

MENTAL AND PHYSICAL HEALTH EFFECTS OF INTIMATE PARTNER VIOLENCE ON WOMEN AND CHILDREN

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Anger, Aggression, and Violence

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It is well recognized that the battering of female partners is a significant health problem that affects at least 4.4 million women in this country each year according to a recent national random survey. ^[109] That survey, however, does not include women battered but not actually living with the abusive intimate partner, those either in a "dating" relationship or having separated from him (or her) and still being abused. Both of those categories also involve significant numbers of battered women. ^{[7] [28] [47]} *Battering* is defined here as repeated physical or sexual assault by an intimate partner within a context of coercive control. ^[32] The emotional abuse that is almost always part of the coercive control also has serious psychological consequences according to women themselves, but the actual effects on women's health seldom have been measured separately.

The increased health problems and health care seeking of physically battered women, however, are well documented. Plichta ^[109] found that women physically abused by a spouse or live-in partner were significantly more likely than other women to define their health as fair or poor, to have been diagnosed with sexually transmitted diseases (STDs) and other gynecologic problems, and to say they had needed medical care but did not get it. The University of New Hampshire national random survey data showed the same finding of fair or poor health status, and also demonstrated that severely battered women had almost twice the number of days in bed due to illness than other women. ^[61] In the survey by Brendtro and Bowker ^[17] of self-identified battered women who had successfully ended the violence, the majority of women had sought help from medical professionals, a higher proportion than from other sources of help.

In the few recent studies of primary care settings, incidence (assaulted within the past year) of battered women from self-report (rather than record review) has ranged from 5% to 25%. ^[64] ^[70] ^[101] ^[113] The strongest risk factor for identification of battered women in one of the primary care settings was depressive symptoms. ^[70] Rath et al ^[113] found that not only the battered women in the HMO studied but also their children used health services six to eight times more often than did controls. Thus, it is important for scholars and clinicians in both the physical and mental health fields to understand, further investigate, and recognize the physical and mental health effects of intimate partner violence on battered women and their children. This article reviews the pertinent research in the field and makes suggestions for better health care services for this vulnerable population.

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MORTALITY RELATED TO ABUSE

Obviously, the most severe health consequence of intimate partner violence is homicide, accounting for more than half the homicides of women in the United States each year. ^[53] The majority of murdered adult women are killed by a husband, partner, or ex-husband or ex-partner, and in the majority of those homicide cases, the woman was battered before she was killed. ^[27] The trajectory of the most severe kinds of abuse is often an increase in severity and frequency over time that may culminate in a homicide if the woman does not leave or the man does not receive either treatment or incarceration for violence. The majority of battered women eventually do leave their abuser, but they are probably most at risk for homicide after they have left the abuser or when they make it clear to him that they are leaving for good. ^[22] ^[35] ^[143]

There are two recent study of urban homicides indicating that the leading cause of maternal mortality in Chicago and New York City is now trauma, with homicide accounting for the largest proportion of those traumatic deaths. ^[55] Maternal death is defined as death occurring during pregnancy or within 90 days of the end of pregnancy. These are the first studies elucidating the growing number of maternal deaths from homicide, at least in urban areas. National homicide data do not separate out maternal homicide, ^[27] ^[28] so that generalizable conclusions are not possible. There is some indication that battered women who have been abused during pregnancy are particularly at risk of being killed or of killing their abuser. ^[9] ^[22] ^[35] ^[143]

WOMEN'S PHYSICAL HEALTH SEQUELAE FROM BATTERING

Battering has been determined as a significant risk factor for a variety of physical health problems treated in outpatient, primary care settings, as well as in emergency departments. Injuries or the aftermath of injuries from abuse such as pain, broken bones, facial trauma (e.g., fractured mandibles), and tendon or ligament injuries usually are followed in outpatient settings. [66] [68] [137] [149] Because battered women frequently report untreated loss of consciousness as a result of abuse, the chronic headaches often described by battered women [61] may be an inadequately diagnosed sequelae of neurologic damage from battering. Undiagnosed hearing, vision, and concentration problems reported by battered women also suggest possible neurologic problems from injury. [48]

Other symptoms and conditions shown to be associated with physical violence from intimate partners may be more related to the results of stress, including chronic irritable bowel syndrome and other stress-related symptoms. [11] [18] [31] [93] [122] Although the suppression of the immune system from chronic stress has been investigated in other populations, the role of stress in the development of the frequent communicable diseases of battered women and their children [93] has not been investigated.

Approximately 40% to 45% of all battered women are forced into sex by their male partners. [31] This forced sex probably results in increased pelvic inflammatory disease; increased risk of STDs, including HIV/AIDS; vaginal and anal tearing; bladder infections; sexual dysfunction; pelvic pain; and other genitourinary health problems as documented in several studies. [11] [31] [40] [109] Eby and colleagues [48] documented that the increased risk for STDs, including HIV/AIDS, in one sample was related to the lack of using protection during intercourse (67%), primarily at the male partner's insistence or when sex was forced, rather than other risky behavior on the woman's part (e.g., multiple casual sexual partners or intravenous drug usage). That study also specifically linked the sexually violent aspects of battering relationships with physical health problems, a link not demonstrated elsewhere because of a general failure to measure or analyze sexual abuse separately from physical battering. Sexually abused battered women in shelters surveyed by Campbell and Alford [31] reported other gynecologic problems such as dysmenorrhea, and the battered women in the HMO study by Hamberger et al [70] were noted as having unexplained vaginal bleeding. Battered women in focus groups also linked forced sex in battering relationships as well as male partner control of contraceptive use with unintended pregnancy, a link also shown in a large population-based study in one state. [15] [36] When asked directly about sexual abuse by health care professionals, women respond without objection, and the health care system is the only place where women are likely to receive appropriate care for this aspect of their battering experience.

WOMEN'S MENTAL HEALTH CONSEQUENCES

Mental health sequelae to abuse are significant and prompt women to seek health care services as frequently as for physical health problems. The primary mental health response of women to being battered in an ongoing intimate relationship is depression. [70]

In controlled studies from a variety of settings, battered women consistently are found to have more depressive symptoms than other women. ^{[16] [89] [101] [114]} Using psychiatric diagnostic procedures, Gleason ^[65] found a significantly higher prevalence of major depression in 62 battered women than in the NIMH Epidemiologic Catchment Area study. In that same study, there was a higher prevalence of major depression (63%) than of diagnosed post-traumatic stress disorder (PTSD) (40%). In comparison, depression in women in general is estimated at 9.3% point prevalence and 20% to 25% lifetime risk. There are increasing recommendations for the treatment of depression in primary care settings. The need to assess for and intervene if necessary for domestic violence as well as depression, however, seldom has been recognized. ^[23]

In studies that explore the dynamics of depression in battered women, significant predictors include the frequency and severity of current physical abuse and stress, more strongly than prior history of mental illness or demographic, cultural, or childhood characteristics. ^{[24] [34] [38]} Self-care agency or women's ability to care for themselves was found to be a protective factor for depression in one study. ^[24] Similar concepts (agency, survival strategies) have been found in other studies, indicating the need to investigate the strengths of battered women as well as their health problems. ^{[67] [97]}

Trauma Framework

Many current mental health researchers and practitioners are conceptualizing the psychological effects of domestic violence within a traumatic response framework. ^{[46] [47]} Trauma occurs "when an individual is exposed to overwhelming events causing feelings of helplessness in the face of intolerable danger." ^[52] DSM-IV ^[4] defines a traumatic event as one in which the individual "experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of himself or herself or others" and that the individual's "response involved intense fear, helplessness or horror" (p 427). Janoff-Bulman ^[91] noted that the situations or events that are most likely to trigger a traumatic stress response are those that are least likely to be subject to alternative interpretations regarding the presence of threat. Herman's ^[73] work suggested that a complex (or chronic) traumatic stress response, where the person is subjected to ongoing abuse, control, and terror, may be more adequate to explain the responses seen in battered women than a single traumatic event. These somewhat different responses include alterations in affect (the predominance of depressive affect), alterations in perception of the perpetrator (the tendency of severely battered women to see their abuser as omnipotent), and alterations in sense of self (the self-blame and disappearance of a sense of self described by severely abused women). ^[32] ^[46] The role of attachment to the abuser should not be underestimated as part of understanding the psychological responses of battered women and their children and making the response to trauma more complex. ^[47]

In support of a traumatic stress conceptualization, higher rates of PTSD have been documented in battered women in shelters than in other women. ^{[5] [65] [147]} So far, the strongest predictor of PTSD in battered women has been the severity of current abuse, ^[5] but other experiences of trauma (e.g., childhood sexual abuse, rape) were not well

measured in that study. The association of PTSD and battering has only fairly recently been documented, and primarily only in the violence literature rather than in mainstream health or mental health publications. Battered women generally would not complain of PTSD per se to a health care provider, but rather of sleep disorders or stress. Thus, there is a substantial probability of misdiagnosis or lack of diagnosis of PTSD by non-mental health providers.

Substance abuse, both of alcohol and illicit drugs, has been found as a substantiated correlate of abuse during pregnancy in all of the studies where it was measured. ^{[3] [10] [25]} Substance abuse is a frequent manifestation of PTSD as part of the avoidance dynamic in other samples of traumatized people, including nonpregnant battered women. ^[126] In the most recent national random survey, however, Plichta ^[109] did not find an association between intimate partner violence and alcohol *use* (abuse not measured) but did find an association with illicit drug (but not tranquilizer) use.

ABUSE DURING PREGNANCY

There are now many studies of abuse in pregnant women, with prevalence of abuse during the current pregnancy ranging from 1% to 17% and with prevalence of abuse prior to pregnancy (within the past year) ranging from 3% to 9%. ^{[25] [60] [63] [103]} In the one prevalence study reported thus far in Canada, 6.6% of 548 women reported abuse during pregnancy and 10.9% at any time before the pregnancy. ^[125] The prevalence rates varied according to how the question was asked, who made the inquiry, and demographics of the sample. The highest prevalence in a large ethnically heterogeneous sample was found by a study that used the regular prenatal care nurse for a face to face oral inquiry, asked at each prenatal care visit, and used the Abuse Assessment Screen, a four-question screen that asks about violent tactics and fear as well as emotional, sexual, and physical "abuse." ^[103] The lowest prevalence was found in a private prenatal site in an affluent community, using two questions, both containing the term "abuse" as part of a longer written questionnaire. ^[117] In two other studies using both private and public patients, however, income level did not affect prevalence. ^{[72] [25]} In a comparison of abuse during adolescent pregnancy with abuse during adult pregnancy, Parker and colleagues ^[108B] found a significantly higher prevalence of abuse among adolescents than adult women (20.7% versus 15%). Other health-related correlates of abuse during pregnancy included substance abuse, smoking, less than optimal weight gain, and eating an unhealthy diet. ^{[108A] [125]} These can be seen as factors related to stress.

In terms of pregnancy outcomes, there are now at least three studies that have documented an association of low birthweight (LBW) with abuse during pregnancy, even controlling for other risk factors. ^{[21] [108A] [118]} As explicated by Newberger and colleagues, ^[108] there may be a direct causal path through abdominal trauma and consequent placenta damage or uterine contractions or premature rupture of membranes. There also may be infection, especially related to forced sex, or exacerbation of chronic problems of the mother such as hypertension or diabetes from the trauma. Indirect causes of LBW from abuse would be through the mechanisms of stress and through the association of abuse with other risk factors for LBW, such as smoking and substance abuse. In the Bullock

and McFarlane ^[21] study, there was a stronger association of LBW with women delivering in a private hospital than those delivering in a public hospital, suggesting that the presence of fewer of the other risk factors for LBW associated with poverty in middle class women may strengthen the detectable effect of battering on infant status. There also have been indications of abuse being related to inadequate prenatal care in at least two studies, potentially another indirect pathway for the abuse-birthweight connection. ^{[25] [103]} Other documented deleterious outcomes of abuse during pregnancy included a significantly increased rate of miscarriage in one study but not an increase in elective abortion. A search of the literature has not revealed any focusing on postpartum depression that specifically measured partner abuse, but many studies have identified lack of support from a partner as a risk factor for postpartum depression. Given the association of battering and depression in other women, it is reasonable to assume that some women diagnosed as manifesting postpartum depression may, in fact, be experiencing abuse from an intimate partner. Gielen and colleagues ^[63] found an increased prevalence (19% versus 10%) of abuse during the postpartum period, alerting clinicians to the necessity of considering abuse beginning or resuming after childbirth as well as during pregnancy.

THE CHILDREN OF BATTERED WOMEN

Several studies have established a significant overlap of child abuse and wife abuse, with estimates of 40% to 70% of children entering battered women's shelters who are themselves abused. ^{[16] [93] [96] [104] [123] [127]} Usually the abuser is the batterer of the mother, but the mother may abuse the children as well. ^[142] This double traumatization exacerbates the deleterious effects of each. ^[89] Children also may be injured inadvertently, sometimes seriously, as the unintended victims of domestic violence. ^[107]

The risk of child abuse logically would be especially severe in families where wife abuse began or became more severe during pregnancy or where the anger seemed to be directed toward the unborn child. In an in-depth interview study of battered women about abuse during pregnancy, a small group (5%), but the most seriously abused women, indicated the partner was sure that the baby was someone else's (even though the woman said it was not), and that their partner seemed to be trying to cause the death of the fetus. ^[33] This theme again arose in a focus group study of battered women. ^[36] Daly, Singh, and Wilson ^[43] have found child homicide to be perpetrated more often by a stepfather or boyfriend of the mother (rather than biologic father of the child) than by other parental figures, and that the presence of children of previous partners is a risk factor for domestic violence. Battered women worry about their children and often try to protect and nurture them against extraordinary odds. ^[83] The threats from violence are pervasive for many mothers, particularly those in low socioeconomic groups. They worry about violence directed toward their children or themselves by the abusive partner, but also about other sources of violence their children may experience outside the household (on their way to or from school, on the playground, the streets, in the neighborhoods). The threats from drugs, guns, sexual abuse, and even the police if certain youngsters (especially African-American male children) are in the wrong place at the wrong time may be very real. ^[83] Battered women who are mothers worry about where the family will stay if they have left

their home due to battering and how they will provide for their children. They worry about the long-term effects of all of these experiences.

In the United States, at least 3.3 million children between the ages of 3 and 17 years witness parental abuse annually. ^[88] The actual numbers are most likely somewhat higher because of the under-reporting of domestic violence. ^[6] Interviews with children of battered women indicate that children are much more aware of this violence than parents imagine. ^[81]

Children of Battered Women and Trauma

Children who experience the battering of their mother often fit the description of traumatized children. Researchers have suggested that post-traumatic stress is a useful framework within which to view the behavior of the children of battered women as well as their mothers, but there have been no empirical studies to date that have documented the prevalence of PTSD in this group. ^[120] The recognition that children actually experience post-traumatic stress reactions is a relatively recent one ^{[135] [148]} and did not receive formal diagnostic recognition until 1987 with the publication of the DSM-III-R. Experiencing and witnessing violence both have been recognized as stressors of the magnitude to produce PTSD symptoms in children. ^[52] ^[112] Sluzi ^[121] noted that "violence becomes traumatic when the victim does not have the ability to consent or dissent, which, in turn, is linked with the universal experience of helplessness and hopelessness engendered by victimization" (p 179)--an apt description of the experience of many children of battered women. McClosky et al ^[102] found that many of the children of battered women in their sample of 365 children ages 6 to 12 years had observed their mothers being choked, threatened with a weapon, or threatened with death in other ways and noted that these children were "living under the shadow of a lethal threat" and "had been exposed to levels of violence as extreme as those described in Pynoos's studies ^{[110] [112]} of traumatized children" (p 1256). Experiencing abusive violence in the home thus would interfere with the child's developing sense of security and belief in a safe, just world. ^[19]

Although the battering and possible child abuse are major stressors in themselves, they are rarely the only ones these children experience. Ongoing marital conflict, underlying family dysfunction, maternal depression resulting in reduced social support and nurturance, ^[102] living with secrecy, dislocations and relocations as the mother leaves the home to seek safety and then returns, economic and social disadvantage, and interactions with the police and the court system are among the other stressors with which the children may be dealing. ^[82] Secondary events may cause additional trauma such as medical treatment of physical injuries, ^{[99] [111]} the stresses related to disclosure, repeated questioning, the reactions of others, forensic examinations, testifying in court in the presence of an assailant, foster placement, and so on. ^[111] Rutter's notion of cumulative stressors suggests that the probability of children developing behavioral disorders increases as the number of significant family stressors increase. ^[115]

Pynoos ^[111] noted that the literature related to violence identifies a number of factors that influence the child's response to violence: "...proximity to violent threat, the unexpectedness and duration of the experience(s), the extent of violent force and the use of a weapon or injurious object, the number and nature of threats during an episode, the witnessing of atrocities, relationship to the assailant and other victims, use of physical coercion, violation of the physical integrity of the child, and degree of brutality and malevolence." Other factors that may influence the child's response to family violence include age, gender, frequency and severity of battering to the mother, and the mother's response. ^[82]

It is also important to assess the strengths of youth who are exposed to violence and to include the social and cultural supports of their communities as well as their problems. ^[85] Various authors ^{[59] [82] [140]} theoretically have reviewed the role of resilience and other factors in mediating children's responses to even chronic stress and violence exposure. These factors, however, have not yet been investigated in the children of battered women.

Children's Responses to Traumatic Events

A number of behaviors and signs have been noted to characterize children's responses to traumatic events in general such as thought suppression, sleep problems, exaggerated startle responses, developmental regressions, deliberate avoidances, panic, irritability, psychophysiologic disturbances, hypervigilance, and fear of recurrence. ^{[52] [111] [130] [131]} Other responses Terr ^{[130] [131]} highlights as being of particular importance in traumatized children are (1) strongly visualized or otherwise repeatedly perceived memories (may include hallucinations); (2) repetitive play or behavioral enactments of the trauma (which may lead to behavior dangerous to the child or others, e.g., "identification with the aggressor" ^[111]); (3) trauma-specific fears as well as fears of mundane things such as the dark or certain animals; and (4) changed attitudes about people, life, and the future. The psychic numbing that often is seen in adults after traumatic events may not be seen in children, instead, children may withdraw into uncustomary behavior patterns. ^{[52] [130]} Traumatized children often are unable to see a future for themselves. ^[130]

After a traumatic event, the individual may have a changed world view--the world is no longer seen as a safe place, adults are no longer seen as competent protectors, events are no longer predictable or controllable. ^{[91] [98]} In an effort to decrease their sense of helplessness and restore a feeling of control and predictability, many trauma victims, adult and children alike, blame themselves for what happened, and this results in feelings of shame ^[126] and guilt, a lowered self-confidence, and a lowered perception of self-competence. ^{[90] [91]}

Effects of Domestic Violence on the Children

Although early studies of the children of battered women suggested a host of problems, including impairment in cognition, developmental delays, and decreased empathy, these studies generally were uncontrolled and conducted in shelters, reflecting the situational stressors of a crisis period, a strange setting, and future uncertainty as well as long-term

effects of family violence. ^{[74] [141]} Later controlled studies indicated *cognitive and emotional responses*, such as higher levels of internalizing (anxiety, social withdrawal, depression), fewer interests and social activities; preoccupation with physical aggression, withdrawal and suicidal ideation; *behavioral problems* (externalizing behaviors [aggressiveness, hyperactivity, conduct problems], reduced social competence, school problems, truancy, bullying, excessive screaming, clinging behaviors, speech disorders); and *physical symptoms* (headaches, bed wetting, disturbed sleeping, failure to thrive, vomiting, and diarrhea). ^{[6] [76] [78] [79] [82] [89]} Differences according to gender, especially aggressiveness (more common in male children), have been reported in some studies ^{[44] [80] [145]} but not in others, ^[41] without clear advantages in methodology allowing conclusions to be drawn.

The validity of using mother-report only in studies of children of battered women has been questioned as the high levels of distress, depression, or anxiety the mothers are experiencing may lead them to have less tolerance for and be less aware of the needs and responses of their children. One study noted a "pervasive tendency" (p 525) for the mothers to rate their children more negatively than other observers such as teachers and shelter staff. ^[80] Thus, for more valid assessments, multiple informants should be used as well as direct self-reports from and observations of the children.

Although no longitudinal studies have been conducted to demonstrate the exact extent of risk of these children perpetrating violence, it is clear that the most consistent risk factor for men being abusive to their own female partners is growing up in a home where their mother was beaten by their father. ^{[77] [127]} Characteristics of children who were abused but did not grow up to abuse their own families can be summarized as including more extensive social supports, fewer life stressors, a supportive relationship with one parent or foster parent, resolve not to repeat the pattern of abuse with their own children, more open anger about earlier abuse, and better able to give detailed accounts of their abuse. ^{[49] [84]}

Several qualitative studies have sought to describe aspects of the experience of being a child of a mother who is battered. Humphreys ^{[81] [82]} explored the worries children in shelters had about their mothers. She found that regardless of the children's age or gender, they worried about the same things about their mothers. The children expressed worries about actual (e.g., injuries due to the battering) as well as potential (e.g., mother's smoking, pregnancy) health hazards their mothers might experience.

A phenomenologic study by Bennett ^[9] focused on adolescent girls' experience of witnessing marital violence. Seven themes were identified that represented interrelated process dimensions of the experience: remembering, living from day-to-day, feeling the impact, escaping, understanding, coping, and resolving or "settling." The girls coped with the violence by blocking aspects of the experience from their awareness. The participants stated that they felt like they had been living in violence for a lifetime, yet they had difficulty recalling specific violence episodes. Similarly, Ericksen and Henderson ^[51] were concerned that 13 children, ages 4 to 12 years old, also interviewed in depth, perceived that violence was both normal and acceptable and appeared unaware of alternative means of expressing their angry feelings and handling conflict.

In addition, these somewhat younger children described three components to their experience. ^[51] The first was "living with violence," which included themes of witnessing the violence, fear, vigilance, powerlessness, and coping. The second component was "living in transition" and included expressions of relief, pleasure, and protectiveness. The third component, "living with mom" (without their abusive fathers), included expressions of sadness, protectiveness, uncertainty, acceptance of violence as a "normal" way of coping with interpersonal conflict, and coping strategies. The children also exhibited a pervasive sadness that seemed to permeate their experiences and did not feel that they could talk to their mothers about their sadness because it would upset their mothers.

Developmental Differences

A 1988 review of studies of children from violent homes ^[54] found that most of the studies did not view age of the witnessing child as a mediating variable, instead lumping children 2 to 12 or 4 to 16 years in homogeneous groups. Studies that have investigated age as a variable have found significant differences in children's responses. Preschool children appear to be particularly vulnerable to the effect of domestic violence and shelter residence. Preschool children in these situations show more behavior problems ^[28] and significantly lower self-esteem ^[80] than do school-aged children. In another study, 39% of the preschoolers tested in a shelter showed developmental delays. ^[142] Fantuzzo et al ^[54] used parental ratings of behavior problems and competencies and children's self-report to investigate the relationships among nature of conflict, place of residence, and type and extent of adjustment in children ages 3.5 to 6 years. They found that "verbal conflict alone was associated with a moderate level of conduct problems; verbal plus physical conflict was associated with clinical levels of conduct problems and moderate levels of emotional problems; verbal plus physical conflict plus shelter residence was associated clinical levels of conduct problems, higher level of emotional problems, and lower levels of social functioning and perceived maternal acceptance" (p 258).

LIMITATIONS IN PRIOR RESEARCH

Research in the area of intimate partner violence has been limited in several areas mentioned, most notably (1) the paucity of intervention evaluations (see next section); (2) variations in operationalizations, including a failure to usually investigate the differential effects of sexual, physical, and emotional victimization for women and children; (3) a lack of good measurement of health care costs; (4) less attention to strengths and protective factors for women and children than measures of pathology; (5) a tendency toward fragmentation of literature along age differentials and along disciplinary lines; and (6) a lack of attention to ethnicity and gender. In terms of the last two issues, participants in many studies of battered women and their children in health care settings have been ethnically diverse, but the investigators with a few exceptions ^[103] did not include ethnicity in the analysis, except for a description of the sample. Although women clearly are more often seriously battered and suffer more injuries and health problems than men, ^[7] ^[39] ^[61] men also are victimized in battering or mutually violent relationships. ^[66] The extent of men affected by domestic violence seeking health care is unknown and is an interesting and important research subject.

INTERVENTIONS: EVALUATION RESEARCH AND POLICY IMPLICATIONS

There are very few experimental evaluations of treatment or interventions specifically for battered women or their children, including the most widely used intervention to address the basic safety of both groups, battered women's shelters. There is little argument that these advocacy institutions have made all the difference in terms of safety and well-being of millions of women and children; however, clinical trial type evaluations have not been conducted. This is primarily because of safety concerns for women seeking services and a lack of more sophisticated, imaginative, community program evaluation designs applied to these complex, multifaceted, individualized programs. ^[42] ^[119] Even so, Berk and associates ^[13] found some quasi-experimental support for shelter stays decreasing violence for women who are active help seekers, and two postintervention survey evaluations rated shelters as excellent sources of help by women who had used them. ^[17] ^[67] In addition, there have been a few experimental evaluations of shelter support group services and follow-up services providing evidence that they decrease depressive symptoms or increase self esteem. ^[128] ^[129] ^[133] ^[134] There is a promising indication that cognitive behavioral interventions can be helpful for adult rape and other sexual assault survivors, ^[56] but they have not been extended to battered women. Treatment of battered women with various mental or physical health diagnoses has not been evaluated with them as a separate group in clinical trials to determine which of the traditional treatments are most effective for their particular combination of problems.

A variety of treatment modalities also have been used to treat children who have witnessed family violence, including individual therapy, ^[50] a family systems approach, ^[62] and group therapy. ^[87] ^[144] The effectiveness of these techniques, however, is unclear as evaluations largely have consisted of subjective reports of the participants and therapists involved, and reports of systematic evaluations of treatment approaches for these children are few.

A pilot study (without a control group) of a group treatment program for latency age children showed improvement in safety skill development, an increase in positive perceptions toward their parents, and increased knowledge of the dynamics of wife abuse. ^[87] Further work by Jaffe's group as well as others has suggested that in group sessions, peers can provide normalization, a lessening of a sense of isolation, meaningful feedback, and acceptable problem-solving strategies. ^[86] Wagar and Rodway ^[138] more recently conducted a pretreatment/post-treatment control group design study that provided an empirical evaluation of the 10-week group treatment program that had been developed by Jaffe et al ^[87] with 38 children ages 8 to 13 years who had witnessed wife abuse. Two variables (attitudes and responses to anger and sense of responsibility for the parents and for the violence) showed improvement but the third (safety and support skills) did not. In addition to the alleviation of symptoms, treatment strategies for children experiencing psychological distress and PTSD symptomatology who are exposed to repeated or ongoing stressors must assist the children in gaining competence and confidence for the future. Treatment programs must help children work through and integrate past and present experiences and feelings; view their world as one in which an individual can

maintain some degree of control and predictability; learn ways, places, and people with whom they can feel safe; and feel good about themselves and their own abilities. These interventions will not only help the children themselves, but potentially prevent further violence perpetration and victimization in their lives.

Developing and testing intervention and treatment strategies for battered women and the children of battered women need to be priorities in health care research funding. One of the difficult aspects of implementing research on the effects of trauma related to violence exposure and designing interventions is the fact that the situation is rarely clear-cut with one event. Often the event is one of a long series of past stressors, ^[100] and additional stressful or traumatic events may occur during the treatment. These facts argue for the necessity of a long-term intervention that goes beyond the mere alleviation of symptoms to include an emphasis of helping women and children build on their strengths and develop skills and competencies to successfully integrate past traumas and master future challenges.

Routine Screening

Several studies have documented a lack of appropriate identification of battered women in primary care and other health settings, ^[70] ^[124] even though a survey of HMO patients indicated that routine medical inquiry about physical abuse was favored by 78% of patients and routine inquiry about sexual abuse by 68% of patients. ^[58] It is not known if identification or lack of identification varies by ethnicity, but it has been documented that health care professionals are more likely to assess for child abuse if families are poor or of minority ethnic heritage. ^[71] In addition, a small survey of battered women in shelters who had been treated in emergency departments ($N=74$) indicated that 45% felt that the type of insurance they had influenced how the emergency department staff treated them and 22% felt that racism affected their treatment. ^[35A] As first noted by McFarlane et al, ^[103] pregnancy also offers a "window of opportunity" wherein abused women are seen the most often by health care professionals and can thereby receive a thorough abuse assessment and intervention. Because of the usual pattern of increase in severity and frequency and the noted beginning of abuse during pregnancy in at least some relationships, it also can be deduced that pregnancy may offer a point of early intervention, before abuse becomes an established pattern. The prevalence of abuse during pregnancy is equal to or greater than the other complications of pregnancy that a great deal of our prenatal care is directed toward. Abuse has the potential for lethality for both mother and fetus and is, therefore, as serious as any of those other complications. It is also directly or indirectly connected with many of them, especially low birthweight. Therefore, it warrants as much attention in our standard prenatal and postpartum care as other potential problems with routine assessment for abuse.

Other primary care settings also offer an ideal time for identification of and interventions with battered women and their children. At least three of the few innovative hospital-based domestic violence programs have found that a significant proportion of abused women referred to the programs stated that they prefer to obtain interventions for abuse in a health care setting than in shelters for a variety of reasons (reference 69 and Duberow

N: personal communication, 1995). Many women in the early stages of battering are not yet ready to identify themselves as abused and often do not associate their own or their children's physical and mental symptoms with battering. ^[32]

When battered women go unidentified, they and their children have increased health problems compared with women who are not battered, resulting in more frequent emergency department visits, other hospitalizations, and increased use of outpatient health care facilities. ^{[11] [68] [93] [101] [113] [136]} Goldberg and Tomlanovich ^[66] found that most of the patients who presented at the emergency department as a result of domestic violence were there for medical complaints rather than trauma, further indicating the need to intervene for abuse with women in other health care settings and, consistent with public health approaches, intervene as early as possible. Forty percent of battered women seen in an emergency room, the most expensive setting for health care and the setting where the most seriously abused tend to report, had previously required medical care for the abuse. ^[14]

According to a recent study conducted at Rush Presbyterian Medical Center in Chicago, the cost of health care services to victims of domestic violence averages \$1633 per patient per year, translating to an estimated national cost of \$857 million. ^[106] These findings highlight the cost of domestic violence in lives, suffering, and dollars. Early identification and intervention can prevent further injury and thereby significantly reduce pain, suffering, and health care costs.

Intervention Strategies

As with other diagnostic challenges, the primary care provider is in an ideal position to take a thorough history; assess the complete mental and physical health ramifications; take into account the total situation including the psychosocial context; and instigate suitable interventions including appropriate referrals and long-term follow-up. Interventions also need to take into account the degree of potential lethality of the situation, with safety planning for the woman and her children predicated on the degree of danger. ^{[22] [32]} Humphreys ^[83] found that the "work of worrying" and the tremendous energy expenditure this requires may have influenced the women's responses to their battering and thus, the effect of the battering on their children. Other investigators have found that women's responses to battering influence the magnitude of the effect of the violence on their children. ^{[88] [145]} Thus, battered women should be encouraged to help themselves as a way of helping their children and should be helped not to feel that by focusing on their own concerns and needs they are somehow neglecting their children.

NEED FOR SYSTEM CHANGE

Even when battered women are identified in the health care system, several researchers have found evidence of inappropriate response from providers, such as being treated impersonally and insensitively and having their abuse minimized. ^{[95] [124] [137]} Researchers also have found a tendency on the part of medical professionals to focus on the physical results of battering, to be paternalistic and distancing, and to subtly blame the battered

women for their abuse. ^[94] ^[95] ^[137] ^[139] Warshaw ^[139] documented that in 90% of the recognized domestic violence cases in one urban emergency department, the physician failed to obtain a psychosocial history or an abuse history, or to address the woman's safety. In a survey of battered women who had ended the violence in their lives, women responded that medical professionals were the least effective source of help among all formal support systems encountered. ^[17] In an attitude survey, Rose and Saunders ^[116] found that most physicians and nurses from several settings did not find wife abuse justified; however, attitudes varied. The degree of negative attitudes toward abused women was more strongly related to gender of participant and general attitudes toward women than specific disciplines or degree of training. The results suggested that those with positive attitudes toward women were more likely to seek out training. These studies indicate a need for systematic, required training if possible. Both physical and mental health primary care providers, however, seldom attend continuing education offerings in domestic violence. They and the systems that employ them need to be persuaded that the incidence of abused women in primary care settings is substantial, that violence may be part of the causes of a variety of conditions, and that appropriate interventions can decrease costs. State law, such as that passed in California, can ensure that the basic educational programs of *all* health care providers include material on the effects of intimate partner violence on women and children and appropriate discipline-specific and interdisciplinary interventions.

Research has indicated that training can be effective for significantly increasing the detection of battered women. ^[105] ^[132] A follow-up study of an emergency department where training was effective, however, indicates that identification rates had slipped back to near pretraining rates after 8 years. ^[105] Thus continuing education programs, orientation programs, and institutional inservice education programs also need to address intimate partner violence on a regular and required basis, with violence-related questions on licensure and certification examinations providing the external incentives for learning basic content and staying current.

Finally, the health care system needs to work in partnership with the advocacy and criminal justice systems, as well as community attitudes and opinions to provide a community wide response to intimate partner violence. The health care system only can be as effective as the other components of a community. A woman's depression will never go away and her physical problems are not likely to end if she is not kept safe from her violent partner or ex-partner. A child's traumatic response cannot be addressed fully in the presence of ongoing trauma. We in the health care system need to view our physical and mental health diagnoses of the victims as *normal* responses to the injury, traumatization, stress, physiologic, and psychological insults of violence. If we wish to develop effective treatment strategies, the violence as well as the response symptoms need to be addressed. We can perhaps significantly alleviate the responses with medication and various therapies, but we can only affect the violence with the help of these other facets of the community.

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