

# PREVALENCE OF INTIMATE PARTNER VIOLENCE AND HEALTH IMPLICATIONS FOR WOMEN USING EMERGENCY DEPARTMENTS AND PRIMARY CARE CLINICS

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**Objectives:** To determine prevalence of intimate partner violence (IPV) among women accessing health care, factors that influence rates of abuse, barriers to disclosure, and associated health problems and perceptions of safety.

**Methods:** A convenience sample of women seeking health care completed 1268 anonymous surveys (75 in Spanish) while at 1 of 24 urban, suburban, or rural emergency departments or primary care clinics.

**Results:** Of women in this study, 50–57% had experienced physical and/or emotional abuse and 26% reported sexual abuse in their lifetime. In the past year, 28% reported emotional abuse, 12% physical abuse, 6% severe physical abuse, and 4% sexual abuse. Logistic regression models found that younger, less-educated, less-affluent women presenting to urban emergency departments reported the highest rates of physical abuse. Although 83% welcomed abuse screening, only 25% ever had been asked and 86% would disclose abuse if asked directly, respectfully, and confidentially. Abused women reported significantly lower health status ratings than nonabused women ( $p < 0.001$ ). Emotional abuse was as strongly associated with health problems as physical abuse. The majority (70–93%) of women with headaches, stomach problems, chronic pain, vaginal bleeding, substance abuse, depression, and suicidal thoughts had experienced lifetime physical/emotional abuse.

**Conclusions:** Women experience many forms of abuse and present to a wide range of health care settings. The striking prevalence of IPV and associated emotional/physical health problems challenges providers to routinely assess for abuse in ways that minimize barriers to disclosure and enhance the development of an effective plan of care based on a patient's abuse experience.

## Introduction

During the past 15 years, health care professionals have increasingly recognized that abuse among intimates is a highly prevalent public health problem with devastating effects on individuals, families, and communities (American Medical Association National Advisory Council on Violence and Abuse [AMA], 2002; Family Violence Prevention Fund, 1999). Lower health status, lower quality of life, and higher utilization of health services by abused women have been

documented (Chalk & King, 1998; Dickinson et al., 1999; Plichta & Falik, 2001; Riger, Raja, & Camacho, 2002; Tjaden & Thoennes, 2000). Major health care professional organizations have called for clinical interventions and institutional changes to provide better care of abused women (AMA, 2002; American Nurses Association [ANA], 1991; Joint Commission on the Accreditation of Healthcare Organization [JCAHO], 1998). *Domestic violence, family violence, and abuse* are often used interchangeably. In this study, the focus is on *intimate partner violence (IPV)*, which is defined as a pattern of assaultive or coercive behaviors that may include inflicted physical injury, psychological abuse, sexual assault, progressive social isolation, stalking, deprivation, intimidation, and threats. These behav-

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iors are perpetrated by someone who is, was, or wishes to be involved in an intimate or dating relationship with an adult or adolescent victim, and are aimed at establishing control by one partner over the other (Family Violence Prevention Fund, 1999).

No community or socioeconomic, ethnic, or religious group is immune from IPV ("Findings," 1998; National Institute for Justice and Centers for Disease Control and Prevention [CDC], 2001). Large, population-based surveys generally place lifetime prevalence of IPV at between 25% and 30% and annual prevalence at approximately 2–12% ("Findings," 1998; Tjaden & Thoennes, 2000). The variability in these estimates has been attributed to a variety of factors, such as the definition of abuse used in the survey, whether the respondents were asked to restrict their abuse to lifetime or current experience, and the demographics of the sample. In large emergency department studies, 37–54% of women reported lifetime or current IPV (Dearwater et al., 1998; Muelleman, Lenghan, & Pakiesen, 1998) and an 11–14% annual prevalence of abuse (Lenghan, & Pakiesen, 1998). In large, diverse, population-based populations of primary care patients, 6–25% reported IPV in the past year (Abbott, John, Loziol-McLain, & Jones et al., 1999; Lowenstein, 1995; McCauley et al., 1995) and 32% had experienced abuse as a child or adult (Grynbaum, Biderman, Levy, & Petasne-Weistobrs, 2001).

#### *Health consequences*

The physical consequences of battering range from minor injuries to permanent disability, disfigurement, and death (Monahan & O'Leary, 1999; Plichta & Falik, 2001; Sutherland, Bybee, & Sullivan, 1998). Physical and psychological abuse is linked to adverse medical health effects and optimal management of chronic illnesses such as asthma, HIV/AIDS, seizure, diabetes, and hypertension may be problematic when IPV is a confounding factor (Bohn & Holz, 1996; Coker, Smith, Bethea, King, & McKeown, 2000). IPV is also linked with mental health consequences for victims including depression, traumatic and posttraumatic stress disorder, anxiety, and suicidal ideation (Golding, 1999; Liebschutz, Mulvey, & Samet, 1997; McCauley et al., 1997; Roberts, Williams, Lawrence, & Raphael, 1998).

A recent study found that women who screen positive for domestic violence are 46.5 times more likely to experience severe physical violence within the next 4 months (Koziol-McLain, Coates, & Lowenstein, 2001). Among IPV femicide victims, 69% had been abused before their death and at least 41% of those women had been seen in a health care setting before the killing (Sharps et al., 2001). Health System Response

Studies show that screening for IPV in medical settings leads to increased identification of abuse and creates opportunities for providers to target interven-

tions toward decreasing a victim's isolation and enhancing her safety via referrals to community agencies (Bohn & Holz, 1996; Gerbert, 1999; Titus, 1996; Wathen & MacMillan, 2003).

Health care providers often underestimate the realities of abuse in the lives of their patients. Physicians and nurses may unwittingly contribute to a woman's reluctance to disclose. An awareness of the abuse history by the health care provider could enhance the accuracy of diagnosis and effectiveness of the plan of care for many health problems (Wathen & MacMillan, 2003).

The purpose of this study was to determine 1) the prevalence of lifetime and past year emotional, physical, severe physical, and sexual abuse as reported by women seeking health care in emergency departments and primary care clinical settings in rural, urban and suburban locations; 2) which factors are associated with higher rates of lifetime and past year abuse; 3) which factors make it easier or harder to disclose abuse to a health care provider; 4) the incidence of health problems reported by women who have experienced lifetime abuse; and 5) women's perceptions of safety and awareness of support services.

## **Methods**

### *Sample*

The study sample included adult female women (18 years and older) who presented to one of 24 emergency departments and primary care clinics within a large integrated health care system during 2-week study intervals in 2002. The sites included five inner city, tertiary, and community emergency departments; two urgent care center; nine primary care clinics staffed by academic teaching faculty; and eight non-academic primary care clinics in the Midwest. Each of these clinical sites was at a different phase in their education and screening for IPV. Data from the sites were reported in urban, suburban, and rural groups as determined by geographic population sizes. A total of 1,268 adult female patients completed the survey, 75 in Spanish.

### *Instrument*

The survey collected basic demographic data such as age, income, education, ethnicity, change in marital status in past year, and children under 18 years living at home. The first eight "yes/no" questions related to specific acts and patterns of abusive, coercive and threatening behaviors in one's lifetime "ever" and currently "past year," and were adapted from the Nursing Research Consortium on Violence and Abuse: Abuse Assessment Screen (AAS). Content validity was established for the AAS by a panel of 12 nurse researchers of white, African American, and

Hispanic ethnicities working in the area of abuse against women. Significant ( $p < 0.001$ ) criterion-related validity was established for the AAS (Parker & McFarlane, 1991; Soeken, McFarlane, Parker, & Lominack, 1998). Asking about being abused by “someone important to you” is frequently used to denote IPV. Our survey specified that the questions pertained to relationships with people known in their life and how they had been treated by them as a child, teenager, or adult.

If a woman answered “yes” to any of the abuse questions she completed five additional questions about disclosure of abuse to a physician/nurse and use of health services. All participants were asked questions related to screening for abuse and safety.

### *Study Design*

The design of this cross-sectional, multicenter, descriptive study included consultation with domestic violence and sexual abuse experts, health care providers, and survivors. Nonacutely ill female patients, >18 years old, who presented for health care and could read English or Spanish were asked to participate in the study by their care provider when they were alone in a treatment area. Written consent to participate was waived by the Institutional Review Board (IRB) approval. Volunteer subjects then completed a 5-min written survey. The exact process for data collection was negotiated with staff at each site to ensure maximum confidentiality and safety for participants. The participant sealed her anonymous survey in an attached envelope and deposited it into a closed study box provided at the site.

### *Data management and statistical analysis*

Anonymous study responses were coded and entered into SPSS/PC (SPSS/PC + Update, 1989). The margin of error overall was + 2.4% with a 95% confidence interval. Descriptive statistics were used to answer questions 1, 4, and 5. Bivariate analysis using chi-square statistics were used to explore relationships between abuse, demographics, health care settings, and geographic regions. Logistic regression was then used to answer question 3. An analysis was done to assess the influence of demographic and clinical type/location variables on the likelihood of reported physical abuse. Because the dependent variables were dichotomous (yes/no to abuse), we used logistic regression to assess relationships between demographic variables and abuse. For each independent variable in the model, logistic regression coefficients were estimated along with a standard error for each coefficient. Positive coefficients in our logistic regression models indicate an increasing likelihood of a “yes” answer to an abuse question. Two logistic regression models were estimated. Model 1 used survey question 1, which measures lifetime physical abuse as the depen-

dent variable. Model 2 used survey question 5, which measures past-year physical abuse, as the dependent variable. These measures were selected because they were the most global measures of abuse compared to other measures in the survey.

A stepwise procedure was used to enter and remove demographic variables from the regression model. Independent variables used in the stepwise procedure were the respondent's age (grouped in 5-year intervals from 18–65+), education (grade school, some high school, high school, college, or postgraduate), annual household income, and ethnic background. In addition, questions related to marital change in the past year and children under 18 years old living at home were included in the regression. Finally, variables related to the type and geographic location of the facility where the respondent was completing the survey were utilized.

## **Results**

The participation rate ranged from 6–48% in the emergency departments and 4–86% in the clinics with an overall average response rate of 9%. The variation in response rates was related to the volume and acuity of patients during the study intervals and the staff's ability and motivation to offer the survey consistently to all eligible patients. However, the study participants were representative of the overall clinical populations served at their respective health care sites. The participants were fairly evenly distributed by age from 18–44 years, which represented 69.5% of the total sample; 16.7% were 45–55 years; 7.5% were 56–64 years; and 6.4% were over 64 years of age. Sixty percent were Caucasian, 21% black, 12% Hispanic, 4% other, 2.5% American Indian/Alaskan Native, and 0.6% Asian/Hmong/Pacific Islander. Twenty-one percent had no annual income or less than \$7,500, 26% \$7,500–\$24,999, 24% \$25K–\$49,999, 27% \$50K–\$100K, and 0.3% over \$100K. Approximately half (53.4%) had some high school or diploma/GED, 4% grade school, and 40.3% college or postgraduate education. The majority had not had a marital status change in the past year.

### *Prevalence of abuse*

Table 1 summarizes the prevalence rates of abuse in women's lifetime and the past year. Physical abuse was reported about twice as often as severe physical and sexual abuse, both lifetime and past year. Emotional abuse was the most frequently reported form of abuse and overlapped heavily with reports of other forms of abuse: 89% of women who experienced lifetime physical also reported emotional abuse; 88% of women who experienced lifetime sexual abuse reported emotional abuse; and 44% of women who

**Table 1.** Prevalence of lifetime and past-year abuse

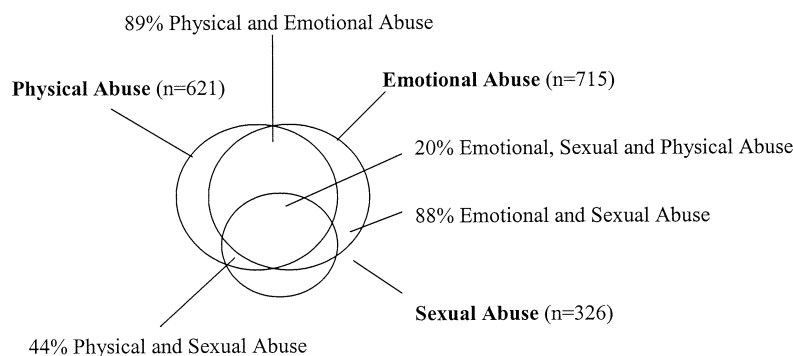
Type of Abuse	Survey Question	Prevalence (N = 1,268)	CI (95%)
Lifetime			
Physical	Have you ever been hit, slapped, punched or pushed by someone important to you?	49.5% (n = 621)	0.46–0.53
Severe physical	Have you ever been threatened, hurt with a weapon, burned, choked or had broken bones or internal injuries caused by someone important to you?	26.2% (n = 328)	0.24–0.28
Emotional	Have you ever been put down with words, emotionally hurt or made to feel afraid by someone important to you?	72.2% (n = 715)	0.54–0.60
Sexual	Have you ever been forced into sexual activities that you did not want to be a part of?	26.0% (n = 326)	0.24–0.28
Past Year			
Physical	Within the past year, have you been hit, slapped, punched or pushed by someone important to you?	11.7% (n = 147)	0.10–0.14
Severe physical	Within the past year, have you been threatened, hurt with a weapon, burned, choked or had broken bones or internal injuries caused by someone important to you?	6.1% (n = 77)	0.05–0.07
Emotional	Within the past year, have you been put down with words, emotionally hurt or made to feel afraid by someone important to you?	27.9% (n = 350)	0.25–0.30
Sexual	Within the past year, have you been forced into sexual activities that you did not want to be a part of?	4.2% (n = 53)	0.03–0.05

experienced lifetime physical abuse reported sexual abuse (Figure 1). Similarly in past-year abuse, 84% of women who experienced physical abuse also reported emotional abuse; 76% who experienced sexual abuse also reported emotional abuse; and 22% who experienced physical abuse also reported sexual abuse (Figure 2).

Questions related to sexual abuse were not limited to “someone important to you,” yet it is noteworthy that perpetrators of sexual abuse in women’s lifetime were most often identified as a male intimate partner/husband/ex-husband, boyfriend/ex-boyfriend (39%) or a male acquaintance (25%). Fathers (6%) and other relative (20.4%) also were identified as perpetrators. Only 11% of perpetrators were strangers. Given this small percentage of abuse by a stranger, *intimate partner violence* is used throughout this study.

#### Clinical Site/Geographic Location and Demographics Factors Associated With Abuse

Large percentages of abused women presented to every type of clinical site in our study (Table 2). Nearly one in three women who presented to emergency departments (34.8%) or academic clinics (31.4%) reported severe physical abuse or forced sexual activity in their lifetime. One in seven (13.7%) women in the emergency departments reported severe physical abuse in the past year. Women using health care settings in urban areas reported the highest levels of all forms of lifetime and past-year abuse. Reported rates of abuse by women completing the survey in rural sites were consistently higher than those reported in suburban settings for all forms of abuse with the exception of lifetime emotional abuse, which was

**Figure 1.** Overlap of types of lifetime abuse reported by study sample (n = 1,268).

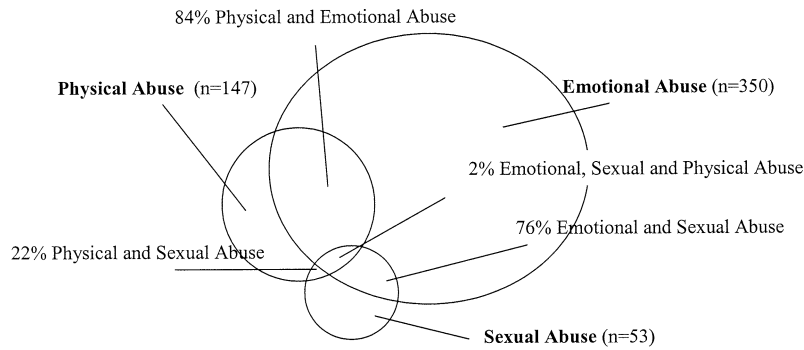


Figure 2. Overlap of types of past-year abuse reported by study sample (n = 1,268).

slightly lower (57.6% rural vs. 60.8% suburban). Rates of lifetime emotional and sexual abuse did not vary by geographic location.

As a group, non-white women reported similar abuse levels as white women in all categories, with the exceptions of non-white respondents (19.5–33.3%) reported more physical abuse in the past year than white women (6.2%) ( $p < 0.000$ ) and black women (13.9%) reported significantly more severe physical abuse in the past year ( $p < 0.000$ ). American Indian/Alaskan Native women reported the highest levels of emotional abuse, but considering the small sample size, these rates were not statistically significant. Given the complexity of factors that influence the rate of IPV, a multivariate analysis was performed to assess the combined influence of both demographic variables and clinical site/location variables on the likelihood of reported physical abuse. The results of the logistic regression models are presented in Table 3. Reported are the B coefficients, estimated odds ratio (Exp(B)) for each independent variable in the model, along with the confidence intervals for the estimated odds ratio. Results for Model 1 show that demo-

graphic variables influenced the odds of reported lifetime physical abuse. As respondents increased in age and education categories, the odds of reported lifetime physical abuse decreased.

Where a person was seeking medical attention was associated with the likelihood of a “yes” answer to lifetime physical abuse. Presenting in an emergency department increased the odds of reported lifetime physical abuse when compared to presenting in a clinic. In addition, seeking medical attention in a suburban location reduced the odds of a report of lifetime physical abuse when compared to an urban setting.

A somewhat similar pattern of results was seen in Model 2 regarding recent physical abuse. Again, as respondents increased in age, the odds of reported recent physical abuse decreased. In addition, as income increased, the likelihood of reported recent physical abuse decreased.

Only 9% of the respondents reported having a marital status change in the past year. The rates of abuse in these respondents were significantly higher for all forms of lifetime abuse (Model 1) but not for recent physical abuse (Model 2).

Table 2. Prevalence of abuse by survey population presenting to various health care settings and geographic locations

Form of Abuse	Health Care Settings			Geographic Locations		
	Emergency Department (n = 295)	Academic Clinic (n = 511)	Nonacademic Clinic (n = 461)	Urban (n = 646)	Suburban (n = 406)	Rural (n = 215)
Lifetime abuse						
Physical (%)	58.1	53.8	40.7	56.9	39.8	45.8
Severe physical (%)	34.8	31.4	16.4	33.6	17.9	19.3
Emotional (%)	67.7	56.9	51.3	59.1	60.8	57.6
Sexual (%)	33.9	29.5	18.2	30.4	20.4	23.5
Past-year abuse						
Physical (%)	20.4	14.1	4.5	18.4	3.0	8.5
Severe physical (%)	13.7	6.4	1.6	10.2	1.0	3.8
Emotional (%)	37.8	30.8	19.6	34.3	19.9	24.1
Sexual (%)	6.5	5.5	1.8	65.0	1.7	2.3

The chi-square for each of these cross-tabulation tables is significant at <0.01.

**Table 3.** Logistic regression models of demographic and clinical site/location data with physical abuse history as the dependent variable

Variable	Coefficient (B)	Estimated Odds Ratio (Exp B)	95% CI for Exp B	
			Lower	Upper
Model 1 (Lifetime Physical Abuse) ( <i>n</i> = 621)				
Age	-.117*	.890	.804	.984
Education	-.190*	.827	.698	.981
Marital status change (No)	-.998***	.369	.215	.632
Site type				
Nonacademic clinic	-.523**	.593	.402	.874
Academic clinic	-.348	.706	.483	1.032
Emergency department (reference)				
Site Location				
Suburban	-.581**	.559	.380	.822
Rural	-.173	.841	.512	1.381
Urban (reference)				
Model 2 (Recent Physical Abuse) ( <i>n</i> = 147)				
Age	-.317***	.728	.600	.884
Income	-.299**	.741	.592	.928
Site type				
Nonacademic clinic	-.598	.550	.248	1.221
Academic clinic	-.859**	.424	.246	.728
Emergency department (reference)				
Site Location				
Suburban	-1.775***	.170	.073	.394
Rural	-.325	.722	.321	1.628
Urban (reference)				

\*\*\**p* ≤ 0.001. \*\**p* ≤ 0.01. \**p* ≤ 0.05.

#### Disclosure of abuse

Most women (83%) in this study thought it was a good idea for physicians and nurses to ask about abuse as part of routine health care. This did not vary significantly by demographics, type of abuse, or abuse history. Only 25% of women reported ever being asked about abuse. Abused women reported being asked slightly more often (32%).

The majority (58%) of abused women said "yes" they would disclose abuse to a physician or nurse; another 28% said "maybe"; and only 14% said "no." The most frequent factors that made it easier or harder for abused women to disclose abuse are noted in Table 4.

#### Health Problems Associated With Abuse

Overall, only 26% of women reporting any form of abuse had sought health care because of the abuse. Women reporting lifetime and past-year severe physical or sexual abuse sought health services for the abuse most often (38–51%); emotionally abused women least often (25–27%).

On a 5-point rating scale (5, "excellent" to 1, "poor") women rated their current health status as excellent (16%), good (43%), average (22%), fair (12%), or poor (2%). Abused women reported significantly lower health status ratings than nonabused women (*p* < 0.001). For example, women who reported lifetime physical abuse had a mean health rating of 3.39 versus nonabused women of 3.83—a difference of .44 (*p* < 0.001). The difference in mean health ratings for the

eight abuse questions ranged from .35–.82, which was statistically significant for all forms of lifetime and past-year abuse (*p* < 0.001) except past-year physical or sexual abuse. Spanish surveyed abused women presenting to urban academic clinics reported the lowest health ratings.

Overall, 69.7% of respondents reported at least one health problem. Abused women versus nonabused women were significantly more likely to have health problems, such as headaches, GI problems, chronic pain, STDs, vaginal bleeding, depression, alcohol or drug abuse, and suicidal thoughts (Table 5). For example, of all the women in this study reporting headaches, 66% also reported lifetime physical abuse. Similarly, 76% of women with depression also reported lifetime physical abuse. Emotional abuse was as strongly associated with the majority of health problems as was physical abuse. A significant number of women with substance abuse and suicidal thoughts also reported lifetime physical, emotional, and/or sexual abuse. Although abused women reported significant physical and mental health problems, only 13% related those problems directly to abuse.

#### Safety

Twenty-seven women did not feel safe to go home on the day of the survey and 13 women were at their health care visit specifically for abuse. Many (70–93%) abused women did not know how to get help from community agencies.

**Table 4.** Factors that made it harder or easier for abused women to disclose abuse to a physician or nurse

	English	Spanish
Factors that made it easier for women to disclose abuse are		
When physicians/nurses		
• Ask me directly	57% (n = 321)	59% (n = 10)
• Don't appear rushed	44% (n = 250)	15% (n = 3)
• Really want to know about the abuse	44% (n = 249)	29% (n = 5)
• Are female	38% (n = 214)	53% (n = 9)
• Don't talk down to me	37% (n = 209)	59% (n = 10)
• Speak same language as me	18% (n = 102)	53% (n = 9)
• Are the same ethnic background as me	6% (n = 32)	12% (n = 4)
When I am		
• Sure they'll keep my record private	65% (n = 286)	58% (n = 7)
• Asked about abuse without my abuser present	48% (n = 211)	8% (n = 1)
• Ready to address the problem	47% (n = 207)	17% (n = 2)
• Sure they'll call police only with my permission	39% (n = 170)	33% (n = 4)
Barriers that made it harder to disclose abuse are		
When physicians/nurses		
• Don't listen well	37% (n = 204)	14% (n = 3)
When I am		
• Too embarrassed	60% (n = 296)	71% (n = 3)
• Not ready to address the problem	27% (n = 133)	29% (n = 5)
• Afraid of harm by the abuser	20% (n = 97)	6% (n = 1)
• Afraid I'll lose my children	19% (n = 92)	29% (n = 5)

### Spanish surveys

Seventy-five women completed a Spanish survey representing 6% of the total sample. Few of those women reported demographic information and those who did were less affluent and less educated than English surveyed women. Overall, there were more similarities than differences between English and Spanish surveyed women.

### Discussion

Approximately half of the women in this study reported lifetime physical and/or emotional abuse and one in four women reported lifetime severe physical and/or sexual abuse. Emotional abuse was the most frequently reported form of abuse and overlapped heavily with reports of physical and sexual abuse.

These findings suggest that many women in abusive relationships have experienced multiple forms of abuse at the hands of intimates, in many cases over their lifetime.

Abused women presented to every type of clinical setting in this study. Although women completing the survey in urban areas reported the highest levels of all forms of abuse, rates of emotional abuse were reported similarly regardless of geographic area. Rural rates of physical and emotional abuse were higher than in suburban settings, and rates of sexual abuse were nearly equal.

In general, younger, less educated, less affluent women were more likely to report physical abuse in their lifetime. Consistent with other studies (Bachman, & Saltzman, 1995; National Institute of Justice and Centers for Disease Control and Prevention, 2001;

**Table 5.** Health problems reported by abused and nonabused women

Health Problem	Lifetime Physical Abuse		Lifetime Emotional Abuse		Lifetime Sexual Abuse	
	Abused	Nonabused	Abused	Nonabused	Abused	Nonabused
Headache	66% (n = 212)	34% (n = 111)	70% (n = 227)	30% (n = 96)	38% (n = 123)	62% (n = 199)
Stomach problems	63% (n = 114)	37% (n = 67)	70% (n = 127)	30% (n = 55)	42% (n = 78)	58% (n = 106)
Chronic pain	66% (n = 100)	34% (n = 52)	77% (n = 117)	23% (n = 36)	48% (n = 74)	52% (n = 79)
Seizure	83% (n = 15)	17% (n = 3)	83% (n = 15)	17% (n = 3)	50% (n = 9)	50% (n = 9)
Broken bones	78% (n = 24)	22% (n = 7)	80% (n = 24)	20% (n = 6)	45% (n = 17)	55% (n = 14)
STD	75% (n = 15)	25% (n = 5)	80% (n = 16)	20% (n = 4)	30% (n = 6)	70% (n = 14)
Vaginal bleeding	70% (n = 21)	30% (n = 9)	79% (n = 23)	21% (n = 6)	30% (n = 11)	70% (n = 19)
Substance abuse	75% (n = 24)	25% (n = 8)	90% (n = 29)	10% (n = 3)	66% (n = 21)	35% (n = 11)
Depression	76% (n = 198)	24% (n = 64)	84% (n = 221)	16% (n = 41)	52% (n = 136)	48% (n = 125)
Suicidal thoughts	84% (n = 52)	16% (n = 10)	93% (n = 57)	7% (n = 4)	93% (n = 42)	7% (n = 20)

Rennison, 2001), younger women, ages 18–24, appear to be at highest risk for IPV, although women of any age may be victimized.

As a group, non-white women in this study had similar rates of abuse to white women with the exception of higher rates of past-year physical abuse. These findings are somewhat inconsistent with combined data on African-American, Asian/Pacific Islander, American Indian/Alaska Native, and mixed-race respondents in a NVAW Survey ("Findings," 1998). The National Violence Against Women (NVAW) Survey findings suggest that all racial minorities experienced more IPV than did whites and that specific minority groups such as African Americans and American Indians/Alaska Natives reported significantly higher rates of abuse than other minority groups. However, most current research employing multivariate models for analysis of variables expected to be related to lethal and nonlethal intimate violence have not found race or ethnicity to be independently associated with increased risk for violence (Campbell et al., 2003; Centerwal, 1995).

Although race was not predictive of IPV in our multivariate analysis, it may be that some information relating to race was implicit in the type of clinical settings and geographic locations of this study. Participants who sought medical attention in a suburban location were more likely to be white and had reduced odds of a report of lifetime physical abuse when compared to an urban setting where more poor, low-income, minority women tended to seek care. In addition, presenting to an emergency department increased the odds of a respondent reporting lifetime physical abuse compared to presenting to a nonacademic primary care clinic. Therefore, where the woman sought care was more predictive of reported physical abuse than race per se.

The relationship between abuse and socioeconomic status as measured by education and income is not clearly understood. Violence against women often hurts most often those with the fewest resources. In this study, less affluent women reported significantly more abuse in all categories and less educated women reported more physical abuse. According to the Office on Women's Health—U.S. Department of Health and Human Services (U.S. Department of Health & Human Services, 2000), whereas minority women are found in all socioeconomic levels, they are more likely to have lower incomes and live in poverty than white women. Despite more than 30 years of progress in this society, minority women continue to have less formal education than white women. Even minority women who have similar levels of education as their white counterparts earn less money and have fewer assets. Minority women also hold a disproportionate share of low-wage jobs, and they experience higher unemployment rates. Women of color often face discrimination

and a lack of culturally appropriate services (U.S. Department of Health & Human Services, 2000). Less affluent women, in general, face social disadvantages and barriers to accessing health care, transportation, safe housing, and adequate childcare (Kaufman Kantor & Jasinski, 1998). Poor abused women have the fewest options available to them to keep their families intact and to become self-sufficient. They are often isolated from family, friends, and supportive agencies and as evidenced in our study, experience high rates of physical abuse.

Several studies indicated that divorced and separated women (Caralis & Muslawski, 1997; Hamberger, Saunders, & Hovey, 1992; McCauley et al., 1995; Plichta & Falik, 2001; Smith et al., 2002; Valente, 2000) as well as those with a recent change in marital status (Dearwater et al., 1998) report higher rates of abuse. Our study findings indicate that there was a strong association with increased reports of all forms of lifetime abuse by the 9% of this sample that had a recent marital status change. It is unclear why these same respondents did not have significantly more reports of recent physical abuse than women who had not had a marital status change. Various researchers, relying on official data and/or qualitative interpretations, have noted the presence of an estrangement, divorce, separation, or an attempt at separation by the female party is an antecedent to increased IPV and/or killings (Campbell, 1995; Wesdale, 1999; Wilson & Daly, 1993).

As with other studies (American College of Obstetricians and Gynecologists [ACOG], 1005; Haden, Barton, & Hayden, 1997; Rodriguez, Bauer, & Flores-Oetiz, 1998; Rodriguez et al., 1999), women in our study welcome screening and would reveal abuse if asked directly and confidentially. Considering the prevalence of abuse in the lives of female patients in clinical settings and the fact that the majority of abused women (74%) do not intentionally seek health care for abuse issues, many professional organizations recommend that women be routinely screened for abuse regardless of presenting health issue (ACOG, 1995; American Academy of Emergency Physicians, 1995; ANA, 1991; JCAHO, 1998).

Women cited numerous barriers to disclosure and factors that would enhance their ability to trust health care providers in discussing abuse. Most notable is that being asked directly and confidentially in an unhurried and intentional manner makes it easier to disclose. The findings of this and other studies (Caralis & McCauley et al., 1998; Muslawski, 1997; Hamberger, Saunders, & Hovey, 1992; Smith et al., 2002; Valente, 2000) supports our understanding of abused women and their perceptions of personal barriers such as intense shame and fear, as well as provider barriers such as lack of time and uncaring attitudes. Spanish surveyed women reported higher levels of embarrass-

ment and more preference for a female, Spanish-speaking health care provider. Respectful and culturally sensitive questioning and interventions about abuse are crucial components of health care.

Significantly more abused than nonabused women had health problems, such as headaches, chronic pain, stomach problems, suicidal thoughts, than nonabused women did. This is consistent with other studies, which show that although battering may present as a physical emergency, battered women constitute an even larger segment of nontraumatic health conditions such as depression, substance abuse, and stress-related reactions to battering (Bohn & Holz, 1996; Campbell et al., 2002; Golding, 1999; Koziol-McLain et al., 2001; Liebschutz, Mulvey, & Samet, 1997; McCauley et al., 1997; Plichta & Falik, 2001; Roberts et al., 1998; Sutherland, Bybee, & Sullivan, 1998).

The findings of our study add to the growing body of knowledge that emotional IPV is as strongly associated with the majority of adverse health outcomes as physical IPV (Bohn & Holz, 1996; Campbell et al., 2002; Crocker et al., 2000; Golding, 1999; Roberts et al., 1998). Although causality cannot be documented from this study, the striking majority of mental and physical health problems reported by abused women demonstrates an important opportunity for health care providers to design an appropriate and effective plan of health care based on a patient's abuse experience.

Few women in our study had sought health care for injuries or illness related to abuse. Women may only relate abuse directly with injuries and not associate their stress and ongoing abuse with other health problems, nor identify the health care system as a place where they could go for help.

Many abused women in our study did not feel safe to go home nor have information about supportive services. Given that only one in four had ever been asked about abuse in a health care setting, it is probable that these women represent missed opportunities to provide interventions that could decrease their isolation and enhance their safety. Each entry point in the health care system has the potential for initiating interventions and referrals to prevent or reduce further violence against women.

### Limitations

This is a cross-sectional study and thus we must be cautious in inferring causal direction from these findings. This study relied exclusively on self-report data, which are vulnerable to the effects of recall bias and social desirability. It depends on participants' ability and willingness to remember and report abusive events from their past. There was an overall average response rate of 9%. Finally, the relatively small sam-

ple size in some of our cells invites caution in the interpretation of our multivariate analyses.

### Implications for Practice and Policy

The prevalence and overlap of physical, emotional, and sexual abuse in the lives of women presenting to a wide range of health care settings is significant. Our study findings address many controversial issues such as whether ethnicity, income, and education affect one's rate of IPV. The highest rates of physical abuse were reported by young, poor, and less-educated women seeking care in urban emergency departments. However, this profile of high-risk women is by no means exclusive of the abused women who presented to other clinical settings in the study. It is the experience of the authors that Euro-American health care providers commonly associate violence and abuse with the poor and people of color. They may misunderstand violence to be cultural and acceptable among certain groups of people. Such thinking can lead providers to anticipate abuse among poor, young, non-white inner-city patients and not anticipate it among others (nonpoor, older, suburban whites) and to screen differently among groups. Health care providers must therefore realize that no community or socioeconomic, ethnic, or religious group is immune from IPV.

Health care providers are in a unique position to routinely assess all female patients for abuse and offer effective interventions that can improve their health. Much of the provider's reluctance to screen for abuse and the patient's barriers to disclosure could be overcome by a provider's understanding of the emotions surrounding abuse and the unique concerns of the patient. There is no doubt that the timing and manner in which abuse is discussed is as important as the specific screening words used.

Physicians and nurses can initiate a useful dialogue with women by emphasizing how common abuse is in women's lives and acknowledge how difficult it can be to discuss these issues. The provider's job is to recognize and appreciate the abuse experience from the patient's point of view and help her reflect on the impact of stress and unhealthy, abusive relationships on her health status.

The short- and long-term effects of abuse are health care issues that nearly every practicing physician and nurse encounters in the course of routine clinical practice. Physicians and nurses are now expected to know the basic assessment and interventions related to primary prevention, early identification, and crisis care of victims of IPV. The data from our study offer insights for providers in how to screen clients in ways that make disclosure possible and promotes health and well-being. An empathetic, supportive, and re-

spectful response enhances the provider–patient relationship and is crucial to designing a plan of care with consideration of abuse experiences and individual safety needs. The inherent trust patients have of the medical profession place health care professionals in a pivotal position to address IPV as part of a larger community effort to prevent violence and abuse.

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