

The Relationship Between Intimate Partner Violence and Other Forms of Family and Societal Violence

Peggy E. Goodman, MD, FACEP

*Department of Emergency Medicine, Brody School of Medicine—ECU,
3ED317, Greenville, NC 27834, USA*

Intimate partner violence (IPV) is a significant individual and public health problem. In many cases the emergency department (ED) or emergency medical services provide these patients' first-line medical assessment. In the past IPV was usually treated by law enforcement as a private matter for a couple. It is now clearly recognized that IPV has significant medical ramifications and that the problem extends to the health and safety of the general public. Others involved in this private matter potentially include any current or former partners of each member of the couple; children of the current or prior relationships; and other family members, friends, or co-workers assisting either the perpetrator or victim of abuse. A variety of relationships, either heterosexual or homosexual, can occur, affecting not only the type of incident, but type of response involved.

The general public is also at risk because incidents occur not only at the victim's residence, but also in the workplace, and on other public or private property (eg, in a parking lot, a commercial establishment, or government building). Because abuse victims often seek medical attention only in the case of significant injury or other acute condition, it is vital that emergency physicians be aware not only of the medical issues involved, but also the greater public health and sociolegal ramifications of IPV.

Epidemiology

IPV affects multiple aspects of society, including the home; workplace; school; public and private property; the economy; and the health care, legal, and social service communities. In the United States, approximately 5.3

E-mail address: goodmanp@ecu.edu

million incidents occur annually, affecting approximately 1.8 million patients, predominantly women, with an annual prevalence of 3%, and a lifetime prevalence of 25% to 30% [1].

In the United States in 2001, 85% of reported nonlethal violent IPV events were against women; in 2000, 1247 women and 440 men were killed by intimates (current and former spouses, boyfriends, and girlfriends) [2]. Firearms were used in most cases; in 2002, 51% of homicides were committed with handguns, 16% with other guns, 13% with knives, 5% with blunt objects, and 16% with other weapons. Almost two thirds of intimate incidents (60% of IPV, 63% of sexual assaults) occurred between 6:00 PM and 6:00 AM [3]. This is particularly significant in emergency medicine because of the decreased availability of resources during these hours [4]. Approximately one fourth of the incidents of violent crime occurred at or near the victim's home, and 76% occurred within 5 miles of home. Other common locations included streets other than those near the victim's home (17%); school (14%); or at a commercial establishment (7%). A total of 19% reported they were at work or traveling to or from work when the crime occurred [3].

Women aged 16 to 24 experience the highest per capita rates of intimate violence, 19.6 victimizations per 1000 women. Risk factors for IPV among both men and women are being black; being young (16–24); being divorced or separated; and living in rental housing [3,5]. Risk factors for increased injury include attitudes of patriarchy or entitlement; exposure as a witness or victim to abuse as a child; unemployment; and alcohol use by the perpetrator. A total of 75% of all incidents and 67% of violent incidents involved a perpetrator who had been drinking, compared with 31% of incidents by strangers [2,6].

Costs to society

When evaluating the annual cost of IPV to society, the main costs are direct (ie, money spent on goods and services) and indirect (ie, loss of goods or services). Direct costs include those spent on health care expenses, law enforcement and court costs, and other public health and safety expenditures. Based on the National Violence Against Women Survey, which looked solely at health care costs, in 1995 (the last year for which data was collected) nearly 2 million IPV-related injuries (including physical assault and sexual assault) were inflicted on women aged 18 or older. Of these, 550,000 required medical attention, a quarter of which required admission to the hospital. An additional 18.5 million mental health care visits occurred after cases of physical assault, sexual assault, or stalking. These health care interventions cost 4.1 billion dollars in 1995. An additional 1.8 billion dollars per year of lost work and productivity, in the household and in the workplace, was incurred [1]. Because of the fragmented distribution of

law enforcement and correctional costs among many local, state, and federal jurisdictions, estimates of these costs are not readily available.

Intimate partner violence

IPV is defined as current or former, emotional, psychological, physical, or sexual abuse between current or former partners of an intimate relationship, regardless of gender or marital status.

Sexual assault, pregnancy, and intimate partner violence

Between 300,000 and 700,000 adult women are victims of sexual assault annually in the United States, with a lifetime prevalence of 13% to 25% [7]. Women in abusive relationships report a 40% to 50% incidence of nonconsensual intercourse [7–9]. Men constitute 5% to 10% of noninstitutional (ie, not incarcerated) victims and postmenopausal women constitute 2% to 3% of sexual assault victims. In 78% of the cases the victim knows the assailant. In assaults against both men and women the perpetrator defines himself as heterosexual. Fewer than one in five rapes are reported to the police because victims feel ashamed, guilty, may not define the occurrence as a sexual assault, or do not think the medical or legal system will be responsive. Men are even less likely to report having been sexually assaulted because of the greater stigma attached.

Lack of reproductive autonomy in an abusive relationship increases the risk of unplanned or unwanted pregnancy, with an approximate IPV prevalence of 3.9% to 8.3%, accounting for more than 324,000 women per year. This makes it more common than gestational diabetes (1.4%–6.1%) and as common as pre-eclampsia (6%–8%), two conditions routinely screened for during pregnancy.

IPV is the leading cause of maternal mortality and other adverse outcomes, such as preterm delivery, fetal distress, antepartum hemorrhage and preeclampsia, low birth weight, miscarriage, or elective termination of pregnancy. Continued high-risk behaviors by the pregnant woman, such as tobacco or alcohol use, and limited access to health care during the pregnancy also result in poor outcomes.

Same-sex relationships and intimate partner violence

Although most studies and resources concentrate on heterosexual relationships, defining the male as the perpetrator and the female as victim, it is important to remember that particularly with emotional and lethal abuse, women abusing men and abuse between members of homosexual couples often occur, with an estimated prevalence of 25% to 33% [10]. There is also the added social stigma regarding homosexual relationships; risks of outing

by a current or former partner; and, in general, fewer resources available for victims. Seven states define domestic violence in a way that specifically excludes same-sex victims, and because of sodomy laws, same-sex victims may be forced to confess to a criminal act to prove that they are domestic partners [11].

Elder abuse

Elder abuse also needs to be evaluated in the context of IPV. Dependent and physically or cognitively impaired individuals are more susceptible to abuse, and some chronic abuse cases last many years without detection. Physical abuse accounts for 14.6% of elder abuse, 12.3% are caused by financial exploitation, and 55% of reported cases are caused by neglect. Caregivers' characteristics are strong predictors of abuse. Psychiatric illness, psychosocial stressors, emotional or financial dependency on the elder, history of abuse, social isolation, inexperience in caregiving, and disinclination to provide care are predictors, although alcohol abuse by the caregiver is the most predictive factor for elder abuse. Spouses perpetrate 15%, with adult children causing 30% to 33%, and other relatives accounting for 9% to 20% of elder abuse [7,12].

Elder abuse can be difficult to detect because victims may feel humiliated or responsible for their abuse, may fear retaliation or eviction from their homes with placement in a nursing home, or they may not want to take legal recourse against a family member. In some cases, medical conditions, such as aphasia or dementia, may make it difficult to elicit a history when abuse has occurred. In other cases, friable skin, balance problems, or osteoporosis may make trivial injuries more likely, even in the absence of abuse. It is important to proceed conscientiously and document well, to avoid misdiagnosis based on potential false-positive and false-negative indicators of abuse.

Child abuse

Children under the age of 12 resided in more than 50% of households in which IPV occurs, and child abuse has been estimated to occur in 30% to 60% of the homes with IPV [13]. Each year at least 3 to 10 million children are exposed to physical and verbal spousal abuse. This statistic is considered a significant underestimate because these data do not include situations where parents are divorced or children are under 3 years of age. Studies of children living in two-parent households report 16% to 20% incidence of physical partner violence [14]. Although pediatricians routinely screen children for abuse, they do not necessarily screen the parents for abuse; when performed, this type of screening revealed that 2% to 6% of children are in homes with current or recent IPV, and 14% to 22% are in homes with a history of past abuse [15].

It is well recognized that witnessing IPV harms children. Studies looking at children's exposure to IPV demonstrate that a child's reaction to IPV may vary according to a number of factors, including [16]:

- With which parent the child resides, and any custody arrangements that result
- Age of the child when he or she witnesses abuse
- Proximity to the violence (whether they are physically in the lap of a parent, in the path of a thrown object, in the same or another room)
- Temperament of the child
- Frequency, severity, and chronicity of the violence
- Support structure available to the child in the family, community, and school

Exposure to IPV may result in emotional distress, behavior regression, somatic complaints, and behavior modeled on the actions they see. These children are less socially competent and more fearful and anxious than other children, with a greater incidence of sleep, attention, and learning disorders. As with cases of divorce, they sometimes feel responsible for the household dysfunction, and respond with guilt or anger toward one or both parents.

Because it is well recognized that living in an abusive home is detrimental, there are attempts to improve identification of these families at risk. Management of cases in which a child who is not physically abused witnesses violence is sometimes controversial. Some states interpret this as potential or imminent danger to the child, requiring reporting as "suspicion of abuse." This sometimes results in charges of "failure to protect" against a victim who does not remove a child from a known abuse situation. Few states have primary statutes addressing children that witness IPV. In some states "witnessing abuse" is a loose enough term to refer to a child living in the same residence or within hearing distance, whereas other states' laws specify that the child must physically be in the same room or location and be able visually to witness the event. When granting custody, some jurisdictions are more likely to decide for the abuser, who tends to have the more stable home environment, with home ownership and greater financial resources than the victim, and presumably with less likelihood of uprooting the child from familiar surroundings, friends, and school. In many cases a no-win situation is created for the abuse victim, who must choose between remaining in the abusive environment or removing the child from the home, which can be perceived as disruptive to their lifestyle. Increased coordination among the legal and social service communities has been implemented to address these issues, with inconsistent results [17].

Pet abuse

Animal abuse, defined as intentional distress, suffering, or pain or death of an animal separate from food, hunting, or husbandry, is being

increasingly recognized as a marker for family violence. Nearly three quarters of families with school-aged children have at least one companion animal. These pets play different roles in child development, including the development of trust, compassion, empathy, and responsibility. In some studies, children's relationships with pets were ranked higher than human relationships in supporting child development [18].

A total of 70% to 75% of women reporting domestic violence also reported that their partner had threatened, hurt or killed one or more of their pets, with actual harm occurring in 57% of cases [19]. In surveys of women going to domestic violence safe houses, 46% to 71% reported that their partner had threatened, hurt, or killed one or more of their pets, and 7% to 32% reported that one or more of their children hurt or killed family pets. A survey in 2002 by the Humane Society of the United States showed that 56% of animal cruelty cases were caused by intentional injury; adults were responsible for 76%, teenagers for 20%, and children for 4% of these cases. A total of 95% to 96% of the perpetrators of intentional animal cruelty are male [20]. When college students were surveyed about animal abuse, 17.7% reported abusing an animal; almost 11% reported the first incident before age 6, 40% were between ages 6 and 12, and 48% reported first abusing animals while in their teenage years. This looked only at cases of deliberate physical abuse, not neglect or psychologic abuse of the animal, such as teasing or prolonged confinement [21].

Cruelty to animals seems to be one of the earliest symptoms of conduct disorder in children. This is noted in children as young as 6.5 years, earlier than bullying, cruelty to people, vandalism, or setting fires. This underlines the importance of early education and intervention in children. A number of motivations have been suggested for animal abuse including retaliation against other people by hurting their pets or abusing animals in their presence, expression of aggression, development of one's own aggressiveness or bolstering self-esteem, transference of hostility toward a more vulnerable target, sadism, curiosity, peer pressure, relief of boredom or depression, sexual gratification, posttraumatic play, re-enactment of violent episodes, or manipulation of another individual. Some studies show that animal abuse was 88% higher in families where physical child abuse is present than in families without physical child abuse; children who are neglected, rejected, or subject to hostility are more likely to commit animal abuse, and pets rarely survive past the age of 2 years in violent households because they are either killed, die from neglect, or run away to escape the abuse [22]. These runaway pets are less likely to be properly immunized against rabies and other diseases, and are more likely to fear humans, responding to contact in either a defensive or aggressive fashion.

Currently, there is no national tracking of animal cruelty and only two states require reporting of animal abuse by veterinarians, although some are now recommending cross-reporting of animal abuse and child or elder abuse. All states have anticruelty laws, but they vary widely; in many cases

animal abuse is still charged as property damage rather than intentional infliction of pain. Some victims of abuse are reluctant to leave home because of the need to leave an animal behind with the abuser; the Humane Society of the United States' "Safe Haven" program lists veterinarians and other groups willing to provide emergency safe shelter for these victims' pets.

Workplace violence

Another significant interface between IPV victims and society is in the workplace. A total of 75% of abuse victims report harassment by their abuser while at work. Approximately 1 million women are stalked each year [23], with approximately one fourth missing work as a result of the stalking, averaging 11 days of absence [24].

Representatives from the business community described the effects of IPV in the workplace as absenteeism, inability to focus, poor self-esteem, low productivity, and low morale. When employers take steps to prevent IPV, there are improvements in performance, productivity, health, work-site safety, job retention, and other outcomes related to employee well-being [25]. For women, homicide was the second leading cause of death on the job in 2003 [26].

School violence

Childhood behavior disorders and abnormal socialization from IPV exposure also carry over to the schoolyard. Children exposed to interparental violence are more likely to be aggressive toward others. Bullying affects approximately 7% to 35% of children and adolescents in the United States, Canada, Europe, Australia, and Japan. Violent homes are among the highest risk factor for the development of antisocial behavior; children exposed to domestic violence show more aggression toward both peers and those who are weaker. These boys and girls are more likely to commit delinquent acts and become victims of abuse at school. Although boys are more likely to develop conduct disorders, girls show more internalization, such as depression, anxiety, and eating disorders. Children who see more forms of violence are more likely to be involved in direct physical bullying and use violence as a method of conflict resolution than children exposed primarily to verbal insults and threats, who are more likely to use verbal threat and intimidation. One study showed evidence that 48.3% of all students reported bullying others at some point within the past 3 months and 59% of them had been victims of bullying. Boys were significantly more likely to use physical force or use name calling, whereas girls were more likely to be excluded or isolated by their peer group. Girls who are exposed to parental violence are 3.5 times more likely to bully others than girls not exposed to IPV [27].

Emergency department screening for abuse

Universal screening for family violence is recommended by most medical organizations [28], but often falls short in practice. Some of the reasons given by health care providers include lack of time, uncertainty about which patients to screen, concerns that patients might be offended by screening, discomfort with the issue, uncertainty about what steps to take if someone needs intervention and referral, liability concerns, and failure to acknowledge that family violence is a medical issue or one they should address in their patient population [29,30].

Patient barriers to disclosure include embarrassment, shame, feeling responsible for being victimized, fear of judgment, fear for their or their children's safety, and protectiveness of the abuser because of status in the community or because of economic dependence. Victims may also distrust the medical and legal systems, which have been nonresponsive in the past, and fear that disclosure may result in the escalation of violence. Cultural and religious factors, affecting what behaviors are considered abusive, deciding to receive assistance, or whether there will be a responsive support system may also impact reporting.

Screening evaluations as short as three or four questions reveal many cases of current or prior IPV. The Partner Violence Screen (Box 1) [31] or HITS screen ("How often does your partner *Hurt, Insult, Threaten* or *Scream* at you?") [32] can each be easily incorporated into a patient history. Studies show that patients are not offended when asked about IPV, particularly when they know that it is a general health care question and that they are not being targeted because of some behavior or other characteristic that makes them "look like a battered woman." They may be even more likely to disclose with self-administered questionnaires than with direct questioning [33]. Because same-sex violence and violence toward men by women does occur, universal screening of all adults is recommended. Screening of children for abuse tends to fall under other guidelines with greater protections

Box 1. Partner Violence Screen

1. Have you been hit, kicked, punched, or otherwise hurt by someone within the past year? If so, by whom?
2. Do you feel safe in your current relationship?
3. Is there a partner from a previous relationship who is making you feel unsafe now?

From Feldhaus KM, Koziol-McLain J, Amsbury HL, et al. Accuracy of 3 brief screening questions for detecting partner violence in the emergency department. *JAMA* 1997;277:1357-61; with permission.

for the children, although even in these cases the parent also should be screened. A wide variety of screening tools and suggested interventions exist depending on the practice setting, patient population, and resources available [34,35].

In 1996 and again in 2004, the US Preventive Services Task Force reviewed studies to make evidence-based recommendations regarding the risks and benefits of family violence screening and intervention. They concluded that there are no studies that determine the accuracy of screening tools; there was “fair to good” evidence that interventions reduce harm to children, limited evidence as to whether interventions harm women, no studies that examined the effectiveness of interventions in older adults, and no studies directly addressing the harm of screening and interventions for family and IPV. The US Preventive Services Task Force reported that they had insufficient evidence to recommend for or against screening of parents or guardians for the physical abuse or neglect of children, of women for IPV, or of older adults or their caregivers for elder abuse [36,37].

Most clinicians who have reviewed the task force recommendations point out that there is no gold standard for screening and that different medical specialties and geographic locations have unique patient populations and screening challenges. In addition, outcomes research in this field has inadequate funding, and data collection and sharing are often limited, particularly with restrictions imposed by the new Health Insurance Portability and Accountability Act of 1996 (HIPAA) requirements, and safety concerns for the victim often limit the ability to follow-up effectively to determine outcomes.

The long-reaching effects of child and partner abuse resulting in poor health outcomes should be screened for and addressed even when clear evidence of the effectiveness is not necessarily forthcoming [38–41].

Medical manifestations of abuse

Medical or psychologic manifestations account for 80% of abuse incidents. Although physical injuries are often more dramatic on initial medical evaluation, medical and psychologic manifestations of abuse are more insidious and are likely to have more severe long-term effects. Although few specific conclusions can be made, it seems that abuse victims have higher incidences of neuropsychiatric illness, such as anxiety disorders, sleep disorders, substance abuse, chronic pain syndromes, depression, chronic fatigue, and posttraumatic stress disorder. Other frequent presentations to the ED or physicians' offices include gastrointestinal symptoms, such as anorexia, eating disorders, ulcers, chronic abdominal pain, or irritable bowel syndrome; cardiac symptoms, such as hypertension, chest pain, palpitations, and hyperventilation; and gynecologic problems, such as sexually transmitted diseases, HIV, vaginal bleeding, vaginal infections, fibroids, decreased libido, genital irritation, dyspareunia, chronic pelvic pain, urinary tract infection, and

infertility [42,43]. Patients with chronic illness, such as asthma, angina, or hypertension, may present to the ED with “poorly controlled” disease or “noncompliance,” which may be caused by stress-related exacerbations of their disease or deliberate withholding of their medications by their abuser.

The most common injuries noted were soft tissue injuries including contusions, abrasions, and lacerations. These are often found on areas of the body that are hidden by makeup or clothing: within the scalp line; in central areas, such as the breasts, abdomen, or perineum (particularly in a pregnant patient); or in areas suggesting defensive injuries (ie, the forearm). A perforated eardrum, significant dental loss or injury in someone young whose dentition otherwise seems to be good, and evidence of pulled hair are suggestive of intentional injury [44,45]. Fractures and dislocations are most common on the arms and hands, particularly in defensive locations caused by warding off blows from the abuser.

Nonlethal strangulation may seem deceptively benign, with 20% reporting only pain; 42% with no visible injury; and the remaining 38% with generally “minor-appearing” contusions, abrasions, ligature marks, or finger impressions. Strangulation symptoms can also be subtle, such as hoarseness; difficulty swallowing; dizziness; and syncope, which may be incorrectly attributed to anxiety or hysteria rather than the development of traumatic laryngeal edema or neurologic sequelae from transient anoxia or traumatic brain injury [46–48].

Long-term negative health consequences of IPV, such as poor health status, poor quality of life, and high use of health services even in the absence of acute injury, are significant and well studied. When childhood abuse as a predictor of adult disability and death is studied, there are higher incidences of alcohol, tobacco, and other drug use; early sexual activity with sexually transmitted diseases and unintended pregnancy; depression; suicidality; anxiety; posttraumatic stress disorder; chronic pain; and other physical complaints [49–53].

The risk of death from IPV is also substantial; several studies looking at homicide rates also look at ED use. In general, approximately 5% to 10% of women who present to an ED are seeking care because of recent partner violence [54]. A total of 30% to 50% of female homicide victims are murdered by a former or current partner, and more than 40% of them sought medical attention in the year before their death [55,56]. The greater their risk factors and the poorer their perceived health, the more likely they were to have multiple encounters for medical or mental health care [57].

Documentation, intervention, and referral

Unfortunately, in many cases, although the symptoms and signs are well documented in a medical record, their etiology is not. Many IPV patients are diagnosed with “forearm contusion” or “anxiety disorder” without the further documentation of abuse that led to that diagnosis [58].

IPV encounters in the ED should be carefully documented because there is a high likelihood of being reviewed in legal proceedings. The better the documentation, the less the burden is on the physician to recall the event later. When obtaining a history, the patient's words should be used whenever possible, placing them in quotation marks, describing what happened, how, when, and by whom.

Whenever possible, photographic documentation of injuries should be included in the medical record. It is important for both the patient and health care provider to recognize that some injuries may not be visibly prominent for hours to days after the initial visit, and follow-up photographs (usually with law enforcement) may be indicated. It is important to look for and diagram or photograph patterned injuries, such as cigarette burns, ligature marks, and handprints. Incidents of forced nonconsensual intercourse should also be documented. If clothing or other evidence is obtained, it should be documented and processed according to departmental protocols; often the date, time of collection, and person collecting the evidence needs to be recorded, and "chain of evidence" procedures need to be observed [59].

The risk of lethal IPV reinforces the need not only to screen for IPV but also to assess the patient's safety and ability to follow-up on discharge (Boxes 2 and 3) [60]. A danger assessment tool asking about escalation of violence, threats, stalking, availability of weapons, and substance abuse is readily available to help determine if a patient's safety is compromised [61]. If patients recognize acute risks, they may be more likely to seek assistance from a local family violence agency or law enforcement. Leaving an abusive relationship is recognized as the most dangerous time, however,

Box 2. Basic IPV safety plan

1. Move to a room with more than one exit, avoiding rooms with potential weapons (eg, kitchen knives).
2. Know the quickest route out of your home.
3. Know the quickest route out of your workplace. Find out what resources they have to protect employees.
4. Pack a bag with essential clothes, valuables, and documents for you and each of your children. Keep it hidden but make it easy to grab quickly.
5. Tell your neighbors about your abuse and ask them to call the police when they hear a disturbance.
6. Have a code word to use with your kids, family, and friends when you need help.
7. Have a safe place selected in case you ever have to leave.
8. Use your instincts.
9. You have the right to protect yourself and your kids.

Box 3. Discharge review: have the following been provided?

1. Screening for possible abuse (see [Box 1](#))
2. Treatment for acute medical problems
3. Assessment and addressing of acute psychiatric risk, and evaluation and referral for mental health needs
4. Assessment of pattern and impact of abuse
5. Appropriate documentation and evidence collection
6. Validating
7. Safety assessment and plan (see [Box 2](#))
8. Information about domestic violence in verbal and written form
9. Options for shelter, legal assistance, and counseling
10. Appropriate follow-up care (or referral) for medical, psychologic, and advocacy needs
11. Assurance of confidentiality

Adapted from Warshaw C, Ganley AL. Improving the health care system's response to domestic violence: a resource manual for health care providers. San Francisco: Family Violence Prevention Fund; 1998; with permission.

so patients' fears about leaving or retribution against children, other family members, or pets must be taken seriously.

It is important for health care providers to be aware of any reporting requirements to social service or law enforcement agencies, particularly if this might increase the patient's risk of increased violence [62]. Knowing and collaborating with local family violence, sexual assault, child protection, law enforcement, and animal control agencies is extremely helpful, because it can be difficult to determine and contact the appropriate resources after-hours, when most cases occur. They can usually provide most of the subsequent services or know where they can be obtained.

Several EDs have developed programs in conjunction with local or on-site advocacy programs or case management for IPV. Increased use of counseling and shelter services has been noted at these sites, although there is no good evidence that there has been a decrease in IPV-related ED visits [63,64].

Summary

IPV is a significant health care problem with numerous effects on individual and public health and safety. It affects individuals of all ages and socioeconomic groups and both genders, and has significant effects on health and quality of life for the general public. Assessments and interventions for victims and perpetrators need continued development, implementation, and

evaluation to decrease the financial, health care, and security burdens on society that currently exist because of intimate partner and related forms of violence.

References

- [1] National Center for Injury Prevention and Control. Costs of intimate partner violence against women in the United States. Atlanta: Centers for Disease Control and Prevention; 2003.
- [2] Rennison C. Intimate partner violence, 1993–2001. Publication No. NCJ 197838. Washington: Bureau of Justice Statistics, US Department of Justice; 2003.
- [3] Rennison C. Intimate partner violence. Publication No. NCJ 178247. Washington: Bureau of Justice Statistics, US Department of Justice; 2000.
- [4] Birnbaum A, Calderon Y, Gennis P, et al. Domestic violence: diurnal mismatch between need and availability of services. *Acad Emerg Med* 1996;3:246–51.
- [5] Rickert VI, Wiemann CM, Harrykissoon SD, et al. The relationship among demographics, reproductive characteristics, and intimate partner violence. *Am J Obstet Gynecol* 2002;187: 1002–7.
- [6] Kyriacou DN, Anglin D, Taliaferro E, et al. Risk factors for injury to women from domestic violence against women. *N Engl J Med* 1999;341:1892–8.
- [7] Rudolph MN, Hughes DH. Emergency assessments of domestic violence, sexual dangerousness, and elder and child abuse. *Psychiatric Services* 2001;52:281–2, 306.
- [8] John R, Johnson JK, Kukreja S, et al. Domestic violence: prevalence and association with gynaecological symptoms. *BJOG* 2004;111:1128–32.
- [9] Campbell JC. Health consequences of intimate partner violence. *Lancet* 2002;359:1331–6.
- [10] Halpern CT, Young ML, Waller MW, et al. Prevalence of partner violence in same-sex romantic and sexual relationships in a national sample of adolescents. *J Adolesc Health* 2004; 35:124–31.
- [11] Barnes PG. It's just a quarrel. *Am Bar Assoc J* 1998;84:24–5.
- [12] Kleinschmidt KC. Elder abuse: a review. *Ann Emerg Med* 1997;30:463–72.
- [13] Edleson JL. The overlap between child maltreatment and woman battering. *Violence Against Women* 1999;5:134–54.
- [14] Zink T, Kamine D, Musk L, et al. What are providers' reporting requirements for children who witness domestic violence? *Clin Pediatr (Phila)* 2004;43:449–60.
- [15] Wahl RA, Sisk DJ, Ball TM. Clinic based screening for DV use of a child safety questionnaire. *BMC Med* 2004;2:25.
- [16] Osofsky JD. Prevalence of children's exposure to domestic violence and child maltreatment: implications for prevention and intervention. *Clin Child Fam Psychol Rev* 2003;6:161–70.
- [17] Jaffe PG. Legal and policy responses to children exposed to domestic violence: the need to evaluate intended and unintended consequences. *Clin Child Fam Psychol Rev* 2003;6: 205–13.
- [18] Muscari M. Juvenile animal abuse: practice and policy implications for PNPs. *J Pediatr Health Care* 2004;18:15–21.
- [19] Ascione F. Battered women's reports of their partners' and their children's cruelty to animals. *J Emotional Abuse* 1998;1:119–33.
- [20] Humane Society of the United States. First Strike Campaign 2001: report of animal cruelty cases. Washington: Humane Society of the United States; 2002.
- [21] Flynn CP. Animal abuse in childhood and later support for interpersonal violence in families. *Soc Anim* 1999;7:161–71.
- [22] Ascione F. Animal abuse and youth violence. *OJJDP Juvenile Justice Bulletin*, NCJ 188677; 2001. Available at: www.ncjrs.org/html/ojjdp/jjbul2001_9_2/contents.html. Accessed March 2, 2005.

- [23] US Department of Justice, National Institute of Justice. Full report of the prevalence, incidence, and consequences of violence against women. 2000. NCJ 183781.14–15. Available at: <http://www.ncjrs.gov/>. Accessed August 16, 2006.
- [24] Tjaden P, Thoennes N. National Institute of Justice Centers for Disease Control and Prevention research brief: stalking in America: findings from the National Violence Against Women Survey. Washington: US Department of Justice, Office of Justice Programs, National Institute of Justice; 1998.
- [25] Partnership for Prevention. Domestic violence and the workplace. Washington: Partnership for Prevention. Available at: www.prevent.org. Accessed March 9, 2006.
- [26] US Department of Labor, Bureau of Labor Statistics. Census of fatal occupational injuries: Table 4. Fatal occupational injuries by worker characteristics and event or exposure, 2003. Washington; 2004.
- [27] Baldry AC. Bullying in schools and exposure to domestic violence. *Child Abuse Negl* 2003; 27:713–32.
- [28] Cohn F, Rudman WJ. Fixing broken bones and broken homes: domestic violence as a patient safety issue. *Jt Comm J Qual Saf* 2004;30:636–46.
- [29] Elliott BA. Screening for family violence: overcoming the barriers. *J Fam Pract* 2000;49: 137–8.
- [30] Chamberlain L, Perham-Hester KA. The impact of perceived barriers on primary care physicians' screening practices for female partner abuse. *Women Health* 2002;35:55–69.
- [31] Feldhaus KM, Koziol-McLain J, Amsbury HL, et al. Accuracy of 3 brief screening questions for detecting partner violence in the emergency department. *JAMA* 1997;277:1357–61.
- [32] Sherin KM, Sinacore JM, Li XQ, et al. HITS: a short domestic violence screening tool for use in a family practice setting. *Fam Med* 1998;30:508–12.
- [33] Webster J, Holt V. Screening for partner violence: direct questioning or self-report? *Obstet Gynecol* 2004;103:299–303.
- [34] Director TD, Linden JA. Domestic violence: an approach to identification and intervention. *Emerg Med Clin North Am* 2004;22:1117–32.
- [35] Family Violence Prevention Fund. National consensus guidelines on identifying and responding to domestic violence victimization in health care settings. San Francisco: 2004.
- [36] Nelson HD, Nygren P, McInerney Y, et al. Screening women and elderly adults for family and intimate partner violence: a review of the evidence for the US Preventive Services Task Force. *Ann Intern Med* 2004;140:387–96.
- [37] Nygren P, Nelson HD, Klein J. Screening children for family violence: a review of the evidence for the US Preventive Services Task Force. *Annals of Family Medicine* 2004;2:161–9.
- [38] Anglin D, Sachs C. Preventive care in the emergency department: screening for domestic violence in the emergency department. *Acad Emerg Med* 2003;10:1118–27.
- [39] Rhodes KV, Levinson W. Interventions for intimate partner violence against women: clinical applications. *JAMA* 2003;289:601–5.
- [40] Taket A, Nurse J, Smith K, et al. Routinely asking women about domestic violence in health settings. *BMJ* 2003;327:673–6.
- [41] Siegel RM, Joseph EC, Routh SA, et al. Screening for domestic violence in the pediatric office: a multipractice experience. *Clin Pediatr* 2003;42:599–602.
- [42] Abbott J. Injuries and illnesses of domestic violence. *Ann Emerg Med* 1997;29:781–5.
- [43] Muelleman RL, Lenaghan PA, Pakieser RA. Nonbattering presentations to the ED of women in physically abusive relationships. *Am J Emerg Med* 1998;16:128–31.
- [44] Crandall ML, Nathens AB, Rivara FP. Injury patterns among female trauma patients: recognizing intentional injury. *Journal of Trauma-Injury Infection and Critical Care* 2004;57: 42–5.
- [45] Muelleman RL, Lenaghan PA, Pakieser RA. Battered women: injury locations and types. *Ann Emerg Med* 1996;28:486–92.
- [46] Strack GB, McClane GE, Hawley D. A review of 300 attempted strangulation cases. Part I: criminal legal issues. *J Emerg Med* 2001;21:303–9.

- [47] McClane GE, Strack GB, Hawley D. A review of 300 attempted strangulation cases Part II: clinical evaluation of the surviving victim. *J Emerg Med* 2001;21:311–5.
- [48] Corrigan JD, Wolfe M, Mysiw WJ, et al. Early identification of mild traumatic brain injury in female victims of domestic violence. *Am J Obstet Gynecol* 2003;188(5 Suppl):S71–6.
- [49] Campbell J, Jones AS, Dienemann J, et al. Intimate partner violence and physical health consequences. *Arch Intern Med* 2002;162:1157–63.
- [50] Felitti VJ, Anda RF, Nordenberg D, et al. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. *Am J Prev Med* 1998;14:245–58.
- [51] Bensley L, Van Eenwyk J, Wynkoop Simmons K. Childhood family violence history and women's risk for intimate partner violence and poor health. *Am J Prev Med* 2003;25:38–44.
- [52] Roy CA, Perry JC. Instruments for the assessment of childhood trauma in adults. *J Nerv Ment Dis* 2004;192:343–51.
- [53] Green CR, Flowe-Valencia H, Rosenblum L, et al. The role of childhood and adulthood abuse among women presenting for chronic pain management. *Clin J Pain* 2001;17:359–64.
- [54] Crandall ML, Nathens AB, Kernic MA, et al. Predicting future injury among women in abusive relationships. *Journal of Trauma-Injury Infection and Critical Care* 2004;56:906–12 [discussion: 912].
- [55] Campbell JC, Webster D, Koziol-McLain J, et al. Risk factors for femicide in abusive relationships: results from a multisite case control study. *Am J Public Health* 2003;93:1089–97.
- [56] Wadman MC, Muelleman RL. Domestic violence homicides: ED use before victimization. *Am J Emerg Med* 1999;17:689–91.
- [57] Sharps PW, Koziol-McLain J, Campbell J, et al. Health care providers' missed opportunities for preventing femicide. *Prev Med* 2001;33:373–80.
- [58] Houry D, Feldhaus KM, Nyquist SR, et al. Emergency department documentation in cases of intentional assault. *Ann Emerg Med* 1999;34:715–9.
- [59] Isaac NE, Enos VP. Documenting domestic violence: how health care providers can help victims. US Department of Justice; 20013. Publication No. NCJ 188564. Available at: <http://www.ncjrs.gov/pdffiles1/nij/188564.pdf>. Accessed August 16, 2006.
- [60] Warshaw C, Ganley AL. Improving the health care system's response to domestic violence: a resource manual for health care providers. San Francisco: Family Violence Prevention Fund; 1998.
- [61] Campbell JC. Danger assessment 2004. Available at: www.dangerassessment.com. Accessed August 16, 2006.
- [62] Houry D, Sachs CJ, Feldhaus KM, et al. Violence-inflicted injuries: reporting laws in the fifty states. *Ann Emerg Med* 2002;39:56–60.
- [63] Zun LS, Downey LV, Rosen J. Violence prevention in the ED: linkage of the ED to a social service agency. *Am J Emerg Med* 2003;21:454–7.
- [64] Muelleman RL, Feighny KM. Effects of an emergency department-based advocacy program for battered women on community resource utilization. *Ann Emerg Med* 1999;33:62–6.