

## HEALTH IMPACT OF DOMESTIC VIOLENCE

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*Health injuries and related problems are well documented for the victims of domestic violence (DV). The health impact of DV behaviors for batterers has gone virtually unstudied. This study addresses the self-reports of health consequences of DV for both batterers and victims. The participants, 31 female victims and 62 male batterers, had numerous medical and mental health visits during the previous six months. Fourteen batterers (23%) received health care as a result of self-inflicted injuries from their battering. Eleven victims (35%) had received health care as a result of being battered. Eighteen batterers (29%) and 20 victims (64%) felt their medical and mental health problems were directly related to the DV. Additionally, batterers identified greater levels of stress on several of the subscales of the Symptoms of Stress Inventory (Nakagawa et al., 1993) than a comparison sample of adult men. Health care access as a result of DV was abundant for both victims and batterers. When assessing for DV, health care providers should screen for perpetrators as well as victims.*

Domestic violence (DV) has received considerable attention in the past decade. The focus has shifted from DV as being primarily a criminal justice system problem to DV as a social problem and, more recently,

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a health care problem (Salber, 1995). Battered women are more likely to seek health care for stress-related ailments than nonbattered women are (Campbell & Sheridan, 1989; Noel & Yam, 1992), and they are more likely to have physical symptoms and higher levels of depression, anxiety, and low self-esteem (McCauley et al., 1995). McPherson (1994) compared numbers of physician visits by family members in homes where there is DV with homes where no DV had been identified: Families where DV had been identified visited the physician eight times more often than families in homes where DV was absent.

In the past decade the body of research in the area of health consequences to victims of DV has grown, but it is scant regarding the perpetrators of DV. Clinical reports indicate that there are medical and mental health consequences to perpetrators as well as victims of DV (Ganley, 1995a). Batterers may seek health care for medical problems that are caused or complicated by their battering behaviors. The cost of direct medical and mental health care to victims of DV has been estimated to be in the range of \$1.8 billion a year (Miller, Cohen, & Wierseman, 1995). When the indirect costs of loss of work, decreased productivity at work, or the loss of an employee because of injury or death are tabulated, the financial toll mounts. However, cost estimates of care for perpetrators of DV are not available in the literature. As the demand for dwindling health-care dollars increases, health consequences of DV violence for both victim and perpetrators must be considered (Ganley, 1995a). In this article I expand on the health impact of DV by examining self-reports of perpetrators and victims.

## DEFINITIONS AND BACKGROUND

In this article *domestic violence* (DV) refers to a pattern of assaultive and coercive behaviors that an adult man uses with his intimate female partner (Ganley, 1995b). These behaviors take the form of physical violence, which includes physical contact (e.g., hitting, punching, pushing, use of weapons, etc.) and psychological violence (e.g., gestures, threats of violence, glares, and other tactics intended to control behavior). *Batterer* refers to a man who is both physically and psychologically violent toward his female partner, and *battering* is the use of both physical and psychological violence. *Victim* refers to the most recent female partner who was victimized by the batterer.

For a 6-month period from June 1997 to January 1998, 62 batterers and 31 of their victims were recruited to participate in a study focusing on completion or noncompletion of an intensive batterers' rehabilitation program. Batterers entering a specialized rehabilitation program were

asked to participate in this study by completing an interview protocol and answering a research instrument that measured their current level of psychological distress. Where possible, their victims also were invited to participate. The victims were interviewed using a research protocol conducted by DV program staff.

In addition to descriptive and demographic information about the batterers and their victims, I was interested in participants' perceptions of the impact of the DV on their mental and physical health. DV staff asked batterers and their victims additional questions as part of the interview protocol to assess health impact of the domestic violence. The batterers were asked (a) Have you ever received health care treatment for injuries related to your domestic violence? and (b) Do you feel that either your medical or mental health problems are related to your domestic violence? The victims were asked health-related questions as well, including (a) Have you ever received health care treatment as a result of injuries caused by domestic violence? and (b) Do you feel that either your medical or mental health problems are related to the domestic violence?

## **REVIEW OF RELATED LITERATURE**

Health consequences of DV to victims are immense. Victims of DV seek assistance for injuries, medical problems, obstetrical or gynecologic manifestations, and psychiatric presentations (for a review, see Warshaw, 1995). Emergency departments and primary health care settings are often the first contacts for victims of DV. Several researchers have estimated that approximately one third of all women seen in emergency rooms are victims of DV (McLeer & Anwar, 1989; Stark, Flitcraft, & Frazier, 1979). In an anonymous survey of 487 female veterans seen at a Veterans Affairs medical center, 24% under the age of 50 reported having been a victim of DV in the past year. These women were twice as likely to report a history of anxiety and depression and had greater enrollment in the mental health clinic than women who had indicated no episodes of DV. In addition, they reported poorer health habits, more emergency department visits, more hospitalizations within the past year, and more lifetime surgical procedures than their nonbattered counterparts (Murdoch & Nichol, 1995).

Although evidence of the health impact of DV continues to grow for victims of DV, the same questions are generally not being asked about the perpetrators. One study examined the health consequences of DV for both batterer and victims and compared them to maritally satisfied community controls (Cascardi, Lanhinrichsen, & Vivian, 1992). The

authors concluded that the rates of husband-to-wife aggression were nearly equal to the rates of wife-to-husband aggression. However, when they looked at the injurious outcomes of the aggression, the women were significantly more likely to sustain severe injuries than the husbands. This study, however, focused on the physical consequences of the violence perpetrated by the victim rather than personal physical injury resulting from the batterer's actions.

When Cascardi et al. (1992) compared the "aggressive couples" (p. 1181) with a sample experiencing marital discord but no violence, and with the community controls, they found that both the husbands ( $p < .09$ ) and the wives ( $p < .02$ ) of the "aggressive" group reported significantly more depressive symptoms. Contrary to their hypothesis, Cascardi et al. did not find that either the wives or the husbands of the aggressive group were more ill or more likely to be taking medication than those in the discord-only or the community control groups. They suggested that when DV occurs, the risk factors for health consequences and distress of both the victim and perpetrator must be considered.

Most of the studies on perpetrators of DV examine stress, mood disorders, and self-esteem as etiologically related to DV. A number of studies have found a relationship between battering and low self-esteem (Johnston, 1988; Neidig, Friedman, & Collins, 1986; Rouse, 1984). In only one study did the authors venture to offer that low self-esteem might be a consequence rather than a cause of DV (Goldstein & Rosenbaum, 1985). In this study, the authors also found significant differences when they compared the self-esteem of 20 domestically violent husbands with nonviolent husbands. The violent husbands had significantly lower scores on the self-esteem measure. Rather than offering the historically accepted assumption that low self-esteem in part causes men to become domestically violent, they suggested that low self-esteem may actually be caused by the violence: "Clinical experience. . . would suggest that abusing one's wife is self-esteem damaging" (Goldstein & Rosenbaum, 1985, p. 427).

In all of these studies, definitions of DV varied widely, from a serious physical injury to the female partner in the past year (Neidig et al., 1986), to slapping the wife any time during the entire relationship (Goldstein & Rosenbaum, 1985). Comparisons are difficult to make when definitions of DV are so variable.

If battering is associated with psychological disorders and other factors, one could speculate that battering one's partner might be stressful. Men who batter may experience both psychological as well as physical manifestations of stress because of their battering. This question has not yet been investigated, leading to the present study of batterers and their partners.

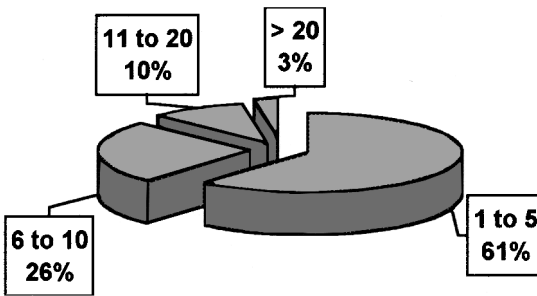
## **METHOD**

A convenience sample of 62 male batterers and 31 female victims-partners was recruited to participate in a descriptive study conducted at the Department of Veterans Affairs (VA) Puget Sound Health Care System. Forty-eight men were veterans, and 14 were active duty military. The women were the victims of men entering a state-certified intensive rehabilitation program for male batterers. This is the only program available to administratively eligible veterans and active duty military for no out-of-pocket expense. Three men (1 African-American, 1 Asian American, and 1 Caucasian) declined to participate in the study; thus the sample represents 95% of all men entering DV rehabilitation during the 6-month period specified earlier. All victims were contacted by mailing information to them about the program and the batterer's status in the program, but only 50% of the most recent victims actually participated in the interview.

DV program staff, according to an interview protocol, interviewed each of the research participants in a confidential setting. In addition to the demographic and health impact information, batterers were given the 94-question Symptoms of Stress (SOS) Inventory (Nakagawa et al., 1993) to complete. Adapted from the Cornell Medical Index, the SOS quantifies the respondent's self-perception of affective, behavioral, cognitive, and physiological components of health and illness. Research participants indicated on a 5-point scale the frequency with which they had experienced symptoms during the past month. Physiological scales include Peripheral Manifestations, Cardiopulmonary Symptoms of Arousal, Upper Respiratory Symptoms, Neurological Symptoms, Gastrointestinal Distress, and Muscle Tension. Psychological scales include Habit Patterns, Depression, Anxiety, Anger, and Cognitive Disorganization. Two-week test-retest reliabilities ranged from .47 to .86, and internal consistencies (Cronbach's alphas) ranged from .62 to .97 for subscales. Concurrent validity has been examined with the Symptoms Checklist-90-R (SCL-90-R) (Derogatis, Lipman, & Cori, 1973). Global distress score correlated .84 with the Global Severity Index. The summated physiological subscales of the SOS correlated .86 with the Somatization scale of the SCL-90-R. Correlation of the subscales of anger, anxiety, and depression between the SOS and the SCL-90-R ranged from .79 to .95 (Nakagawa-Kogan, Betrus, Beaton, Elmore, & Thompson, 1993).

### **Batterers' Outcomes**

The men's ages ranged from 18 to 65 years. The men were African American (29%,  $n = 18$ ), Asian American (5%,  $n = 3$ ), Native American



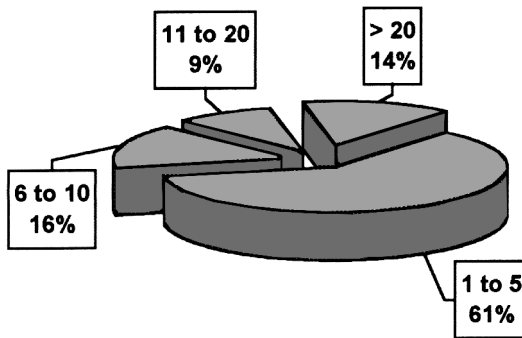
**FIGURE 1.** Percentages and numbers of health care visits for batterers ( $n = 39$ ).

(3%,  $n = 2$ ), Caucasian (55%,  $n = 34$ ), Latino (6%,  $n = 4$ ), and of mixed racial identity (2%,  $n = 1$ ). Although most had been court ordered for treatment (85%,  $n = 53$ ), some sought help for other reasons (14%,  $n = 9$ ). The majority (94%,  $n = 58$ ) had recent police response on a domestic violence call, and only 4 men (6%) had neither court-ordered treatment nor recent police response.

Thirty-nine of the men (63%) had numerous health-care visits in the past 6 months that ranged from 1 visit to more than 20 (see Figure 1). Twenty-three men (37%) had no medical visits to either the VA Puget Sound Health Care System or nearby Madigan Army Medical Center. By far the most frequent physical problem was musculoskeletal in nature, with 31 men (50%) seen for this problem. Other medical diagnoses included pulmonary (8%,  $n = 5$ ), dermatology (10%,  $n = 6$ ), gastrointestinal (13%,  $n = 8$ ), cardiovascular (14%,  $n = 9$ ), and neurological (10%,  $n = 6$ ) conditions.

Also of interest was whether the men had received health care treatment as a direct result of their DV injuries. Fourteen of the men (23%) reported having injured themselves and receiving health-care intervention for DV-related injuries.

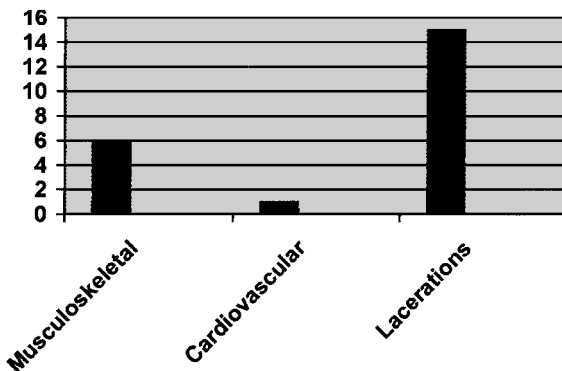
Their mental health visits in the prior 6 months were even more numerous than their medical visits. Fifty-six men (90%) had from 1 to more than 20 mental health visits (see Figure 2). Only 6 (10%) had no mental health visits in the previous 6 months. Fifty-six of the men had psychiatric diagnoses, including mood disorders (27%,  $n = 17$ ) anxiety disorders (24%,  $n = 15$ ), psychosis (2%,  $n = 1$ ), a personality disorder (2%,  $n = 1$ ), and substance abuse (45%,  $n = 28$ ). Although 45% of the men had a current substance abuse diagnosis, 61% ( $n = 38$ ) reported having had drug or alcohol treatment at some point (or points) in their lives. There is some overlap in these numbers, as some of the men had more than one physical and/or psychiatric diagnosis identified in their clinical record.



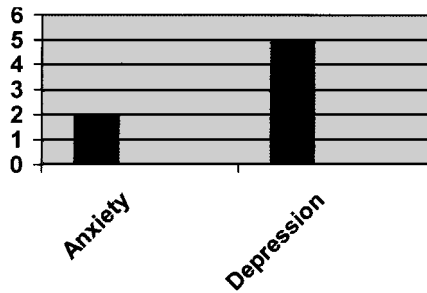
**FIGURE 2.** Percentages and numbers of mental health visits for batterers ( $n = 56$ ).

It is interesting that 29% ( $n = 18$ ) of the men felt that their medical and mental health problems were directly related to their DV behaviors: They identified depression, anxiety, cardiovascular problems, lacerations, bruises, and broken bones as related to their DV behaviors (see Figures 3 and 4 for the self-identified medical and mental health problems). None of the men identified anger as a possible mental health consequence.

Information on health care visits was retrieved from the hospital database for each veteran and soldier. The DV assessment and follow-ups were not included in this count. For purposes of this study, only 6 months' worth of data were retrieved. These men had from 1 to more than 20 health care visits in the past 6 months, and numerous hospital visits were related to their DV. Although estimating the cost of health care is difficult in the VA and the Department of Defense, an approximate total of \$42,408 for victims and batterers was spent in the past 6 months. By



**FIGURE 3.** Medical consequences of domestic violence for batterers ( $n = 22$ ).



**FIGURE 4.** Mental health consequences of domestic violence for batterers ( $n = 7$ ).

multiplying these visits by the number of years these men have battered, an enormous amount of hospital resources have likely been accessed as a direct result of DV.

The SOS provided additional information about the men's current state of psychological and physical distress. I compared the batterers' scores with those of a sample of adult men who volunteered to participate in the Stress Management Program at the University of Washington School of Nursing (Thompson, 1989). Although the batterers' overall level of stress was only marginally greater than that of the comparison sample,  $t(172) = 1.31$ ,  $p < .20$ , the batterers reported significantly greater levels of stress on a number of the subscales. They reported significantly greater levels of cardiopulmonary symptoms of arousal, upper respiratory symptoms, gastrointestinal symptoms, muscle tension, habitual patterns, and depression. They did not report greater amounts of peripheral manifestations, central neurological symptoms, anxiety/fear, or anger. They revealed only marginally greater levels of cognitive disorganization than the comparison sample,  $t(172) = 1.31$ ,  $p < .20$  (see Table 1 for a summary of SOS subscales). I conducted reliability testing for each subscale on the two largest ethnic categories: African American and Caucasian. Alpha coefficients for the African American group ranged from .88 to .94 and from .73 to .93 for Caucasians.

### Victims' Outcomes

Thirty-one of the victims participated in the study. Although all of the victims were contacted, some declined to participate because they were no longer in the relationship. Ages of participants ranged from 18 to 55 years. They were African American (3%,  $n = 1$ ), Asian American (13%,  $n = 4$ ), Caucasian (71%,  $n = 22$ ), Latina (3%,  $n = 1$ ), and mixed or of another ethnic group (10%,  $n = 3$ ).

**TABLE 1.** SOS Inventory Comparisons of Batterers With Adult Male Stress Management Clients

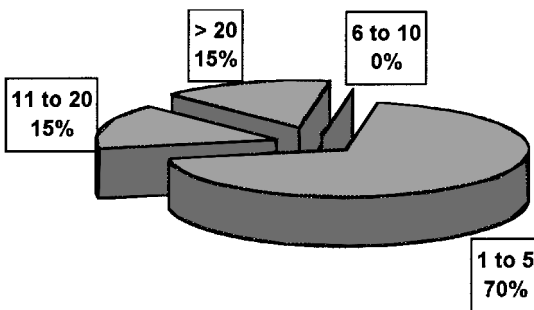
SOS Inventory Scale	<i>t</i> <sup>a</sup>
SOS Total	<i>t</i> (172) = 1.31*
Peripheral Manifestations	<i>ns</i>
Cardiopulmonary Symptoms of Arousal	<i>t</i> (205) = 1.9**
Upper Respiratory Symptoms	<i>t</i> (201) = 2.10***
Central Neurological Symptoms	<i>ns</i>
Gastrointestinal Symptoms	<i>t</i> (207) = 1.92**
Muscle Tension	<i>t</i> (202) = 1.75**
Habitual Patterns	<i>t</i> (198) = 2.18***
Depression	<i>t</i> (209) = 2.26***
Anxiety/Fear	<i>ns</i>
Emotional Irritability	<i>ns</i>
Cognitive Disorganization	<i>t</i> (210) = 1.625*

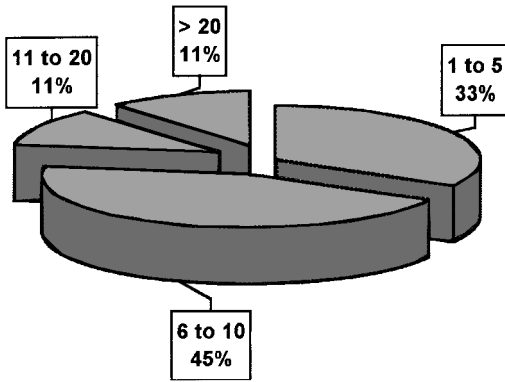
Note. SOS = Symptoms of Stress.

<sup>a</sup>two = tailed.

\**p* < .20. \*\**p* < .10. \*\*\**p* < .05.

They, too, had numerous medical and mental health visits during the previous 6 months. Twenty women (64%) felt their medical and mental health problems were directly related to the DV. Eleven (35%) received health-care intervention as a result of DV injuries. Thirteen women (42%) had been seen from 1 to more than 20 times for medical reasons during the past 6 months (see Figure 5). They identified musculoskeletal problems, cardiovascular problems, lacerations, and bruises as a result of the DV (see Figure 6). They reported currently having the following medical diagnoses: cardiovascular (2%, *n* = 1), neurological (16%, *n* = 5), pulmonary (6%, *n* = 2), musculoskeletal (16%, *n* = 5), dermatology (3%, *n* = 1), and gastrointestinal (6%, *n* = 2) conditions.

**FIGURE 5.** Percentages and numbers of health care visits for victims (*n* = 13).

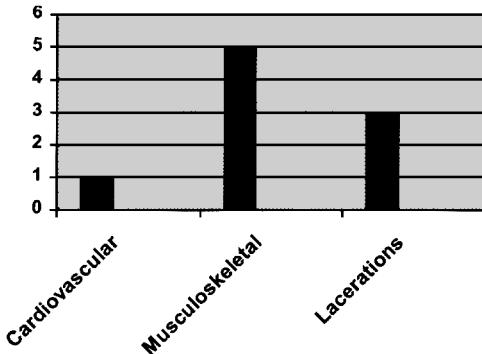


**FIGURE 6.** Percentages and numbers of mental health visits for victims ( $n = 9$ ).

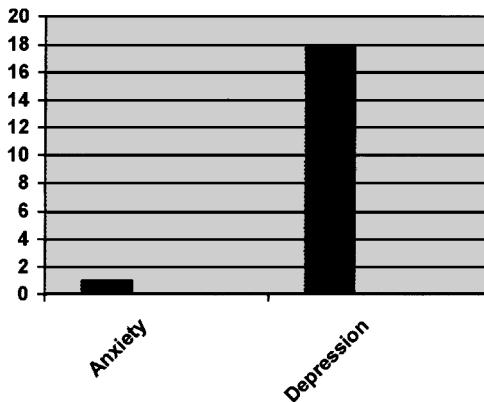
Nine women (29%) had 1 to more than 20 mental health visits in the past 6 months (see Figure 6). The women endorsed higher rates of mental health problems as a result of the DV than did the men. Although only 1 woman (3%) stated that she felt she had anxiety that was due to the DV, 18 (58%) felt they had depression because of it (see Figure 8). They identified themselves as having the following current psychiatric diagnoses: mood disorders (52%,  $n = 16$ ), anxiety (19%,  $n = 6$ ), psychosis (3%,  $n = 1$ ), a personality disorder (3%,  $n = 1$ ), and substance abuse (10%,  $n = 3$ ).

### DISCUSSION

Health care providers tend to think of negative health consequences as happening only to victims of DV. Indeed, health injuries and problems related to DV are well documented for victims. When one works with



**FIGURE 7.** Medical consequences of domestic violence for victims ( $n = 9$ ).



**FIGURE 8.** Mental health consequences of domestic violence for victims ( $n = 19$ ).

domestically violent men it quickly becomes apparent that they generate self-injuries as well as other physical and mental health consequences as a result of their behaviors. The batterers in this study described such things as lacerating their hands and forearms by punching through windows, breaking bones or bruising soft tissue by punching walls or other objects, and inadvertently getting hit when an object they threw at the victim bounced and hit them instead. Victims, the intended targets of these destructive acts, described having broken bones and lacerations from such things as being thrown through a glass door or out a second-story window; broken jaws and split lips from punches; and bruising from choking, punching, and grabbing. Close to one-third of the women and approximately a quarter of the men in the study reported having DV-related injuries.

Although injuries that are due to DV cause the most overt health impact of DV, the men and women in this study identified other, less obvious health problems that were due to the violence. In some areas, the batterers indicated that they were experiencing greater symptoms of physical and psychological stress than a comparison group of adult men. One batterer and one victim believed that the DV contributed to their cardiovascular problems. The batterer, when talking about his high blood pressure, stated that “I think it [the DV] is bad for my heart.”

By far the greatest impact identified by victims was a mental health impact. Nearly two thirds of the women believed that their depression was the result of being battered. Although fewer in number, some of the men reported anxiety and depression and attributed these to their violent behavior and its subsequent outcomes. The depression experienced by the batterers was more evident in their response to the SOS. Although

only five men linked their depression to their battering, as a group they were significantly more depressed than a comparison group of men. Both batterers and victims talked about the shame they felt as a result of battering or being battered. Batterers also identified embarrassment from being arrested and handcuffed in front of family and neighbors and living with the stigma of being a "wife beater."

This study looked at self-perceptions and reports of health impact as a result of DV. Comparing batterers and victims with matched controls who have been screened for the presence of DV would strengthen this research. The sample of adult men used to compare SOS scores were not screened for DV and, although there may have been batterers among them, it is unlikely that the sample consisted 100% of batterers, as did the research group. In addition, this study looked only at the health impact on the most recent victim. Thirty-four of the batterers reported that they had battered previous partners as well, making the potential health impact of their DV even greater.

Health care workers are in a unique position to interface with DV perpetrators in a nonjudicial or nonlegal setting. In the past decade medical and mental health providers have increased their understanding and recognition of health consequences of DV to victims (Warshaw, 1995). However, this same awareness and assessment are not generally in evidence for perpetrators of abuse. A comprehensive review of how to respond to the DV perpetrator is beyond the scope of this article. A more thorough understanding of the dynamics of DV and what to watch for may be obtained by reading "Health Care Responses to Perpetrators of Domestic Violence" (Ganley, 1995a). Referrals should be made to specialized programs following initial screening and treatment of the presenting injury or illness.

## REFERENCES

- Campbell, J. C., & Sheridan, D. J. (1989). Emergency nursing interventions with battered women. *Journal of Emergency Nursing, 15*, 12–17.
- Cascardi, M., Lanhinrichsen, J., & Vivian, D. (1992). Marital aggression impact, injury, and health correlates for husbands and wives. *Archives of Internal Medicine, 152*, 1178–1184.
- Derogatis, L. R., Lipman, R. S., & Cori, L. (1973). The SCL-90. *Psychopharmacology Bulletin, 9*(13), 13–28.
- Ganley, A. L. (1995a). Health care responses to perpetrators of domestic violence. In D. Lee, N. Durborow, & P. Salber (Eds.), *Improving the health care response to domestic violence: A resource manual for health care providers* (pp. 89–106). San Francisco: Family Violence Prevention Fund.

- Ganley, A. L. (1995b). Understanding domestic violence. In Lee, Durborow, & Salber (Eds.), *Improving the health care response to domestic violence: A resource manual for health care providers* (pp. 15–42). San Francisco: Family Violence Prevention Fund.
- Goldstein, D., & Rosenbaum, A. (1985). An evaluation of the self-esteem of maritally violent men. *Family Relations*, 34, 425–428.
- Johnston, M. E. (1988). Correlates of early violence experience among men who are abusive toward female mates. In G. T. Hotaling, D. Finkelhor, J. T. Kirkpatrick, & M. A. Straus (Eds.), *Family abuse and its consequences: New directions in research* (pp. 192–202). Newbury Park, CA: Sage.
- McCaughey, J., Kern, D. E., Kolodner, K., Dill, L., Schroeder, A. F., DeChant, H. K., Ryden, J., Bass, E. B., & Derogatis, L. R. (1995). The “battering syndrome”: Prevalence and clinical characteristics of domestic violence in primary care internal medicine practices. *Annals of Internal Medicine*, 123, 737–746.
- McLeer, S. V., & Anwar, R. (1989). A study of battered women presenting in an emergency department. *American Journal of Public Health*, 79, 65–66.
- McPherson, H. C. (1994). Domestic violence: Planning your way to safety. *View*, 36(6), 24–27.
- Miller, T. R., Cohen, M. A., & Wierseman, B. (1995). *Crime in the United States: Victim costs and consequences* [final report to the National Institutes of Justice]. Washington, DC: Urban Institute and National Public Services Research Institute.
- Murdoch, M., & Nichol, K. L. (1995, May). Women veterans’ experiences with domestic violence and with sexual harassment while in the military. *Achieves of Family Medicine*, 4, 411–418.
- Nakagawa-Kogan, H., Betrus, P., Beaton, R., Elmore, S., & Thompson, E. (1993). *Therapeutic manual for stress response management* (rev. ed.). University of Washington, School of Nursing.
- Neidig, P. H., Friedman, D. H., & Collins, B. S. (1986). Attitudinal characteristics of males who have engaged in spouse abuse. *Journal of Family Violence*, 1, 223–233.
- Noel, N. L., & Yam, M. (1992). Domestic violence: The pregnant battered woman. *Nursing Clinics of North America*, 27, 871–884.
- Rouse, L. P. (1984). Models, self-esteem, and locus of control as factors contributing to spouse abuse. *Victimology: An International Journal*, 9, 130–141.
- Salber, P. R. (1995). Introduction. In D. Lee, N. Durborow, & P. Salber (Eds.), *Improving the health care response to domestic violence: A resource manual for health care providers* (pp. 1–11). San Francisco: Family Violence Prevention Fund.
- Stark, E., Flitcraft, A., & Frazier, W. (1979). Medicine and patriarchal violence: The social construction of a “private” event. *International Journal of Health Services*, 9, 461–492.
- Thompson, E. A. (1989). *Interpretation of the Symptoms of Stress (SOS) Inventory*. Stress Management Project, Department of Psychosocial and Community Health Nursing, University of Washington.
- Warshaw, C. (1995). Identification, assessment and intervention with victims of domestic violence. In D. Lee, N. Durborow, & P. Salber (Eds.), *Improving the health care response to domestic violence: A resource manual for health care providers* (pp. 49–86). San Francisco: Family Violence Prevention Fund.