CHAPTER 1

Prevalence and physical health impact of domestic violence

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Domestic violence and abuse is threatening behaviour, violence or abuse between adults who are relatives, partners or ex-partners. It includes abuse from adult children and from parents of adult children. Domestic violence is a breach of human rights as well as a major public health and clinical problem. In this chapter we focus largely on violence between partners or ex-partners when discussing prevalence, and exclusively on partner violence when reviewing evidence on the health impact of domestic violence and abuse, as this is the focus of most research to date.

Definition of intimate partner violence

Intimate partner violence is a form of domestic violence occurring between intimate partners or ex-partners. Whereas violence between partners occurs in all types of relationships and cuts across all sections of society, intimate partner violence is recognised as a gendered issue where women are overwhelmingly more likely to be injured as a result of violence, require medical attention or hospital admission, and fear for their lives, and men are more likely to perpetrate violence. Internationally, there are no consistent demographic associations with intimate partner violence, such as ethnicity, age and number of children, other than relative poverty. Although it is prevalent across the socioeconomic spectrum, intimate partner violence is more common in families and communities which are relatively deprived (Pickett & Wilkinson, 2009). In the UK, the USA and Canada, younger women (aged between 16 and 34) experience the highest rates of intimate partner violence (Smith *et al*, 2011; Catalano, 2012; Sinha, 2012) and there is some evidence that women with disabilities are at increased risk (Mirlees-Black, 1999).

In earlier decades, terms such as wife abuse, conjugal violence and spousal abuse were commonplace, but they have been superseded by more general terms, such as domestic violence, in recognition that violence and abuse does not just occur between married couples. In the UK, domestic violence has a precise definition denoting violence between adults who are relatives, partners or ex-partners (Home Office, 2012). Intimate partner violence

specifically refers to abuse from partners or ex-partners, distinguishing it from other forms of violence that may occur in a family or domestic setting. The World Health Organization (WHO) defines intimate partner violence broadly, as any behaviour within an intimate relationship that causes physical, psychological or sexual harm to those in the relationship; it includes: physical aggression, psychological abuse, forced intercourse and other forms of sexual coercion, as well as various controlling behaviours (Krug *et al*, 2002*a*). This definition reflects the increasingly recognised multidimensional nature of intimate partner violence where physical abuse is just one part of the pattern of abusive behaviour that individuals may experience. Examples of the types of behaviour that fall within the scope of intimate partner violence are outlined below.

Physical abuse

Physical violence is included in most definitions of intimate partner violence (Nicolaidis & Paranjape, 2009), although as discussed below different disciplines may place more or less emphasis on minor forms of violence. Conceptualisations of physical violence may include:

- hitting, slapping, pushing, kicking
- the use of weapons or objects as weapons
- burning, scalding
- choking
- hair-pulling
- interference with medical treatment
- undue restraint or inappropriate sanctions.

Sexual abuse

Sexual abuse includes (Abraham, 1999; Bacchus *et al*, 2006):

- rape, attempted rape and sexual assault
- coerced sexual contact
- being forced to watch or re-enact pornographic material
- denial of the right to use contraception.

Psychological abuse

Psychological abuse includes (Follingstad *et al*, 1990):

- reoccurring criticism
- verbal aggression
- jealous behaviour and accusations of infidelity
- threats of violence
- threats to end the relationship
- hostile withdrawal of affection
- destroying property.

Research shows that psychological abuse can have severe consequences, even after controlling for the effects of physical abuse (Marshall, 1996;

Arias & Pape, 1999), and many victims of intimate partner violence rate the impact of emotional abuse on their lives as more profound than that of the physical abuse (Follingstad *et al*, 1990; Murphy & Hoover, 1999; O'Leary, 1999; Coker *et al*, 2000).

Coercive control

Some researchers conceptualise coercive control rather than physical violence as the defining feature of intimate partner abuse (Johnson, 1995, 2006; Dutton & Goodman, 2005). In this vein, Hegarty (2006) argues that it may be more useful from a health perspective to conceive of intimate partner violence as a 'chronic syndrome' that is characterised not by the episodes of physical violence that punctuate it, but by the range of behaviours including emotional and psychological abuse that perpetrators invoke to exert and maintain control over their partners. The level of control exerted by one party over another is argued by some to distinguish relationships that are simply conflicted and occasionally violent from those which are abusive (Johnson, 1995, 2006; Gordon, 2000; Carbone-Lopez *et al*, 2006) and which characterise the experiences of a large proportion of victims who make contact with specialist domestic violence services (Graham-Kevan & Archer, 2003*a*,*b*; Carbone-Lopez *et al*, 2006; Johnson, 2006). On the other hand, others consider all acts of violence as intimate partner violence (Straus, 1990). These differences in conceptualisation may be a function of discipline and the theoretical perspective held by researchers.

Controlling behaviour may manifest as (McCloskey, 2001; Beeble *et al*, 2007):

(a) isolation from friends, family and other support networks;
(b) limited access to money;
(c) surveillance of everyday tasks such as grocery shopping;
(d) intercepting mail, phone calls and text messages;
(e) threats to harm or kill children.

Harassment and stalking may also form part of a general pattern of coercion and control, although these behaviours are sometimes regarded as distinct from one another (e.g. Tjaden & Thoennes, 1998; Britton, 2012). Common stalking behaviours include unwanted communication (phone calls, text messages or emails), being followed on the street, contacted at home or at work, unwelcome visits or gifts, threats, damage to property, violence, and gaining information about the victim under false pretences, for example posing as a family member (Abrams & Robinson, 1998; Kamphuis & Emmelkamp, 2001).

Definitional issues

The myriad definitions of intimate partner violence that conceptualise it in slightly different ways complicate comparisons between epidemiological studies measuring prevalence and impact. Therefore, before turning to a

discussion of prevalence we consider some of the issues that may determine the way that intimate partner violence is defined, and which may in part account for differences in prevalence rates and estimates of impact (Alhabib *et al*, 2010).

The definition of intimate partner violence that we use throughout this book captures its multidimensional nature, encompassing non-physical forms of abuse in recognition of their impact on individuals' health and well-being. Others are narrower and consider only physical acts of violence (e.g. Straus, 1986; Rodgers, 1994) or emotional abuse in the context of physical violence (e.g. Saltzman *et al*, 2002). The decision to include one, some or all of the components of abuse outlined earlier can differ from researcher to researcher and discipline to discipline (Gordon, 2000).

Different disciplines have different goals, objectives and methods of research (Desai & Saltzman, 2001; Nicolaidis & Paranjape, 2009), which undoubtedly affects the way that abuse is defined. Family conflict researchers, who consider violence to be a response to conflict, define intimate partner violence as any abusive act perpetrated by men or women, with less consideration of antecedents to violence, intent and consequences (e.g. Straus, 1997; Archer, 2000), or the use of non-violent tactics. In contrast, feminist researchers, placing emphasis on the power dynamics of the relationship as well as intent and consequences, use broader definitions (e.g. Stark & Buzawa, 2009). Based on these two disparate perspectives, an isolated slap that is enacted in the 'heat of the moment' and does not form part of a wider pattern of behavior may be considered abusive by family conflict researchers, but not those subscribing to a feminist perspective (Hegarty, 2006; Nicolaidis & Paranjape, 2009).

Definitions further vary in terms of their reference to the impact of the abuse. The WHO definition, along with several others, makes reference to the impact of behaviour, with only that which causes harm defined as violence (e.g. Weis, 1989); others do not make any particular reference, instead focusing simply on the frequency and severity of behaviours, although it is worth noting that frequent but more minor acts may be just as damaging to an individual's physical and emotional health as a more severe but one-off violent act (Gordon, 2000; Hegarty, 2006). Consideration of harm caused may be a good way of encompassing all behaviours, minor and major, that comprise abuse, and also of giving some weight to the context in which the behaviour occurs, given that the emotional impact of behaviours may depend on factors such as past abuse (Mahoney *et al*, 2001). Further, not all violent acts are equal (Mahoney *et al*, 2001) and appraisal of harm may also be a way by which the same acts perpetrated by men and women can be classified differently, given that the same act perpetrated by a man may have a greater impact than if perpetrated by a woman (Dobash *et al*, 1992). However, it may be more difficult to make this distinction for non-physical acts. Several authors suggest that definitions of violence should include the intent with which behaviour is carried out (Burke *et al*, 1989; Weis, 1989; Hegarty, 2006), which may help to determine what

constitutes abuse, although Hegarty (2006) points out that this is a facet rarely reflected in definitions and measurement of abuse.

In summary, how intimate partner violence is defined determines how it is measured and in turn, determines conclusions about its nature and magnitude (Waltermaurer, 2005; Nicolaidis & Paranjape, 2009; Alhabib *et al*, 2010). Studies which adopt broader definitions of abuse yield higher rates than those which use narrower definitions; those undertaken from a family conflict perspective which focus on the frequency of discrete behaviours suggest that rates of partner violence perpetration are comparable between men and women; whereas other studies considering the severity, intentions and impact of violence reveal significant gender asymmetry. These are issues of which one needs to be aware when appraising estimates of prevalence, although understanding whether variation in rates reflects true difference or can in part be attributed to a difference in definition is made difficult by the fact that few studies even describe the criteria used to define the abused sample (Geffner *et al*, 1988; Alhabib *et al*, 2010).

Prevalence

Prevalence studies estimate the proportion of a population that has suffered intimate partner violence during adult life or during a specified time period. They are important in understanding the scale of the problem (Heise *et al*, 1999; Walby & Myhill 2001; Krug *et al*, 2002*b*), although, as outlined earlier, variation between studies may reflect a combination of real and measurement differences. Further, the population sampled may also have a bearing on estimates derived from studies, with clinical populations tending to yield the highest rates (Feder *et al*, 2009; Alhabib *et al*, 2010).

Between 2000 and 2003, the WHO undertook a multicountry study with the aim of estimating the extent of physical and sexual intimate partner violence against women in 15 sites in ten countries (Bangladesh, Brazil, Ethiopia, Japan, Namibia, Peru, Samoa, Serbia and Montenegro, Thailand, and the United Republic of Tanzania). This study, with 24 000 participants aged 14 to 59 years and using standardised survey methods, is to date the most robust comparison between countries, although figures do not represent national prevalence rates because the samples were based in specific rural or urban settings (Garcia-Moreno *et al*, 2006).

The reported lifetime prevalence of physical or sexual violence, or both, for ever-partnered women varied from 15 to 71%; and the 12-month prevalence rates in the sample varied from 4 to 54%. The percentage of ever-partnered women in the population who had experienced severe physical violence ranged from 4% in a Japanese city to 49% in a province in Peru. The proportion of women reporting one or more acts of their partners' controlling behaviour (including keeping from family and friends, expecting a woman to seek permission before seeking medical treatment) ranged from 21 to 90%. With respect to this finding, the authors suggest that

these wide-ranging rates may reflect cultural differences with regard to the normative level of control in intimate relationships. However, the finding that women across all sites who suffered physical or sexual partner violence were substantially more likely to experience severe controlling behaviours than non-abused women is in line with the view that coercive control is a defining feature of intimate partner violence, irrespective of culture (Garcia-Moreno *et al*, 2006). Moreover, this study revealed consistent health consequences of intimate partner violence (see pp. 10–13 of this chapter), supporting the WHO's reference to the impact of abusive behaviour in their definition of intimate partner violence.

The British Crime Survey

In the UK, the British Crime Survey (BCS) is the most reliable source of community prevalence estimates. It is a face-to-face victimisation survey of over 40 000 individuals aged between 16 and 59 in which people resident in households in England and Wales are asked about their experience of a range of crimes in the 12 months prior to the interview. The BCS is the best source for assessing long-term trends since it uses a consistent methodology and is not based on changes in reporting and recording procedures that can have an impact on criminal justice data. It is undertaken on a rolling basis, allowing comparisons of crime trends year on year. Intimate partner abuse is assessed using a self-completion module which asks respondents about their experiences of domestic abuse, sexual assault and stalking.

The 2010–2011 BCS reports lifetime partner abuse prevalence at 27% for women and 14% for men; 7% and 5% respectively had experienced abuse in the previous 12 months. The definition of partner abuse includes non-physical abuse, threats, force, sexual assault or stalking. The BCS also measures non-partner domestic violence (termed 'family abuse'), reporting a lifetime prevalence of 10% and 7% for women and men respectively. The starkest gender difference in prevalence revealed by the BCS is for sexual assault: 17% and 2% lifetime prevalence for women and men respectively, although these figures include assaults by partners, ex-partners, family members, or any other person. Examination of violent incidents recorded in the BCS (Hall & Innes, 2010) gives some sense of how common domestic abuse is compared with other types of violent victimisation. Data indicate that the majority of violent incidents against women are carried out by partners, ex-partners, family members (30%) or acquaintances (33%) as compared with 24% by strangers or 19% in mugging incidents. In contrast, the majority of incidents against men is categorised as stranger victimisation (44%) or mugging (19%); 6% as domestic and 32% acquaintance. Thus, the majority of violent incidents against women are carried out by people women know whereas for men violent incidents are most likely perpetrated by strangers.

Although the BCS represents the UK's best estimate of prevalence, there are two major caveats about its scope and measurement. First, the sampling frame excludes individuals living in 'institutional' settings

including women's refuges. Unsurprisingly, samples based on women who have gone to refuges and shelters have consistently shown much higher frequency of abuse than those from national surveys (Dobash & Dobash, 1979; Okun, 1986; Straus, 1990), and this omission may have a particular impact on estimates of 12-month prevalence rates. The BCS also omits hospital in-patients, people living in hostels and people with no fixed abode; all of these groups are likely to have a higher exposure to domestic violence. Second, the BCS measures the frequency with which individuals experience any abusive acts, without consideration of the wider context in which these behaviours take place, creating a misleading picture of relative gender symmetry (Dobash *et al*, 1992). Using data from the 2001 survey, Walby & Allen (2004) demonstrated that women as compared with men were more likely to sustain some form of physical or psychological injury as a result of the worst incident experienced since the age of 16 (75% *v.* 50% physical; 37% *v.* 10% psychological), and more likely to experience severe injury such as broken bones (8% *v.* 2%) and severe bruising (21% *v.* 5%). Moreover, 89% of those reporting four or more incidents of domestic abuse were women. Whereas women are more likely than men to be the victims of escalated life-threatening levels of abuse, it is noted that where men do experience this type of violence it appears similar in its form and impact to that experienced by women (Carbone-Lopez *et al*, 2006; Johnson, 2006). Gender asymmetry is confirmed in other epidemiological studies, such as the Canadian Social Survey (Brennan, 2011), which found that a larger proportion of women reported being beaten, choked, threatened with or assaulted with a weapon by their partner in the past 5 years than did men (34% *v.* 10%) and women were more likely to state that they were injured as a result of the violence (42% *v.* 18%). This survey also found that the rate of spousal violence among those who are gay or lesbian was more than twice the rate of reported violence experienced by those who are heterosexual.

In north America, repeated cross-sectional population studies using the same methodology suggest that there has been a reduction over time in physical and sexual violence against women from their partners or ex-partners. For example, the 2004 Canadian Social Survey found a reduction of the 5-year prevalence of intimate partner violence against women from 8 to 7%, with the difference driven by reduction in intimate partner violence from ex-partners (AuCoin, 2005); rates remained stable between 2004 and 2009 (Brennan, 2011). In the UK, the BCS has shown a reduction of any current (past year) domestic abuse against women from 9% in 2004/2005 to 7% in 2010/2011 (Britton, 2012). This decline has been interpreted as a shift away from criminal acts to other methods of coercive control of women by their male partners or ex-partners, which may have similar impact on their long-term health (Stark, 2009). However, it has also been suggested that this reduction is in part accounted for by the development and increased utilisation of public services (Walby, 2009).

Women who currently experience or have a history of abuse use healthcare services more frequently than those with no history of abuse

(Bonomi *et al*, 2009). Therefore it is not surprising that the prevalence of intimate partner violence is higher in clinical than in community populations. A systematic review of 16 UK intimate partner violence prevalence studies (5 community and 11 clinical populations) found that both 1-year and lifetime prevalence were consistently lower in community populations: 75% lower for 1-year prevalence and 25% lower for lifetime prevalence (Feder *et al*, 2009). In a global systematic review of 134 prevalence studies, half representing community and half clinical populations, Alhabib *et al* (2010) found the highest prevalence of intimate partner violence in psychiatric and gynaecology clinics and in accident and emergency departments.

Causation

There is a profusion of competing theories attempting to explain intimate partner violence, each embedded in explanatory frameworks (Wolfe & Jaffe, 1999; Mitchell & Vanya, 2009). Within a psychological framework, early victim-blaming frustration–aggression theories were superseded by social learning and cognitive–behavioural theories. Within a biological framework, there are weak genetic influences on personality and cognitive traits associated with violence and there are strong neurohumoral and immunological mediators of violence on health. Within a sociological framework, economic relationships and cultural norms are seen to be playing a crucial role in reinforcing (or challenging) intimate partner violence. Within a feminist framework, intimate partner violence against women is construed as a form of social control that results from society's patriarchal structure leading to inequality in power relationships between men and women, a 'liberty crime' (Stark, 2009). The feminist framework has informed the human rights perspective on domestic violence.

The notion that perpetration of intimate partner violence was simply a function of psychopathology evaporated when it was found that most perpetrators do not have a personality disorder or a serious mental illness, although many abusive males have deficits in one or more of coping mechanisms, anger control and communication skills. The fact that male perpetrators and female victims are more likely to report histories of exposure to violence in childhood supports this theory. Although there appears to be an important transmission effect, most individuals exposed to violence do not commit violence as adults, and not all who do abuse have had a violent upbringing. Furthermore, the link between poor parenting, including neglect, and subsequent intimate partner violence in adulthood suggests that the effect is not simply one of modelling abusive behaviour. Exposure to rejecting or neglectful parenting is associated with adverse effects on intrapersonal (e.g. poor self-worth) and interpersonal development, which are associated with intimate partner violence. Exposure to a wider range of early trauma or adversity is linked with antisocial

behaviour more generally but does not necessarily distinguish perpetrators or victims of intimate partner violence (Dube *et al*, 2002).

No single theory (or framework) sufficiently explains intimate partner violence, even where there is some empirical evidence supporting it. Although intimate partner violence occurs more often in contexts where there is support for male authority in the family and women have less access to economic security, it is not clear why some individuals are more likely to be violent under such conditions than others. Because types of intimate partner violence vary between couples, there are likely multiple causes for its occurrence, even if one accepts the central role of coercive control supported by patriarchal social structures. The field has moved from vociferous debate between competing theories towards an integrative multidimensional approach characterised by a social ecology model applied by Heise (1998) to aetiological and risk factors for perpetration and experience of intimate partner violence. Heise's model shown in Fig. 1.1 conceptualises the aetiology of intimate partner violence as a complex interplay between personal, social and situational factors, rather than as having a single cause.

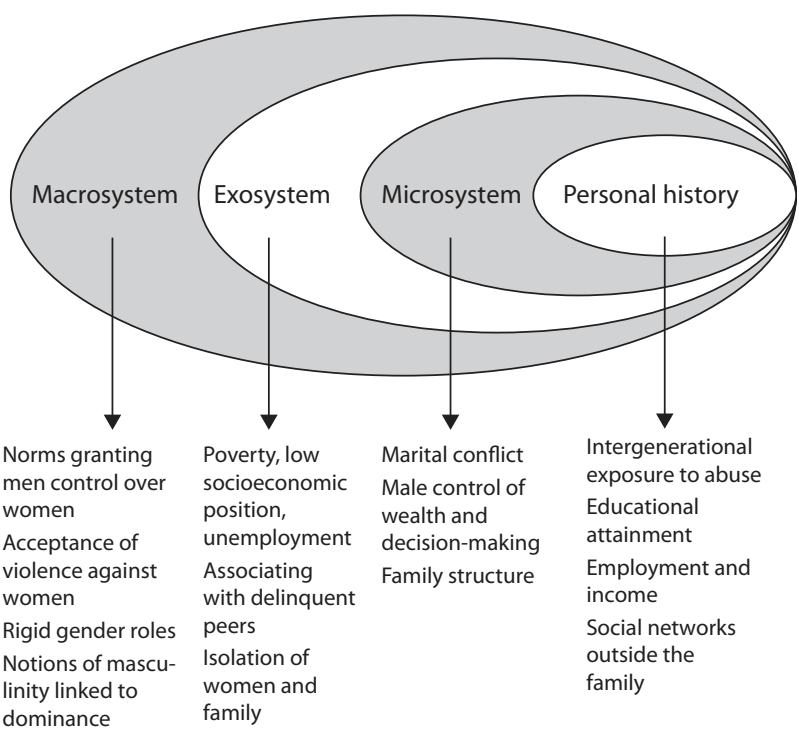

Fig. 1.1 An ecological framework of violence against women. Adapted from Heise (1998). © 1998 by SAGE. Reprinted with permission of SAGE Publications.

Physical health consequences of abuse

As well as measuring prevalence, the WHO multicountry study measured health status with a standardised questionnaire with the aim of assessing the extent to which physical and sexual violence were associated with adverse health outcomes (Ellsberg *et al*, 2008). The survey focused on general health and disabling symptoms. Pooled analysis of all 15 sites found significant associations between lifetime experiences of intimate partner violence and self-reported poor health and with specific health problems in the previous 4 weeks: difficulty walking, difficulty with daily activities, pain, memory loss, dizziness, and vaginal discharge. The increased risk varied by symptom, ranging from 50 to 80%. These significant associations were maintained in almost all of the sites. Between 19 and 55% of women who had ever been physically abused by their partner were ever injured.

The first burden of disease analysis of intimate partner violence was conducted in the Australian state of Victoria (Vos *et al*, 2006). It reported that intimate partner violence contributed 8% to the total disease burden in women aged 15 to 44 years and 3% in all women. Most strikingly, intimate partner violence was the leading contributor to death, disability and illness in women aged 15 to 44, being responsible for more of the disease burden than many well-known risk factors such as diabetes, high blood pressure, smoking and obesity. Poor mental health contributed 73% and substance misuse 22% to the disease burden attributed to intimate partner violence.

Reproductive health

Reproductive health problems have been the most extensively studied physical health consequences of intimate partner violence. In a systematic assessment of reviews up until 2008 (Feder *et al*, 2009), we found five reporting reproductive health effects. Here we summarise the findings of the more comprehensive reviews.

In a review of 14 published case–control and cohort studies, Murphy and colleagues (Murphy *et al*, 2001) meta-analysed the association between abuse during pregnancy and low birth weight in the child, finding a pooled odds ratio of 1.4 for a low-birth-weight baby in women who reported physical, sexual or emotional abuse during pregnancy, compared with women who were not abused. Boy & Salihu (2004) analysed 30 peer-reviewed studies on the impact of partner violence on pregnancy outcomes. Of the six studies focusing on maternal mortality, one case–control death review found that a woman abused during pregnancy was three times more likely to be killed by a partner. The remaining five studies on maternal mortality were based on death reviews and all noted that the majority of homicides were the result of partner violence. Similarly, the UK Confidential Enquiry into Maternal Deaths has consistently found a significant proportion of maternal deaths to be caused by homicide by a partner (Lewis, 2011).

Twenty-three studies looked at partner violence and pregnancy outcomes. Three cohort studies found no significant differences between women who were abused when pregnant and women who were not, seven studies reported mixed results, and the remaining thirteen found significant differences between the outcomes in these two groups. Six of the seven studies with mixed results reported a variety of negative behaviours during pregnancy in women who were abused, particularly substance misuse, and complications. Women who were abused were three times more likely to have kidney infections and were one-and-a-half times more likely to deliver by Caesarean section.

A review of nursing studies (including qualitative designs) on the relationship between partner violence and women's reproductive health published after 1995 was conducted by Campbell and colleagues (Campbell *et al*, 2000). Two studies examined the effects of forced sex on women's health. One study found that women who were sexually assaulted had significantly more gynaecological problems than those who were not sexually assaulted ($P=0.026$). The second study found that women who were sexually and physically abused had more physical health symptoms than those who were only sexually abused. One study investigated the association between abuse and risk of sexually transmitted infections, and found that the rate among the abused, assaulted and raped women was significantly higher than in those who were not. One study examined records from 389 victims of sexual assault, 71% of whom knew the perpetrator; it found that more than three-quarters of those resuming sexual activities reported sexual difficulties and 17.1% reported gynaecological pain, but almost all of them had normal general physical (98%) and gynaecological (95%) examinations.

Acute injury

Injuries are the most obvious manifestation of intimate partner violence; a clinician should have increased suspicion for intimate partner violence if the presenting history of injuries is not consistent with the physical examination, and when there is a delay in seeking medical care for injuries. Patients exposed to physical violence may present with injuries that vary from minor abrasions to life-threatening trauma. While there can be overlap between injuries resulting from intimate partner violence and injuries from other causes, the former typically involve trauma to the head, face and neck, with a meta-analysis of seven studies reporting an odds ratio of 24 for intimate partner violence in women with these injuries compared with women presenting with injuries at other sites (Wu *et al*, 2010). Multiple facial injuries are suggestive of intimate partner violence rather than of other causes and those that are more specific for intimate partner violence include zygomatic complex fractures, orbital blow-out fractures and perforated tympanic membrane. Musculoskeletal injuries are considered the second most common type of injuries, including sprains, fractures and dislocations. Blunt-force trauma to the forearms should raise

suspicion of intimate partner violence, as this can occur when trying to block being struck.

The most severe consequence of domestic violence is death; in England and Wales, two women a week are killed by a partner or ex-partner (Povey, 2004). Women are at a greatest risk of violence from their partners when they attempt to leave and for several months after. Homicides may also involve other members of the family: in 2010/2011, 38% of all homicides (of victims aged 16 or older) in the UK were domestic related, with the murder of a parent by a child being most prevalent after that committed by a partner or ex-partner (Osborne, 2012).

Chronic physical health conditions

There are no systematic reviews of the chronic physical health consequences of intimate partner violence other than those addressing gynaecological and obstetric sequelae, summarised earlier (pp. 10–11). In addition to the WHO study, there are many cross-sectional studies, usually with convenience samples, showing increased risk of gastrointestinal, neurological and musculoskeletal syndromes (summarised in Campbell *et al*, 2002) in women who have experienced intimate partner violence, although confounding is possible and may limit interpretation. A well-designed study of 1152 consecutive female patients in two US family practices (Coker *et al*, 2000) found that women who experienced intimate partner violence had a significantly increased risk of: disability preventing work (1.6), chronic neck or back pain (1.5), arthritis (1.5), hearing loss (2.0), angina (2.0), bladder and kidney infections (1.7), sexually transmitted infections (3.1), chronic pelvic pain (1.5), stomach ulcers (2.0), irritable bowel syndrome (3.7); this was after controlling for potential confounders such as age, race, insurance status (as a proxy of income) and childhood exposure to intimate partner violence.

Impact on children

Exposure to intimate partner violence during childhood and adolescence is found to increase the risk of negative health outcomes across the lifespan. Reviews indicate a moderate to strong association between children's exposure to intimate partner violence and internalising symptoms (e.g. anxiety, depression), externalising behaviours (e.g. aggression) and trauma symptoms (e.g. flashbacks) (English *et al*, 2003; Kitzmann *et al*, 2003; Wolfe *et al*, 2003; Evans *et al*, 2008). Children exposed to domestic violence are estimated to be 2 to 4 times more likely to exhibit clinically significant problems than children from homes where there is no violence (McDonald & Jouriles, 1991; Cummings & Davies, 1994; Holden, 1998). Links are also demonstrated between children's exposure to violence and conflict and social development, academic attainment, engagement in risky health behaviours (e.g. smoking, substance misuse, early initiation of sexual activity) and other physical health consequences (Kolbo *et al*, 1996; Kitzmann *et al*, 2003; Bair-Merrit *et al*, 2006), although a more recent evidence synthesis concluded

that there remains some uncertainty as to the magnitude and consistency of detrimental effects on these domains of children's functioning, whereas evidence relating to children's emotional and behavioural development is less equivocal (Feder *et al*, 2009). Several studies suggest that boys and girls may be differently affected by exposure (Wolfe *et al*, 2003; Evans *et al*, 2008) and that exposure may have a greater impact on younger children (Sternberg *et al*, 2006); in general, however, evidence relating to the moderating role of age and gender is unclear (Herrenkol *et al*, 2008).

Despite the fact that exposure to intimate partner violence undoubtedly constitutes a significant stressor in children's lives, studies indicate considerable variation in children's reactions and adaptation following exposure to this risky family context (Hughes & Luke, 1998; Grych *et al*, 2000). Heterogeneity in children's adaptation may in part be explained by the presence or absence of other adversities in their lives. For example, children exposed to intimate partner violence are at increased risk of being directly maltreated or neglected (e.g. Appel & Holden, 1998), with some evidence to indicate higher rates of maladjustment among children experiencing this 'double whammy' compared with children who are exposed to violence but not maltreated or neglected themselves (Hughes *et al*, 1989; Grych *et al*, 2000; Wolfe *et al*, 2003). Children exposed to or experiencing domestic violence may also be subject to a range of other adversities such as poverty, parental mental ill health, substance misuse and antisocial behaviour (Fantuzzo, *et al*, 1997; Margolin & Gordis, 2000; Appleyard *et al*, 2005), which may compound the effect of exposure to violence. The more adversities a child is exposed to, the greater their risk of experiencing negative health outcomes (Appleyard *et al*, 2005).

Conclusions

Domestic violence is common and is associated with numerous adverse health consequences for both adult and child victims. Although differing conceptualisations of domestic violence have led to some inconsistent findings, there is clear evidence that domestic violence is more prevalent in women who attend healthcare services, and it is therefore a major public health problem.

The next chapter discusses the evidence on mental health consequences of domestic violence, before we discuss, in chapters 3 and 4, how the mental health professional can address domestic violence experienced by people presenting to mental health services.

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