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Reducing homicide: A review of the possibilities*

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Abstract. This paper explores the potential for reducing homicide, with a particular focus on the United Kingdom. It draws upon data from the Homicide Index, international research on homicide, and the general crime reduction literature. Homicide is highly diverse in its characteristics, causes and dynamics, so effective strategies to reduce it are likely to require tailoring to specific forms. The paper focuses upon four important categories: domestic (partner) homicide; the killing of infants; alcohol-related homicide; and homicide involving guns and knives. Attention is also paid briefly to issues around 'dangerous' offenders and mental disorder, and to homicide victimisation in relation to specific occupations.

1. Introduction

The main aim of this paper is to identify and explore possible strategies for reducing the level of homicide, with a specific focus on the United Kingdom (though many of the conclusions will be relevant elsewhere). Clearly, given the relative infrequency, diversity and apparently low predictability of homicide incidents, this is no simple task. In addition, homicide is an under-researched topic in this country, and although a fair amount of evidence is available from North America and elsewhere, its value is limited by cultural differences. The paper is therefore inevitably speculative in character and provides only a preliminary framework for more systematic thinking about patterns of homicide and the most promising policy responses.

Of course, crime reduction can be attempted through a wide variety of approaches. Traditionally, a basic distinction has been made, particularly by North American writers, between 'primary', 'secondary' and 'tertiary' crime prevention strategies.[1] Primary approaches focus upon direct prevention of the crime event (a simple example being the fitting of locks and bolts). Secondary prevention aims to combat criminal motivation before people become involved

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in crime (e.g. through anti-poverty programmes, education, or alternative activities to 'keep young people off the streets'). Tertiary prevention focuses upon halting criminal careers *via* the treatment or punishment of known offenders. As Pease (2002) notes, in the United Kingdom the police have tended to take the lead in primary prevention, youth services in secondary prevention, and the prison and probation services in tertiary prevention.

Although these remain useful analytical categories, they are becoming increasingly blurred in practice. In the United Kingdom, policy has been strongly influenced since the early 1980s by the concept of 'situational' crime prevention, the key aim of which is to reduce the opportunities (and/or increase the likelihood of detection) for specific types of crime in specific kinds of situations or locations.[2] While initially based primarily upon the 'target hardening' or surveillance of geographical locations, this approach has become increasingly flexible, and has evolved to incorporate strategies which focus upon potential offenders and victims as well as locations. At the same time, there has been a revival of interest in broader 'social' crime prevention policies (including initiatives in community regeneration, literacy, parenting skills, etc.) as well as in offender treatment programmes, both of which may be combined with situational approaches in the same multi-agency project.

These developments have been given major impetus by the Home Office Crime Reduction Programme (CRP), which invested around £400 million between 1999 and 2002 in a variety of experimental initiatives aimed at determining 'what works' in responding to crime. The CRP was not wedded to any one approach to crime prevention. Its guiding principles were that policy choices should be 'evidence based' in terms of proven capacity to reduce crime, should be cost-effective, and should draw in resources from the public, private and voluntary sectors through the creation of multi-agency partnerships. There was also a general assumption that coordinated multiple interventions are more cost-effective than single interventions (Goldblatt & Blairs, 1999). At first, most attention was focused upon familiar forms of 'volume crime' such as burglary and vehicle-related theft, but efforts are now being made to apply similar kinds of thinking to more serious and organised crime and to less well-trodden areas such as 'criminal markets' for drugs or stolen goods (Sutton et al., 2000). This paper considers whether homicide might be similarly amenable to a variety of planned preventive strategies.

The specific objectives of the paper are as follows:

- To identify – and as far as possible, to place into working categories – significant recurrent patterns or 'pockets' of homicide in the United Kingdom.
- To explore both the general crime reduction literature and the international research literature on preventing homicide, and to assess their relevance

and potential application to particular forms of homicide in the United Kingdom.
- To identify potentially productive changes in policy and practice and to make recommendations for future research.

It should be emphasised that, while these objectives lead us to look primarily for 'situational' and other strategies which might have an effect in the relatively short term, this does not mean that we consider approaches aimed at more fundamental social change – and hence working within a much longer time-frame – to be unimportant. On the contrary, as will be expanded upon later, there is evidence of a strong correlation between homicide rates and levels of poverty and social inequality, and it may be that, in the long run, significant and lasting reductions in homicide can only be achieved by strategies which take this fully into account.

The paper is structured as follows. The second section deals with issues in defining, counting and categorising homicides. Third to sixth sections discuss four broad categories of homicide and possible means of reducing their incidence: 'domestic' homicide; the killing of infants; alcohol-related homicide; and killing with knives and guns. Seventh and eight sections are much briefer, doing no more than drawing attention to some other issues. Seventh section raises the complex question of the relationship between homicide and mental disorder, and makes brief comments on the (often confused) debates about 'dangerous offenders' and 'psychopaths'. Eighth section examines very briefly jobs or professions which appear to carry a higher than normal risk of victimisation, identifying prostitutes in particular as a neglected group worthy of attention. Ninth section presents some conclusions and recommendations.

2. Homicide in the United Kingdom: An overview

Definitional and recording issues

Homicide is not a straightforward concept, and any statistics on its frequency have to be examined with care (see, for example, White, 1999; Brookman, 2005). In its broadest sense, it refers to 'the killing of a human being'. However, an important (albeit not always clear) distinction has to be made between 'lawful' and 'unlawful' forms of homicide. Examples of lawful homicide in England and Wales include the killing of another human being during wartime, self-defence and accidental killings (Soothill et al., 1999). In Scotland, a similar distinction exists between criminal homicide and non-criminal homicide. The latter includes 'cases of justifiable or excused killing,

and casual homicide, that is, where a person kills unintentionally, when lawfully employed and without culpable carelessness' (Gane & Stoddart, 1988: 479).

Unlawful homicides – the focus of this paper – are in most cases legally classified as murder, manslaughter or infanticide. However, the picture is complicated by driving-related homicides, which are generally dealt with differently by the police, courts and statisticians. In England and Wales, cases of causing death by dangerous driving, by aggravated vehicle-taking, or by careless driving when under the influence of drink or drugs (which together total around 300 per year) are not recorded as homicide, but as a separate group of offences. There is a further important category of deaths which are regarded by many as homicide, but do not find their way into the official homicide statistics at all. These are what are sometimes referred to as 'corporate killings' – deaths which result, at least in part, from negligence by a corporate body. It has even been argued that, in terms of the number of lives lost, such deaths represent the most significant single category of homicide in Britain (Levi & Maguire, 2002). An average of around 600 work-place deaths per annum are recorded by the Health and Safety Executive (HSE).[3] Of course, by no means all of these can credibly be claimed to involve corporate negligence, but it is likely that a significant proportion do, whether or not this is recognised in law. Moreover, these figures are undoubtedly an underestimate,[4] and in any event capture only a sub-group of all 'corporate killings', as they exclude the more highly publicised 'disasters' in which at least an element of corporate negligence might be claimed. A quick reckoning of total deaths in just some of the major disasters in Britain during the last 15 years (such as the collapse of the Piper Alpha oil platform, the fires at King's Cross underground station and Bradford City Football Club, the crush at the Hillsborough stadium, and the Southall and Paddington rail crashes) produces a figure of around 500 deaths.

Summarising the implications of such issues for the presentation of criminal statistics, Soothill et al. (1999: 4) note that:

> . . . the most restrictive definition of homicide would be offences which have been successfully prosecuted which involve the killing of another human being; the least restrictive to estimate all incidences of the killing of a human being, whether lawful or unlawful. Both jurisdictions [England & Wales and Scotland] tread an intermediate path between these two extremes.

In addition to problems of boundary definition, the counting of homicides (like the counting of every type of crime) is afflicted by the problem of the 'dark figure'. Three specific aspects of this deserve brief mention:

The discovery of bodies. We do not know how many killers manage to dispose of the bodies of their victims without trace. It is estimated by the National Missing Persons Helpline that about 250,000 people go missing every year in the United Kingdom, a fair proportion of whom are never accounted for (personal communication). More specifically, a large force such as Greater Manchester Police can expect in the region of 11,000 missing person reports each year (Newiss, 1999). Whilst many of these will have deliberately sought obscurity, some will probably have become victims of homicide.[5]

Establishing the cause of death. In the case of a discovered body, it is not always possible to determine whether the death was unlawful. One of the purposes of a medico-legal autopsy is to establish whether the mode of death was natural, accidental, suicide or homicide, but distinguishing between these categories is not always straightforward (Geberth, 1996). This issue has been well documented in relation to infant deaths, where it is recognised that distinguishing an infant homicide from 'Sudden Infant Death Syndrome' (SIDS) or 'cot death' can be very difficult.[6]

Reclassification of cases. Databases on homicides are normally flexible and subject to frequent adjustment as new information emerges about particular cases. For example, apparent unlawful homicides may later be reclassified as accidents or suicides, or the charges in court may be lowered to, for example, assault, child cruelty, or aiding and abetting suicide. Recording procedures in such circumstances can vary widely between jurisdictions.

In short, the seemingly simple question of how many homicides take place in a particular year cannot be easily answered, and whilst most jurisdictions produce official statistics pertaining to homicide, these clearly do not include all killings of another human being. In comparing jurisdictions, or in looking at trends over time, careful attention has to be paid to definitions and recording practices.

Patterns of homicide and sub-lethal violence

Numbers and trends

Figure 1, which should be read bearing in mind the caveat expressed in the previous section, shows the annual totals of homicides officially recorded in the United Kingdom over the 20-year period 1979–1998. The figures for England and Wales are derived from the Homicide Index, which is compiled by the Home Office on the basis of incidents reported to it by the 43 police forces. These encompass only those homicides classified as murder, manslaughter or infanticide: 'corporate' homicides and deaths by dangerous driving are not included. The figures for Scotland and Northern Ireland are taken from similar databases in those two countries.

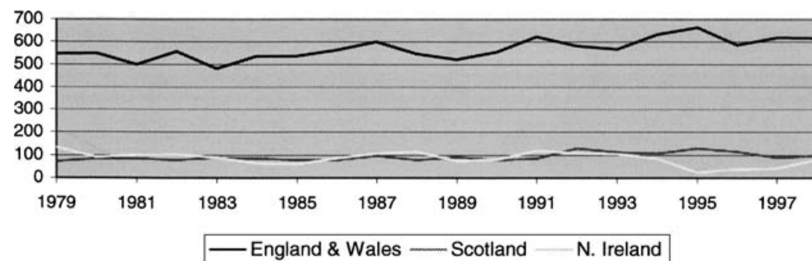

Figure 1. Annual totals of recorded homicides in the UK, 1979–1998. (*Sources*: The Homicide Index (England and Wales); Criminal Statistics England and Wales; The Scottish Homicide Index; Criminal Statistics, N. Ireland).

The annual totals of homicides are subject to frequent downward revision for the first two or three years after initial reporting, as individual cases are reclassified by Home Office statisticians on the basis of new information. This has the effect of scaling down the totals considerably, typically by around 15%.[7] *Criminal Statistics* each year gives figures both for 'offences *originally* recorded as homicide' and for 'offences *currently* recorded as homicide' (see, for example, Home Office, 1998: 73).

It can be seen from Figure 1 that the annual totals for the United Kingdom are consistently well below 900 and that the overall trend is only gradually upwards. For example, the totals in England and Wales for the four 5-year periods were: 1979–1983, 2633; 1984–1988, 2782; 1989–1993, 2846; 1994–1998, 3115.[8] In Northern Ireland, indeed, the figures in the mid- to late 1990s were generally *below* those of the early 1980s.[9]

Patterns of homicide

Most work on patterns of homicide stems from the United States. One of the most consistent findings of the American studies – to some extent echoed elsewhere – is that there are strong statistical associations between areas with high homicide rates and areas with high levels of poverty and inequality (Loftin & Hill, 1974; Parker & Smith, 1979; Blau & Blau, 1982; Avakame, 1997; Messner & Rosenfeld, 1999). Equally, Parker and McCall (1997) found that absolute and relative deprivation as well as social disorganisation adversely affect both white and black intra-racial homicide offending in a number of US cities; and Karmen's (1996) regression analysis of 1991 data showed that homicide in New York occurs overwhelmingly where there is a concentration of multiple deprivation (high levels of unemployment and poverty), low social mobility and a high proportion of 16–19 year olds. As Sampson and Lauritson (1990: 63) put it, after reviewing numerous studies in this area:

> Almost without exception, studies of violence find a positive and usually large correlation between some measure of area poverty and violence – particularly homicide.[10]

Studies of patterns of homicide outside the United States have also noted its greater incidence in poorer areas, but have tended to highlight other factors such as the locations where offences occur, the weapons used, the gender of offender and victim, the motives and behavioural characteristics of offenders, and the role of factors such as alcohol. Studies of this kind are important sources for policy-making, as they provide statistical information about the relative risks of homicide in a variety of settings and offer a starting-point for creative thinking about how such risks might be reduced. They also assist the classification of homicide into more meaningful categories (see later). Examples include studies by Polk (1994) on homicide in Victoria, Australia, based on coroner's files; Wallace (1986), who reviewed police homicide files from New South Wales between 1968 and 1981; and, in the United States, Daly and Wilson (1988), who analysed police homicide files from Detroit.

In the United Kingdom, some work has been conducted on patterns of multiple and stranger murder, with particular emphasis on offenders' behavioural characteristics (Gresswell, 1994; Gresswell & Hollin, 1992; Salfati, 1998; Salfati & Canter, 1999). However, the only recent comprehensive study of homicide patterns in England and Wales is Brookman's (2000, 2005) analyses of data from police files and the Homicide Index – on which this paper will draw periodically.

More details about particular categories of homicide will be presented later in the paper, but by way of introduction we present a brief summary of some of the most consistent patterns of homicide to be found in England and Wales. The following general statements (which conceal some substantial variations across time and location) are mainly derived from analysis of the Homicide Index:

1. Men are more likely than women to be offenders and victims of homicides. Males comprise 80–90% of offenders and 60% of victims. Around half of all homicides involve a male offender and male victim.
2. Both offenders and victims tend to come from lower socio-economic groups.
3. Young people over 16 are generally at greater risk of becoming a victim than children or older adults: the peak ages among adults tend to be 21–25 years.
4. Although children in general constitute a low-risk group, the risk for babies under one is often higher than among any other single-year age group.

5. Offenders tend to be young, with most aged between 18 and 35.
6. In male-on-male homicides, a significant proportion of offenders, victims or both have consumed alcohol – often to excess.
7. Men are more likely to be killed by strangers or acquaintances; women are more likely to be killed by spouses, partners or ex-partners.
8. Homicides amongst unrelated men often take the form of confrontational 'honour contests' that erupt spontaneously. They also quite frequently entail grudge/revenge style killings, where the offender seeks out the victim and commits a planned assault.
9. Afro-Caribbeans and Asians are more at risk of homicide than Whites.
10. Around 60% of homicides occur between 8.00 p.m. and 4.00 a.m.

Implications for crime prevention

The earlier outline of patterns of homicide has some important implications for the creation of strategies to reduce its incidence.

First of all, one of the most consistent findings is that homicide – like most other violent crime and predatory property crime – is strongly associated with poverty and social inequality. It is important not to lose sight of this point, which suggests that preventive strategies focused upon particular offences should be complemented by – and complementary to – broader long-term initiatives against poverty and social exclusion. It may also be productive for policy-makers to consider how major structural factors like poverty interact with specific local factors. For example, Bowling (1999) argues that the surge in murder rates in New York the late 1980s can be explained by an explosive mix of economic decline, severe cuts in welfare benefits, the growth of a lucrative illicit drug economy, the free availability of guns, and low police morale and effectiveness. In essence, the despair fostered by increasing poverty and homelessness fuelled demand for drugs, and the appearance of large supplies of the relatively cheap drug crack cocaine drew numerous young men with no other 'career prospects' into a frenzy of disorganised and violently competitive dealing in search of quick profits. The combined effect, he claims, was to 'transform an area of extreme poverty and marginalisation to one of routine serious violence' (Bowling, 1999: 537). Following a number of social, economic and policing initiatives in the mid-1990s, there was an equally dramatic fall in homicide rates. There are disputes about the main reasons for this reversal (in particular, whether it was brought about primarily by 'zero tolerance policing' or whether this was only one factor among a variety of structural and cultural changes), but the New York case illustrates the potential value to designers of crime prevention policy of taking into account both wider social problems such as poverty and specific local circumstances.

Secondly, the relatively small numbers of known homicides in the United Kingdom (an average of 16–17 per week) appears at first sight to limit greatly the scope for effective preventive measures. Many crime reduction strategies – especially 'situational' approaches – rely on predictions about where, when and/or by what kinds of person offences are likely to be committed, so that interventions can be targeted at particular 'hot spots' (or populations), sometimes at particular times. The scope for such predictions is reasonably good where 'volume' crimes like burglary, car theft and alcohol-related assault are concerned. In many towns and cities, however, homicide is a rare event whose occurrence is extremely difficult, if not impossible, to predict.

Homicides as 'fatal assaults'

On the other hand, homicides are not randomly distributed. As we have already seen, perpetrators (and to a lesser extent victims) belong disproportionately to particular socio-demographic groups, and homicide events display certain patterns. Perhaps more importantly, these patterns and characteristics are also to a large extent typical of *violent crime in general*. The British Crime Survey indicates, for example, that in 40% of violent incidents the offenders were under the influence of alcohol, in 80% male, and in 44% aged 16–24 (Kershaw et al., 2000; for further data on gender, age and social-class correlates of violent crime in the United Kingdom, see Levi & Maguire, 2002; Maguire, 2002; Stanko et al., 2002).

Indeed, a number of writers have argued that not only the social correlates, but also the dynamics, of homicide are in many cases identical to those of other forms of violence (see, for example, Fyfe et al., 1997; Harries, 1990). As Gottfredson and Hirschi (1990: 34) point out, many violent interactions occur which, while not resulting in homicide, are very similar in aetiology and intent:

> The difference between homicide and assault may simply be the intervention of a bystander, the accuracy of a gun, the weight of a frying pan, the speed of an ambulance or the availability of a trauma centre.

Harries (1990: 48, 68) likewise concludes that:

> the legal labels 'homicide' and 'assault' represent essentially similar behaviours differing principally in outcome rather than process . . . the typical homicide is most appropriately considered a fatal assault.

These similarities, then, give support to the view that, while homicide itself is relatively rare, it is not a completely separate and unique form of behaviour. Rather, it can be understood as an extreme manifestation of serious violence, with similar underlying causes and influenced by similar situational factors.

Clearly, if this is the case, strategies for reducing homicide can be developed in conjunction with those aimed at violent crime in general – or, alternatively, at the most serious kinds of violent crime (see Maguire and Brookman, 2005). Thus, for example, the 663 homicides recorded in England and Wales in 1995 can be considered alongside a similar number of attempted murders (634), and a much greater number of 'woundings or other acts endangering life' (10, 445).[11]

Within this frame of reference, three alternative approaches to homicide reduction suggest themselves:

(a) to develop a range of strategies to *reduce the overall frequency of interpersonal violence*, the assumption being that a decrease in violence will automatically bring with it a decrease in homicide;
(b) to identify *people*, *locations or situations associated with an exceptionally high risk of serious violence*, and to 'target' these for preventive interventions – the basic assumption being similar to that in (a), but that a greater reduction of homicide may be achieved through a more focused use of resources;
(c) to identify ways of *reducing the likelihood that an assault will end lethally*, the aim here being to reduce the degree of violence or its impact upon the victim without necessarily aiming to reduce the overall numbers of violent incidents.

These approaches are not mutually exclusive, and there is considerable overlap in practice. In this paper, we consider examples of all three, where possible assessing their potential effectiveness. The central focus is upon the reduction of homicide *per se*, so strategies to increase the odds of a victim surviving a serious assault are clearly relevant. At the same time, we are interested in ways of reducing the chances of violent assaults occurring at all, as any one of them has some lethal potential.

Each of the three approaches can be put into effect in a wide variety of ways, ranging from 'primary' to 'tertiary' and 'situational' to 'social' forms of crime prevention. Hence, for example, attempts may be made to reduce violence as a whole (the first approach earlier) by methods as diverse as schools initiatives, advertising campaigns, parental training, CCTV surveillance, the modification of environments, anger management programmes for offenders, and harsher sentences. Interventions based on targeting high risks (the second approach) might include special monitoring of high-risk locations or households, protection of potential victims, and control of potential offenders. Attempts to reduce the lethality of assaults (the third approach) might range from reducing access to the most lethal weapons (e.g. *via* gun control) or

making potential weapons less dangerous (e.g. by making beer glasses out of plastic), to more effective responses to emergency calls.

Homicide as a distinct phenomenon

Finally, however, it is important to take into account the possibility that homicide and other forms of serious violence are not so closely linked as first appears, and that at least a proportion of homicides are of a quite different order. Some researchers have noted that homicide rates and violence rates do not always move together.[12] It is also clear that there are some homicides in which the perpetrator fully intends to kill (as opposed to injure) the victim and makes very sure that he or she is dead. These may include coldly premeditated murders, murders by people who actively 'enjoy' killing (some of whom may be serial murderers) and frenzied attacks in which the victim is stabbed or bludgeoned numerous times.

Felson and Messner (1996: 520) are among the main proponents of this alternative perspective. They claim that 'a substantial portion of homicide offenders really do intend to kill their victims and not merely injure them' and hence that we are dealing with behaviour quite different to that of assault. They cite supporting evidence for this from their regression analysis of a merged data set from the United States containing information on homicides, robberies, rapes and assaults. Whilst only a minority of researchers currently adhere to this view (see, for example, Klack, 1991; Reidel, 1993), it is nevertheless an important topic for further investigation.

Our own view is that the two arguments are not incompatible. Clearly, there are homicides which are similar in dynamics to other acts of violence, and homicides which are not: the main question is where to draw the line between them. Some progress has been made in this direction by Brookman (2000, 2005), who identified two contrasting forms of 'male-on-male' homicides in England and Wales, referred to as 'confrontational' and 'grudge/revenge'. There were some common elements between them, notably in the part frequently played by 'masculine ego', but there were also fundamental differences. Confrontational homicides generally arose from 'honour contests' in response to relatively trivial disagreements. The subsequent spontaneous assaults that took place were rarely intended – at least at the outset of the dispute – to result in the victim's death. In contrast, grudge/revenge killings were much more purposeful and determined in nature. Murder was often planned in advance, the offender seeking the victim out and giving him little chance to resist the lethal attack. Firearms were adopted in these assaults to a much greater extent than in other forms of homicide amongst men.

The refinement of such distinctions could pave the way for more focused intervention strategies that address the very different dynamics of homicides

in which there is a sustained determination to bring about the victim's death and those where the death is, to a certain extent, an unforeseen outcome of a more commonplace act of violence.

As already made clear, the main focus of this article is on homicides which fit the latter description, as they appear on the face of it more amenable to preventive interventions, especially those based on situational principles. However, some brief comments will be made in relation to the possibilities of reducing homicides of the former (more 'deliberate') kind. First, the sixth section contains a discussion of homicides in the United Kingdom committed with firearms, of which the majority are pre-planned, and which typically involve disputes between criminal groups.[13]

Secondly, seventh section contains brief comments on the issue of 'dangerous' individuals. In particular, it addresses the possibility that there are certain homicides (probably a small minority) which could only be prevented by the 'incapacitation' of- or, at least, the implementation of strong controls over – people who (for whatever reason) have a propensity or desire to kill. Whilst there are some obvious overlaps with the 'risk-based' approach to violence reduction outlined under (b) earlier, this takes us into a rather different area of prevention which is almost entirely offender centred, and which also raises a set of complex conceptual, ethical and practical issues: for example, about the relationship between mental disorder (especially 'psychopathy') and homicide; about the problems of prediction; and about the balance between community safety and the human rights of people assessed as dangerous. There is no space to discuss any of these matters in depth, but it is important to sketch out their place within the overall framework of homicide reduction.

Categories of homicide

As is already apparent from the previous section, there is a variety of ways in which particular categories of homicide might be separated out for attention. Specifically, one could focus upon:

- high-risk offender groups [who];
- high-risk victim groups [who];
- high-risk locations [where];
- common methods/weapons [how];
- common motives/circumstances [why].

There is clearly some overlap amongst these categories. For example, some high-risk offender groups (e.g. young men) are also high-risk victim groups, and some high-risk locations (e.g. city centre pubs and clubs and the surrounding areas) are also associated with certain high-risk activities, such

as consuming alcohol, and with certain high-risk groups, such as young men. Furthermore, the relationship between victim and offender can be integral to the motives or circumstances of the offence.

In this paper, we shall consider briefly the possibilities for reducing the level of homicides of several kinds. However, most attention will be focused on four specific categories. Three of these are defined by a combination of the type of victim, type of offender and the motives/circumstances of the offence; the fourth is defined by the type of weapon used. The categories were selected on the basis that (a) they are recognisable as relatively distinct and homogeneous kinds of homicide, each with its own set of 'typical' characteristics; (b) they are significant categories in terms of numbers (between them, they cover in the region of two-thirds of all homicides); (c) they cover both 'domestic' and 'street' offences, and homicides with predominantly male as well as predominantly female victims; and (d) they appear from the existing literature to offer some scope for preventive action. The chosen categories are as follows:

- Women killed by their male partners, current or former.
- Infants (below 1 year) killed by parents/step-parents or intimates.
- Alcohol-related homicides, especially in and around licensed premises.
- Homicides involving guns and knives (especially 'on the street').

The next four sections deal with these in turn. In the final two sections, much briefer comments are offered on two other areas which are less easily categorised, but also important. These concern homicide by – or the risk of homicide from – people variously defined as 'mentally disordered', 'psychopathic' or 'potentially dangerous'; and special risks of victimisation connected with particular types of job or profession.

3. Domestic (partner) homicide

Scale of the problem

'Domestic' (or 'partner') homicide – here defined, in conformity with Homicide Index categories, as killing by a current or former spouse, cohabitant or sexual partner[14] – makes up a significant proportion of homicides in the United Kingdom. In 1998, for example, about one-fifth of all recorded homicides in England and Wales were of this kind. It is also clear from both national and international data and literature, that killing by a partner is the form of homicide to which women are most at risk (Wallace, 1986; Daly & Wilson, 1988; Polk & Ranson, 1991; Easteal, 1993; Stout, 1993; Wilson & Daly, 1993; Polk, 1994). According to the Homicide Index, between 1995 and 1999, 44% of all female homicide victims in England and Wales – and 50% of those killed by

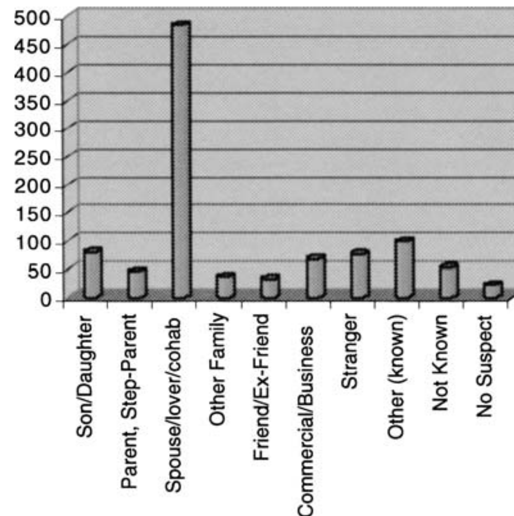

Figure 2. Relationship between victim and suspect, where suspect is male and victim is female: recorded homicides 1995–1999. (*Source*: Homicide Index.)

men – were killed by a current or former sexual partner (see Figure 2). This compares to just 7% of all male victims. In numerical terms, there were 484 female and 153 male victims of domestic homicide over the 5 years. Data from various regions of the world show similar gender differences.[15]

Issues in prediction

Researchers have consistently found that a significant proportion of female victims of domestic homicide have previously experienced domestic violence (Wallace, 1986; Campbell, 1992; Moracco et al., 1998; Smith et al., 1998). It has therefore been suggested that one important avenue for reducing domestic homicide is *to identify and intervene with female victims of domestic violence*.

However, domestic violence is obviously much more widespread than domestic homicide, making it difficult to determine those women, from the large numbers who suffer domestic violence, who might be seriously 'at risk' of homicide. The 1998 British Crime Survey (Mirrlees-Black et al., 1998) found that almost one in four women aged 16–59 had fallen victim to domestic violence over their lifetime. By contrast, under 100 women aged 16–59 fell victim to domestic homicide during 1998, which translates to less than one in 100,000 across England and Wales. In short, one might have to cast the net very wide in order to prevent a small number of domestic homicides.

Further evidence for this is provided by Sherman (1993) who found, in his analysis of data from Minneapolis, that only a tiny fraction of addresses

with repeated domestic disturbance calls to the police witnessed a domestic homicide. Further, three-fifths of all domestic homicides reviewed occurred at addresses to which the police had *never* been called.[16] He concluded (1993: 25) that 'a prediction of domestic homicide from chronic domestic disturbance calls would be wrong 997 times out of 1,000'.

A number of avenues have been explored in attempts to improve the accuracy of prediction. Generally speaking, predictions based on clinicians' judgements have been found to have poor predictive value. On the other hand, claims of greater success have been made for predictions using actuarially or psychologically based risk assessment instruments. In North America, Sonkin et al. (1985), Hart (1988) and Strauss (1990) have all devised instruments based on research and clinical experience which, although not psychometrically validated, are said to have proved valuable in assessing the potential for lethality within domestic violence settings (Campbell, 1995: 99). Common amongst the danger signs are threatening a female partner with a weapon in hand (such as a gun or household knife), drug/alcohol dependency by the abuser, and extreme male dominance or attempts to achieve such dominance.

Another important research finding which may assist prediction is that a substantial proportion of domestic killings by men are in some way connected to separation or the threat of separation between the intimates (Showalter et al., 1980; Barnard et al., 1982; Wilbanks, 1982; Wallace, 1986; Campbell, 1992; Wilson & Daly, 1992, 1993). In such cases, it is often suggested that the killer was impassioned by sexual jealousy and/or by his concerns about losing his partner. Hence, Polk (1994: 23) refers to such homicides as motivated by 'jealousy/control' and Wallace (1986: 96) uses similar terms when she talks of 'jealousy/sexual exclusivity'. As Polk and Ranson (1991: 18) remark, the phrase 'If I can't have you no one will' echoes through the literature on male perpetrated spousal homicide.

The earlier observations fit well with other research suggesting that a particular factor which may increase the risk of serious violence from an ex-partner is evidence of *stalking*. The first survey of stalking victims conducted in the United Kingdom involved questionnaires administered to 95 self-defined victims of stalking who had contacted the London-based Suzy Lamplugh Trust, a charity concerned with the promotion of personal safety (Sheridan et al., 2001). The respondents came from a wide cross-section of British and Northern Irish society, but 92% were female, while 87% of the stalkers identified were male. Of particular relevance to the current discussion is the finding that *in almost half of all cases, the stalker was an ex-partner of the victim*. Overall, half of all victims were threatened with physical assault, a third were actually assaulted by a stalker, and one-quarter had been the victim of a murder attempt.

Despite its ostensible importance, detailed statistical analyses of the linkage between femicide and stalking by ex-partners are virtually absent from the literature. A valuable exception is a study by Moracco et al. (1998) of 586 femicide victims in North Carolina. The researchers found that 36% of these had been murdered by a current or former partner who had previously committed domestic violence against them,[17] and that in 23% of these latter cases – i.e. about 8% of the total sample of femicides – the killer had stalked the victim prior to the fatal incident. McFarlane et al. (1999) argue on the basis of these findings that when stalking occurs in conjunction with intimate partner violence, there is a significantly enhanced risk of severe violence and/or femicide, and they urge that both abused women and relevant agencies should be so advised.

Finally, two more recent studies from America present positive findings in the area of predicting risk of repeat violence (though not of homicide). First, the Danger Assessment Scale (Campbell 1986, 1995; Stuart and Campbell, 1989), which has been used for some years for this purpose, was subjected to a careful pilot investigation by Goodman et al. (2000). Whilst the sample size adopted was small (49 women), the findings indicated that the DAS, when administered to female victims of domestic violence seeking help from the criminal justice system, can contribute significantly to the prediction of short-term abuse recurrence amongst arrested batterers.

Secondly, Weisz et al. (2000) conducted research to assess the accuracy with which female victims of domestic violence (termed 'survivors') could predict further episodes of severe violence against themselves. The researchers compared women's predictions of risk against items gleaned from several studies and reviews of risk indicators, as well as Campbell's Danger Assessment Scale. Findings indicated that women who strongly predicted future violence were often likely to be correct (for the 4-month follow-up period). The researchers concluded that survivors' predictions should be incorporated into existing risk assessment models and should be taken seriously even where other markers fail to identify a risk. They also stressed the importance of agencies maintaining contact with such women over the longer term. However, while these appear to be sound suggestions, it should be noted that the research examined only the risk of serious violence – no attempt was made to test women's assessment of mortal risk.

Risk factors: Conclusions

From the available evidence, much of which emanates from North America, a number of indicators can be identified as most appropriate to assessing risk of homicide within the domestic setting. The following list, which is adapted from Campbell (1995: 111), includes some which are undoubtedly

more applicable to the United States than the United Kingdom, such as access to guns. Most, we feel, are likely to be as important in the United Kingdom context as in America, although this cannot be confirmed without further research.

- Access to/ownership of guns.
- Displaying weapons such as knives within the household.
- Threats with weapons.
- Threats to kill.
- Serious injury in prior abusive incident.
- Threats of suicide by male partner (in response to female partner's threats to leave).
- Drug and alcohol abuse by male partner.
- Forced sex of female partner.
- Obsessiveness/extensive jealousy, extensive dominance.

From the other research mentioned earlier, we might add to this list:

- Women's (survivors') predictions of future risk and its likely severity.
- Evidence of stalking.
- Recent ending of a relationship instigated by female partner.

It is important, however, to end with a strong note of caution in relation to the whole issue of risk assessment in this area. The presence even of those factors that appear particularly salient as risk factors (and which may be good predictors of violence), such as threats to kill, does *not* lead to homicide in the great majority of cases. It is revealing, for example, that in their study of 15,000 domestic assault reports over a 3-year period in Milwaukee, Sherman et al. (1991) found that *none* of 110 prior episodes of gun pointing and death threats were followed by homicide. Equally, it should be remembered that a fair proportion of domestic homicides have no reported history of domestic abuse.

Possible preventive strategies

The research findings outlined in the previous section suggest that predictions of *serious domestic violence* can be refined to a sufficient extent to allow targeted interventions, but that the scope for predicting *domestic homicide* – and hence for specific interventions – seems much more limited. Even so, there is evidence of some links between the two phenomena, suggesting that a significant reduction in the overall frequency of domestic violence (especially that involving serious and repeated assaults) would be accompanied by at least a small reduction in the number of homicides. For this reason, we

now look at possible preventive strategies, which might achieve this double purpose.

As pointed out earlier, interventions can be targeted at potential offenders, potential victims, or both. We begin with a discussion of responses within the criminal justice system (including prosecution, anti-stalking legislation and offender programmes), before moving on to look at multi-agency responses.

Criminal justice responses

(a) Prosecution. The core weapon of the criminal justice response to domestic violence is, obviously, the prosecution of offenders. However, this has always been dogged by the major problem of case attrition – most frequently through the fear or reluctance of victims to give evidence in court. In recent years in the United Kingdom there have been a number of legislative and procedural efforts to address this problem (Edwards, 2000). These include the introduction of the Protection from Harassment Act, 1997; prosecutions using Section 23(3)(b) of the Criminal Justice Act, 1998 (often called 'victimless prosecutions'), whereby the victim can avoid attending court and submit a written statement to take the place of an oral statement; and enhanced monitoring and evidence gathering by the police at crime scenes to support prosecutions.

Guidelines published by the Home Office in March, 2000 included guidance to the Crown Prosecution Service (CPS) that it must consider prosecuting perpetrators of domestic violence even if their victims withdraw complaints. At the same time, the Home Office urged local authorities to evict 'wife beaters'. Such measures may prove particularly valuable in cases where there is evidence that a victim is at risk of serious assault or even that her life may be in danger. The key to effective use of these provisions, however, lies in identifying which cases pose the most significant risk and in the adoption of a co-ordinated response to women's plight, and that of their children where appropriate.

Personal communication between one of the authors and staff at a local family support unit (FSU) revealed some of the difficulties encountered by the police in assisting victims of domestic violence and, in particular, ensuring their future well being. Some concerns revolved around the perceived inadequacy of the CPS to deal with domestic violence cases due to a lack of specialised staff. A further concern was the recurring situation of offenders receiving bail at magistrates' court after being charged with serious assaults on their female partners. The development of specialist domestic violence courts was seen as one possible solution (a tactic which has been piloted in one court in Liverpool), as was a general 'tightening up' of the processes surrounding the handling of domestic violence cases. As one police officer put it, 'We talk about women withdrawing complaints, yet it

appears that the courts are withdrawing from their responsibilities far too often.'

(b) Anti-stalking legislation. The main statutory protection against stalking is provided by the Protection from Harassment Act, 1997. Under the Act, victims no longer have to present evidence of physical violence in order to secure injunctions and restraining orders. Breach of a restraining order carries up to five years' imprisonment and/or a fine. The Act also recognises an offence of putting people in fear of violence (s4) and provides for a civil remedy (s3).

Harris (2000) undertook an evaluation of the use and effectiveness of this Act and found that it was most often used in relation to harassment by former partners and by neighbours (as opposed to cases fitting the popular image of stalking by an obsessed stranger). Harris also reported a variety of implementation problems. For example, the police were not always clear about what constituted harassment (within the meaning of the Act), did not always take action at an appropriate time and did not always select the most appropriate charge. The publication by the Home Office of an 'Investigator's Guide' to stalking and other forms of harassment (Brown, 2000) may have improved the situation in this respect. However, there is also a problem of relatively high attrition rates in harassment cases: the cases against 39% of those arrested were dropped, often because of the withdrawal of complaints (Harris, 2000: 55). Harris suggests that victims need to be better supported through the pretrial and trial stages in order to reduce the levels of withdrawal. Finally, the research found that restraining orders were only imposed in around half of all convictions and that, even where they were imposed, there were problems with enforcement and breaches were common. The latter findings are echoed in a study by Sheridan et al. (2001), who report that, among 19 cases in which an injunction was obtained, it had been breached in 15 cases. In the light of the previously quoted findings on the risks of violence (and homicide) from *ex*-partners, this seems to be a matter for some concern.

In January, 2000, the UK government announced that stalkers and violent partners may be electronically tagged to prevent them from approaching their victims in the future. There is as yet no evidence as to the effectiveness of this measure. However, given the frequently high levels of breaches of injunctions in domestic violence cases, and general experience of tagging in other contexts, it is likely that to be successful, tagging will need to be accompanied by swift responses from the police to infringements.

(c) Offender programmes. In 2000, there were around 30 perpetrator programmes running in the United Kingdom (Mullender & Burton, 2000; see also Scourfield and Dobash, 1999). These generally incorporate a

cognitive-behavioural approach and/or gender analysis. Programmes range from 20 h over 10 weeks to 120 h over 48 weeks. The National Practitioners' Network recommend programmes of 75 h over 30 weeks, with a minimum of 50 h over 6 months (Mullender & Burton, 2000). Despite some evidence of success in reducing reoffending for some specific programmes (see for example, Dobash et al., 1996; Burton et al., 1998), there remains a general lack of conclusive evidence as to their effectiveness. Programmes in this field are extremely difficult to evaluate for a range of methodological reasons, including small sample sizes, lack of comparison groups, and inadequate means of measuring outcomes (Dobash et al., 1996).

It may also be the case that different types of men require different types of approaches and respond very differently. Some researchers in America suggest that specialised approaches to offender programmes are required, based on typologies of batterers (Healey & Smith, 1998). For example, offenders with mental health problems, or who regularly abuse alcohol or drugs, may require very different kind of interventions from other men without such difficulties. It remains to be seen if such typologies can be realistically and usefully constructed. Moreover, if they were, it would require various layers of the criminal justice system to be fully informed and made aware of which programmes best fit specific types of offender: in other words, a co-ordinated approach is vital, from enrolment to completion and follow-up.

Completion rates have been shown to be problematic in all countries surveyed and some thought is required as to how best to counteract this. There is some evidence to suggest that criminal justice interventions can dramatically increase compliance with perpetrator programmes – for example, prompt, rigorous and agreed action in cases of breach of conditions (Mullender & Burton, 2000). Healey and Smith (1998) suggest that probation officers are the most critical link between the criminal justice system and other interventions and suggest that assigning them to specialised units would enhance their ability to assist both offenders and their victims effectively.

Finally, it is vital that consideration of the safety of partners and children is at the forefront of planning programmes and that perpetrator programmes do not dilute or divert attention away from services for survivors. In short, perpetrator programmes should never be set up in isolation. Rather, they need to form part of a comprehensive strategy to protect the safety of women and their children.

Multi-agency approaches

One of the clearest messages from the literature – already reflected in the earlier remarks – is that criminal justice interventions alone are unlikely to produce a significant impact on the problem of domestic violence (and

by inference, on domestic homicide), and hence that a well-coordinated multi-agency approach is vital. The agencies most likely to be involved in effective multi-agency work are the police, probation service, social services, and voluntary agencies such as those who provide domestic violence shelters. Coordinated programmes of intervention need to operate at various levels, starting with identifying risk of an escalation in violence, then dealing appropriately and effectively with victims and offenders, and finally continuing to monitor the effectiveness of any such interventions. There is much scope for improvement at all three levels, which are briefly discussed in turn.

(a) Identification of risk. As Carcach and James (1998) observe, intimate-partner homicides generally occur within the home, where the levels of external guardianship are very limited or nonexistent. That said, there is some evidence from recent research that domestic violence is not necessarily private violence. Smith et al. (1998: 413), in their analysis of 108 partner homicides in North Carolina, found that 'many in the couples' social networks, as well as the police, knew the women were being battered'. It is therefore important (as has happened to a large extent in the case of child abuse) that those who come into contact with victims of domestic violence are alert to signs of serious risk.

An obvious starting-point, therefore, is a concerted effort to make agencies such as the police, social services and voluntary agencies more fully aware of the indicators of increased risk outlined earlier, and to devise strategies of notification where they are present. Hospital emergency departments and general practitioners may also provide an important link in the identification of 'at risk' women. Studies have shown that victims of domestic violence consult doctors more often than they consult the police or any other groups of professionals (Dobash & Dobash, 1979; Dobash et al., 1985; Gottlieb, 1998; Stanko et al., 1998). However, the specific role that medical practitioners may adopt in relation to domestic violence is debated. For example, some researchers (Shepherd, 1998) view accident and emergency departments as an important additional route to the identification and conviction of perpetrators of domestic violence. Others, such as Morley (1995), view this as flawed, believing it may dissuade some women from seeking medical help and make others less able to disclose the cause of injury. Morley suggests that, rather than concentrating on procedures for reporting to the police, staff in accident and emergency departments would be more useful to victims by providing them with non-judgemental support and information about the range of community support services available and how to access them (Morley, 1995: 1618).

(b) Coordinated interventions. Where interventions themselves are concerned, data from the United States support the notion that decreases in

domestic homicide follow from increased co-operation between domestic violence service providers, police departments and professionals who work with offenders. The authors of the report *Homicide in Eight U.S. Cities* (Lattimore et al., 1997) cite Tampa as an excellent example of such a coordinated approach. Tampa has a large number of services available to abuse victims and their children. The domestic violence shelter has 77 beds and 20 cribs and no one is ever turned away – hotels and motels provide available rooms at no charge to domestic violence victims when the shelter is full to capacity. A school housed at the shelter is seen to overcome the problem of children being abducted to and from school, or whilst at school. Finally, an offender programme is also operated by the shelter. The programme is an intensive 26-week course to prevent re-offending. Ninety percent of participants have been ordered by the courts to attend. Whilst Tampa had a low number of intimate/family homicides prior to the aforementioned programmes, it is claimed that the combination of programmes has led to a significant reduction in the number of domestic related homicides. Atlanta also experienced declines in the number of intimate/family homicides following increased co-operation between domestic violence service providers and the police since 1985. In particular, the police in Atlanta conducted more arrests than previously for domestic violence, and domestic violence services became more professional and better organised.

(c) Monitoring and evaluation. Finally, both the evaluation of particular interventions and the monitoring of individual cases – including keeping in touch with 'at-risk' women over time – are areas in need of improvement. The importance of this is that it is possible that inappropriate, poorly coordinated, or clumsily executed interventions may actually exacerbate the situation and *increase* the risk to some women. As Sherman (1993: 22) notes: 'While more intervention might deter the deterrable, it may only challenge the defiant to become even more violent.'

A positive development in the United Kingdom is the incorporation of domestic violence into the general framework of the 'What Works' approach currently being adopted in relation to a wide range of crime-related issues. In 1999, the Policing and Reducing Crime Unit of the Home Office commissioned a series of reviews to examine 'what works in tackling domestic violence'. These included assessing and managing risk; use of the criminal and civil law; policing domestic violence; accommodation provisions; multi agency fora and perpetrator programmes. A number of ideas emerged, some of which could play a role in reducing the likelihood of domestic homicide – although this issue was not specifically tackled. Among them were:

- improved long-term monitoring of at-risk women;
- resettlement schemes to increase women's safety in their own homes;
- reduced case attrition;
- more following up and charging of men who leave before the police arrive in response to calls;
- extended use of exclusion orders, especially where there is an interim care order or emergency protection order; and
- more research to increase understanding of patterns of both desistence and escalation.

Many of these ideas have since been taken forward, notably in the form of multi-agency initiatives that integrate offender based intervention and risk assessment with victim-centred assistance and risk assessment. For example, multi-agency risk assessment conferences (MARACs) are increasingly being used to identify high-risk domestic violence victims, and to put in place plans and responsibilities for monitoring and protecting them: there already some positive preliminary findings regarding their impact (Robinson, 2005). At the same time, more innovative domestic violence perpetrator programmes are being developed, though evidence of effectiveness in this area remains unclear.

Finally, further research is required into the nature and antecedents of escalation patterns, specifically the changing frequency and severity of assaults and factors associated with this. Closer understanding is also required of the relationship between domestic violence and other forms of victimisation, such as stalking (see Walby & Myhill, 2000). Crucially, we need evaluations of risks to women before and after separation. An established body of research suggests that separation is a particularly dangerous time for battered women in terms of risks of homicide. It is important to decipher whether and how actually leaving an abusive partner merits specific forms of intervention by criminal justice agencies.

Reducing domestic homicide: Conclusions

Around one in five of all homicides in England and Wales are perpetrated by a cohabitant or ex-partner. Such homicides are very difficult to predict, as the vast majority of victims even of serious and repeated domestic violence are not killed, while many homicides occur without prior reports of violence. Even so, it is likely that effective measures to reduce domestic violence as a whole would have at least a small effect on the number of domestic murders. The evidence reviewed in this section suggests that the following are important means towards this goal:

- More work on the identification of risk factors for serious domestic violence (and homicide), including more attention to issues such as stalking by ex-partners and women's own assessments of risk.
- Effective dissemination of information about risk factors to key agencies such as the police, probation service, courts, social services and voluntary agencies.
- Increased co-ordination and co-operation amongst agencies which deal with either the perpetrators or the victims of domestic violence.
- Further examination of the effectiveness of various preventive measures in order to work towards tailored responses that meet the needs of vulnerable women under different circumstances.

The evidence strongly suggests that female victims of domestic violence should be treated as particularly vulnerable during and after separation from their violent partner. This means closer monitoring of both the victim and perpetrator, more stringent measures to ensure that they remain separated, and the enhancing of victims' abilities to protect themselves from harassment – for example, by increasing the availability of confidential shelter arrangements. More stringent controls might be considered in cases where there is evidence of stalking. Most importantly, the message from the research literature is that interventions will only be effective if they are carefully planned and coordinated and are multi-faceted, involving a range of partner agencies: inappropriate interventions may actually increase the risk to victims.

Finally, whilst we have not dealt with female perpetrators of partner homicide in this paper it is worth noting that men's violence toward their female partners is also critical when considering the problem of partner homicides committed by women. Several researchers have observed that women who kill their male partners do so in response to violence perpetrated by the male (Browne, 1987; Radford, 1993; Wilson & Daly, 1993; Jurik & Winn, 1990). Further, such violence is often linked to male sexual jealousy and propriety. Hence, regardless of the sex of the perpetrator, partner homicide often occurs as a result of a history of habitual male aggression and abuse, physical and/or sexual (see Smith, et al., 1998).

4. The killing of infants

Scale of the problem

This section deals with the killing of infants less than 1 year old. This form of homicide is commonly referred to as 'infanticide', although this is not strictly accurate. Infanticide is a legal term used to describe instances where mothers

kill their own babies in a disturbed state of mind.[18] As our discussion covers any killing of an infant, regardless of motive or of the relationship between perpetrator and victim, we shall use the more general term, 'infant homicide'.

Infant homicide may be regarded as a sub-group of the broader category of *child* homicide.[19] However, there are some important differences between the killing of babies and of older children, which mark the former out as worthy of special attention. First of all, while (as with adult homicide) men predominate as offenders, infants are much more likely than older children to be killed by women. For example, between 1995 and 1999 in England and Wales, 90% of the known or suspected killers of children aged 10–16 were male, dropping to 62% for children aged below 5 years, and 56% for babies less than 1 year.

Secondly, the proportion of child homicides in which the perpetrator is a parent is exceptionally high among infants. Over the aforementioned period, 80% of victims under 1 year old were killed by a parent, compared to 49% of those aged 1 year, and less than 5% of those aged 15 or 16.[20] Research from Australia and North America has revealed similar patterns (Critenden & Craig, 1990; Adler & Polk, 1996).

Taken together, these two sets of findings reveal the general pattern that filicides (killings of children by a natural parent) are committed in roughly equal proportions by mothers (47%) and fathers (53%), but that where the child is killed by someone other than a parent, males strongly predominate. At the same time, filicide is largely confined to infants and very young children. It is important to be aware of such differences when considering possible strategies for the reduction of child homicide.

Finally, however, the most striking difference between infant homicide and other child homicide lies in the *frequency of its occurrence*. While children as a whole have a low risk of being killed compared to adults, babies of less than 12 months old are at higher risk than any other single year age group, child or adult (see Figure 3). Indeed, in England and Wales they face around *four*

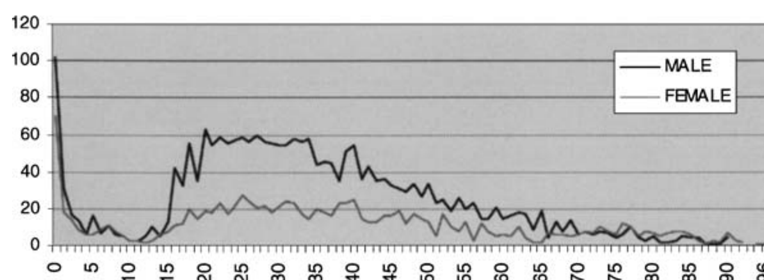

Figure 3. Ages of homicide victims in England and Wales (1995–1999). (*Source*: Homicide Index.)

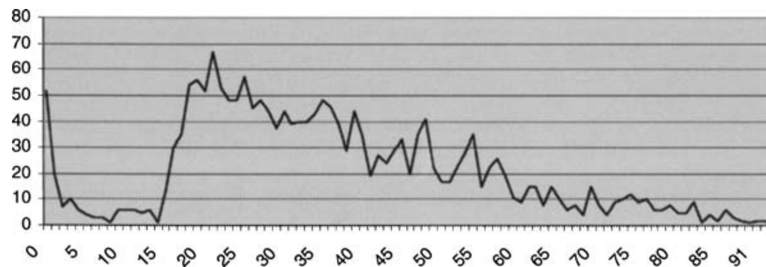

Figure 4. Ages of homicide victims in Scotland (1987–1997). (*Source*: The Scottish Homicode Index.)

times the average risk of falling victim to homicide (measured per 100,000 population). This ratio has remained relatively constant since the Homicide Act 1957 (Marks & Kumar, 1993: 329).[21]

The special vulnerability of infants is by no means unique to the United Kingdom. Australian researchers also report that children under 1 are the most vulnerable to homicide (Strang, 1996) and in the United States child abuse homicides have remained, since the mid-1970s, among the five leading causes of death for those under 5 (Christoffel, 1983). In Scotland, too, infants less than 1 year constitute a high-risk group, although not quite the highest (see Figure 4).

Furthermore, there is evidence that child homicides are susceptible to under-counting due to difficulties that may sometimes arise in distinguishing homicide from 'Sudden Infant Death Syndrome' (SIDS) or 'cot death'. SIDS is characterised by the death of seemingly healthy babies where the cause of death cannot be identified (Beckwith, 1970). It has been claimed that up to 20% of SIDS cases are in fact suspicious infant deaths, largely attributable to the effects of child abuse (CESDI, 1998; Green & Limerick, 1999; White, 1999). There are many reasons for misdiagnoses, including inadequate police inquiries into the victim's background where suspicion is present (Bacon, 1997; Meadow, 1999), lack of multi-agency co-operation and communication, misdiagnosis by pathologists due to lack of information, a lack of specialism in paediatric pathology, and time pressures in returning the body to the family. It has also been suggested that professionals tend to err on the side of caution in adopting the SIDS label too readily when in doubt. However, recent appeal cases in the UK in which convictions have been ruled unsafe have led to counter-claims that some are too ready to assume that abuse has occurred. This is an inherently difficult and sensitive area in which uncertainty will always be present.

Characteristics of infant homicides in the United Kingdom

Victims

One hundred and seventy-two babies aged under 1 year were officially recorded as victims of homicide in England and Wales between 1995 and 1999; 102 males and 70 females. The great majority (82%) died under circumstances defined as 'child abuse' – a somewhat vague category, which suggests mistreatment over a period of time by people with responsibility for their care. This is reflected in the fact that almost half (47%) were recorded as victims of 'shaking' or other non-specific methods of killing and a further 8% died due to abuse or neglect. In addition, 17% were suffocated.

Offenders

The majority of the babies were killed by a natural parent – 91% where a female suspect was involved and 71% where a male suspect was involved. A further 8% of homicides were attributable to a (usually male) step-parent. Virtually all of the remainder were killed by other family members (including foster parents), family friends and acquaintances. Most offenders were young: over half were aged below 26 years, and most of these were between 21 and 25.

Neonaticides

In keeping with previous research in this area, Marks (1996) identifies the important sub-category of 'neonaticides' (babies less than 1 day old). Between 1995 and 1999, 27 homicides of babies less than 1 day old were recorded in England and Wales, which translates to 17% of the total number of infant homicides. This is slightly lower than previous research in the United Kingdom has suggested: Marks (1996), for example, suggests that 20–25% of infant victims are killed within the first day of their life. The most striking difference between neonaticides and infant homicides as a whole is that fathers are rarely implicated in the former, yet are (slightly) more likely than mothers to be the perpetrator when the victim is an older baby. Another key difference is that neonaticides are more likely to result from abandonment or neglect than from physical violence (Marks & Kumar, 1993).

The average age of women known to have committed neonaticide during the period 1995–1999 was 22, compared to 27 for those who killed infants over 1 day but under 1 year. This is consistent with anecdotal reports and case note studies, which suggest that neonaticidal mothers are more likely to be teenagers, single and living at home with their parents. The pregnancy is often the first and is likely to be unintentional and concealed (Marks, 1996).

One of the most frequent observations made in relation to mothers who commit neonaticide is that the pregnancy has been denied (Brozovsky & Falit,

1971; Green & Manohar, 1990). Regardless of whether the expectant mother has failed to acknowledge her pregnancy or simply ignores the reality of the situation, it is often the case that she does not seek medical help and makes no preparations for delivery (Marks, 1996). Whilst there are no available data to determine the number of 'hidden' pregnancies that result in neonaticide, the suggestion is that it may be significant. These cases are clearly cause for concern, but their absence from public/official view makes it difficult to undertake appropriate interventions.

Risk factors in infant homicide

Several researchers have commented upon the general paucity of reliable data and published studies of child homicide (Unnithan, 1991; Critenden & Craig, 1990). There is also a shortage of in-depth research into the killing of infants in the United Kingdom. Partly as a result of this neglect of the topic, there is as yet no definitive explanation of why such young babies are at greater risk of homicide than either older children or adults. That said, most researchers suggest that their fragility and total dependence or helplessness is of key importance (Strang, 1996; NSPCC, personal communication). In addition, the very real demands and stresses placed on a family by a newborn baby are almost certainly a factor (Wallace, 1986). Some researchers have claimed that infants with feeding or sleep difficulties, first born children, or those whose deliveries were difficult, may also be associated with greater risk (Marks, 1996). Other factors identified as increasing risk include low birth weight and lack of pre-natal care (Cummings & Mueller, 1994).

As with domestic violence and domestic homicide, it is widely accepted that a link exists between fatal and non-fatal child abuse (Strang, 1996).[22] Hence, literature that focuses upon the prevention of non-fatal events can provide useful insights as a starting point for consideration of policies to reduce homicide. Recent literature on this topic is in relatively short supply in the United Kingdom, but earlier United Kingdom research and more recent studies from Australia and America suggest that a number of factors are frequently present in the backgrounds of offenders. Among the most frequently cited are mental disturbance in mothers and a range of social and economic factors.

Maternal mental disturbance

There is a longstanding view that mothers who kill their infants are often suffering from some sort of postpartum mental illness. In England and Wales this view is enshrined in legislation in the form of the Infanticide Act (1938), which allows such mothers to be dealt with and punished as if guilty of manslaughter

as opposed to murder (a verdict of manslaughter through diminished responsibility is, of course, also possible, though less common in practice). Just under a quarter (23%) of all females accused of killing their babies under one year were convicted of infanticide between 1995 and 1999 in England and Wales.[23] Scottish legislation makes no such provision, but mental state is prominent in the disposal of a high proportion of female cases in Scotland: as Marks and Kumar (1993) tellingly note, 69% of mothers compared to none of the fathers who killed their infants during 1978–1993 were recorded as having done so because of their 'mental state'.

It has been suggested that 50–80% of all women experience some degree of depressed mood after giving birth (Toufexis, 1988, cited in Ewing 1997). Women have also been calculated to be 25 times more likely to become psychotic in the month immediately after childbirth than at any other point in their lives.[24] The relative risk declines thereafter, although it remains at double that of a pre-childbearing mother in the 12th month after delivery (Kendell et al., 1987). While this may be relevant to the incidence of infant homicide, it should be strongly emphasised that the vast majority of women – depressed or not and mentally ill or not – do not harm their children, and that many women who harm their children are not mentally ill (D'Orban, 1990; Marks, 1996).

There is considerably less literature available regarding the mental state of fathers (natural or step-fathers) who kill their infants or older children. There is, however, evidence that some men who kill their children are suffering mental distress that can manifest itself in depression or rage and the subsequent suicide or attempted suicide of the killer. Strang (1996: 6) observes that 'the precipitating factor in these incidents appears frequently to be the desertion of the wife from the marriage, either taking the children with her and thus engendering rage in the offender, or leaving them behind and thus engendering depression.'

Wallace (1986: 125), in her analysis of homicide of pre-school children in Australia, noted that well over one-third of the fatal assaults involving fathers occurred whilst they were alone with the child, or with a number of its siblings, either babysitting or caring whilst the mother was out. Some of these fathers had full-time responsibility for the child. Similar findings have been reported from America (Gil, 1970) and England (Scott, 1973; see also Adler and Polk, 1996). Moreover, Strang (1996) observes that patterns of filicide in Australia may have seen an increase in the proportion of fathers as killers, perhaps linked to fundamental structural changes in Australian society (presumably changes in child care roles and in the differential pressures suffered by mothers and fathers).

Socio-economic factors

Aside from the literature that posits a link between a parent's (generally mother's) mental state and the killing of infants, other research has focused upon social conditions, which may give rise to such killings. Many of the social factors cited mirror those in the child abuse literature more generally – for example, social deprivation, single parenthood, and unstable and violent relationships. However, by no means all researchers see these as key factors. Marks (1996: 105), for example, observes that:

> The rate of infant homicide in England and Wales has remained relatively constant since 1957 despite continuing social and economic improvements which have led to a progressive decline in infant and maternal mortality during the last 50 years; nor has the rate of infant homicide fallen since the liberalization of abortion laws (Abortion Act, 1967).

Marks and Kumar (1993) also point out that negative social changes associated with the gradually increasing rate of homicide observed in the population as a whole have not affected the incidence of infant homicide. Marks (1996: 105) consequently concludes that the gross contribution of cultural, social and economic factors to the occurrence of infant homicide is less important than 'other, as yet, unidentified, processes'.

Overall, however, perhaps the most salient feature of the literature on both infant homicide and serious child abuse, is the tendency of writers to recognise the combined influences of both individual and structural factors. Critenden and Craig (1990: 202), in observing that child homicide is poorly understood and rarely studied, suggest that this may be partly because of 'the lack of a single pathogen upon which to focus prevention or treatment efforts'. Strang (1996) similarly notes that both social-structural and individual factors, interact to bring about incidents of serious abuse, while Greenland (1987: 20) states that such incidents:

> are, almost invariably, situationally specific events. Ill health or excessively demanding behaviour in the child, maternal distress or depression, an unstable or unhelpful male partner, when combined with social isolation, poverty and poor housing, may precipitate a perilous or lethal family situation. The infant's powerlessness and inability to escape defines him as a victim.

Risk factors: Conclusion

As was noted in the earlier discussion of 'domestic homicide', whilst analysis of risk factors may help to narrow down the population at highest risk of abusive behaviour, many difficulties remain in terms of translating this knowledge

into practical and effective ways of identifying particular parents who might fruitfully be made the target of prevention strategies in relation to serious abuse – let alone to homicide specifically. As Strang (1996: 5) points out:

> It is apparent that the offenders in these incidents do not differ sufficiently from a much larger population of socially and economically disadvantaged young parents for them to be identified specifically prior to the event.

Some researchers nevertheless report encouraging findings from more focused efforts to identify abusive parents. Lynch and Roberts (cited in Oates, 1982), who studied families in Australian maternity hospitals, found five factors that distinguished a control group from an abusive group. Abusive mothers were more likely:

- to be under the age of 20 when their first child was born;
- to have signs of emotional disturbance recorded in their maternity notes;
- to have been referred to a hospital social worker;
- to have caused concern to hospital staff over their mothering capacity; and
- to have had their babies admitted to the special care nursery.

Other research has suggested that health visitors who visit parents in the first year are able, with reasonable reliability, to identify families in which there is a significant risk of child abuse (Dean et al., cited in Oates, 1982).

Again as with domestic violence, there is much less research on risk factors which might be used to predict fatality within the wider spectrum of child abuse. However, a certain amount may be gleaned from general studies of filicide (child-killing by parents). In particular, Wilczynski (1993, 1995) found that filicidal parents tend to exhibit three characteristics. First, they experience multiple social stresses, such as financial and housing problems, youthful parenthood, marital conflict, lack of preparation for parenthood, and children who are difficult to care for. Such factors can combine, leading to a situation of isolation, instability and misery. They are also often compounded by psychiatric problems: many offenders exhibit depressive symptoms, have received prior psychiatric treatment, and have abused alcohol or drugs. The second common feature of filicidal parents is that they usually have a lack of compensatory personal and social resources with which to cope with their problems and are often extremely isolated (Goetting, 1988; Korbin, 1986). Finally, filicidal parents tend to perceive their situation as essentially negative (Korbin, 1987).

Wilczynski (1995) also draws out some important differences between male and female perpetrators of filicide. She notes that general patterns of family violence are much more characteristic of male filicide perpetrators than of female: men who kill their children are more likely to have been violent to the child – and to their partner – before the filicide. Women are more likely

to have been diagnosed as suffering from some form of psychiatric disorder. Similarly, Wallace (1986: 115) found that significantly more women than men had undergone professional treatment for mental disorder some time prior to the killing (54 and 20%, respectively).[25]

To sum up, although it is possible to identify a number of risk factors in relation to infant homicide (drawn mainly from studies of filicide and from studies of non-fatal child abuse), there remains the perennial problem that faces anyone attempting to predict and prevent grave but low frequency offences. Even among those who exhibit the risk factors in abundance, only a tiny minority will actually kill an infant, so it is extremely difficult to target interventions at the right individuals.

Possible preventive strategies

Despite the difficulties of prediction, there is a fair degree of agreement within the available literature regarding the kinds of measures that need to be put into place to reduce the incidence of child and infant abuse (fatal or otherwise). Among the most often cited preventive strategies are parental education programmes; improvements in the diagnoses and identification of infant and child abuse; more co-ordinated responses to suspected abuse cases; and improved services to parents both before and after childbirth. Each of these is discussed briefly in turn.

Parental education programmes

Many commentators argue that education programmes or campaigns may go some way toward reducing the incidence of infant or child maltreatment and, by extension, the number of deaths. Strang (1996) suggests that most parents, especially the very young, would benefit from education for parenting, whether at school, as part of prenatal care or through the media. The reason for this is that much abuse is a consequence of ignorance of good child rearing practices and reasonable expectations of children's behaviour. Similarly, the NSPCC, in its *5-Point Manifesto for Protecting Babies* (see Figure 5) urges improved preparation for parenthood, with better antenatal advice on how to cope with crying babies and sleep deprivation; more public education on the dangers of shaking and hitting babies; and education about family life in the national school curriculum. With this aim in mind, the NSPCC launched its 'Full Stop Campaign' in March 1999. This included a national television advertising campaign aimed at supporting parents under stress and protecting babies from harm. In addition, 600,000 parents of new millennium babies received a book entitled *Babies' First Year* and magazine *Get Ready*!, urging parents to think about the more difficult aspects of parenting before the baby is

(1) Improved preparation for parenthood with better antenatal advice on how to cope with crying babies and sleep deprivation, more public education on the dangers of shaking and hitting babies and education about family life in the national school curriculum;

(2) Better health service support for parents including increased resources for and expansion of midwife and health visitor support;

(3) Child protection awareness training for all professionals working with children and families;

(4) National guidelines to ensure consistent procedures in Accident and Emergency departments to identify and manage non-accidental injuries as soon as they occur and;

(5) Early, thorough and consistent investigations of all child deaths.

Figure 5. NSPCC's 5-point manifesto for protecting babies.

born and during its first year of life. Whilst it is too early to determine whether the campaign has had any impact upon child or infant abuse or homicide, it has been found to have significantly increased public awareness of the issues surrounding child abuse. Audience research has shown strong identification among new parents with the stressful situations portrayed in the television advertising campaign (personal communication, NSPCC).

Improvements in diagnoses and identification of infant and child abuse

As indicated earlier, there is evidence that a significant proportion of infant deaths may be incorrectly attributed to SIDS. Research by Jayawant et al. (1998) on the incidence and clinical outcome of subdural haemorrhage in children under 2 years of age in South Wales and the south west of England highlights the difficulties in attributing this condition to accident or abuse. The researchers concluded that 27 of the 33 cases of subdural haemorrhage they reviewed were highly suggestive of abuse. They also found that a significant number of these cases had not been properly investigated at the time that the child was presented at hospital. Nine of the children died and a further 15 suffered profound disability. Four of the children who died had suffered previous physical abuse. The authors argue that the high probability of child abuse in cases of subdural haemorrhage is still not being recognised and cases are not being investigated fully. They note that clinical investigations must include a full series of basic investigations and that previous child abuse in an infant is a strong risk factor for subdural haemorrhage. They urge that child protection agencies must therefore give 'high priority to the protection of all current and future children in such families' (p. 1561). Similar conclusions were reached by Hicks and Gaughan (1995) who found that the families involved in 6 of the 14 cases of fatal child abuse they reviewed in Ohio had prior protective service involvement. The NSPCC similarly recognises the importance of identifying

child abuse swiftly. Point 4 of their Manifesto requests national guidelines to ensure consistent procedures in Accident and Emergency departments to identify and manage non-accidental injuries without delay.

More co-ordinated responses to suspected abuse cases

One of the principal recommendations put forward by Fleming et al. (2000) in a wideranging review of previous inquiries, was the adoption of a partnership framework for the investigation of sudden infant deaths. For example, health care representatives, paediatric and forensic pathologists, police officers and the social services should all be involved. Similarly, point 5 of the NSPCC's Manifesto stresses the need for early, thorough and consistent investigations of all child deaths. Linked to this, the aforementioned research by Jayawant et al. indicates that a partnership approach is equally vital in identifying potentially vulnerable babies or children both at the time of injury and in the immediate aftermath (to prevent any further instances of harm). As Strang (1996) suggests, whilst it may be impractical to target families on the basis of general risk factors, it may be possible to prevent some homicides by putting in place a rapid and coherent response once cases of actual abuse and injury have been identified.

Improved services to parents both before and after childbirth

Strang (1996) suggested that home visiting services might usefully compensate for the decline of adequate family support for parents. Research into the possible preventive value of home visiting services has produced somewhat mixed findings. Roberts et al. (1996), in their review of 11 randomised controlled trials of home visiting programmes, found conflicting evidence which they attributed to differential surveillance for child abuse between intervention and control groups. However, many studies report positive findings. Olds et al. (1986) provide evidence that women at highest risk of child abuse and neglect (which they defined as teenagers, unmarried or of low socio-economic status) benefited from home visits. Amongst the high-risk women they studied, those who were visited by a nurse had fewer instances of verified child abuse and neglect during the first 2 years of their children's lives. MacMillan and Thomas (1993) also found that home visits can prevent physical abuse and neglect of children in high-risk families. Finally, Eckenrode et al. (2000) in a large-scale longitudinal study of socially disadvantaged pregnant women in New York, found that families receiving home visits during pregnancy and infancy (from birth to 2 years) had significantly fewer child maltreatment reports involving the mother as perpetrator. What these and other studies appear to indicate is the importance of sustained visiting programmes (i.e. up until the child's second birthday) for effective preventive results to be fully realised.

On a somewhat broader social, cultural and policy level, it is important to highlight some promising findings from Sweden. Somander and Rammer (1991) observed a decrease in child homicide (those aged 0–14 years) in Sweden in the second half of the decade 1971–1980, from 59 victims to 37. According to Belsey (1993) the Swedish rate of infant deaths from presumed abuse is now one of the lowest in the industrialised world. Whilst no specific strategies have been shown by research to be positively linked to the decrease, some important changes in laws, policies and programmes aimed at protecting children, promoting their well being and recognising their rights (Durrant & Olsen, 1997) are likely to have played a part. For example, in 1979 the Parental Code was changed, forbidding all physical punishment of children. The Swedish law was the first of its kind in the world. Sweden boasts well-developed maternity and child welfare centres available to all inhabitants without exception. The killing of infants due to postnatal depression is rare, arguably due to good surveillance of mothers (Somander & Rammer, 1991). In addition, parental leave allowances (parents can share a 12-month leave from work while being compensated at 75% of their salary) and extensive day care provisions for all children aged 1 year and older are seen to have reduced the extent of parental stress and of work-family conflicts (Durrant & Olsen, 1997). Durrant and Olsen regard it as significant that such provisions have taken place in a social and cultural climate that emphasises a collectivist approach to meeting children's needs and rights through public policy.

Finally, as far as neonaticides are concerned (where pregnancies are often denied and hidden from public view), prevention becomes extremely difficult since no one may be aware of the woman's plight (herself included). Perhaps the most sensible approach would involve education campaigns aimed at vulnerable pregnant women and their families. Families could be alerted to the importance of recognising pregnancy and provided with relevant information, while young pregnant women could be directed towards sources of confidential assistance.[26]

Conclusions

To conclude, on the basis of research in the area of infant homicide and the cognate areas of filicide and abuse of young children, the most promising preventive strategies – which may be aimed at homicide and abuse simultaneously – appear to be:

- More and better educational programmes, including advertising, aimed at improving parenting skills.

- A need to emphasise to parents the particular fragility of infants and the ease with which parents (e.g. by shaking their babies) can cause their death.
- Improvements in the identification of high-risk/vulnerable families and circumstances with an emphasis on improved co-ordinated responses across a range of professions.
- Improvements in the identification, investigation and management of cases of non-accidental injury, including more rapid and better co-ordinated multi-agency responses.
- Home visiting programmes – such as public health nurses visiting parents at home who may be at risk of abuse or neglect.
- Counselling and respite services to families suffering undue stresses/pressures.

5. Alcohol-related homicide

One of the factors most strongly associated with violent behaviour is the consumption of alcohol (see, for example, Deehan, 1999; Levi & Maguire 2002). As we shall see, alcohol is also an important factor in a considerable proportion of homicides. Moreover, both alcohol-related violence and alcohol-related homicide share a number of common features. These similarities, together with the fact that many homicides in which the offender is intoxicated are not pre-planned, nor involve a strong determination to kill (as opposed to injure), make it plausible to argue that alcohol-related homicides represent for the most part the 'top of the pyramid' of a common type of violent crime, rather than a distinct form of behaviour.[27] If this is the case, of course, it is likely that strategies which significantly reduce alcohol-related violence will also reduce alcohol-related homicide.

In this section, we begin with a discussion of the extent of alcohol-related homicide and of the circumstances in which it – and other serious alcohol-related violence – most often takes place. We then outline some recent initiatives to reduce both the frequency of assaults and (of particular relevance to homicide prevention) the level of injury resulting from them.

Extent of the problem

It is difficult to provide accurate figures on the number of homicides occurring in the United Kingdom that are in some way related to the use of alcohol. Information about alcohol and drug consumption by suspects was added to the Homicide Index (England and Wales) in 1995. According to the database, 9% of all suspects during the period 1995–1999 were under the influence of alcohol at the time of the killing (88% of these being male).[28] Among 'adult

male on adult male' homicides, the proportion was higher, at 12%. However, it would appear that the Index considerably underestimates the extent of alcohol use in both cases, if studies using more detailed records are to be relied upon.[29]

A study of police murder investigation files from three police force areas in England and Wales (Brookman, 2000, 2005) found that in over half (52%) of all adult male-on-male homicides analysed, either the victim or the offender had consumed alcohol, often to excess. Furthermore, in 36% both the offender and victim had consumed alcohol.

These figures are not dissimilar to findings from other countries. For example, Wallace (1986: 67) found that 47% of homicides amongst men in New South Wales, Australia, involved alcohol consumption. In the United States, Wolfgang (1958) found that 64% of the 'male-on-male' killings examined involved alcohol consumption by either the victim or the offender, and 44% involved both men consuming alcohol. In Ireland, Dooley (1995: 19) found that 47% of *all* perpetrators of homicide were intoxicated (defined as estimated to be over the legal driving limit), as were 42% of victims. Perhaps most striking of all are the findings from an older study by Gillies (1976) based on a sample of 400 people charged with murder in the Strathclyde region of west Scotland – an area of severe social deprivation. Two-thirds of the sample (which included both male and female suspects) were found to have been intoxicated at the time of the killing.

Returning to the Homicide Index (England and Wales), analysis reveals that over half (56%) of homicides involving an intoxicated suspect occurred in circumstances of what are officially categorised as 'rage/quarrels' amongst unrelated individuals. This rises to 64% where the suspect was an intoxicated adult male. In contrast, only 29% of killings by non-intoxicated suspects were classified as such. Whilst the category rage/quarrel is clearly broad, the data are consistent with the observation that alcohol tends to inflame quarrelsome and aggressive behaviour – often in relation to so-called 'trivial arguments' and/or taking the form of a masculine 'honour contest' (Polk 1994) – amongst unrelated men. In this context, the aforementioned study by Gillies (1976) is useful in illustrating the similarity between violent incidents involving alcohol which do and do not result in homicide. Noting that nearly half of all homicide suspects had previous convictions for lesser violence, he comments:

> Most crimes were unpremeditated, unintended, impulsive and precipitated by quarrels picked over trifles when the participants were worse for drink.

The Homicide Index does not, currently, record details of the location of homicides. However, Scottish records do so.[30] Under 4% of killings between 1979 and 1998 in Scotland occurred in pubs, clubs or restaurants. The coding scheme adopted does not allow for any measure of homicides that took place

outside such buildings, so there is no indication of the extent to which 'spill out areas' from pubs and clubs were involved – although it may be relevant that about a quarter of homicides in Scotland occurred on 'streets or footpaths'.[31]

In summary, alcohol-related homicides predominantly occur amongst unrelated adult males and are the result of some kind of quarrel. Few of these killings appear to take place within pubs or clubs although it is likely that larger numbers occur in 'spill out' areas or, even if committed further away, involve people still intoxicated from earlier drinking sessions. Moreover, alcohol is, of course, a transportable product, and significant numbers of killings occur where perpetrators, victims, or both have been drinking in their own or other people's homes. This suggests that tackling pub/club-type violence, in which considerable progress has been made recently, will only go part of the way to reducing alcohol-related homicide (and violence more generally).

Another complex issue to unravel is the precise nature of the relationship between alcohol (and/or drug) consumption and violence. The evidence available is mixed to say the least. As Levi (1997: 873) points out:

> It is rare for such people to be violent every time that they consume those substances, so it cannot be said, for example, that the drink is a sufficient or even necessary explanation of their violence.

(Additionally, of course, many people who consume alcohol *never* become violent.) That said, it would be unwise to ignore the problem of alcohol-related violence – let alone alcohol-related homicide – purely because a direct causal link cannot be established beyond doubt. There is ample indirect evidence of a link, albeit mediated by other factors. For example, Brookman (2000, 2005) concluded that alcohol consumption had played at least a contributory role in a significant proportion of the male-on-male homicides she analysed, although undoubtedly its effects were very much influenced by other situational and personal factors operating at the time. Along similar lines, Tomsen (1997: 90) argues that some strong insights into the alcohol–violence connection are provided by:

> a dual consideration of the tie between masculine social identity and heavy group drinking and the importance of issues of male honour in the social interaction that leads to much violent behaviour.

Preventing alcohol-related homicide

As indicated earlier, significant effort has been put into finding ways of reducing violence in and around licensed premises. Moreover, many of the measures employed appear to have met with some degree of success. Most

of the research in this area recognises that not all pubs and clubs are equally associated with violence (Deehan 1999; Maguire & Nettleton, 2003; Maguire & Hopkins, 2003). Rather, it is generally the case that towns and cities contain a number of 'hot spots' in the form of establishments with a high frequency of (and often reputation for) violent incidents, together with a larger number of generally unproblematic venues. Research and interventions have focused mainly on the physical or social environment in and around such 'hot spots'. Figure 6 shows a list of interventions that have been implemented in various city centres.

One area of attention has been the physical design of pubs and clubs. For example, research conducted by Graham and Homel (1997) identified a number of factors conducive to violence in public houses and clubs, including the density of activities within such premises and indoor design (e.g. the location of furniture and pool tables, pillars, walls and bars). Design features, they point out, can also affect the social environment through helping to create a particular mood or atmosphere.

Other examples of attempts to improve the social environment include training and licensing schemes for 'door staff' (who work inside clubs as well as 'on the doors'). It is claimed that properly trained staff can often spot indicators of impending trouble and take discreet action to prevent it (Deehan 1999). Equally, there is evidence that poorly trained and unsupervised door staff can cause violence as well as prevent it (Hobbs et al., 2002). Some areas have set up partnership arrangements to facilitate joint actions by the police, licensing magistrates and managers of licensed premises. While it may occasionally be necessary to use deterrent measures (such as threats to withdraw licenses) against 'hot spots' where managers are uncooperative, in most cases the partnership approach appears to be the best way of identifying and solving underlying problems in particular premises (Maguire & Nettleton, 2003).[32]

Figure 6 also draws attention to a number of interventions concerned directly with the monitoring and control of drinkers, including controls over the numbers of people entering premises, CCTV surveillance (and, again, surveillance by well-trained security staff), refusal of drinks to intoxicated customers, and 'Pubwatch' schemes.[33] Many of these appear from local evaluations to be promising in terms of their potential to reduce violence, although little fully reliable research evidence is available (see Maguire & Nettleton, 2003; Maguire & Hopkins, 2003). Still less, of course, is known about their capacity for reducing homicide.

Finally – and particularly importantly – many local authorities are now beginning to recognise the emergence in the United Kingdom of the phenomenon of the 'night-time economy' (Hobbs et al., 2000) and with it their

Nature of intervention	Examples
Manipulation of the physical environment of pubs/clubs	• No 'hidden' alcoves that prevent the easy monitoring of behaviour • Attention to the spacing of furniture, including, tables, chairs, stools and pool tables to avoid customer crowding • Raised bar-areas to permit staff monitoring of customer behaviour
Controlling the social atmosphere	• Attractive, well-maintained premises • Registered door-staff schemes and employment of well-trained staff who discourage anti-social behaviour in a manner that does not escalate violence • The reduction of excessively loud music
Alcohol control	• No 'happy hours'/drinks promotions • Serving of food and soft beverages
Control of drinkers	• Well ventilated premises with controls over the number of customers entering • Well trained and socially skilled door staff and bar staff experienced at dealing with aggressive or violent individuals (see also above) • Refusal of alcohol to already intoxicated customers • 'Pubwatch' schemes • The use of CCTV to monitor disorder and violence • Staggered closing times to avoid large numbers of individuals gathering in the same area together • Regular and reliable transportation away from pubs and clubs
Injury reduction	• Use of toughened glass • Use of plastic cups • The banning of bottle-served alcohol • Swift removal of any glassware used • Weapons searches on entry to public houses and clubs
Criminal justice policy	• Heavier penalties for breaches of licensing laws such as serving to underage drinkers (relevant to both 'on' and 'off' licences) • Courts to divert alcohol-offenders to treatment and education programmes • Monitoring of 'problem/violent' premises • Alcohol education schemes

Figure 6. Summary of strategies for reducing violence in and around licensed premises.

responsibility to manage this economy in a proactive fashion, rather than simply leaving it to the police. This includes preventing the late-night gathering of crowds of intoxicated individuals by staggering closing times and providing reliable transport services at times when people are leaving pubs or clubs in

large numbers. This is claimed in several cities to have reduced incidents of fighting between people under the influence of alcohol. For example, a study by Purser (1997) in Coventry found that 70% of city centre assaults occurred in or around major entertainment centres and at licensed premises' closing times, and taxi ranks were identified as regular sites for violence. Transport facilities were subsequently organised to prevent queuing and a late night bus service was organised. Purser reports a reduction in alcohol-related assaults as a result of these measures.

In terms of reducing *homicides* in and around licensed premises, general violence reduction measures of these kinds are clearly relevant. However, it is also important to consider measures aimed specifically at *minimising the level of harm that results from those violent incidents which are not prevented*. One obvious strategy here is to encourage the use of safer glassware and bottles, which has been identified by Shepherd (1994, 1997) as an important factor in reducing the seriousness of injuries from assaults in licensed premises. In this context, the wide-scale introduction of drinking glasses made from toughened glass needs further consideration.[34]

Another possibility is the wider use of 'unbreakable plastic' glasses. These were used successfully throughout Cardiff city centre during the 1999 Rugby World Cup, when substantial numbers of people drank outside pubs on the streets.[35] Again, some forward-looking manufacturers (e.g. Bass) are starting to use specially designed plastic bottles for drinks which are often drunk from the bottle. In welcoming this, the Portman Group (1998: 20) adds that, regardless of the policies ultimately implemented regarding glassware, 'licensees can substantially reduce the risk of "glassing attacks" on their premises by ensuring that empty bottles and glasses are regularly collected.' Such policies might also reduce the number of assaults that end fatally – as might other harm minimisation strategies including speedy intervention when violence erupts and rapid medical treatment when individuals have been injured.

Responses by emergency services

We finish this section with a brief discussion of another possible strategy for reducing homicide which applies not only to alcohol-related violence, but to violence of any kind where the victim does not die immediately. This concerns improvements to the emergency services which may have an opportunity of saving the victim's life.

Unfortunately, there are no data available on the 'time-lag' between victims of homicide being assaulted (or otherwise injured) and their subsequent death. This information is currently recorded only in Coroner's files.[36] Equally, there has been very little research on the potential role of emergency medical treatment in reducing homicides. As Corzine (2000: 6) notes:

> There has been little work that integrates variations in medical resources or treatment into macro-level research on homicide. However, for many victims of serious assault, the length of time between being injured and receiving medical care is likely to be an important influence on their chances of survival.

The most obvious area for attention concerns the speed and efficiency of emergency treatment administered to victims of assault. The Lawrence Inquiry (Macpherson, 1999: para. 10.14) commented on the poor efforts at first aid of the London police officers who attended the scene where Stephen Lawrence lay after being assaulted. After conceding that nothing would have saved his life as he lay on the floor (due to extensive blood loss) the report states:

> That does not mean that steps should not have been taken to follow the rubrics taught to the officers present in their First Aid training. They had no way to know how severe his injuries actually were and they should have performed First Aid in case Stephen's life could have been saved.

The Inquiry concludes (para. 10.25) that:

> Lack of training and/or improper content caused both officers present to fail to check the source of bleeding as an elementary first step.

There is a small amount of research evidence from the United States to indicate that the speed and quality of post-assaultive medical care can affect the lethality of violent attacks. In particular, the role of emergency medical services (EMS) was considered by Lattimore et al. (1997) in their study of homicide in eight US cities. They observed a number of improvements in EMS across these cities, especially in terms of the quality and quantity of vehicles and equipment, increased staff training, and more sophisticated staffing and vehicle-routing schemes. Some of these improvements corresponded with reduced homicide rates, but the authors were unable to be fully confident about a connection. They concluded that improvements in EMS had perhaps helped to ameliorate the consequences of a huge upsurge in the frequency of use and power of firearms across the eight cities. In short, EMS improvements may have 'dampened an increase in gun homicides that would otherwise have been seen' (Lattimore et al., 1997: 140; for discussion of other US evidence, see Doerner & Speir, 1986; Doerner, 1988).

Sherman (1993: 28) – albeit speculatively – uses variations in the quality of care to explain some fluctuations in homicide rates. For example, he notes that significant reductions in homicide observed after World War I in both Australia and the United States may well have been due in large part to 'the widespread introduction of telephones, automobile ambulances and emergency rooms, as

opposed to a decline in assaultive behaviour.' He further suggests that lower speed and quality of emergency care may play a role in the much higher rates of homicide observed in the Northern Territory of Australia than in Australia as a whole.[37] Soothill et al. (1999), too, mention longer distances travelled to intensive care facilities as one of several possible factors accounting for the higher per capita homicide rate in Scotland than in England.[38]

Another medical issue discussed by Sherman (1993) is the question of the effects of alcohol on the body's trauma defence mechanisms. Alcohol reportedly slows the body's reaction to puncture wounds, inhibiting cardio-circulatory functions and depressing the central nervous system shock reactions which aid in survival (Doerner, 1988: 176). This may explain, in part, the finding that alcohol use is more common in homicide victims than in aggravated assault victims (Pittman & Handy, 1964: 470). As Sherman (1993) notes, 'Discovery of some medical intervention to neutralise those specific effects of alcohol and allow the body's shock defence system to work could be a major breakthrough in homicide prevention'.

In summary, there has been very little research (and no empirical research in the United Kingdom to the best of our knowledge) in relation to the role of emergency medical treatment in preventing serious assaults from becoming homicides. However, research from other countries indicates that this is a promising avenue which merits further exploration.

Conclusions

A substantial proportion of homicides are associated with the consumption of alcohol. While around half of these occur in or around victims or offenders' homes, many of the remainder – which are predominantly 'male-on-male' offences – occur in licensed premises or on the streets. These are often the result of apparently trivial arguments or 'masculine honour contests', and they share many of the characteristics of the very large numbers of non-lethal assaults, which occur in similar circumstances. Hence, in terms of prevention, there is a good case for arguing that a significant reduction in alcohol-related *violence* would lead also to a reduction in alcohol-related *homicide*. There have been considerable advances in this area in recent years, and a number of promising interventions can be recommended for serious attention. These include the following:

- More widespread manipulation of the physical and social environments of public houses and clubs to minimise the potential for violent altercations.
- The more consistent implementation of measures to reduce intoxication – such as the serving of food and promotion of lower alcohol beers.

- More imaginative strategies to reduce alcohol consumption by underage people.
- The establishment of co-operation and co-ordinated responses between landlords, door-staff, the police and licensing authorities, especially in responding to regular violent 'hot spots' and in ensuring speedy responses to violent disorder.
- Staggered closing times and efficient and regular transportation away from town and city centres.

A second type of strategy, aimed more directly at homicide reduction, concerns attempts to reduce the 'lethality' of those assaults, which do take place. Again, although there is no clear British evidence on the effectiveness of such initiatives, some American research results give cause for cautious optimism. Suggested measures include the following:

- Improvements in the responses of emergency services to street assaults.
- The universal introduction of toughened (or non-glass) glassware.

However, it should be emphasised that all the aforementioned strategies can only go part of the way towards reducing alcohol-related homicide, as significant numbers of cases occur beyond the confines of public entertainment, and often in people's homes. Significant reductions may only be achieved over the long term by serious attention to ways of eroding the association between masculine bravado and the consumption of large volumes of alcohol.

6. The use of weapons: Homicide with guns or knives

The kinds of weapons most often used in homicides in the United Kingdom are sharp instruments, and especially knives. Around a third of homicides each year in England and Wales are attributable to sharp instruments. This is followed in frequency by fists or feet (hit or kicked to death), which averaged around 11% of the annual total between 1995 and 1999, and assaults with blunt instruments, which averaged 10%. Guns are used relatively infrequently, shootings accounting for under 6% of homicides over the same period (see Figure 7).

Similar patterns are observed in Scotland, although the use of sharp instruments is even more predominant than in England and Wales. During the 20-year period 1979–1998, sharp instruments were used in over 40% of all recorded homicides. This was followed in frequency by hitting or kicking (21%) and blunt instruments (12%). Shootings comprised just over 5% of the total.

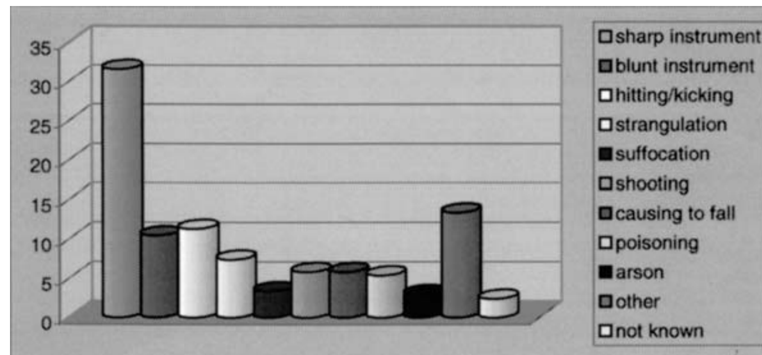

Figure 7. Method of killing (percentages), homicides in England and Wales, 1995–1999 combined.

The aforementioned patterns contrast strikingly with the United States, where firearms are by far the most common type of weapon used in homicides. Indeed, at the height of the 'murder boom' in New York in the late 1980s and early 1990s, nearly 80% of homicides were committed with handguns (Tardiff et al., 1995; Bowling, 1999). This is at the high end of the spectrum, but in many other American cities the equivalent proportion is in the region of two-thirds.

Knives

As the aforementioned data clearly illustrate, sharp instruments pose the most significant problem in terms of weapon use in the United Kingdom. This is the case regardless of the 'gender mix' of offenders and victims involved in homicide, with the exception of all-female encounters, where a wide variety of weapons are used.

Knives are used as weapons in both 'domestic' and 'street' homicides. However, in this paper we restrict the discussion to the latter, where specific prevention strategies focusing on the weapons *per se* come into consideration (while knives are often used in partner homicides, prevention of these is probably best attempted – as already discussed – by targeting 'high-risk' households: it would be unrealistic to aim at, say, reducing the supply of kitchen knives).

The Homicide Index in England and Wales does not identify the locations of offences, but the Scottish Index does. This indicates that around 40% of all homicides involving knives take place in the street or other outdoor locations. This immediately draws attention to the issue of people carrying knives as a weapon or 'means of self-defence' when they go out. There is relatively little

evidence as to the extent of knife-carrying, but there are some indications that it is by no means unusual, especially among young men. A study conducted in Scotland (McKeganey & Norrie, 2000) found that, among 3121 children aged between 11 and 16 who completed a confidential questionnaire, 12% claimed to have carried a sharp instrument (referred to as 'blades' and including various knives, razor, machete and sword) as a weapon at some stage in their lives. The research further suggests an association between weapon carrying and illegal drug use. The above figure increased to 37.5% for children who used more than one type of drug and among *young male drug users*, it was as high as 63%.

Whilst there are issues of reliability to be considered, not least in terms of the extent to which children may have either concealed or exaggerated their involvement in drug taking and/or carrying of weapons, these findings certainly suggest that the carrying of potentially lethal weapons by young people is not uncommon in Scotland.[39] It is tempting to link this to the exceptionally high proportion of homicides in Scotland that involve sharp instruments (see earlier paragraphs), but without comparable evidence about levels of knife-carrying elsewhere in the United Kingdom it is unsafe to state this categorically.

Preventive strategies

Although the link is yet to be established beyond doubt, it seems reasonable to assume that one of the most effective ways to reduce homicide involving knives or other sharp instruments would be to reduce the number of people carrying such weapons. This might be achieved through greater police use of stop and search powers, harsher penalties, and/or campaigns to educate young people on the dangers of carrying knives. Referring back to the discussion in the last section, there is also scope for more stringent searches on entering places of public entertainment – particularly clubs where incidents of violence are known to occur on a fairly regular basis (i.e. violent 'hot spots').

Where the carrying of knives in the street is concerned, the police already possess a range of powers to stop and search suspected individuals, and the need is less for new legislation than for more effective use of those powers – remembering, of course, that stop and search is an intrusive activity which causes resentment if overused, carried out insensitively, or appearing to be driven by racial or other prejudice.

One of the strongest existing powers is the Knives Act 1997, of which section 8 amends section 60 of the Criminal Justice and Public Order Act 1994, to allow an officer of the rank of Inspector or above to authorise the exercise of stop and search powers for up to 24 h if he or she reasonably believes that:

- incidents involving serious violence may take place in any locality within the police area, and an authorisation given under this section would be expedient to prevent their occurrence; or
- that people are carrying dangerous instruments or offensive weapons in any locality in the police area without good reason.

Out of a total of 6800 people stopped and searched in 1998/1999 under section 60 of the 1994 Act (i.e. in 'anticipation of violence'), 249 (4%) were found to be carrying an offensive or dangerous instrument, and of these, 110 (fewer than half) were arrested (Wilkins & Addicott, 2000). Considering that the search powers in question should be used only where a specific threat of violence is present, these 'hit rates' are surprisingly low, and suggest that police actions alone are unlikely to have a huge impact on the carrying of knives. They need to be backed up by educational campaigns and perhaps periodic 'crackdowns' when there is evidence of weapons being carried in a particular area.

Firearms

Indeed, apart from a brief rise at the turn of the century, the proportion of homicides officially recorded as attributable to firearms has fallen since the early 1990s. There were 313 instances over the five-year period from 1990 to 1994 and 198 between 1995 and 1999. The year 1993 was the worst, with 75 fatal shootings (11%) and 1998 was the 'best' year, with 32 fatal shootings (5%).

Although the overall level of firearms-related homicides in the United Kingdom is low, they tend to be concentrated in large cities, where they can pose a very significant policing problem. Most of the available evidence points to drug-related feuds as one of the most common motives in such killings. They are also quite strongly associated with some specific offender and victim groups.

Homicides with firearms in England and Wales over the period 1995–1999 nearly all involved handguns, revolvers or pistols. An unusually high proportion remain undetected (nearly 40%, in comparison with under 10% of homicides as a whole); indeed, over a quarter of all unsolved homicides in England and Wales involved a firearm as the weapon of kill. They occurred predominantly between males and (where relationships are known) between 'acquaintances' or 'strangers', rather than between relatives or partners; there is also evidence that a higher than average proportion involved more than one offender. Over 40% of those with male suspects and victims are recorded as stemming from a 'faction fight/feud' or a quarrel between unrelated individuals, and in a further 36% no motive is recorded. The majority

occurred in large metropolitan forces, especially the MPD (31%), Greater Manchester (12%), West Midlands (11%) and Merseyside (7%).

Finally, young black males have for some time been heavily over-represented in fatal shootings as both offenders and victims. For example, over the aforementioned period, in 32% of all shooting incidents in England and Wales involving male suspects and male victims, at least one suspect was black.[40] Equally striking, in 27% of all homicides in which both offender and victim are known to have been black, the weapon used was a firearm (data are not available for the other jurisdictions of the United Kingdom). It is probably significant that such homicides occurred principally in cities where most of the media reports of 'yardie' killings have been focused, especially London and Birmingham.

Preventive strategies

Based on the earlier evidence, the most obvious strategies for reducing firearms-related homicides in the United Kingdom are:

- to tackle the overall supply of guns;
- to increase the risks to anyone owning or carrying illegal weapons (through increased police activity and/or heavier penalties for illegal possession);
- to intervene in drug markets;
- to target criminal groups whose members are known to own or use guns.

Where the first two of these options are concerned, it is interesting that the significant dip in firearms-related homicides in England and Wales in 1998, followed the introduction of the Firearms (Amendment) Act 1997, which prohibited ownership of the vast majority of handguns. More generally, it seems very likely that, historically, one of the main reasons for the low rate of such homicides in the United Kingdom compared to the United States has been the tight controls on gun ownership in this country. Moreover, as Bowling (1999) has noted, the 'rise and fall of murder' in New York was to some extent associated with major changes in the police enforcement of laws against carrying weapons. In other words, maintaining tight controls to restrict the availability of firearms seems to us the keystone of any effective strategy to reduce the incidence of homicide by shooting.

The third option – efforts to change drug markets – is a major undertaking, which raises many complex questions, and there is no space to discuss them here. We simply point out that possible strategies range from operations to 'disrupt' local drug markets, through major educational and health campaigns to combat the demand for drugs, to the radical option of legalisation or part-legalisation of certain drugs. Ultimately, of course, it is the level of demand for illegal substances that makes drug-dealing so lucrative and hence leads

people to be prepared to kill to assure their place in the market: strategies which ignore this basic truth probably have a low chance of success over the longer term.

Finally, we make a few comments on the fourth option – the systematic targeting of offenders involved in drug dealing who are prepared to use violence. The most important example of this in the United Kingdom to date is 'Operation Trident', a major coordinated strategy (based in London, but with a national brief), which was launched in 1999. This has both an intelligence gathering and analysis function and an operational arm.

Although there has been no independent research conducted to date to assess the work of Operation Trident, there are early indications that it is performing well in terms of detecting offenders. By Spring 2000, 26 suspects had already been charged in relation to the murders of 17 people. This apparently high level of success has been attributed by officers, in part, to the close working of key members of the black community in London with the police, which has permitted officers to bridge gaps with black victims and witnesses who were previously afraid to give evidence against offenders.[41]

There are some parallels between the workings of Operation Trident and operations against violent street gangs in parts of America, in that both revolve around intensive, crime-specific policing. However, American projects have tended to add an extra dimension, which might be described as 'systematic harassment' of anyone targeted. One prominent example is the Boston 'Ceasefire' strategy, a two-part multi-agency intervention in Boston which combined direct law enforcement attacks on the illicit gun market with an approach that came to be known as 'pulling levers'. This latter strategy involved reaching out directly to gangs, setting clear standards for their behaviour, and backing up that message by 'pulling every lever' legally available when those standards were violated. The operation that resulted 'made use of a wide variety of traditional criminal justice tools but assembled them in fundamentally new and different ways' (Kennedy, 1998: 3). Essentially, a strong message was transmitted (and followed through) to gangs in the area that the use of serious violence would draw major crackdowns, hitting them with the full impact of the criminal and civil law for all manner of activities in which they were involved. This strategy is said to have overcome the problems of agencies being unable to devote heightened attention to all gangs at all times, and of delivering occasional crackdowns with little long-term impact:

> From a world in which the cost to a gang of committing a homicide was, perhaps, that a gang member would be caught and prosecuted (while 'street' benefits such as reputation for toughness accrued to the gang as a whole), the cost soared. Added to the original risk would be everything else the

> authorities could bring to bear: cash-flow problems caused by street drug market disruption, arrests for outstanding warrants, the humiliation of strict probation enforcement . . .. Those costs were borne by the whole gang, not just the shooter. As long as the authorities were confident that they knew what gangs were involved in a particular act of violence, as they usually were, these penalties were certain (Kennedy, 1998: 5–6).

Spectacular claims have been made for the effectiveness of these kinds of approach: they have been given credit, for example, for a two-thirds drop in youth homicide in Boston since 1996, and a 45% fall in homicide in Minneapolis within a year (Kennedy, 1998). However, some care has to be exercised in interpreting such claims (cf. Bowling, 1999). It should also be noted that, while the notion of systematic 'disruption' of criminal groups is informing a number of projects in the United Kingdom, this has so far been undertaken with a sensible degree of caution. Clearly, the cultural context is very different in American cities, and the unthinking use of such repressive tactics in the United Kingdom might have major unwanted consequences.

Conclusions

While not all types of homicide are likely to be prevented by interventions aimed at reducing the availability or 'lethality' of weapons, there is clearly some scope for such initiatives in relation to both knives and firearms. Knives, are the most commonly used weapons in homicide in the United Kingdom. While many stabbings occur in people's homes, about 40% of homicides involving knives occur 'outdoors', and the latter may be amenable to reduction through a strong focus on the weapons themselves. More targeted use of police stop and search powers, harsher penalties for possession of offensive weapons, and campaigns to educate people on the dangers of carrying knives, are all potentially effective strategies.

Preventing homicides with guns – which (contrary to impressions given in the media) fell in number in the United Kingdom in the late 1990s – requires attention to both supply and demand factors. These include enhancing controls over the availability of firearms and stronger penalties for illegal possession. Targeting criminal groups known to own or use guns is another important preventive strategy for which success has been claimed in both the United States and United Kingdom.

More specifically, the following appear to be the most promising weapons-related strategies:

- Educational campaigns regarding the dangers and penalties in relation to the illegal carrying of knives and other weapons.

- Periodic 'crack-downs' on the carrying of illegal weapons.
- Searches for weapons on entry to public houses and clubs with reputations for violence.
- Consideration of the extension of major intelligence-led operations against criminal groups, such as 'Operation Trident', to other police force areas.

7. Mental disorder, 'psychopaths' and 'dangerous offenders'

In this section, we comment briefly on the complex and often controversial issue of measures to protect the public from 'dangerous' offenders. In England and Wales, despite legislation in the 1990s which has considerably widened the use of preventive detention and other controls over people assessed as dangerous,[42] public concern continues to be aroused by highly publicised individual cases, and there are frequent demands for even more stringent measures to be employed (Kemshall & Maguire, 2001, 2003).

The 'dangerousness' issue has a number of strands, which are often confused and conflated. One set of questions revolves around the relationship between mental disorder and homicide, a key aspect of which is the risk posed by so-called 'psychopaths' (people not necessarily mentally ill, but suffering from severe personality disorders). At the same time, concern has grown about the potential threat from convicted sexual and violent offenders – whether or not they are suffering from mental disorders – after they are released from prison: here, 'paedophiles' have received the most media attention in recent years, but concerns also exist about people previously convicted of attempted murder, rape and many other serious offences.

We shall divide our discussion into three main sections: the relationship between homicide and mental disorder; possible strategies for reducing homicides by the mentally disordered; and issues in the 'risk management' of dangerous offenders. The kinds of preventive strategies, which have been tried or suggested, range from the general improvement of mental health services to proposals to introduce powers to incarcerate people with severe personality disorder, even in cases where they have not committed a criminal offence. It is impossible to do full justice to all these topics in a short space and – particularly where they are covered in depth elsewhere – we shall not attempt to do so. Rather, we aim to clarify some of the main issues, and to provide a few pointers to possible options for policy development.

Homicide and mental disorder

Despite widespread misconceptions, and a number of high-profile cases, there is no clear evidence to associate mental disorder *per se* with a significantly

increased risk of violent offending (Monahan & Steadman, 1994; Peay, 2002). Equally, it is generally agreed that individuals suffering from mental disorder are responsible for a relatively small proportion of all homicides. However, these broad statements require some important qualification.

Most importantly, there are wide variations in definitions of 'mental disorder'. Some analyses are based on diagnoses of mental *illness*, in the relatively narrow sense of the term normally used by psychiatrists (i.e. restricted mainly to conditions such as schizophrenia and other forms of psychosis). For example, Taylor and Gunn (1999: 10) estimate that around 40 homicides per year are committed by mentally ill individuals: this translates to around 6% of the total homicides in an average year. Furthermore, the authors claim that there has been little fluctuation in the number of mentally ill people committing homicide over the 38-year period 1957–1995 (Taylor & Gunn, 1999: 9).

Data from UK homicide databases generally support these estimates. For example, analysis of the Scottish Index for the 20-year period 1979–1998 reveals that almost 3% of homicide offenders received hospital orders and a further 1% were determined to be insane and unfit to plead or insane at the time of the offence. If one adds to these figures most of the further 2.5% of offenders who committed suicide before their cases were heard in the courts, a figure of around 6% again emerges. Analysis of the Homicide Index (England and Wales, 1995–1999) on the same basis produces a similar result.

However, if a wider definition of mental illness/disorder is adopted, estimates tend to be rather higher. The *National Confidential Inquiry into Suicide and Homicide by People with Mental Illness* (Appleby et al., 1999) examined the psychiatric reports of 500 people awaiting trial for homicide between April 1996 and October 1997, and concluded that 71 of these (14%) had displayed symptoms of a wide range of conditions including psychoses, personality disorders, chronic substance abuse and affective and organic illnesses. The most common primary diagnosis was personality disorder, identified in 30 of the 71 cases (6% of the total sample), followed by schizophrenia/delusions, identified in 27 cases (also 6%).[43] Cases in which mental disorder was combined with serious alcohol or drug misuse – what are sometimes described as 'dual diagnosis' cases – were also relatively common. This is consistent with findings from the United States and elsewhere, which suggest that this combination is a significant risk factor in predicting violence (see Monahan, 1997).

The Appleby Inquiry further concluded that 'mental state abnormalities' had played a 'major role' in the offence in 48 cases – i.e. in 10% of the total case sample. Despite this, only 15 subjects had been receiving intensive community care at the time of the homicide.

Comparable results emerged from a review by Dooley (1995) of homicide in Ireland between 1972 and 1991. Similarly to the Appleby Inquiry, Dooley determined that in 9.5% of cases, the primary motive for homicide was some form of mental disorder. He also found that 12% of offenders had a previous psychiatric history, about three-quarters of these having had in-patient treatment. Once again, the diagnoses covered a very wide range of disorders (Dooley, 1995: 19).

The overall message from the (still evolving) literature, then, seems to be that, while there is little justification for regarding the whole 'mentally disordered' population as a special risk group in respect of violent behaviour, there are certain subgroups which may merit closer attention. The two most important of these appear to be:

- people with severe personality disorder; and
- people with problems of substance misuse.

Reducing homicides committed by the mentally disordered

As Taylor and Gunn (1999: 13) point out, whilst most health care services may offer adequate assessment and treatment to people suffering from schizophrenia and major affective illness, there is 'a reluctance and probably even inability on the part of most services to provide for people with problems of substance misuse and personality disorder'. Yet, as outlined earlier, it is precisely these two groups that emerge from research as posing the highest risk among the mentally disordered.

Dual diagnosis cases

The concern about substance misuse is strongly echoed by Ward and Applin (1998), who reviewed 17 reports of inquiries into homicides by mentally disordered people. They observed in particular a glaring neglect of recommendations in relation to alcohol and drug misuse – despite the fact that 14 of the reports indicated a marked alcohol or drug misuse component. In over half of the cases, indeed, alcohol or drug misuse 'could be argued to be a major, if not the major, cause of the homicide' (p. 3). Ward and Applin conclude that substance-misuse services remain under-developed and recommend that the Department of Health should immediately initiate further urgent work to research and explore in greater depth the contribution of substance misuse in homicides committed by people with mental health problems. In addition, they suggest that future inquiry reports should specifically address drug and alcohol misuse within their recommendations.[44]

Finally, Ward and Applin (1998: 3) recommend that mental health and alcohol and drug services at both national and local levels should collaborate to develop better service responses to the often 'chaotic, dually diagnosed clients presented in inquiry reports'. At the same time, they add, 'This should not be at the expense of the wider group of people with alcohol and drug problems who are also faced with a shortage of appropriate services'. This is an important insight, for as indicated earlier (Section 5), the links between alcohol and homicide are clearly not confined to those cases involving a mentally disturbed offender.

Proposed measures for 'psychopaths'

The particular issue of the risk posed by 'psychopaths', which was prominent in the 'dangerousness debate' during the 1970s following the case of Graham Young (a released mental patient with a severe personality disorder who poisoned new victims), has again attracted major public attention since the mid-1990s in the wake of the case of Michael Stone, who was convicted in 1995 of killing a mother and her daughter. Stone, who also suffered from a severe personality disorder, had apparently asked doctors for help in relation to his mental condition shortly before committing the offences, but had been deemed untreatable and hence not admitted to a hospital.

Partly as a result of this case, a number of controversial proposals were published by the Home Office in July 1999 for new measures to reduce the risk posed by people with such disorders. The consultation document describes the range of options being considered with two aims in mind:

(1) to ensure that dangerous severely personality disordered people ('psychopaths') are kept in detention for as long as they pose a high risk;
(2) to manage these individuals in a way that provides better opportunities to deal with the consequences of their disorder.

Two main proposals were put forward to meet these aims, both based on extended use of preventive detention. The first involved strengthening existing legislation so that 'psychopaths' would not be released from prison or hospital until it was considered they no longer presented a risk to the public. The second was the introduction of a new legal framework to provide powers for the indefinite detention of 'dangerous psychopaths' without any evidence of their having committed a crime. Both proposals (and particularly the latter) have met with strong opposition, chiefly on human rights grounds and are unlikely to be passed as legislation in the near future. Critics have also argued that, given the well-known problems of predicting serious violence (Bottoms, 1977; Monahan, 1981, 1997), it is by no means certain that such a programme of selective incapacitation would have a significant effect on levels of serious

violence, let alone homicide. Although it has been claimed that psychopathy – as measured by diagnostic instruments such as 'PCL-R' (Hare, 1991) – is one of the best predictors of violence, many writers point out that such instruments are designed for classifying risk groups, not for individual risk assessment (Cooke et al., 1998). They have also had little testing in the United Kingdom, as opposed to the United States and Canada, and cultural differences may be important.

General strategies

In addition to its comments on specific groups such as the dually diagnosed, the Appleby Inquiry, which provides the most comprehensive recent review of homicide and mental disorder, made a number of general recommendations for improving mental healthcare and removing the risk of violence by the mentally disordered. These included:

- setting up closer links between hospitals and community care services so that high-risk patients can be followed up within 48 hours of leaving hospital;
- introducing patient 'passports' to ensure that information about patients is transferred between services;
- specialist training in dealing with violence for all staff in contact with patients at risk; and
- improvements in compliance with community treatment orders.

The last of these is of particular interest here, as the report estimates that two homicides per year might be prevented by improving patient compliance with treatment – above all, ensuring that prescribed medicines are taken. However, Geddes (1999) has pointed out that the number of interventions needed to achieve this would be enormous, and that there is no evidence that the strategy would be effective.

Risk management of 'dangerous offenders' in the community

The major alternative – or complementary – strategy to incarcerating people assessed as dangerous is to 'manage' their risk in the community. Important developments have occurred recently in this area, focusing not specifically on psychopaths, but on the broader category of 'potentially dangerous offenders', as well as on convicted sex offenders. These have been examined in several Home Office reports (e.g. Kemshall, 2000; Maguire et al., 2000; Plotnikoff & Woolfson, 2000; see also Kemshall & Maguire, 2001, 2002, 2003; Maguire & Brookman, 2005; Bryan & Doyle, 2003) and we shall not dwell on them

at length here. Even so, they are clearly of relevance to the issue of reducing homicide, and a few of the findings will be outlined.

The main focus of attention here is upon people coming out of prison, or moving into a new area, who have convictions for serious sexual or violent offences and who are thought to pose a significant risk of re-offending. The most important development has been the development of statutory Multi-Agency Public Protection Arrangements (MAPPA), set up under the Criminal Justice and Court Services Act 2000, whereby formal partnerships are created at a local level between police forces, probation services, social services, housing, health and other agencies, information is exchanged, formal risk assessments are undertaken, and plans are drawn up to protect the local public from those assessed as posing a risk. Such plans might include periodic visits to their homes, police surveillance, the use of informants, or efforts to engage the offender in treatment programmes.

The main findings of research by both Plotnikoff and Woolfson (2000), and Maguire et al. (2000) into earlier versions of MAPPA, were that the new system had not yet ‘settled down’ and was subject to wide variations in practice. Resourcing problems (not least managers’ time) were also found to be significant and increasing as the number of registered sex offenders rose. Indeed, in some areas panels were in danger of being ‘swamped’ by having to deal with large numbers of ‘routine’ cases, and there was a need to focus more sharply on those judged to pose the highest risk.[45]

As yet, no evaluation has been taken of the new system in terms of outcomes, (though see Bryan & Doyle, 2003) and there is no concrete evidence as to whether it actually reduces serious re-offending, let alone whether it has the capacity or potential to reduce homicide. However, anecdotal evidence suggests that, where panels concentrate their attention and resources heavily upon individual cases with a clear and immediate risk, there can be a positive response from the offender (whether caused by fear of detection or by the offers of assistance which often accompany the surveillance). Both qualitative and quantitative works are required in this area to examine the question of effectiveness further.

Finally, it is important to mention recent challenges to the domination of risk management by professional agencies through systems like MAPPA, and the development of alternatives which attempt to involve the community more directly, such as ‘Circles of Support’ and ‘Stop it Now’ (see Freeman-Longo and Blanchard, 1998; Kemshall and McKenzie, 2004; Maguire and Kemshall, 2004). An assumption common to both is that to isolate and exclude sex offenders from normal community life increases rather than diminishes their risk, and that ordinary people can play a part in both supporting them and monitoring their behaviour. The success of such approaches, of course,

depends upon a mature and responsible reaction from the community (as opposed to attempts to drive sex offenders out of the area) and they are generally accompanied by efforts at public education about the nature of such offending and the risks posed.

8. High-risk occupational groups

We end the main body of the article with some very brief comments about jobs or professions in which staff appear to be at a higher than normal risk of falling victim to homicide. As stated at the beginning, we have decided due to shortage of space not to include a discussion of the complex issue of homicide through 'accidents' at work caused wholly or partly by the negligence of employers, although this is a topic that also requires serious attention.

The first point to make is that, according to the Homicide Index (which, of course, excludes homicide through employer negligence), it is the *unemployed* who are most likely to be killed. Nearly 40% of homicide victims in England and Wales between 1995 and 1999 were recorded as unemployed at the time of their death.[46] Similarly, over 40% of victims killed in Scotland over the 20-year period 1979–1998 were classified as unemployed. Both data sets indicate that unskilled manual workers are also over-represented among victims.

At the same time, there are some particular occupations that appear to be associated with an above-average risk of victimisation. Between 1996 and 1999 in England and Wales, the occupations with the highest number of homicide victims were:

Security staff	25
Medical staff	24
Prostitutes	17
Social workers	14

Admittedly, it is not known how many of the mentioned victims were killed in the course of their work and how many in an unrelated context. Even so, as the same would be true of any other recorded occupation, the likelihood is that their job was a directly relevant factor in many cases. Further indirect support for this comes from the British Crime Survey, which allows analysis of the extent of 'violence at work' – defined as 'assaults or threats that occurred while the victim was working and were perpetrated by members of the public' (Budd, 1999: 2). The BCS findings suggest that comparatively high rates of violence at work are suffered by:

	Assaulted in 1997 (%)	Threatened in 1997 (%)
Police officers	25	6
Social workers/probation officers	9	9
Publicans/bar staff	8	5
Nurses	5	3
Retail managers/proprietors	4	6
Welfare/community/youth workers	4	3
Security guards, etc.	3	8
Bus drivers, etc.	3	5

Adapted from Budd (1999: 16–26).

Three points are worth highlighting in comparing these two sets of information. First, while the BCS indicates that police officers face by far the highest risk of being assaulted at work, relatively few (four) fell victim to homicide over the period 1995–1999, one more than fire-fighters and ambulance staff combined. Secondly, prostitution was not included in the BCS as an 'occupation', so no data were available on sex workers' risks of being assaulted. And thirdly, while 'security staff' comprise the largest occupational group where homicide victims are concerned, they do not appear to face an exceptionally high risk of non-lethal violence. The last of these points seems the most difficult to explain, and the high total of deaths of security staff merits serious attention in its own right, but we have insufficient information to pursue these issues here: 'security staff' covers a wide range of jobs, and it is difficult to explore possible strategies for reducing their exposure to risk, without further details on what kinds of such staff are killed in what circumstances.

By contrast, both medical staff and social workers feature prominently in both lists, and there is quite wide awareness of the kinds of risks they face. Considerable efforts have also been made in recent years to provide both groups with better protection. These include improvements to security systems in hospitals, nurses' living quarters and doctors' surgeries, as well as personal safety practices (such as prior risk assessments, visiting in pairs, and personal alarm systems) for social workers and other professionals when visiting clients in their own homes. As yet, no clear evidence is available about the effectiveness of such measures.

However, much less attention has been paid to the safety of sex workers who, in addition to the real possibility of being murdered, daily face very high risks of violence and rape (McKeganey & Barnard, 1996; Sharpe, 1998). This is an important area in which there is clearly scope for new initiatives.

First of all, it is likely that the figure of 17 homicides in 5 years seriously under-represents the true number of murders of prostitutes, as the coding system does not include in its record of 'key occupation' those women who have other forms of employment and/or whose involvement in prostitution is hidden from official view. Indeed, research by Sharpe (1998) found that four prostitutes were murdered in the space of just 16 months in Hull. Sharpe notes that Hull is relatively small in terms of prostitute activity. She also points out [personal communication] that:

> the transient nature of the world of prostitution and eclectic lifestyle of prostitutes also raises the real possibility that some prostitutes who have been murdered may simply have been placed on the Missing Persons list.

Some police forces in the United Kingdom have links with Safer Cities to improve street lighting in areas used for prostitution, and CCTV has been used with various degrees of success in a number of cities (Brittan, 1994). More radical means of regulating the work of prostitutes, which may involve decriminalisation, zones of toleration, personal security systems and regular health check-ups, have also been examined in some depth (Golding, 1994; Punch, 1996), although few of these are currently operational in the United Kingdom. In sum, this is clearly an area of direct relevance to homicide reduction, which would benefit from further research and more imaginative policy initiatives.

9. Concluding remarks

The application of normal crime prevention principles to the phenomenon of homicide comes up against some substantial difficulties. First of all, homicide is highly diverse in its characteristics, causes and dynamics. For this reason, there is unlikely to be a single preventive strategy that can impact upon all forms of homicide. To compound the problem, there has been insufficient research in the United Kingdom that clearly distinguishes different forms of homicide in ways that would facilitate targeted prevention programmes. In this paper, we have discussed in some detail four substantially different categories of homicide – domestic homicides, killings of babies, alcohol related homicides, and killings with knives or guns. We have also looked briefly at homicides involving mentally disordered offenders and those against members of occupation groups with a higher than average risk. This has already led us to discuss a wide variety of possible reduction strategies, different in every case. If we had space to consider more types of homicide – for example, homicide against elderly victims, homicide against children, sexually motivated homicide, vehicular homicide, or corporate homicide – we would have

had to consider yet other strategies. This does not make homicide reduction an impossible task, but one which has to be undertaken systematically, with a series of very precise focuses.

Secondly, the overall numbers of homicides are small (an average of 16–17 per week across the United Kingdom), so prediction of where, when, and by or against whom they will be committed is extremely difficult, if not impossible. This problem can be partly overcome by targeting interventions at violence in general (which shares many characteristics with homicide), in the expectation that reducing violence will reduce homicide as a 'by-product': as violent offences are relatively common, it is much easier to determine local patterns and target interventions. However, there remain homicides in which the intention to kill (as opposed to injure) is so strong and sustained that there is an argument that they should be treated as a separate phenomenon, not amenable to reduction by general anti-violence measures.

Most of the possible strategies we have discussed in this article have been targeted at the types of homicide that have most in common with other forms of violence. Thus, strategies to reduce the levels domestic (partner) homicide, infant homicide, alcohol-related homicide, homicides with knives, and homicides against particular occupational groups (especially 'sex workers') are all informed by data pertaining to lesser assaults of similar kinds, and are aimed at reducing the latter as well as homicide *per se*. In addition, some strategies (e.g. the use of plastic glasses in pubs) aim to reduce the level of harm – including the potential lethality – produced by those assaults which are not prevented.

Such an approach seems sensible, not least because, unlike in the United States, there are not many parts of Britain where the number of homicides is high enough to warrant major local initiatives aimed at the reduction of homicide alone. There is, however, a case for such initiatives in a few large cities; this includes efforts to target the more 'deliberate' kinds of murder (such as grudge/revenge murders of rival drug dealers). Operation Trident, described in the sixth section, is one of the few existing examples in the United Kingdom of an apparently successful initiative of this kind.

Operation Trident, of course, was narrowly focused, and there are no examples yet in the United Kingdom of the kind of generalised anti-homicide initiatives – usually involving a 'problem-oriented' approach and based on close partnerships between the police and other agencies – which have been carried out in some American cities. One of the most interesting of these is the 'Comprehensive Homicide Initiative' undertaken in Richmond, California and described by Fyfe et al. (1997). The report notes that, 'Conventional police wisdom treated homicide as a crime relatively immune from police suppression efforts, regarding it as a product of forces over which the police had

little control', but that after a proliferation of drug-, gun- and gang-related homicides in the mid-1980s, and in line with a general shift towards problem-oriented policing, this view came to be questioned. The result was the introduction of a multi-pronged proactive strategy designed to identify the paths that frequently lead to homicide and to close them through early intervention. Particular interventions included collaboration between police, probation departments and local school children to work towards the prevention of children becoming involved in drug-related gang activity, which was associated with a significant proportion of homicides; the development of close working relations between local housing authorities, domestic violence workers and victims of domestic violence; and the introduction of skills courses, job training and summer jobs for young people whose lives revolved around street gangs.

In Britain, such initiatives are unlikely to be feasible except in a few major cities, but any police force that did decide to go down this road would now have the advantage (thanks particularly to the multi-agency arrangements in place countrywide following the implementation of the Crime and Disorder Act 1998)[47] of being able to draw on considerable experience of multi-agency partnerships and 'problem-oriented' approaches to crime control. Equally importantly, there is certainly scope for some of the specific interventions we have discussed during the paper to be organised or coordinated at a national level. These, too, could be linked to broader government initiatives, such as those aimed at reducing social exclusion and improving parenting skills.

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Appendix A: Policy recommendations

The conclusions arrived at in this paper suggest a number of policy recommendations in relation to each of the main categories of homicide discussed. At the same time, we are mindful that there is relatively little rigorous evidence in the United Kingdom on which to base recommendations for particular interventions, especially regarding their potential effectiveness, and the list is inevitably somewhat speculative. Indeed, perhaps the first of our recommendations should be for funding to bring the (currently minimal) level of research knowledge about homicide in the United Kingdom closer to that of countries like Australia and Canada. We list in Appendix B a number of the specific areas in which, in our view, research is most needed.

With the earlier reservations, our review of research and current practice suggests that consideration should be given to the introduction or expansion of initiatives of the following kinds.

Domestic homicide

- More work on the identification of risk factors for serious domestic violence (and homicide), including more attention to issues such as stalking by ex-partners and women's own assessments of risk.
- The development of effective strategies of dissemination of information about risk factors.
- Co-ordinated multi-agency programmes of intervention with high-risk households.
- Monitoring of high-risk cases over longer periods.
- Particular attention to the protection of women during and after separations.

The killing of infants

- Educational programmes/campaigns to better prepare parents for the stresses of childcare and to emphasise the particular fragility of young babies to shaking.

- The expansion of home visit programmes and midwife and health visitor support, both before and after childbirth.
- Counselling and respite services to those families identified as suffering undue stresses/pressures and generally regarded as potentially ‘at risk’ of harming themselves or their baby.
- Multi-agency co-operation and responses once a ‘high-risk’ family has been identified, to prevent further risk of abuse/neglect.
- More attention to the creation of a social climate emphasising the protection of infants and children.

Alcohol-related homicide

- More widespread manipulation of the physical and social environments of public houses and clubs to minimise the potential for violent altercations.
- The more consistent implementation of measures to reduce intoxication – such as the serving of food and promotion of lower alcohol beers.
- More imaginative strategies to reduce alcohol consumption by underage people.
- The establishment of co-operation and co-ordinated responses between landlords, door-staff, the police and licensing authorities, especially in responding to regular violent ‘hot spots’ and in ensuring speedy responses to violent disorder.
- Staggered closing times and efficient and regular transportation away from town and city centres.
- The universal introduction of toughened (or non-glass) glassware.
- Measures to improve responses by the emergency services to street assaults.
- Over the longer term, much greater attention to ways of eroding the association between masculine bravado and the consumption of large volumes of alcohol.

Homicide with guns or knives

- Educational campaigns regarding the dangers and penalties in relation to the illegal carrying of knives and other weapons.
- Periodic ‘crack-downs’ on the carrying of illegal weapons.
- Searches for weapons on entry to public houses and clubs with reputations for violence.
- Consideration of the extension of major intelligence-led operations against criminal groups, such as ‘Operation Trident’, to other police force areas.

The last two substantive sections, on 'dangerous offenders' and on homicide in workplaces, were briefer than the others. They sought mainly to raise questions rather than address in depth the issue of reduction, and did not go into a comparable level of detail. However, a few specific recommendations do emerge. In relation to the former topic, it is clear that the following improvements to current practice are urgently needed:

- The provision of more and better substance-misuse services for 'dual diagnosis' mentally disordered offenders.
- Better monitoring of potentially violent mentally disordered patients (and stricter enforcement of compliance by those under community treatment orders) to ensure that they take prescribed medicines and remain in contact with relevant service providers.
- Better communication between hospitals and community care services.
- In areas with major resource problems, more systematic prioritisation by multi-agency risk management panels of the highest risk cases.

In relation to homicide and work, it was noted that many improvements in security procedures have been made in recent years to protect staff in high-risk occupations, such as social workers, nurses and security guards. The development of these should of course continue, as there are still relatively high numbers of homicides against such staff. However, special attention was paid to another high-risk 'occupation' which is often neglected, that of prostitution. The feasibility of many preventive strategies depends largely on the legal position of sex workers and police enforcement practices. However, possible strategies (few of which have yet been used in the United Kingdom) include the following:

- Zones of toleration, regularly patrolled by police.
- Personal security and alarm systems.
- Installation of CCTV in 'red light' districts.

Throughout all the aforementioned recommendations, as throughout the whole article, the most recurrent theme has been the central importance of *co-ordinated multi-agency responses*. No single body or group can alone identify risk or offer appropriate preventative measures. Specifically how the various layers should interact to promote effective reduction/prevention, is probably a question best explored in the context of explorations of particular types of homicide.

Finally, we re-emphasise the fact that we have not been able, in this preliminary review, to consider all forms of homicide. It would be helpful to follow it up with brief reviews of several other specific categories of homicide, in

order to work towards the development of a programme of focused preventive strategies. In particular, the reviews might usefully include:

- elderly victims,
- child victims,
- prostitute victims,
- homicides committed by youths,
- robbery-related homicides,
- gang-related killings,
- drugs-related homicides,
- racially-motivated homicides,
- homophobic homicides,
- work-place homicides,
- vehicular homicide,
- corporate homicide,
- the links between 'masculinity' and homicide.

Appendix B: Suggested areas for future research

Three main areas for future research emerge from the paper. We list under each heading a number of specific research questions that might fruitfully be addressed.

Risk-related questions

- United Kingdom specific research to identify the most significant risk factors associated with domestic homicide and infant homicide.
- Research to explore the particular risks associated with women leaving an abusive partner, and to evaluate any specific forms of intervention at this point by criminal justice or other agencies.
- The creation of profiles of abusing families to determine the specific links between child abuse more generally and infant homicide specifically.
- More sustained investigations into the links between alcohol consumption and lethal violence, including the effects of alcohol upon the body's trauma defence mechanisms.
- The links between illegal weapon carrying and involvement in drug-taking, drug-dealing or other forms of criminal activity.
- More attention to the role of alcohol and drug misuse in violence committed by the mentally disordered.

Prevalence studies/improvements to data

- Research to explore the 'true' extent of infant homicide and, in particular, to improve our ability to distinguish sudden infant deaths from suspicious deaths.
- More accurate data on the prevalence and location of alcohol-related homicides.
- The extent to which individuals of various ages, gender, and social class carry dangerous weapons and reasons for such behaviour.
- Research targeted at specific occupational groups to assess their vulnerability to homicide in terms of both offending and victimisation.

Monitoring and evaluation

- Monitoring and evaluation of the current range of criminal justice responses to domestic violence and their impact upon victims and offenders.
- Evaluation of specific policing strategies designed to impact upon firearms related violence.
- Evaluation of the usefulness and effectiveness of home visit schemes to parents.

Notes

1. A number of other basic classifications have been developed. For example, Tonry and Farrington (1995) distinguish four strategies of crime prevention, namely (1) law enforcement, (2) developmental, (3) community and (4) situational strategies. Law enforcement is chiefly ignored by Tonry and Farrington in their discussion, despite its inclusion in their classificatory scheme. In fact, the exclusion of law enforcement from the field of crime prevention has become something of an 'academic orthodoxy' in criminology of late (Hughes, 1998: 21).
2. For general discussions and examples of situational crime prevention, see Clarke (1995), Pease (2002), and Hughes (1998: Chapter 4).
3. Figures, for the year 1997/1998 for example, reveal that 210 employees and 397 members of the public were killed in work places (HSE 1998).
4. For an excellent discussion of the dark figure of work-related deaths that could fall within the definition of homicide, see Slapper and Tombs (1999).
5. A report by the Home Office Policing and Reducing Crime Unit suggests that whilst only a small proportion of missing persons are likely to be the victims of serious crime, police procedures for identifying 'suspicious' cases are underdeveloped (Newiss, 1999). The author recommends a number of measures to assist the police in identifying suspicious cases from the mass of reports they receive.
6. See fourth section for further discussion. Although probably unique on such a scale, the highly publicised case of Dr. Harold Shipman (who is thought to have murdered over 200 of his patients) also showed that the process of recording cause of death could itself be

subverted by a medical practitioner abusing his professional position to conceal homicide. More generally, some homicides caused by what amounts to criminal negligence (as in a small number of recent cases involving incompetent surgeons or anaesthetists) may not come to light for many years, if ever.

7. For example, the figures for 1991, 1992 and 1993 were initially 725, 681 and 675, respectively, but eventually revised to 623, 581 and 565. Figures are not retrospectively revised upwards, as homicides are recorded for the year in which they were first discovered, rather than the year of the victim's death.
8. These figures are based on 'current', not 'initial', totals (cf. note 7). 1999 figures are excluded, as these are still likely to be subject to significant revision as more information about the circumstances of deaths becomes available.
9. It is important to note, however, that the Northern Ireland figures exclude 'terrorist' murders. It is also worth noting that while in England and Wales and Northern Ireland, one homicide is counted for each death, in Scotland multiple deaths in a single incident are counted as one crime. There are (thankfully rare) occasions such as the Dunblane shootings when this makes a significant difference.
10. It should be noted, however, that there has been a long-standing and sometimes acrimonious theoretical and empirical debate as to whether high rates of homicide in the southern regions of the United States can be attributed primarily to structural factors such as poverty or to a regionally based 'subculture of violence' (see, for example, Hawley & Messner, 1989; see Harries, 1990 for comprehensive coverage of this debate). The apparently huge class differentials found in relation to violent offending as a whole, have also been questioned by writers who claim that they are exaggerated due to the more rigorous policing and prosecution of certain groups and areas (Braithwaite, 1979; Graham & Bowling, 1995).
11. The 'wounding' category refers to assaults resulting in serious injury (mainly 'GBH' cases). There were also 7044 recorded offences of 'threat or conspiracy to murder', and 193,016 of less serious 'other wounding, etc.' (mainly 'ABH').
12. See, for example, Soothill et al. (1999: 76). There also seems to be an 'inversion' between England & Wales and Scotland, the former having a higher rate of violence but lower rate of homicide and *vice versa*. However, such apparent anomalies may be due mainly to differences in recording practices, particularly in the categorisation of non-lethal incidents. This view would be supported by Bowling (1999: 533), who argues that homicide 'is the most valid and reliable indicator of serious violence'.
13. This is different to the United States, where the ready availability of guns means that many of the more spontaneous 'confrontational' and 'domestic' homicides are committed with firearms.
14. This is a combination of six Homicide Index categories of relationship between suspect and victim: 'spouse', 'ex spouse/estranged spouse', 'cohabitant/common law spouse', 'ex cohabitant/ex common law spouse' and (rather quaintly) 'lover/mistress/sweetheart' and 'ex lover/ex mistress/ex sweetheart'.
15. There appears to be an anomaly in the United States, where almost as many women kill their husbands as men kill their wives (Wilson & Daly, 1992). However, it is not clear that this holds if the data are extended to include cohabitants and other sexual partners.
16. This does not, of course, mean that incidents of domestic violence had never occurred at these addresses. It has been well established that domestic violence is often not reported to the police (Hamner & Saunders, 1984; Jones et al., 1986; Mirlees-Black, 1995; Heidensohn, 2002).
17. A further 18% were killed by partners without any evidence of prior domestic violence.

18. The Infanticide Act (1938, section 1) states that:

> Where a woman by any wilful act or omission causes the death of her child – aged less than a year – but at the time the balance of her mind was disturbed by reason of her not having fully recovered from the effect of giving birth to the child or by reason of the effect of lactation . . . the offence which would have amounted to murder is deemed to be infanticide and is dealt with and punished as if it were manslaughter.

19. Children (that is those aged 16 years and below) comprised 11% of the total homicide victim population in England and Wales between 1995 and 1999 (Homicide Index). There were 487 child victims over this period, 295 males (61%) and 192 females (39%).
20. Apart from parents, the other groups from which most killers of children were drawn were step-parents, 'other family' and 'friends or ex-friends'. Overall, 7% were classified as 'strangers'. However, the majority of the children killed by strangers were aged 15 or 16. *No* infants under 1 year, and very few children under 10, were known to have been killed by a stranger. And even among older children, this was still a rare event. For example, over the period 1995–1999, out of 117 homicides of children aged 10–16, 23 were known or suspected to have been committed by a stranger.
21. During the years 1930–1956 the rate of homicide of children less than 1 year old was considerably higher than that recorded after 1956, when the Homicide Act (1957) was introduced. However, changes in the method of recording homicide statistics make it difficult to compare directly rates before and after this Act.
22. This assumption, however, has been questioned by Rodriguez and Smithey (1999), who challenge the notion of a continuum of violence ranging from mild physical punishment to severe abuse and infant homicide.
23. This figure may underestimate the extent to which the Infanticide defence is successfully adopted, as proceedings remain pending for 24 instances of babies under 1 year killed by a female (32%). A further 15% were convicted of various categories of manslaughter.
24. Some writers have drawn particular attention to Munchhausen's Syndrome by Proxy (MSbP), a condition which can cause a parent (usually the mother) to fake or induce illness in a child, and to present it – often repeatedly – for medical assessment and care (Rosenberg, 1987 cited in Wilczynski, 1995). Smothering to induce seizures or fits is the most common method. Research by Meadow (1999) suggests that up to half of all 'suspicious infant deaths' could involve a person with a history of MSbP or an analogous disorder. However, this has been seriously challenged in the UK, in the light of some highly publicised overturned convictions.
25. Wallace notes, however, that such disparities regarding the mental health of male and female child killers may be 'more apparent than real' due to differences in reporting symptoms and seeking help across the sexes and ultimately to differential patterns of treatment and hospitalisation for men and women.
26. It is also worth mentioning that claims of success have been made for the introduction of incubators in some Hungarian hospital lobbies, in response to a rise in the number of mothers abandoning their babies. Eight hospitals in five Hungarian cities offer desperate mothers an alternative to abandoning their babies in potentially dangerous locations. The Schopf-Merei Agost Hospital initiated the incubator programme in 1997 and claims to have saved the lives of nine babies. The programme also includes discreet antenatal care and counselling for mothers who do not want to keep their infants (Kovac, 1999).
27. As noted earlier, similar arguments can be put forward in relation to other categories of homicide (notably most forms of 'domestic' homicide and the killing of infants; 'knifings'

on the street – see next section – also seem to fit well), but the case seems particularly compelling in the context of alcohol-related incidents.

28. The great majority were under the influence of alcohol alone. Less than 1% were recorded as under the influence of drugs and a further 2% under the influence of both drink and drugs.
29. The code for alcohol consumption is only used if the suspect was said (by the police in their homicide returns to the Home Office) to have consumed large amounts of alcohol, spent a long time drinking, or shown signs of drunkenness. Of course this might be impossible to determine if a suspect is apprehended some time after the alleged homicide. In contrast, any mention of drugs is sufficient for a positive coding for drugs. Neither Scotland nor Northern Ireland routinely record information on these matters.
30. It has not been possible to determine the location of homicide in relation to alcohol consumption as none of the jurisdictions record both aspects of the homicide event.
31. The largest proportion – 53% – occurred in and around dwellings. These figures may be compared with data from Ireland (Dooley, 1995), where about 45% of homicides between 1972 and 1991 occurred in victims' or offenders' homes, and a further 36% in an outdoor public location (typically streets or parks).
32. This report evaluates a successful experimental initiative, which received funding under the Home Office Crime Reduction Programme to implement a multi-agency project to reduce alcohol-related violence in the city centre of Cardiff, Wales.
33. Sheffield has invested considerable effort in a city-wide Pubwatch scheme (which includes a system of communication between pubs about people likely to become violent), to which a fall in alcohol-related crime in the city has been partly attributed. Another scheme worthy of mention is a high-profile enforcement strategy in Torbay, based on frequent police visits to pubs and checks for violations of licensing laws, which has again been associated with a fall in violent crime (both schemes are described by Deehan, 1999).
34. Breweries are increasingly coming to recognise the importance of this issue (see, for example, Brewers and Licensed Retailers Association, 1997), although it is important to add that further scientific research is needed to identify the safest forms of glass (see also Shepherd et al., 1993).
35. Instrumental in this was the Cardiff Licensees Forum (a key partner in the current violence project), which persuaded all city centre licensed premises to use plastic glasses with a government approved design and official stamp. It is the aim of the Forum to see all premises using these on a regular basis.
36. Personal communication, Cleo Rooney, Office of National Statistics.
37. Rates of homicide in the Northern Territory are eight times greater than those for Australia as a whole (Strang, 1993: 9).
38. Scotland has recently recorded homicide rates in the region of 19 per million inhabitants, compared with 11 per million in England and Wales.
39. A significant drawback with this study is its failure to ascertain the extent to which young people *frequently* carried weapons (as opposed to ever in their lifetime). Future research could overcome this and also begin to unravel more clearly why, if indeed it is the case, significant numbers of young people find it necessary or desirable to carry weapons and whether they have ever used these weapons in altercations with other individuals.
40. Nine percent involved an Asian offender and 54% involved a white offender. In the remaining 5% of cases the ethnic background of the offender was not known or not recorded.
41. Personal communication, officer at Operation Trident. It is noteworthy that the 26 arrests all involved black suspects and black victims.

42. In particular, the Criminal Justice Act, 1991 – otherwise based upon the principle of 'just deserts' – allowed longer sentences for sexual and violent offenders on the grounds of public protection; the Crime (Sentences) Act, 1997 introduced a mandatory life sentence (with scope for exceptions) on second conviction for a serious violent or sexual crime; and the Sex Offenders Act 1997 introduced a requirement on virtually all convicted sex offenders to register their names and addresses with the local police, with the expectation that the latter would exchange information and engage jointly in 'risk management' with other agencies. The latter duty was in turn extended by the Criminal Justice and Court Services Act 2000 to cover serious violent offenders.
43. This latter finding is very much in line with the estimates by Taylor and Gunn and the figures derived from the Homicide Index, which focus upon 'mental illness' in the narrower sense of the term.
44. Other researchers have argued that homicide inquiries are inefficient, costly and misleading and should be treated with caution, as the study of an individual case can tell us very little about possible routes to future prevention (Eastman, 1996; Geddes 1999). It has been argued that, if they are to remain, they need to sharpen their focus and be integrated into procedures designed to improve quality (Buchanan, 1999).
45. Other findings from the Maguire study were that: in most areas there was good cooperation between police and probation partners, but the involvement of other agencies was patchy; information was freely exchanged between most agencies, though health representatives were often unwilling to breach confidentiality with patients; and while the multi-agency work in some areas was actively overseen by senior management committees, in others there was little policy direction. They recommended that:

    - Guidelines should be developed by the Home Office to promote more standardisation and consistency, particularly in preliminary risk assessment and referral systems;
    - Resourcing for public protection work should be more clearly designated within agencies, and partner agencies should pool resources to provide dedicated coordinators to service panel work;
    - More attention should be given to the managerial oversight, monitoring and accountability of public protection systems: this is essential to the production of defensible decision-making.

46. In round figures, this compares with about 30% in employment, and 30% student, retired or under school age. These percentages exclude 'unknowns', which account for about 20% of all cases. The data are not totally reliable, but seem to be broadly correct.
47. This Act places a statutory duty on local police forces and elected local authorities to conduct local 'crime audits', set up multi-agency 'Crime and Disorder Partnerships' and develop joint strategies to reduce crime and disorder.

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