burden of suicide in middle aged men and measured the years of

potential life lost (YPLL) and presented value of life time earnings (PVLE) in a U.S. study. They found that although suicide rates are higher among the young and older age groups, the highest public health burden was in middle-aged men. As a consequence of the increasing evidence of this emerging at risk group, middle-aged men have recently been targeted as a priority group in the recent suicide prevention strategy (Department of Health, 2012).

People from an ethnic minority group were overrepresented in this sample compared to the general population. Ethnicity is scarcely defined in the literature but a study by Liem et al., (2009) that examined homicide-suicide in the Netherlands reported a similar finding. In England and Wales, higher rates of people from ethnic minority groups were also reported in suicide and homicide samples compared to the general population. Recent Home Office statistics show that compared to other ethnic groups, Black people had higher rates of homicide, with the highest rates among Black males (Home Office, 2011b). Similarly, high rates of suicide in England and Wales were reported among women born in India and East Africa (Soni Raleigh, 1996).

A quarter of the perpetrators were reported to have been born outside the UK. High rates of suicide among immigrants has previously been recorded, and attributed to poorer mental health in some ethnic groups (Bhui & McKenzie, 2008), socio-economic status and socio-cultural factors, absorption into country and feeling integrated in a community (Maynard et al., 2012). The association between ethnicity and homicide and suicide rates is complex and the importance of cultural and socio-economic factors cannot be underestimated. Therefore, it is difficult to draw conclusions from this data, except to say that the rates are comparable to suicide and homicide.

10.5 RELATIONSHIP BETWEEN THE PERPETRATOR AND VICTIM

Homicide-suicide incidents reported in this study were consistent with typologies reported in the international literature. The majority of cases were familial involving spousal/intimate partner relationships or the perpetrators children, consistent with previous findings (Eliason, 2009; Liem, 2010). Only 4% involved parties in a non-familial relationship. Non-related victims are rare in homicide-suicide. In a Canadian study, Saleva et al., (2007) found 100% of the cases involved family members. In an exception to these findings, Malphurs & Cohen (2002), reported that 8% of their cases were extra-familial homicide-suicides. The main relationship types were analysed briefly with particular focus on the emotional distress associated with the adverse life event that occurred before the offence.

10.5.1 INTIMATE PARTNER HOMICIDE-SUICIDE

The findings of this study show that in the majority of cases the victim was a spouse or intimate partner of the perpetrator. The circumstances under which these offences occurred predominantly involved a relationship breakdown or imminent separation due to the victim's ill health.

10.5.1.1 RELATIONSHIP BREAKDOWN

Relationship breakdown was the most common factor associated with homicide-suicide between spouses and intimate partners. The findings of this study have shown separation was either imminent or the couple had recently separated and began discussing divorce proceedings.

The existing research overwhelmingly suggests that women are most at risk of intimate partner homicide following separation (Campbell, 1992). In a Canadian study of 551 women killed between 1974 and 1990, (where motive was established) 45% of the homicides were attributed to 'rage' over the separation and 15% attributed to the partners infidelity (Gartner, Dawson, & Crawford, 1998). Wilson et al., (1995) also established that violence *after* a separation was different from the type of violence occurring within a relationship, in that it is more serious violence and may lead to homicide. The authors report that some perpetrators will 'stop at nothing' to prevent their partner from divorcing them. Daly & Wilson (1988), from an evolutionary psychologist perspective, asserted that some men see women as proprietary objects and they have an entitlement and ownership over their female partners. The action of a woman leaving can lead to an overwhelming sense of abandonment and damage to the man's self-esteem. Gregory (2012) in her analysis of homicide-suicide, suggests that in most cases male possessiveness is the most significant motivating factor for the offence. Evidence of jealousy and obsessive behaviour was recorded in this current study, supporting the male proprietariness theory. A number of perpetrators were recorded as saying 'if I can't have you, no-one can'. Statements of this kind can be interpreted as the partner's belief that the victim will remain their possession for eternity.

To place these cases in context, the number of homicide-suicides committed under the circumstances of separation or divorce are very small in comparison to the number of relationships that breakdown every year in England and Wales. Data from Social Trends reported 113,900 divorces in 2009 (Office for National Statistics, 2011a). Divorce statistics alone do not represent an accurate picture of relationship breakdown. We do not have data on the number of married couples who separated but have not divorced, nor the number of other cohabiting or intimate partner relationships that ended during this period. Suffice to say, the cause of homicide-suicide goes beyond that of relationship breakdown per se, more specifically, it relates to how individuals respond. Some people are emotionally less equipped to cope with the distress caused by separation. The hostility and

acrimonious nature of some separations and divorce were considered by Jacobson & Portuges (1978) to be associated with the potential for suicide. The authors suggest that this may be greater if the individual is subject to hostility from their ex-partner, and does not respond by expressing a similar level of hostility, but instead turns the hostility inward. The authors also suggest that potential for suicide may also increase according to the level of emotional dependency and reliance on the partner for everyday things. Although the author was not referring to homicide-suicide specifically, evidence of these reactions was observed in a number of cases in this sample.

10.5.1.2 DOMESTIC VIOLENCE

In this study, nearly a third of perpetrators had a history of violence; this included serious violence, previous homicide, grievous bodily harm and actual bodily harm, assaults and threatening behaviour. Domestic violence within the relationship was commonplace. Campanelli & Gilson (2002) in a study of 16 homicide-suicides in New Hampshire reported that 50% of perpetrators had a history of domestic violence (54% in intimate partner cases); in 25% of cases a restraining order was active against the perpetrator at the time of the offence. Other studies have also reported a prevalence of domestic violence ranging between 9.6% and 25% (Malphurs & Cohen, 2005). Proportions also varied by sample; Friedman (2005) reported physical abuse in 15% of fathers and 30% of mothers in filicide-suicide cases, whereas higher rates were reported in spousal/intimate partner samples.

Wood Harper & Voight (2007) considered a type of homicide-suicides they labeled “Domestic Lethal Violence–Suicide”, which contends that these incidents amount to an extreme form of domestic violence. This typology is commonly reported in intimate partner homicide studies (Daly & Wilson, 1988; Dobash & Dobash, 1979). The feminist theory of patriarchy and power dominance extends to the domestic violence literature, where it is argued that violence is used in a relationship as a mechanism of control, dominance and oppression (Hanmer, 1990). The notion of male entitlement, supported by a patriarchal culture, has been linked to women's subordinate role in society, and violence against women, from this perspective, is a means of maintaining power and control (Schneider, 1992).

10.5.1.3 DECLINING HEALTH OF PARTNER

Half of the homicide-suicides by perpetrators over the age of 60 involved intimate partners, where the victim had poor or deteriorating physical health. In these cases, elderly men were commonly found to be the primary caregiver for spouses with dementia. This is consistent with the proportion reported by Malphurs et al., (2001). These cases are often categorised as ‘mercy killings’ (Marzuk et al., 1992).

Calasanti & King's (2007) study of 22 elderly caregivers included 9 males. The authors reported the strategies used by men in their approach to caring for their wives who had Alzheimer's disease. They

considered this role to be a 'job', and admitted to exerting force in order to get the job done. They would 'enforce compliance' regardless of their wife's feelings, blocking these emotions. The difference between older male and female caregivers was illustrated by the different approaches to the same tasks. The authors also suggested masculinity was an important factor in these cases, both internally and in how these men were perceived through their interactions with others. It has been suggested that as the stress increased, the risk of intimate partner violence also increased as a means of exerting control over that stressful situation (Karch & Nunn, 2011). This may also result in homicide (Cohen, 2000).

In cases such as these, the focus tends to be on the victim's ill health as the cause of the perpetrators stress. As such, little is known about whether there was existing violence in the relationship prior to the onset of ill health or dementia. This is important for our understanding of these incidents as it would tell us whether the violence was triggered by the frustration of the situation, or whether the illness accentuated violence in an existing abusive relationship. The framing of these homicides as mercy killings is therefore questionable. Cohen (2000) suggested that 'controlling or dominant personality', 'domestic violence' and 'marital discord' are risk factors in this group. The brutality used in the homicide in some of these cases is more suggestive of rage and frustration as opposed to showing mercy. Therefore, they should not be viewed as assisted dying, or fulfilling the victim's wishes. As a verdict of unlawful killing indicates, these perpetrators would have been prosecuted for homicide if they had survived.

10.5.2 FILICIDE-SUICIDE AND FAMILICIDE-SUICIDE

The second most common type of homicide-suicide found in this study was filicide, which is the killing of children by a parent, and familicide which involves the deaths of both the spouse and child(ren). The literature on filicide and familicide has shown that the key factors associated with these types of homicide-suicide differ by gender (Leveille, Marleau, & Dube, 2007). Relationship breakdown, separation and divorce and self-destructive behaviour are features of male filicide, often motivated by revenge. In contrast, female filicides are most commonly associated with mental illness such as postnatal depression and motivated by altruism, perceived or real (Hatters Friedman et al., 2005). Female familicide is extremely rare and little research has been undertaken on these perpetrators.

Male perpetrated filicide can be the ultimate act of revenge. In certain cases the perpetrator intends to inflict the maximum amount of pain on an ex-partner who has to continue their life without their children. Katz (1988) introduced the concept of "righteous slaughter", where the perpetrator sees himself as a victim, he is the one that has been wronged whilst the victim is the "bad one" whose actions have caused this situation. The homicide is a result of the perpetrator feeling compelled to rectify this wrong doing. The process of "making it right" becomes more important, and the children are

not seen as people but as a sacrifice that has to be made in order to put things right again. Often the reality and the consequences of the filicide become apparent after the fact and lead to the perpetrator taking their own life. The paradox in these cases is that the perpetrator is often described as a great father who adores his children, who does not want to be separated from them, but is powerless because his wife has all the control, and this is a hopeless situation. Both male perpetrated filicide and familicide are often premeditated, planned and undertaken in a methodical and meticulous way and therefore are not irrational spontaneous acts.

In this study, the findings show that maternal filicides are usually explained in the context of mental illness, most commonly depression. The maternal instinct to protect one's own child is challenged in these cases when the mother believes that the best future for the child is to be with the mother in death. There is a longing for a better life together in the 'afterlife'. This is consistent with altruism previously reported (Resnick, 1969). The qualitative findings show that some family members viewed this as an act of love, referring to the perpetrators 'bravery'. In the context of parents with mental illness, they do not appear to have the insight to make rational decisions and consider the alternatives or trust agencies to care for their sick children. Furthermore, Isser and Schwartz (2008) found that women were judged differently following filicide depending on whether they were perceived to be a 'good' mother or a 'bad and neglectful' mother prior to the offence.

10.6 OFFENCE CHARACTERISTICS OF HOMICIDE-SUICIDE

The results of the study show that the most common method used in the homicide was a sharp instrument, and the cause of death in the suicide was hanging. This is consistent with research on suicide and homicide reported previously (NCISH, 2011). Over half of the offences occurred in the home shared by the perpetrator and victims. A recent report on homicides in 3 European countries found that 73% of homicides in Finland occurred in private homes and these were most likely to be between acquaintances (Granath et al., 2011). Familial homicides occurring in shared homes are often referred to as "expressive" homicides by criminologists and are more commonly seen as crimes of passion (Block & Christakos, 1995) suggesting they were impulsive acts. However, findings from this study support previous research suggesting that homicide-suicides involve premeditation which has previously been explored by Dawson (2005). Premeditation is commonly reported in 'family-annihilator' homicides (Fox & Levin, 2003) characterised by the acquisition of weapons and detailed planning. The degree of preparation and planning has important implications for assessing an individual's state of mind, as these actions require organised thought. There is inconsistent data on planning in the suicide literature regarding this issue with both premeditated and impulsive suicide being reportedly associated with hopelessness and depression (Conner, 2004; Dumais et al., 2005a).

10.7 EVIDENCE OF MENTAL DISORDER

The measure used to define mental illness in this study was having a diagnosis documented in the medical records. The findings are discussed in relation to lifetime mental illness, contact with GP and mental health services and by diagnoses.

10.7.1 HISTORY OF MENTAL DISORDER

A lifetime history of mental illness was recorded if there was documented evidence to support this in the GP medical records. Information on duration of illness, and level of dysfunction (i.e. requiring hospitalisation or referral to mental health services) was also available. This lifetime measurement of mental illness was used to provide an understanding of the perpetrators previous history and potential vulnerability. To be consistent with a similar national study by Moskowitz et al., (2006) the findings were also presented for those perpetrators who had a diagnosis of mental illness considered to be 'situational', i.e. following the breakdown of a relationship (n=6).

The results show that a high proportion of cases (62%) had previously been diagnosed and treated for a mental disorder. This is consistent with studies also using data from the coroner's files; 67% (Buteau et al., 1993); and 63% (Lindqvist, 1995). Those reporting higher rates and those who used multiple data sources also included evidence from interviews with family members which could explain a higher prevalence (Rosenbaum, 1990). Conversely, a study using a similar methodology and data source reported a lower proportion of mental illness (42%), which could be explained by the exclusion of cases with situational depression (Moskowitz et al., 2006).

The results demonstrate that comparing studies that have employed a similar methodology in terms of data sources have yielded similar results internationally. Therefore, a previous history of mental illness is an important feature in perpetrators who commit homicide-suicide cross-culturally. In this study, there were only a small proportion of perpetrators with recent onset of mental illness following an adverse event. Therefore, the majority had some evidence of pre-existing mental illness. In those patients who were recently diagnosed, their condition deteriorated rapidly, leading to suicide shortly after contact with their GP.

10.7.2 CONTACT WITH GP SERVICES

GP medical records, or information from these records documented in the coroner's files were obtained in 53 cases (88%). Contact for psychological problems was recorded if the perpetrator had discussed problems with their mental health or that they were experiencing psychological distress. In total, a third of cases consulted their GP for psychological problems within 12 months of the incident. Previous studies of homicide-suicide such as Moskowitz et al., (2006) have detailed timing of contact with

mental health services, but not with primary care services. Comparing this study's findings with the literature is problematic, as the nature of contact described in previous studies is unclear. For example Logan et al., (2008) and Bossarte et al., (2006) both used the National Violent Death Reporting System (NVDRS) to describe perpetrators who were "currently in mental health treatment or using antidepressants". Bossarte et al., (2006) reported 7.2% of cases previously received treatment for mental disorder, 11% were considered mentally ill at the time of the offence, 8.6% with depression. In stark contrast, Bourget & Gagne (2002) found that 91% of their sample of filicide cases had received prior treatment. It would be misleading to draw any implications from previous literature in relation to primary care contact. The absence of any detailed description of how mental illness was defined and measured, suggests that comparative analysis of primary care contact is limited.

10.7.3 PRESCRIBED ANTIDEPRESSANT MEDICATION

In this study, we found that the perpetrators were prescribed medication for a mental health problem by their GP at the time of offence in around a quarter of cases. It is acknowledged that receipt of a prescription for psychotropic medication is not a reliable indicator of mental illness per se, as antidepressants can be prescribed for other uses. Furthermore, this study could be underestimating the number if the perpetrator was issued a prescription from a psychiatrist, and this was not noted in the GP medical record, but this is unlikely. The data was verified by cross-checking with toxicology reports, and the evidence showed that some were prescribed but were non-adherent. The proportion of perpetrators prescribed antidepressants was higher at 23% compared to Logan et al's study of 408 perpetrators, in which 12% of those with toxicology reports were using antidepressants at the time of the homicide-suicide. However, Logan et al's study had methodological problems as toxicology data was not routinely reported to the National Violent Death Reporting System (NVDRS), the proportion therefore is likely to be an underestimate.

There has been a marked increase in the prescribing of antidepressants in primary care over the last decade. In a recent literature review Menchetti et al., (2011) reported that between 21% and 65% of patients were prescribed psychotropic medication when they attended primary care services with symptoms of depression. There is a debate as to whether GPs under or over prescribe antidepressants due to a lack of experience in diagnosing mental illness or the patients presentation or frequency of attendance (Menchetti, Murri, Bertakis, Bortolotti, & Berardi, 2009; Mitchell, Vaze, & Rao, 2009).

10.7.4 CONTACT WITH MENTAL HEALTH SERVICES

In the current study, as noted above, the majority of perpetrators had a lifetime history of mental illness. Seven (13%) were under the care of mental health services within a year of the offence.

Others were not considered to be seriously mentally ill and their care was managed by their GP. Moskowitz et al., (2006) found of 33 cases, 18% had been in contact with mental health services within a year of the offence. Logan et al., (2008) reported 10% were receiving current mental health treatment at the time of the offence. Compared to previous research undertaken by the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (NCISH) (Flynn et al., 2009; NCISH, 2006), the proportion in contact with mental health services in this study was higher than previously reported. The previous study undertaken by the author (Flynn et al., 2009) examined 203 homicide-suicides in England and Wales over 9 years, and found 10% had previous mental health service contact, 7% within a year. In Flynn et al's analysis, homicide-suicide was compared with suicide-only and homicide-only, the proportion of homicide-suicide perpetrators in contact with mental health services was lower than both in homicide and suicide cases. It was inconclusive as to whether the results suggested the absence of mental illness or that the type of illness was not severe enough to require care from secondary mental health care services.

10.7.5 DIAGNOSIS

The second research question of this study was to identify the commonest mental disorder in perpetrators of homicide-suicide. Depression was the most prevalent diagnosis. This finding was consistent with earlier observations. Roma et al., (2012) in a review of 30 homicide-suicide studies reported the most prevalent diagnoses from published research. Depression was reported in 39% of 20 studies; substance abuse in 20% of 10 studies and psychosis in 17% of 11 studies. Morbid jealousy, psychopathy, psychotic depression and neurosis have also been associated with homicide-suicide (West, 1965).

10.7.5.1 DEPRESSION

The current study found that in over half the cases where medical records were obtained, the perpetrator had received a diagnosis of depression within their lifetime. These results corroborate the findings of a great deal of the previous work in this field that depression is the most prominent condition. However, as mentioned in the literature review, the rates of depression vary widely. West (1965) found depression to be the most prevalent mental disorder in his sample of 78 cases. He reported over a third had depression. In a psychological autopsy, Rosenbaum reported 75% had depression. Malphurs & Cohen (2002) in a newspaper surveillance study of intimate partner homicide-suicide found 65% with depression, and Logan et al., (2008) using the NVDRS found 15% had depression. All these studies have methodological limitations. Some overestimated depression by including diagnoses from family and friends whereas others underreported depression as the data source had a considerable amount of missing data.

Consistent reports have illustrated the high prevalence of depression in homicide-suicide perpetrators. This could be explained by the fact that depression is the most common mental illness experienced by the general population. A survey measuring the Adult Psychiatric Morbidity in England reported that 16% of the population had a common mental disorder (depression or anxiety) at the time of interview (McManus et al., 2009). Furthermore, psychiatric morbidity was found to be high in the UK compared to other European countries. A study examining general practice attendance in six European countries over a period of 6 months assessed major depression, panic and anxiety disorders. The highest prevalence found in the UK for all disorders (King et al., 2008).

Although half of the perpetrators in this study had a lifetime diagnosis of depression, this could still be underestimated, partly because of the methodology used to identify the cases, but also because GPs have long been criticised for not being able to identify mental illness in their patients. Mitchell et al., (2011) in a meta analysis found that a third of patients attending with depression were not diagnosed. It is possible therefore, that although the proportion diagnosed with depression in the current study was relatively high, it could still be an underestimate, as cases may have been missed. In addition, the remaining perpetrators who did not consult their GP, but were experiencing acute psychological distress may have received a diagnosis of mental illness if they had attended, but this is purely speculative.

A further potential explanation for the high prevalence of depression in this group is that previous research has already shown the association between suicide and mental illness. Studies have examined this in two ways. Firstly, studies have reported on the completed suicide's previous GP attendance, and have found higher rates of depression and other mental disorder (Power, Davies, Swanson, Gordon, & Carter, 1997). Barraclough et al., (1974) found of 100 suicides in England and Wales, 93% were mentally ill, 83% diagnosed with depression or alcoholism. In a national study of suicides by mental health patients in contact with services, the NCISH reported the most common diagnosis was depression, accounting for 46% of diagnoses (NCISH, 2006). Secondly, the risk of suicide is elevated in individuals with mental illness. Mortensen et al., (2000) found serious mental illness requiring hospital admission, was associated with an increased risk of suicide. Both clinical depression and traumatic life events have been shown to elevate the population attributable risk for suicide ideation by 47% and 38% respectively (Gunnell, Harbord, Singleton, Jenkins, & Lewis, 2004).

10.7.5.2 PSYCHOSIS

The current study only reported 1 case with a documented psychotic diagnosis. A Finnish study that described 10 cases of homicide-suicide, did not report any cases with psychotic disorder (Saleva et al., 2007). In a methodologically similar study Moskowitz et al., (2006) reported 4 (12%) with psychosis prior to the incident. However, 3 of these were cases diagnosed from lay descriptions, and the

perpetrator had not previously been seen or treated by mental health services. The highest rates of psychosis are most notably observed in filicide-suicide. Bourget & Gagne (2002) found 4 of the 27 cases of maternal filicide-suicide perpetrators were psychotic at the time of offence. Hatters-Friedman (2005) in a similar study of filicide-suicide also reported a higher prevalence of psychosis (27%).

The absence of psychotic illness in the current study is an important finding. The methodology in this study requires documented evidence in the medical records. Similar to Moskowitz et al's (2006) findings, the qualitative analysis in this study suggested that 1 case may have been experiencing psychotic symptoms before the offence, but this was not recorded in the medical records.

Possible explanations for why psychosis is not a feature of homicide-suicide could lie in the fact that these homicides are predominantly intimate partner homicide. The characteristics commonly associated with people with schizophrenia are being unmarried, living alone or socially isolated (Harvey, 1996). However, it is recognised that the victims of violence and homicide by people with schizophrenia are also more commonly close relatives than strangers or acquaintances (Angermeyer, 2002). West (1965) suggested the higher rate of schizophrenia reported in American homicide-suicide studies, was due to American psychiatrists having a more liberal use of the 'schizophrenia' label in that period. West claims that if these homicide-suicide perpetrators had been treated in England, they would probably have been diagnosed with depression.

10.7.5.3 PERSONALITY DISORDER

In this study, none of the perpetrators had been diagnosed with personality disorder. There was reference to 'behavioural problems or issues' but there was no diagnosis of personality disorder. It was beyond the scope of this study to generate retrospective diagnoses from the text, but it was certainly acknowledged that this method of assessing the presence of mental disorder would underestimate personality disorder. Personality disorder may have been present co-morbidly and contributed to the severity of an individual's reaction to a relationship breakdown. It is possible that those perpetrators who had been previously imprisoned for serious violent offences (particularly homicide) may have had a diagnosis of personality disorder recorded in their prison medical records, but this information was not contained within the coroners file.

Starzomski & Nussbaum (2000) suggest that personality disorder among perpetrators of homicide-suicide had been under researched. Possible explanations for this were given as difficulty in assessing and arriving at a diagnosis. Evidence suggests that personality disorder is common among patients attending primary care. Moran et al., (2000) in their sample of 303 consecutive consultations, reported that 24% of primary care attendees had a personality disorder. These patients also had other psychiatric diagnoses. Therefore, although no cases of personality disorder were recorded as a primary diagnosis in the GP records in the current study, a number of these perpetrators may have

shown some features of abnormal personality. The reliance on documentary evidence from medical records rather than personal assessments may underestimate the prevalence of this disorder.

10.8 PSYCHOLOGICAL EXPLANATION FOR HOMICIDE-SUICIDE

Theoretical explanations for homicide-suicide are limited in the literature. Conversely, there is a wealth of theoretical debate on the causes of suicide and causes of homicide as separate phenomena. Explanatory theories are usually categorised into three domains; biological, social and psychological. In this thesis I have examined homicide-suicide from a psychological perspective and explored the role of mental illness. However, it is acknowledged that social and evolutionary theories are relevant in interpreting the causes of these incidents.

It has been suggested that the intra-familial nature of these incidents means that “instrumental” homicide theories are less important in this group. Structural factors relating to the overall crime rate and socio-economic factors are less likely to be associated with these types of incidents. Evidence from this study suggests that these incidents have multiple causes but are overwhelmingly interpersonal and driven by the experience of emotional and psychological distress.

10.8.1 THEORIES OF VIOLENCE

Most of the cases in this study experienced separation and loss. Personal rejection resulted in feelings of anger, frustration, humiliation, jealousy and a desire to exact revenge. The literature describes similar findings. Haines et al., (2010), in a comparison of suicide and homicide-suicide, found a higher proportion of homicide-suicide perpetrators were violent and hostile prior to the incident. Henry and Short (1954) considered frustration to be the underlying cause of aggression and homicide, particularly homicide-suicide. The frustration itself derives from domestic and social situations and economic and financial difficulties. Katz (1988) examined the role of humiliation and how it interacts with rage. When an individual acknowledges his humiliation (e.g. been made to look foolish by a cheating partner), he responds by becoming enraged at the victim. The emotional response of rage transcends the humiliation by enabling him to take dominance over the situation. From an evolutionary perspective, a violent response to feelings of jealousy have been explained in the context of masculinity and male proprietariness in intimate partner homicide and homicide-suicide (Daly et al., 1988; Gregory, 2012; Polk, 1994). Although not reported in this study, Gilligan (2000) considered shame to be the “primary or ultimate cause of all violence, whether towards others or towards the self”. The loss of self-respect can lead to a ‘psychological conflict’ culminating in violence. Finally, Conner and Weisman (2011) identified embitterment, i.e. the sense of injustice or being let down, as influential in triggering a violent response from perpetrators.

10.8.1 THEORIES OF SUICIDE

In addition to aggression and violence, this study found that perpetrators internalised their emotions, and displayed symptoms of hopelessness. Analysing personality and behaviour traits, Beck (1999) stated a common psychological problem arises from the offenders perception or misperception of himself in relation to other people. The aggressor sees himself as a victim who other people disrespect. These cognitive distortions can quickly lead to feelings of worthlessness and reduce self-esteem, which can culminate in violence. Peck (1979) explored fatalism in perpetrators of homicide-suicide, whereby rigid personality types are incapable of change or redefining life goals. If an individual considers another person to be the cause of his or her failure (i.e. a spouse) then they become the object of aggression in the first instance. As these perpetrators have a fatalistic outlook, it will follow that the act of violence and aggression will also thus be turned towards themselves in the form of suicide.

Suicide itself can be an aggressive act directed at another party. Anthropological studies of suicide have shown that in some cultures suicide is used as a method of taking revenge against an oppressor, such as an abusive partner. Counts (1987) studying a tribe in Papua New Guinea, described a form of suicide used an act of vengeance by women, who are considered powerless following domestic abuse. In this culture, suicide is used as revenge against a partner for the abuse suffered. Not only does the suicide bring shame on the husband, but the relatives of the deceased will seek justice and vow to avenge the death, placing the abuser in physical danger themselves. Furthermore, previous research has examined the relationship between impulsive-aggressive behaviours and suicide particularly in relation to individuals with personality disorder (Turecki, 2005). Keilp et al., (2006) citing the work of Barratt et al. (1999) and Stanford et al., (2003) suggest that aggression in suicide can be premeditated rather than impulsive and involve careful planning and strong intent.

Past suicide attempts were found to be relevant to the medical history of homicide-suicide perpetrators in this study, suggesting previous episodes of mental illness have been severe. Evidence of suicidal behaviour i.e. a history of self-harm or previous suicide attempts, is indicative of high risk. The qualitative analysis revealed that when perpetrators had become suicidal in the past, this was often in response to adverse incidents such as childhood trauma, and previous rejection and relationship breakup. Haines et al., (2010) in a study of 22 homicide-suicide cases in Tasmania, reported 18% of perpetrators had previously attempted suicide. Previous research in mental health patients has shown that compared with 'non-attempters', people who have attempted suicide more commonly have personality characteristics such as hostility and aggression and impulsivity (Keilp et al., 2006; Mann, Waternaux, Haas, & Malone, 1999); and experience more symptoms of hopelessness and depression (Hawton, Kingsbury, Steinhardt, James, & Fagg, 1999). Neuringer (1961) in a case-control study found that dichotomous thinking was accentuated when people were in emotional distress. In suicide terms

this would be 'if I cannot have you, I can't live' and in homicide 'if I can't have you, no-one else will'. Neuringer (1976) found that suicidal people possess a rigid personality trait, and are unable to adapt to compromise, or seek alternatives leading to a sense of "no escape" or "no rescue" (Williams & Pollock, 2000).

10.8.3 DIFFICULTIES WITH PROBLEM SOLVING

The finding that past suicidal behavior was not uncommon in the sample could suggest that these perpetrators reverted to previous behaviour patterns in times of stress or crisis. A comparison in the ability to solve problems has also been studied between suicidal and non-suicidal individuals, and has revealed a difference in performance. It has been suggested that mood states such as depression impair this ability. Depression has been found to affect memory function and the retrieval of memories of how similar problems were solved in the past. Previous research has shown that problem solving solutions in a crisis are more limited in people who have already attempted suicide, and people rely on learned or previous behaviour they have been exposed to (Williams & Pollock, 2000). Therefore people with a previous history of suicide attempts are emotionally more vulnerable, and have less ability to see a way out of their current problems other than suicide. They believe they have limited options. Previous experience of suicide remains important as past exposure may evoke suicide ideation in individuals who are having difficulty coping, particularly if they also have a pre-existing mental disorder.

10.9 THE PORTRAYAL OF HOMICIDE-SUICIDE IN THE MEDIA

The qualitative analysis presented in chapter 8 combined all the sources of data including the newspaper articles to further our understanding of these cases. However, newspaper reports have a unique role in providing a subjective account of the incident. Working within these biases, three themes emerged from these documented accounts of homicide-suicide; the reasons why the cases were considered newsworthy; how the cases were reported; and whether these accounts differ from the official records.

The concept of 'newsworthiness' is complex. There is no agreed standard definition. Some homicides in particular are deemed more newsworthy as they 'deviate from the statistical norm' (Mawby & Brown, 1984; Sorenson, Manz, & Berk, 1998). The general perception is that an incident or story needs to be serious and dramatic. Previous research has found that some victim groups generate more interest, for example sexual crimes involving middle-class women rather than prostitutes (Benedict, 1993). When victims are females or involve children and the elderly, then the homicide will receive more media attention, particularly if they occur in wealthy neighbourhoods. Cases of homicide-suicide tend to shock communities. McKenna et al., (2007) reported that homicides are sensationalised in the media. However, a comparison of how homicides by people with or without mental illness were

reported in the media, found that mental illness did not increase the 'newsworthiness' of homicide cases (Kalucy et al., 2011).

The results of this study show that overall, these cases were reported relatively objectively, but there were exceptions. This is consistent with previous research. Websdale and Alvarez (1998) described newspaper reporting of homicide-suicide. The researchers proposed that these incidents fall within a routine of reporting referred to as 'forensic journalism', which recount the facts of the offence and the immediate 'situational dynamics'. There are 3 common characteristics to this type of reporting:

- 1) "Situationally based reporting" – characteristics of the perpetrator and the crime
- 2) "Situationally based dramaturgical representations" – facts presented for dramatic effect
- 3) "Internal myopia" – ignoring the known journalist slant

Thus, although the reports on homicide-suicide are generated as part of the formulaic routine cycle of crime reporting, Websdale and Alvarez (1998) suggest that in homicide-suicide the forensic reporting is different. The authors found that homicide-suicide perpetrators were less inclined to portray the perpetrator negatively or "taint" their reputation. This is consistent with the findings of the current study. The authors also found that there was "constrained sensationalism", which again is affirmed by the findings of this study. Reporting was most often found to be largely factually based, but there were exceptions.

Different language and styles of reporting between tabloid and broadsheet newspapers have long been noted (Crystal & Davy, 1969). The purpose of the language is also different according to Bagnall (1993) in which he describes tabloid reporters using "popspeak", which describes popular expression. This type of language is usually emotive and highly subjective. The current study shows that reporting, particularly by tabloid newspapers, can be stereotypical and has a gender bias regarding filicide-suicide conveying sympathy for mothers committing this act. Conversely, Nikunen (2006) analysed two homicide-suicides reported in the Finnish media. The analysis contrasted paternal and maternal filicide-suicide cases. Similar to the findings of this study, there was a gender difference in the type of reporting. However, contrary to the theme reported in this study, Nikunen reported that the male case was portrayed as a 'caring father' rather than vice versa in this British media. In a case study analysis of a domestic violence homicide-suicide case, MacDowell (2009) concluded that media coverage of homicide-suicide does not help us to understand these incidents. She added; "Instead, the routines of forensic journalism spin narratives that maintain dominant ideologies."

10.10 IMPLICATIONS OF THE RESEARCH

Homicide-suicide is a relatively rare event. The number of cases per year is relatively small, and with further sub-group analysis, it is clear that the heterogeneity of this group makes recommendations for specific policy interventions imprudent. It is important not to overstate what can be achieved in terms of prevention and risk reduction as these events are multi-causal.

Homicide-suicide generates public interest and affects a wide number of people to warrant serious investigation, yet ironically, with small numbers and such diversity in the types of cases, specific targeted policies would be impractical. In terms of healthcare interventions, the danger of over predicting those at risk is high. Many people would rate positively for the risk factors associated with homicide-suicide but would never commit homicide-suicide.

An alternative would be to adopt a wider public health approach by linking the findings of this study with current violence reduction and suicide prevention policies. The difficulty is that both the protective and risk factors commonly associated with violence and with suicide are not always observed in homicide-suicide. For example, homicide-suicide perpetrators have relatively low rates of previous violence and/or substance abuse and the average age of offenders is higher than homicide perpetrators in the general population. Likewise, factors known to be protective of suicide such as having a family are actually key characteristics of homicide-suicide. Therefore, there is a risk of becoming too generic and losing the nuances of these cases if too broad an approach is taken. The implications of these findings therefore, are discussed with specific reference to particular services (i.e. health and criminal justice), and within a broader public health context where appropriate.

10.10.1 RISK ASSESSMENT BY GP SERVICES

The number of perpetrators seen by their GP within a month of the offence for psychological problems indicates a potential opportunity for intervention. Previous research in mental health service patients has shown that although psychiatrists inquire about suicide ideation in their patients, they tend not to routinely ask patients about homicidal or violent thoughts (Friedman et al., 2008 ; Jennings et al., 1999; Sanders et al., 2000). Koziol-McLain et al., (2006) reported that patients who experience suicidal ideation may simultaneously be experiencing homicidal thoughts but are more reluctant to disclose this. Where threats to kill are made, they should be taken seriously and the appropriate agencies should be informed such as child protection, social services and the police. Victims are often family members, so it is important to consider this in standard risk assessments. Predicting the risk of homicide-suicide may be difficult as it is such a rare occurrence, but predicting the risk of violence is more achievable. Koziol-McLain et al., (2006) identified risk factors for femicide-suicide and recommended health care professionals in primary care, mental health and substance abuse services should assess patients for their dangerousness. The researchers advocate screening on previous

history of perpetrating intimate partner violence, suicidal ideation, and mental disorder (specifically when a consultation relates to marital problems) with a view to directing those at risk into treatment or counseling. Therefore, potential for violence or homicide, particularly in depressed individuals, should be evaluated the same as suicide risk. Previous research has found that people with mental health problems are more likely to go to the GP, which demonstrates greater help seeking behavior (Pearson et al., 2009). This is particularly the case in patients with a history of depression (King et al., 2008). It is therefore important for primary services to be more willing to rigorously assess the risk of violence, particularly of a domestic nature, in their patients with existing mental health problems. Oram & Howard (2013) suggest there is also an issue of poor identification of victims of intimate partner violence among mental health patients, which may be resolved by routine enquiry.

To put the findings into context, this study shows that a third of perpetrators were in contact with a GP for psychological problems within a year of the offence, and there were a relatively small number of cases over a 3 year period. The majority of perpetrators were not in contact with services therefore, prevention from a clinical perspective is challenging.

10.10.2 DIAGNOSING COMMON MENTAL HEALTH DISORDERS AND EMOTIONAL DISTRESS

In this study, the measure of mental illness in homicide-suicide was based on diagnosis of mental illness made by GPs and mental health professionals. This study raises an important question regarding diagnosing and distinguishing between mental illness and acute emotional distress, and the effect this may have on the under or over reporting of mental illness. In a recent letter in the Lancet regarding the diagnosis of depression in primary care, Pathak (2009) quoted previous research in which a GP admitted “I don’t have the time sit back in the chair and have a chat with patients.” Another GP stated that they were aware of the patients’ emotional disorder, but avoided discussing it as “they just did not want to open Pandora’s Box.” The research by Mitchell et al., (2009) whose work Pathak was referring to, suggested that although GPs missed cases of depression, more false positive diagnoses were recorded, i.e. more people were misdiagnosed with mental disorder who did not have it. Therefore, the implication is that a better understanding of the distinction between emotional distress, unhappiness and diagnosis of mental illness in homicide-suicide cases is required. Accurate and timely diagnosis of mental illness would prevent deterioration in the patient’s mental health and put them on a pathway to receive appropriate care and treatment. The expansion of psychological services via the IAPT (Improving Access to Psychological Therapies) (Department of Health., 2012) programme has increased the provision of appropriate care to those with common mental health problems. The success of the programme is an important step towards implementing the ‘No health without mental health’ strategy proposed by the Government (Department of Health., 2011).

10.10.3 POLICE AND THE CRIMINAL JUSTICE SYSTEM

This study has shown that although perpetrators may have not have been in recent contact with a GP or under the care of mental health services before the offence, a proportion were know to the police and the criminal justice system. A common feature of cases presented in this thesis was intimate partner violence. Tackling domestic violence has been a priority for the government. There has been an expansion in the provision of domestic violence prevention programmes, an increase in the number of shelters and facilities for abused women, and the police have been granted greater powers to intervene in domestic disputes. The National Institute for Clinical Excellence (NICE) is currently developing guidance on how to address domestic violence from a public health perspective. Findings from the consultation document *“Domestic violence: how social care, health services and those they work with can identify, prevent and reduce domestic violence”* are expected to be published in 2014.

The current guidance to tackle violence against women and girls emphasises the need to challenge the attitudes and believes around violence and abuse, and raise awareness of the issues (Home Office, 2011a). The pilot of ‘Clare’s Law’ in which an individual’s past offences for domestic violence can be disclosed to their new partner, will assess if access to this information could reduce domestic violence/homicide. However, the pilot scheme has received criticism. Commentators have argued that if women need to ask these questions, they already have concerns regarding violence in the relationship, which indicates something is wrong. Furthermore, the judiciary has been condemned for being too lenient on perpetrators, thus undermining the safeguards put in place by other agencies. In this study, a number of the perpetrators had breached non-molestation orders, or had exclusion orders, which carried potential lengthy prison sentences, but rather than imposing a custodial sentence they were released. Therefore, all sectors need to be working in unison to ensure the system is working effectively.

Davina James-Hanman, director of the Greater London Domestic Violence Project (Hilpern, 2008) suggested that measures to reduce domestic violence have impacted on the murder-suicide rate, as the rate of domestic violence had reduced by 58% in 6 years in London, and there were no family annihilator homicide-suicides during this period. However, as data from this study has shown family annihilator homicide-suicide cases are very rare. Nonetheless, the Domestic Abuse, Stalking and Honour-Based Violence (Dash) questionnaire, which was introduced in 2009 by ACPO (Association of Chief Police Officers) has assisted police in the identification of women and children at high risk. Referrals to Multi-Agency Risk Assessment Conferences (MARAC) are now standard practice for those at highest risk of serious harm. Multi-Agency Public Protection Arrangements (MAPPA) also ensure the management of violent offenders who pose a risk to the public. In conclusion, tackling domestic violence could have a positive effect in reducing the number of homicide-suicide cases.

10.11 CRITIQUE OF THE STUDY METHODOLOGY

10.11.1 RESEARCH DESIGN

There were strengths and limitations to using a mixed method approach to study homicide-suicide. Addressing the limitations firstly, from the researcher's perspective, undertaking qualitative analysis for the first time concurrently with quantitative analysis was challenging. A lack of experience in qualitative research may have affected the interpretation and presentation of the findings. Undertaking the qualitative analysis on a nationally representative sample was ambitious due to the number of data sources and volume of data generated in each case. Data collection was expensive and time consuming and the in-depth analysis of these cases proved to be a lengthy process. Combining the findings from both the quantitative and qualitative analysis and interpreting the main findings was also challenging. However, I overcame these obstacles by undertaking training on qualitative analysis and through the advice and guidance of my supervisors.

A strength of undertaking a mixed method study was that it provided a holistic approach, extending our knowledge of homicide-suicide. The narrative adds meaning to the descriptive statistics and enables the research questions to be answered more meaningfully. The use of triangulation techniques strengthens the research findings by providing corroborative evidence from multiple sources. It also enables new theories to be generated. By using a national consecutive case series, this also ensured the results were generalisable to the population.

Acquiring data on a national study was time consuming and expensive. In some cases coroners provided photocopies of all the data, other times they were more selective in choosing to forward the most relevant parts of the file. The photocopy charge was usually over £1 per page. The files varied in size, and were not always photocopied in their entirety, because of either their bulk, or the coroner's office did not have the resources to undertake this request. To ensure the researcher accessed information on these cases, assessing the files in person was preferred. As this was a nationwide study, travelling was also time consuming and expensive. The retrieval of information in one case involved a 570 mile round trip.

In this study, I have endeavoured to exploit and maximise the strengths of using both quantitative and qualitative methods in one study. To date, little qualitative work has been undertaken in this field, and few studies have provided theoretical background and examples of cases. The study design has proven successful in generating new themes for future research. This study has shown that more research is required to explore past coping strategies used by perpetrators to manage emotional distress. Identifying patterns of previous 'risky' behaviours (e.g. suicide attempts, self-harm and violence, particularly domestic violence) may help in the future management of these individuals (if engaged with services). The study also identified a high prevalence of lifetime mental illness in these

perpetrators, but this was not accompanied by high rates of recent contact with GP services for psychological problems prior to the offence. Future research could examine prior help-seeking behaviour of these perpetrators and examine why there was a lack of engagement with services.

10.11.2 SAMPLE AND SAMPLING STRATEGY

There are limitations to case ascertainment that need to be acknowledged. Firstly, there is a potential that some cases of homicide-suicide were missed. For example, if the relationship between the victim and the perpetrator was not known, there is a possibility that a police investigation may not have linked the two deaths as part of one event, i.e. if a couple were secretly in a relationship (Krulewitch 2009). Secondly, coroners differentiate between suicide-pacts and homicide-suicide at the inquest. It could be possible that some homicide-suicides were recorded as 'suicide pacts'. Furthermore, two inquests were required in one case in this sample. Following the first inquest, the coroner ruled accidental death for both the victim and perpetrator. However, following the discovery of new evidence, a second inquest was held and the verdict was recorded as unlawful killing and suicide. Thirdly, the sample was based on offences that occurred between 2006 and 2008. At the time of analysis, an inquest had not been completed on one case and therefore it had to be excluded. The delayed notification to the NCISH in one case resulted in it being too late to undertake data collection as the analysis was already underway, therefore the case was not included. Overall, the potential for missing cases was negligible.

The identification of homicide-suicide cases in this study was achieved firstly through the notification of suspected homicides from both the Homicide Index and from police forces. Secondly, the process of verifying verdicts of unlawful killing and suicide was undertaken by cross checking the NCISH database or contacting the coroner directly. The inclusion of open verdicts in suicide research is standard practice. However, it is less conventional to include narrative verdicts. The justification for this inclusion was to minimise potential bias. It was felt that if these cases were excluded from the study, it would be unrepresentative. Where the narrative verdict clearly stated the victim was unlawfully killed and the perpetrator intended to take his/her own life, then this was considered a case. The exclusion of narrative verdicts from suicide research will become more problematic in the future as the number of narrative verdicts has increased over recent years (Carroll, Hawton, Kapur, Bennewith, & Gunnell, 2012).

A criticism of the inclusion of 'selective' narrative verdicts is that there is no precedent in the homicide-suicide literature for doing this. Furthermore, it is only possible to filter these cases in this way when the numbers are small. It is therefore not practical for larger studies of homicide-suicide to undertake this level of scrutiny on the coroner's verdict. If future studies cannot distinguish the nature of these cases by accessing the coroner's narrative, then homicide-suicide cases will continue to be

underreported. One of the strength of this study is the use of different data sources to identify homicide-suicide cases in the first instance.

The time between the suicide and the homicide was also used to define these cases. The reason why the interval between the homicide and suicide is important is because these acts should be considered as one event. From a psychiatric perspective, the likelihood that the perpetrators mental state would be the same at both events is also an important consideration. The time between deaths is a contentious issue that has not been adequately addressed in the literature. In this study, a cut-off of 3 days was used, however it could be argued that this time period is too long and therefore over inclusive and only those who kill and take their own life immediately should be included. In contrast, this requirement may limit the inclusion of cases whose mental state remains unchanged for over 3 days, therefore underestimating cases. At present, the variance in the time periods used in previous studies appears arbitrary, and has possibly been based on the acquisition of cases to increase sample size. There is currently no uniformly accepted definition. Therefore, the definition used in this study was believed to be the most appropriate measure.

Finally, the terminology used in this field of research, i.e. murder-suicide or homicide-suicide is technically incorrect. The perpetrator had not been found guilty of a homicide, yet there is an 'assumed' guilt. The police investigation and the evidence provided to the coroner, though thorough, has not been scrutinised by a criminal defence lawyer. The role of a coroner is not to apportion blame or to determine who killed who. The coroner determines how an individual died and provides a verdict accordingly. In most of these cases, the inquest into the death of both (or multiple) individuals is heard jointly, as the deaths are inextricably linked. The verdict usually given by the coroner states that one party was 'unlawfully killed' and the other 'took his/her own life'. There is overwhelming evidence from the preceding police investigation to link the two events and this assumption is well grounded, but officially there is no legal 'judgement' that the deceased was found to be guilty of homicide.

10.11.3 MEASURE OF MENTAL DISORDER

This study carried out a retrospective analysis of GP medical records to determine the presence or absence of mental illness. A serious weakness of using diagnoses recorded in official documents as a measure of mental illness is the potential to underestimate the prevalence. The reliability of the diagnoses across all the GPs has not been verified and is likely to be inconsistent. Furthermore, it is not known whether the diagnostic data in this study accurately reflects actual symptom-based diagnoses in a reliable and valid way.

There are inherent difficulties in using documentary analysis to determine whether an individual was experiencing symptoms of mental illness at the time of the offence. This can only be achieved reliably

by assessing the perpetrator after the offence. However, in these cases this is not possible. Despite the shortcomings of this method of defining and measuring mental illness, this is arguably the most robust method available on this population.

10.12 RELIABILITY AND VALIDITY OF DATA SOURCES

The use of documents as a primary data source has its limitations. The documents may be incomplete, or edited when forwarded to the researcher. The content may also be insufficient to answer all research questions. For instance, court reports are prepared for judicial reasons, not research. Therefore, it is possible that the information needed to answer the research question cannot be derived from a singular source or document. The documents may also contain bias from the author, an issue discussed earlier in chapter 6.

To counter some of these difficulties, data were used from a number of sources to corroborate the information obtained. If information was considered to be inconsistent with other data sources, this was highlighted. A decision to include this data was made on the basis on both the reliability of the source, and personal judgement. It is recognised that inconsistencies may be a result of potential bias toward the original data collection method or organisation. For example, witnesses may have told the police one account and subsequently given journalists another version of the events. The limitations of each data source have been summarised briefly below.

10.12.1 HOMICIDE INDEX DATA

The homicide index is a live database, continuously updated following notification of case information from the police and court service. The database is flexible and subject to revision and change as new information is received (Francis et al., 2004). Personal experience of using this database has led to cautious interpretation regarding the robustness of the data. Occasional missing cases and incorrect outcome variables are identified by NCISH staff, and passed on to the Home Office. To my knowledge, there does not appear to have been an analysis into the validity of the Homicide Index as a data source, and therefore it is difficult to measure reliability. Because of these inconsistencies, for homicide-suicide cases, the NCISH request additional notification of cases from the police as a secondary data source, as we know that not all cases have been recorded on the Homicide Index.

10.12.2 CORONER RECORDS AND POLICE FILES

Cantor & Alison (2003) outlined how data collected as evidence in police investigations can be used in research. This is also applicable to coronial files. Using this data has both advantages and disadvantages. Official documents are produced for a specific purpose and audience, but in most

circumstances, the public can access this information. By utilising this data source the researcher can view information usually unavailable through other means. Information on some criminal activity, for example, may be difficult or impossible to study via other methods (Berg 2001). However, there are shortcomings with this data source. The information was not intended for use in research but rather to investigate and collect evidence that will lead to a prosecution or inquest. The police will only collect data they deem relevant. The quality and validity of the data will therefore not always be of the standards required for academic scrutiny.

Obtaining access to police or coroner records for research purposes is not easy to achieve. There is a 75 year closure on files and permission to view the inquest file is at the coroner's discretion. Following one request for information to a coroner, access was denied, the reasons given were outlined in a letter that stated:

"Whilst I accept that there may well be considerable potential benefit in the work being undertaken by you, I cannot accept that you are a properly interested person within the meaning of the Coroners Act to enable me to authorise the release to you of the inquest file. It would be necessary for you to forward to me written consent of the next of kin before I would be able to grant permission for you to attend at my office to examine the contents of the file."

As the ethics committee had instructed that direct contact with next of kin was not permitted, it was not possible for me to approach the family to gain consent.

10.12.3 GP MEDICAL RECORDS

There are methodological limitations in the use of GP medical records for research purposes. Mant et al., (2000) assessed the accuracy of GP records on smoking use and alcohol intake, compared to self completed postal questionnaires by patients. The agreement was found to be moderate, with incomplete and misclassified data recorded in GP records. The researchers warned of the potential confounders, which should be adjusted for when using this data source. Matthews et al., (1994) found that not all consultations were recorded in the case notes, which may present an underestimation in studies using consultations. However, other studies such as Jordan (2004) found that the use of electronic systems improved reliability. Furthermore, the variation in the quality of GP record keeping has previously been criticised. It was beyond the scope of this study to check the reliability and validity of this data, but it is a potential limitation.

10.12.4 NEWSPAPER REPORTS

The use of newspaper databases such as Lexis-Nexis have been criticised for not being comprehensive in their reporting, and have been described as inconsistent and incomplete. When

using a database such as Lexis-Nexis, cases could be missed when relying on the presence of keywords as search terms. However, in this study the use of the individual's names in the search, in conjunction with terms such as homicide or suicide made missing data less likely. Duwe (2004) suggested that newspaper coverage of homicide-suicide events were more likely to include cases of mass murder with multiple victims in public places. In England and Wales, incidents of homicide-suicide are highly newsworthy, and the overwhelming majority of the cases in this study received coverage in the national media. Some cases received more detailed press coverage than others, when the story to wider social issues.

10.13 DATA COLLECTION TOOLS

Quantitative data were collected via the use of a structured tool, the design of which was based on a similar questionnaire schedule used in previous research (Pearson et al., 2009). This pro-forma was also used to capture data used in the qualitative analysis. There were shortcomings in the method in which data were extracted from coroner's files when in situ. Notes were taken and extracts of witness statements were copied verbatim. This was undertaken during a single visit to the office. The documents could not be removed or photocopied and there was a time restriction on extracting the relevant data. As most visits involved travelling across the country, there was only one opportunity to retrieve the information. Therefore, a limitation of this method would be potential selection bias of the material I considered to be relevant. Unlike the files sent to the office, I was unable to refer back to the other files. The limitation therefore is that I may have missed some of the nuanced remarks from witnesses, which may have been important in later iterative assessments in the qualitative analysis.

10.14 DATA ANALYSIS

10.14.1 STATISTICAL LIMITATIONS

Statistical analyses were restricted by the small sample size. Descriptive statistics were provided, but there was not enough statistical power to test for association. Consideration was given to undertaking multivariate logistic regression analysis; however, this was not undertaken for the following reasons:

- 1) The small sample size suggests the power of detecting anything significant was low.
- 2) With small group sizes, potential missing values prohibits multivariate analysis because of the listwise nature of procedures.
- 3) The agreed strategy was not to over-analyse the data, or trawl the data to 'squeeze' results that were simply not there.

It is also acknowledged that given the richness of the data collected, additional analysis could be undertaken with this data in the future. For example, the data could be compared with the NCISH's existing homicide-only or suicide-only cases in a case control study. Complex statistical analysis could then be used to investigate the study's research questions, and potential risk factors may be identified.

10.15 REFLECTION ON THE RESEARCH

I am a researcher with over 10 years experience in researching homicide and suicide. I recognise that there will inevitably be bias in my approach to these cases. Firstly, I have an understanding of mental illness in relation to violence and homicide perpetration, for example, people may not be responsible for their actions if the offences were committed whilst they were unwell. Therefore, this may have biased my approach to the interpretation of these cases. I have also undertaken research on the reporting of homicide by people with mental illness in the media, which also shaped my understanding of how these cases are reported in tabloid and broadsheet newspapers. Furthermore, having conducted previous research in homicide-suicide and this being an area of personal interest, I have read extensively the descriptions of cases in the literature and the media prior to undertaking this research, which may have influenced my understanding of these cases. Therefore, my existing preconceptions of the perpetrators will inevitably be reflected in my interpretation of the findings, as previously highlighted (Miles & Huberman, 1994).

In my role as a researcher, I have used pro-formas and questionnaire schedules to extract data from documents such as psychiatric reports, and have undertaken statistical analysis of national datasets for reports and journal publications. However, I had no previous experience of qualitative analysis prior to this study.

Another limitation is that I am not clinically trained, which could have been an advantage when interpreting psychological distress in these cases. However, I feel I have sufficient life experience to enable me to recognise and empathise with the individuals under investigation. The loss experienced by cases in this study is not uncommon in everyday life, although the perpetrator's reaction to this adversity was extreme. Throughout the study I have tried to remain impartial and non-judgmental; I inevitably brought my own bias from previous experience and understanding of how people deal with emotional distress and how they use different coping mechanisms. This will have had an effect on how I have interpreted the cases.

During the course of the study, I have been exposed to sensitive and distressing material, and have reviewed disturbing evidence in the investigation files such as harrowing witness statements and crime scene photographs. These factual accounts are reported in explicit detail as these documents are used in evidence. The methodology employed in this study requires the researcher to become

immersed in the detail and to try and understand these complex behaviours. There were certain cases that I ruminated over and became somewhat preoccupied with the detail and imagery of the incident. In other cases, the smallest detail or action of the perpetrator would capture my imagination in trying to understand its significance.

In addition to studying documents, hearing firsthand accounts of the incidents made the subject matter come 'alive', rather than just being a narrative. By attending an inquest, or listening to the recording of an inquest on CD's, I observed the family's grief, which was a powerful reminder of the loss and despair that surviving family members experience. When a family member turned and berated the press at an inquest, I immediately stopped taking notes and found myself feeling guilty for being there, as if I was intruding on a deeply personal matter, despite it being a public hearing and being personally invited to attend by the coroner.

I interviewed the mother of a perpetrator in her home, whilst she was caring for her grandchild. Data from the interview was not used in the study, because this was the only interview undertaken. The interviewee recounted the homicide-suicide incident and her own previous personal struggles raising her children in an abusive household. She had a very difficult and traumatic life herself. I found myself reflecting on how she coped with everyday life, her faith seemed important in achieving this. Following the interview on the train journey home, a group of three women of similar age were discussing their plans for an evening, which involved dinner and attending the theatre. I could not help but contrast their fortunes, (though I knew nothing about these women), I contemplated how some people are ill fated by being born into a cycle of violence and abuse. This inevitably shapes their lives, influences their choices, and limits their options and outcomes. Growing up in this environment and the consequential upheaval appeared to have had a significant detrimental impact in this particular perpetrator's life.

In a more general reflection of undertaking this research, I found there to be numerous administrative and bureaucratic challenges. Identifiable information is required to link data sources and is difficult to obtain from official sources. It would have been extremely difficult to acquire this type of information if the study had not been undertaken as part of the NCISH. The study experienced some considerable delays in obtaining approval to access deceased patients medical records without the consent of the next of kin. It took over 12 months to secure written approval from PIAG (now NIGB). Without this approval, R&D approval could not be obtained from Primary Care Trusts, which delayed this phase of data collection considerably. The study was not adopted on to the NIHR Portfolio therefore, acquiring R&D approval from over 50 individual PCTs was time consuming and added to the delay in accessing medical records data. For cases in Wales, all forms for the RM&G application process were translated into Welsh for 1 PCT before the request would be considered. Undertaking this type of research

therefore would be very difficult without the existing support, resources and expertise of an established research unit. It would not have been possible to have completed this study without the NCISH's already established data sharing agreements with some of the data providers and the extensive work regarding information security protocols, which had already been in place prior to commencing the research.

CHAPTER 11: DIRECTIONS FOR FUTURE RESEARCH

Much has already been learnt about the offence characteristics and demographic features of perpetrators and victims of homicide-suicide, however much remains unknown. A number of methodological challenges, not least the lack of an internationally acceptable definition and an established inclusion criterion, limit current academic research on this phenomenon. This is an important issue for future research, in order to enable reliable cross-cultural comparisons. The findings of this thesis are a valuable addition to the existing literature. The data provides a rich source of information that adds to our understanding of the circumstances in which these events occur and the role of mental illness in these offences. This type of qualitative research can begin to address some of the unanswered questions regarding the phenomenon and identify areas for future research. Suggestions for additional research that would enrich our understanding of these incidents have been outlined below.

11.1 COPING STRATEGIES FOR EMOTIONAL DISTRESS

Through the qualitative analysis of this phenomenon, themes for future research have emerged. The prevalence of previous histories of suicide attempts, self-harm and aggression warrant further investigation as possible risk factors. Understanding how these individuals have coped with previous emotional distress may provide further insight into the behavioural features of perpetrators. In addition, despite the high proportion of perpetrators with a history of mental health problems, relatively few had consulted with their GP regarding emotional distress prior to the offence. It would be valuable to examine the barriers for perpetrators in accessing services, and how certain 'groups' could be encouraged to seek help when experiencing this type of emotional crisis.

11.2 HOMICIDE-SUICIDE AND DOMESTIC VIOLENCE

Evidence from this study supports the call by Warren-Gordon et al., (2010) for future research examining patterns of domestic violence in intimate partner homicide-suicide. Prediction of violent behaviour is unquestionably difficult, however there are often warning signs within these turbulent relationships. A closer examination of previous offending in all these cases (including elderly intimate partner homicide-suicides) by examining police data on call-outs for domestic abuse, cautions and reprimands may help our understanding of the extent of the problem, duration and frequency of these incidents by the perpetrator in that relationship, and previous relationships. This depth of information may also help to delineate between those homicide-suicides that are committed in the context of 'controlling behaviour' and those involving mutually violent relationships. The proportion of victim-precipitated homicide-suicide and the dynamics within these relationships is also an area for future investigation.

11.3 LONGITUDINAL TRENDS

A number of previous studies have compared the international rates of homicide-suicide (Coid, 1983; Milroy 1995; Large 2009). However, little previous research has specifically focusing on longitudinal homicide-suicide trends within populations or regional samples. It has been argued that homicide-suicide rates have remained stable over recent decades because they are familial homicides. The theory suggests that this type of homicide is less likely to be affected by a fluctuation in overall homicide rates, and therefore will be comparative to the rate of intimate partner homicide. Conversely, other researchers have suggested that homicide-suicide is similar to suicide and therefore it could be hypothesised that there may be a relationship with the suicide rate.

A comparison of homicide, suicide and homicide-suicide rates within the UK could add to our knowledge on longitudinal patterns within this group, in relation to socio-economic factors and offence characteristics such as weapon use. Future studies could, for example, examine the impact of the recession and whether austerity measures affecting social care provision impact on homicide-suicide, or examine any temporal patterns in light of new domestic violence prevention schemes. It has been asserted that factors such as improvements in the diagnosing and treating of mental illness, improved availability of counseling services and social support may have lead to a downward trend in homicide-suicide (Gartner & McCarthy, 2008).

The correlation analysis undertaken in this study suggests that there was no relationship between homicide-suicide rates and homicide-only and suicide-only rates. However, this data was only over a 3 year period. More research on this topic needs to be undertaken over a greater time period to assess the temporal trends more robustly.

11.4 COMPARISON STUDY

Most research on homicide-suicide is descriptive and limited by the lack of a comparator. Some studies have compared homicide-suicide to homicide only, others to suicide only and some have compared homicide-suicide to both (Logan et al; Flynn et al., 2009). Flynn et al., (2009) in a comparison of homicide-suicide with suicide and homicide used univariate and multivariate logistic regression to examine factors that would increase the risk of suicide following homicide. However, the data were not matched, either by age or sex of the perpetrator, or by type of offence. Some studies have specifically focused on intimate partner homicide or filicides, but have not matched characteristics within these groups. To further our understanding, future research needs to use comparators or controls to place the findings in context. Robust case-control designs using a sufficient sample size to undertake the statistical analysis may be of benefit to identify clinical and behavioural risk factors.

11.5 INTER-DISCIPLINARY RESEARCH

The research design used in this research was a mixed method approach, incorporating both quantitative and qualitative data. Statistical techniques were used in conjunction with framework analysis. In future investigations it might be informative to embrace a range of methodologies to investigate this phenomenon, drawing upon research undertaken in different disciplines. Furthermore, as these cases are heterogeneous, combining expertise and data sources from other fields such as social services, the prison service, the probation service, as well as mental health services, would be a valuable collaboration. Expanding our understanding beyond a medical model would prove an important step forward toward prevention.

11.6 DEVELOPING A COMPREHENSIVE NATIONAL DATABASE

To facilitate high quality research in this field, researchers require access to reliable and robust datasets. If this type of data were available in England and Wales over longer than a 3 year period, a longitudinal qualitative approach could be taken in the analysis of temporal variations in homicide-suicide. To achieve this, a comprehensive national database is required similar to the National Violent Death Reporting System, managed by the Centers for Disease Control and Prevention in the U.S. The surveillance system monitors violent deaths in 18 states, with four main data sources: coroners and medical examiner reports, police reports, data from forensic laboratories and death certificates. The linkage of data sources such as these in the UK could provide a complete dataset, which could be used to increase our understanding of these events and inform prevention. Linking valuable national datasets such as the Homicide Index, the NCISH's homicide-suicide database, National Primary Care Database such as the Clinical Practice Research Datalink (CPRD), and data extracted from police investigation reports or coroner's files would be possible. A greater depth of information we have on a large sample of cases would increase the potential to explore the rare subgroups such as filicide-suicide or elderly homicide-suicide in more detail, and enrich our understanding of these cases.

CHAPTER 12: CONCLUDING REMARKS

Homicide-suicides cases generate a great deal of public interest, but this does not necessarily translate into a “social problem” that demands attention from policy makers. This may be because the events are rare compared to homicide or suicide alone and are viewed as an extreme and disproportion reaction to common societal and personal problems. However, the devastation caused by these incidents is far-reaching. The act results in the deaths of an estimated 40-50 people per year. Homicide-suicides are generally considered as a variation of either suicidal or homicidal behavior, yet most studies of suicide or homicide do not include this sub-group in their analyses. Separate studies of homicide-suicide are typically descriptive, they do not have a comparison group, and few sociological and psychological autopsy have been undertaken, and the phenomenon is not well understood by academics. This study addresses the gap in the literature and provides valuable qualitative interpretations of these incidents on a nationally representative sample, which to my knowledge has never been previously undertaken.

The perpetrators of homicide-suicide in this study were overwhelmingly middle-aged white males, who recently experienced a relationship breakdown; had a history of violence and or depression. The perpetrators experienced conflict with a partner who they had a strong emotional attachment with, causing immense stress and strain, and this lead to a struggle to retain power and control and dominance over the victim and the situation. The circumstances of these incidents are complicated further by the perpetrators poor coping mechanisms and previous history of mental health problems.

To generate effective interventions for violence and suicide within this population, a broad public health approach is required to remove the stigma of mental illness and encourage help seeking behaviour. The wider provision and increased accessibility of counselling services may encourage more people to discuss the problems causing psychological distress, which is traditionally and culturally difficult for men to do.

The results of this study indicate that there is still a significant amount of research required before we can fully understand the risk factors in homicide-suicide. High quality research is required on specific sub-groups within this population to identify and target those at most risk, and tailor interventions towards them. As these incidents are heterogeneous and involve complex interpersonal relationships, the evidence from this study suggests that future research should address the issue on homicide-suicide in a social, economic and clinical context, with particular focus on domestic violence and mental disorder. To date interventions are elusive, because risk factors have been perceived to be too generic. There is a limit to the extent that prevention can realistically be achieved when an adverse outcome such as homicide-suicide occurs, as it is extremely rare. However, by addressing these wider public health problems, a reduction in the number of homicide-suicides may be achievable.

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APPENDICES

APPENDIX 1: LITERATURE SEARCH STRATEGY

A review of the literature was undertaken to identify key studies of homicide, suicide and homicide-suicide, with particular focus on mental illness.

Studies were restricted to the English language.

SEARCH STRATEGY

The University of Manchester library electronic databases were searched. These databases included:

- Ovid MEDLINE
- EMBASE
- PsycINFO
- PubMed
- Psychology: A Sage Full-Text Collection
- Cochrane Library
- Criminology: A Sage Full-Text Collection
- Criminal Justice Abstracts

Cross-referencing was used to identify articles from reference lists published in peer review journal articles, book chapters, and books. Internet searches were also conducted via Google and Google Scholar.

SEARCH TERMS

A range of search terms used, these included:

- Homicide-suicide
- Homicide followed by suicide
- Murder-suicide
- Dyadic death
- Suicide after homicide
- Filicide-suicide
- Family violence
- Family homicide
- Familicide
- Intrafamilial homicide
- Intimate partner violence

- Femicide
- Femicide-suicide
- Extended suicide
- Attempted suicide
- Parasuicide
- Self-harm
- Mental illness
- Mental disorder
- Depression

These search terms were combined using Boolean operators (AND, OR, NOT). Wildcard operands such as (*) were used to find words that begin with specified characters, for example homicid* would return homicide, homicides and homicidal. Filters were also applied in some searches to restrict the results by publication date, or article type. For all relevant articles, full text copies were retrieved where possible. If articles were not available online or from the University of Manchester library, they were ordered from the British Library via the University inter library loans system.

APPENDIX 2: HOMICIDE INDEX VARIABLES

The data provided by the Home Office Homicide Index contained the following variables:

Home Office case number	Homophobic motive	Suspect Sexuality
Police force name	Alleged homosexual panic	Suspect visual ethnicity
Number of victims	Prior dom. violence against victim	Suspect ethnic self class grouping
Victim number	Prior dom. violence against suspect	Suspect ethnicity self class
Initial classification	Provoked by violence from victim	Suspect country of birth
Currently recorded as homicide?	Victim harassed by suspect	Suspect employment status
Offence date	Linked to mental state of suspect	Suspect occupation
Date recorded	Linked with prior threats to kill	Conviction/case conclusion date
Year recorded	Gang related	Suspect crown court
Victim surname	Contract killing	Suspect offence indicted
Victim first name(s)	Drug related	Suspect final outcome group
Victim date of birth	Victim killed during employment	Suspect final outcome
Victim age	Victim missing person	Suspect court disposal
Victim gender	Victim living with suspect	Sentence duration (months)
Victim drink/drug level	Suspect attempted suicide	Appeal marker
Victim illegal drug user	Body recovery	On bail for other offence
Victim illegal drug dealer	Victim dismembered	Suspect drink drug level
Victim sexuality	Victim bound/gagged	Known illegal drug user
Victim visual ethnicity	Victim disturbed clothing	Known illegal drug dealer
Victim country of birth	Body moved after death	Motive to obtain drugs
Victim employment status	Body concealed	Motive to steal drug proceeds
Victim occupation	Number of suspects	
Offence location	Principal suspect	
Method used	Suspect number	
Method other (text)	Corporate-company homicide	
Firearm used	Suspect surname	
Firearm type	Suspect forename	
Firearm licensed	Suspect date of birth	
Sharp instrument used	Suspect age	
Sharp instrument type	Suspect gender	
Relationship to suspect grouping	Suspect marital status	
Relationship to suspect	Date charged	
Main circs	Date charged not known	
Main circumstance of offence other	Illegal immigrant	
Racial motive	Asylum seeker	
Religious motive	Previous homicide conviction	
Sexual motive	Previous serious conviction	

APPENDIX 3: PRO-FORMA FOR NCISH HOMICIDE-SUICIDE POLICE FORCE DATA COLLECTION

Incident Details: Date of Incident: ____/____/____ Nature of Incident: Homicide followed by <input type="checkbox"/> death of Perpetrator <input type="checkbox"/> Suicide pact (assume elder is perpetrator) * <input type="checkbox"/> Nature of incident is unclear Other (please specify) <input type="checkbox"/>	Surname	First name or Initials	Date of Birth	Date of Death	Sex M/F	Ethnic Group	Address
	Method of homicide: * (see note below if suicide pact)				Relationship of Perpetrator to Victim:* (see note below if suicide pact)		
	Method of suicide:						

Information on All Cases of Homicide Followed by Death of Perpetrator (including possible suicide pacts)

Please complete and return this form to the address below. If you have no cases to report please tick box, sign and return form

*We realise that suicide pacts rarely have a victim and a perpetrator, but so we do not miss these cases, for the purpose of completing this form, can you please call the elder person the perpetrator, and the younger the victim. We establish full details of the case from another source at a later stage in our inquiry.

Signed:.....Name:.....Date:.....Police Force:..... Address:

The National Confidential Inquiry into Suicide and Homicide by People with Mental Illness

Homicide followed by suicide

Coroner and Police File Pro-forma

Version 1 26/03/2007

CASE ID:

DATE:

Section A: Case Summary

1. Date of offence/...../.....

2. Time of offence

3. Date of suicide/...../.....

4. Time of suicide

5. How many victims were involved in the incident?

--	--

Name	Relationship to offender

6. How long had the offender and victim known each other?

.....

7. Method of homicide

1st 2nd 3rd

- | | | | |
|----|-------------------|----|------------------|
| 1 | Sharp instrument | 2 | Blunt instrument |
| 3 | Hitting / kicking | 4 | Strangulation |
| 5 | Suffocation | 6 | Shooting |
| 7 | Drowning | 8 | Poisoning |
| 9 | Arson | 10 | Causing to fall |
| 11 | Other | | |

--	--	--

8. Were there any witnesses to the incident?

☐

No = 0

Yes = 1

If yes how many?

--	--

9. Describe the events leading to the incident

--

10. Describe the incident (how did the victim & perpetrator die?)

11. Where did the homicide occur?

☐

- 1 Offenders home
- 2 Victims home
- 3 Home shared by victim and offender
- 4 Other house
- 5 Shop/bank/public place
- 6 Work
- 7 School
- 8 Street/city/town centre
- 9 Park
- 10 Rural/countryside
- 11 Hospital
- 12 Prison/police station
- 13 Other, please specify.....

12. Where did the suicide occur?

☐

- 1 Offenders home
- 2 Victims home
- 3 Home shared by victim and offender
- 4 Other house
- 5 Shop/bank/public place
- 6 Work
- 7 School
- 8 Street/city/town centre
- 9 Park
- 10 Rural/countryside
- 11 Hospital
- 12 Prison/police station
- 13 Other, please specify.....

13. What brought the offender and victim together?

☐

- 1 Regular scheduled activity
- 2 Irregular scheduled activity
- 3 Offender sought victim out
- 4 Victim sought offender out
- 5 Other, please specify.....

14. What were the problems that led to the incident?

- 1 unprovoked / no problems

☐

- 2 treatment / custody of children

☐

3	infidelity / alleged infidelity	<input type="checkbox"/>
4	personal rejection	<input type="checkbox"/>
5	separation / divorce	<input type="checkbox"/>
6	financial / employment	<input type="checkbox"/>
7	possession of goods	<input type="checkbox"/>
8	domestic violence / physical or emotional abuse	<input type="checkbox"/>
9	mental illness	<input type="checkbox"/>
10	other	<input type="checkbox"/>
15.	Was the offender under the influence of alcohol at the time of the incident?	<input type="checkbox"/>
No = 0	Yes = 1	<input type="checkbox"/>
16.	Was the offender under the influence of drugs at the time of the incident?	<input type="checkbox"/>
No = 0	Yes = 1	

17. Was there evidence that the homicide was premeditated?

☐

No = 0

Yes = 1

Please explain

18. Had the deceased discussed with anyone what they were planning?

No = 0

Yes = 1

a) If yes, please detail

19. Was there evidence that the suicide was premeditated?

No = 0

Yes = 1

☐

Please explain

20. Was there evidence that the homicide was accidental?

☐

No = 0 Yes = 1

Please explain

21. Was anyone else present at the time of the incident?

☐

No = 0 Yes = 1

If yes, who?

- | | | | |
|---|-----------------------|---|-----------|
| 1 | Stranger/Passer by | 2 | Friend |
| 3 | Partner | 4 | Relative |
| 5 | Medical Professional | 6 | Colleague |
| 7 | Other, please specify | | |

22. Who discovered the victim(s)?

☐

- | | | | |
|---|----------------------|---|-----------------------|
| 1 | Stranger/Passer by | 2 | Friend |
| 3 | Partner | 4 | Relative |
| 5 | Medical Professional | 6 | Police |
| 7 | Colleague | 8 | Other, please specify |

☐

23. Did the offender contact anyone after the homicide or try to explain what had happened?

No = 0 Yes = 1

If yes, give details

24. Were there precautions against discovery or intervention?

No = 0 Yes = 1

If yes, please detail

25. Was the offender arrested by the police after the incident?

No = 0 Yes = 1

26. Who discovered the offender?

- | | | | |
|---|----------------------|---|-----------------------|
| 1 | Stranger/Passer by | 2 | Friend |
| 3 | Partner | 4 | Relative |
| 5 | Medical Professional | 6 | Police |
| 7 | Colleague | 8 | Other, please specify |

27. How long after the homicide did the offender commit suicide?

1 <24 hours

2 1-3 days

3 3-7 days

4 8-28 days

5 >28 days

28. Did the deceased give any reason(s) for wanting to die?

No = 0

Yes = 1

If yes, please detail

29. Did the deceased leave a suicide note?

No = 0

Yes = 1

If yes, please provide brief details of its content

30. Did the deceased put their affairs in order or give away any possessions?

No = 0

Yes = 1

If yes, please detail

The National Confidential Inquiry into Suicide and Homicide by People with Mental Illness

Homicide followed by suicide study

General Practitioner Medical Records Pro-forma

[Version: 1/2007]

CASE ID:

.....

DoD:

.....

GENERAL PRACTITIONER ID:

.....

DATE:

.....

RESEARCHER NAME:

.....

SECTION 1: GENERAL QUESTIONS

- 1. How long had the deceased been registered with their General Practitioner?**

_____ Months	_____ Years
--------------	-------------

- 2. Total number of contacts with General Practitioner in the 12 months preceding homicide - suicide.** *(Please state number of consultations – face to face contacts)*

--

- a) If there were contacts in the 12 months preceding the homicide-suicide, please provide brief details.** *(Please state dates & brief reasons for consultations)*

--

- b) If NO contacts in 12 months preceding homicide-suicide, what was the date of the last contact with the General Practitioner?

_____ Day	_____ Month	_____ Year
-----------	-------------	------------

N/A

☐

Only continue to complete Sections 1, 2, 3 & 4 if there has been contact with the GP in 12 months prior to suicide.

3. Were any of these contacts as a result of previous incidents of deliberate self-harm or suicide attempts?

Yes ☐

No ☐

N/K ☐

- a) If yes, how many?

N/A

☐

- b) Date of most recent contacts.

_____ Day	_____ Month	_____ Year
-----------	-------------	------------

N/A

☐

- c) Method used to deliberately self-harm or attempt suicide in most recent of these contacts. (If more than one, please give direct cause)

Self- poisoning

☐

Carbon Monoxide Poisoning

☐

Hanging/ strangulation

☐

Drowning

☐

Firearms

☐

Cutting/ stabbing

☐

Jumping from height

☐

Jumping/ lying before train

☐

Jumping/ lying before road vehicle

☐

Suffocation

☐

Burning

☐

Electrocution

☐

N/K

☐

N/A

☐

Other

☐

(If other please specify)

4. Were any of these contacts as a result of previous incidents of serious violence?

Yes

☐

No

☐

N/K

☐

a) If yes, how many?

N/A

☐

b) Date of most recent contact.

N/A

☐

Please use the space below to provide any other comments.

SECTION 2: FINAL GP CONTACT

5. What was the date of the last consultation between the deceased and their General Practitioner?

_____ *Day* _____ *Month* _____ *Year*

6. How long before the homicide-suicide did this contact occur?

Less than 24 hours

More than 4 weeks-less than 13weeks

More than 24 hours-less than 7 days

☐

More than 13 weeks-less than 6 months

□

More than 7 days-less than 4 weeks

More than 6 months-1 year

☐

7. What was the reason for this contact?

Mainly psychological reasons

7

Both physical & psychological

Mainly physical reasons

9

N/K

Other

7

(If other please specify)

--

8. Was any treatment offered at last contact?

Yes

☐

No

☐

N/K

☐

a) If yes, please specify. (Brief details of medication, advice, counselling or other treatments)

N/A

☐

b) If yes, did the deceased accept this treatment?

Yes

☐

No

☐

N/K

☐

N/A

☐

9. Is there any clear evidence in the records of any of the following being present at the last consultation?

	<i>Yes</i>	<i>No</i>	<i>Not known</i>
Emotional distress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Depressive illness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Deterioration in physical health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Delusions or hallucinations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hostility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased use of alcohol	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased use of other substances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recent deliberate self-harm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hopelessness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Suicidal Ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please use the space below to provide any other comments about last contact with General Practitioner.

SECTION 3: PHYSICAL HEALTH

10. Was the deceased diagnosed with any physical illnesses in the 12 months before their death?

Yes

☐

No

☐

N/K

☐

a) If yes, please specify the disorder(s) & date(s) of diagnosis.

N/A

☐

11. Was the deceased suffering from any chronic physical illnesses?

Yes

☐

No

☐

N/K

☐

a) If yes, please specify the disorder(s) & date(s) of diagnosis.

N/A

☐

12. Was the deceased suffering from any terminal illnesses?

Yes ☐ No ☐ N/K ☐

a) If yes, please specify the disorder(s) & date(s) of diagnosis. N/A ☐

13. Was the deceased prescribed any medication for their physical health problems in the 12 months prior to death?

Yes ☐ No ☐ N/K ☐ N/A ☐

a) If yes, please specify. (Name of medication, dose prescribed & dates)

N/A ☐

b) If yes, did the deceased accept this medication?

Yes ☐ No ☐ N/K ☐ N/A ☐

14. Were any referrals made for the deceased’s physical health problems in the 12 months prior to death?

Yes ☐ No ☐ N/K ☐ N/A ☐

a) If yes, please specify. (Brief details - speciality, hospital)

N/A ☐

b) If yes, did the deceased accept the referral?

Yes ☐ No ☐ N/K ☐ N/A ☐

15. Did the deceased undergo any surgical procedures / operations for their physical health problems in the 12 months prior to death?

Yes ☐ No ☐ N/K ☐ N/A ☐

a) If yes, please specify.

N/A

☐

16. Was the deceased waiting for any surgical procedures / operations for their physical health problems in the 12 months prior to death?

Yes ☐ No ☐ N/K ☐ N/A ☐

a) If yes, please specify.

N/A

☐

17. Was the deceased offered any other treatment for current physical health problems in the 12 months prior to death?

Yes ☐ No ☐ N/K ☐ N/A ☐

a) If yes, please specify.

N/A

☐

b) If yes, did the deceased accept this treatment?

Yes ☐ No ☐ N/K ☐ N/A ☐

Please use the space below to provide any other comments on deceased's physical health.

SECTION 4: MENTAL HEALTH

18. Has the offender ever been diagnosed with a mental disorder?

Yes

☐

No

☐

N/K

☐

Only continue to complete Section 4 if the answer to Question 21 is YES

19. When was the deceased first diagnosed with a mental disorder?

_____ Day _____ Month _____ Year

N/K

☐

20. What was the diagnosis?

21. Who made this diagnosis?

22. If their General Practitioner did not make this diagnosis, when did they first become involved in the mental health care of the deceased?

_____ Day _____ Month _____ Year

N/A

☐

23. Had the deceased been diagnosed with any other mental disorders?

Yes

☐

No

☐

N/K

☐

a) If yes, please specify including dates of diagnosis. N/A

☐

24. Was the deceased prescribed any medication for their mental health problems in the 12 months prior to death?

Yes

☐

No

☐

N/K

☐

a) If yes, please specify. (Name of medication, dose prescribed & dates)

N/A

☐

b) If yes, did the deceased accept this medication?

Yes ☐ No ☐ N/K ☐ N/A ☐

25. Was the deceased offered any other treatment for their mental disorder in the 12 months prior to death?

Yes ☐ No ☐ N/K ☐

a) If yes, please specify.

N/A

☐

b) If yes, did the deceased accept this treatment?

Yes ☐ No ☐ N/K ☐ N/A ☐

26. Was the deceased receiving mental health care from any other person in the 12 months prior to suicide? (e.g. counsellors/ substance abuse services)

Yes ☐ No ☐ N/K ☐

a) If yes please specify.

N/A

☐

--

Please use the space below to provide any other comments on the deceased's mental health.

APPENDIX 6: THEORETICAL FRAMEWORK

As outlined in chapter 6, framework analysis was used to examine the documentary evidence. This process had five key stages; familiarisation; building a theoretical framework, indexing, charting and, mapping and interpretation. This appendix demonstrates how the process of conducting the framework analysis was achieved.

STAGE 1: FAMILIARISATION

The documents obtained from all sources were read closely, firstly to familiarise myself with the content of the files, but also to determine the most relevant material for extraction. To aid the computer analysis of this data, the information contained in the files for each case were summarised in a single word document. Due to the confidential nature of this information, and to protect the individual's anonymity, it is not possible to present a copy of the summarised document in the appendix.

STAGE 2: DEVELOPMENT OF THEMES

The second stage of the analysis was to build a theoretical framework from the initial examination of the data. The themes and sub-themes were carefully analysed in detail and coded based on the a priori research questions and knowledge of the subject area. At this stage, the themes were descriptive examples. The associated text has been provided in Table 22. To summarise, these eight initial themes were:

- Using self-harm or attempting suicide as a coping strategy
- Expressing suicidal ideation prior to the incident
- Emotional distress expressed in suicide note or final communication
- History of violent behaviour
- Behavioural characteristics
- History of mental disorder
- GP notes about the patients' mental state
- Adverse life events

STAGE 3: INDEXING

The next stage was to recode the data into higher themes. Some codes appeared in more than one theme for example this section of text:

They were visited 3 times a day by social services. In early 2006 (wife) was assessed during a respite admission at a nursing home. It was noted that she needed total personal care and

feeding and a recommendation was made for 24-hour care in a dementia setting. He found this difficult to accept and she returned home.

Firstly, this text was coded as an 'adverse life event' as the victim's deteriorating health impacted on the perpetrators daily life. Secondly, it was coded under the 'behaviour characteristics' theme, as the perpetrator was in denial about the severity of his wife's declining health and the need for her to be admitted to a nursing home. With subsequent examinations of the text, the interpretation of themes became focused on the significant features of these cases.

STAGE 4: CHARTING

Data were charted using the software package MaxQDA, which produced Excel spreadsheets on individual themes. These charts captured the coded pieces of information from the text. Data were organised by individual or by theme. This method of handling the data facilitated an organised and coherent approach to the interpretation of the data. An example of how the data were charted from the initial theoretical framework is presented in Table 23. The chart illustrates an abbreviated version of the Excel file, listing the coded text associated with an initial theme from the theoretical framework: using self-harm or attempting suicide as a coping strategy.

TABLE 23: OUTPUT OF THEMATIC ANALYSIS: SELF-HARM AND/OR ATTEMPTED SUICIDE

Case number	Description
ID 9	Two main suicide attempts in addition to the one when age 11. 1985 she walked into the sea fully clothed and 1986 she went to Beachy head. See had made previous suicide attempts and was taking Citalopram 10mg.
ID 22	She found it difficult to adjust to the new culture, but she was accusing him of being gay. 14th October 2003, she stabbed herself in the chest in front of him. 12 Jan 2004, locked herself in the bathroom and nearly drank a full bottle of bleach. She was pregnant. The doctors did gave her a psychiatric assessment – no mental illness but social problems. On occasions, she was violent to him and knocked him down the stairs. She was violent to his two sisters when she first arrived and this was reported to social services.
ID 18	After his girlfriend became aware of his conviction the relationship ended. He reacted by taking an overdose in Aug 2003 and was admitted to hospital for 4 days.
ID 25	His history was of poor impulse control leading to aggression towards others and episodes of self injury by overdose and wrist cutting.
ID 86	Within the last 3 weeks however, she confirmed that before they met she had a relationship. This was too much for him to cope with, and on 26th Nov 2007 he attempted to commit suicide by connecting a hose from the car exhaust and filling his car with fumes. His wife and daughter found him and he was taken to

	hospital.
ID 99	He had some history of mental health issues, and although there is no evidence that he ever sought professional psychiatric help, records from the Hospital show that he was admitted on 2 occasions in 1987 and 1993 as a result of suicide attempts. In 1987 he reportedly jumped out of a window of a first floor flat following domestic problems. He suffered back pain as a result. In 1993 he was again admitted to A&E having taken an overdose of paracetamol with two bottles of sherry.

STAGE 5: MAPPING AND INTERPRETATION

The text presented in Table 23 was mapped into one of the final four theme “emotional response to adverse incidents”. As I immersed myself in the data, it became clear that for a number of perpetrators, previous self-harming and suicidal behaviour was linked to specific domestic incidents with a partner or long standing mental illness. Therefore, a pattern of behaviour was associated with emotionally stressful events. Some of the original themes from the thematic framework were no longer considered relevant, and others were merged and recoded. The final four themes were:

- Causes of emotional distress
- Emotional response to adverse incidents
- Coping with emotional distress
- Evidence of mental illness

This appendix aimed to provide a transparent illustration of how the framework analysis was used to generate the final themes. By briefly illustrating each stage, it is hoped that the decision making process is clearly demonstrated. However, the analysis is complex and relies on the researcher’s interaction with the data. It is not always possible to document the subjective method of coding or handling the data, or the reasoning behind the interpretation of data. However, this interaction of the researcher and the data is in itself, a fundamental feature of qualitative analysis.

APPENDIX 7: PUBLICATIONS

PEER REVIEWED PAPERS

Oram, S., Flynn, S., Shaw, J., Appleby, L., Howard, L. M. (2013). Mental illness and adult domestic homicide: a population-based descriptive study. *Psychiatric Services* (in press)

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