

Relation of Domestic Violence to Health Status among Hispanic Women

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Abstract: Little research has addressed the association of domestic violence (DV) with physical and mental health in Hispanic women. We conducted a cross-sectional study with 146 Hispanic women patients in 2002 at an urban family medicine practice. Twenty-one percent of the women were identified as current victims of DV. Two-fifths of victims (41.9%) experienced physical and/or sexual abuse. Approximately two-thirds (64.5%) had depressive symptoms. Poorer mental health was associated with all forms of abuse. Relatively low socioeconomic status and acculturation level may lead to disparities in obtaining services for DV intervention. Culturally appropriate protocols are needed in primary care settings to prevent and intervene among Hispanic women at risk for DV.

Key words: Domestic violence, spouse abuse, Hispanic Americans, women's health, health status, mental health.

Domestic violence is associated with numerous long-term negative health consequences. Abused women report poorer general health status, lower quality of life, and more health risk behavior.¹⁻⁷ Previous studies indicate that lower health status is associated with greater morbidity and mortality and more physician visits.⁸⁻¹¹ Abused women are more likely than others to report using alcohol or illegal drugs and smoking cigarettes.^{2-4,6,12,13} Studies also indicate that abused women are at higher risk for a number of physical and mental health problems. Abused women are more likely to report chronic pain, gynecological problems, migraine and frequent headaches, and stomach problems.^{4,5,14} Domestic violence is also linked to mental health problems including depression,^{2-4,6,13,15} anxiety,^{3,13} symptoms of post-traumatic stress disorder,³ stress-related problems,^{5,6} and suicide attempts.^{3,4,13} With few notable exceptions,^{3,13,14,16} most studies address the health influence of physical abuse alone. The association of psychological abuse alone and physical and/or sexual abuse with health status remains

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largely unknown. Furthermore, previous studies have failed to control for relevant confounders or to use a validated tool to assess abuse.¹⁷⁻¹⁸

Hispanics constitute the nation's largest minority group, making up 14% of the U.S. population.¹⁹ Little research has assessed the physical and mental health consequences of DV among Hispanic women. A recent study using a general population sample indicated that 10.8% of Hispanic women were currently experiencing physical or sexual abuse by intimate partners.¹⁸ Abused Mexican American women reported poorer overall health, as well as poorer physical and mental health than Mexican American women who were not abused.¹⁸ One study found that 44-67% of Hispanic victims reported symptoms of multiple measures of psychological distress.²⁰ Several studies found that abused Hispanic women may have poorer health than abused non-Hispanic women because of their relatively low socioeconomic status, high social stress, and low utilization of health care and community services.²¹⁻²⁸

We conducted a study of Hispanic women seeking health care in family medicine settings to examine (1) the prevalence and overlap of emotional, physical, and sexual abuse in current relationships; (2) physical and mental health associated with different forms of DV; and (3) the relationship of psychological, physical, and/or sexual abuse to physical limitations and depressive symptoms. This is one of the first studies to examine different forms of DV and their association with physical and mental health in Hispanic women.

Methods

Participants. This analysis derives from a larger study that tested the reliability and validity of a brief DV screening instrument, HITS, among women in a primary care setting.²⁹ We collected cross-sectional data using a structured interview conducted at an urban family medicine practice in New Jersey. In this urban area, 20% of the population is Hispanic. Of this Hispanic population, 60% is Puerto Rican, 7% is Cuban American, and 33% is from other Latin American countries. The urban practice where the research took place has seven family physicians and 27 residents who see approximately 1,700 male and female patients (including children) per month, of whom approximately 70% are Hispanic. The target population for the larger study was women who were 18 years or older and currently involved with a partner in an ongoing relationship.

Prior to the start of the study, three medical students fluent in Spanish received two weeks of intensive training by the investigators and a DV specialist. During June through August 2001, the medical students screened nearly all female patients presenting for appointments for eligibility. Some patients were missed due to the heavy volume of patients. Women who met the study criteria were invited to participate in the study. Once recruited, patients were seen alone in a private room where medical students obtained informed consent. Medical students then conducted the interview in English or Spanish depending on patient preference. Patients were provided a stipend of \$10 for their participation. For women who screened positive for DV in their current relationships, the medical students made appropriate referrals. Institutional review board approval for this study was obtained.

In the larger study, during the six weeks at the practice, 386 women were eligible to

participate. Of these, 56 did not complete the questionnaire due to the waiting period for a private room and 128 women refused to participate. Therefore, 202 eligible patients (52%) participated in the larger study. Demographic background data for non-respondents were not collected; however, the percentages of Hispanic women in the total sample and in the practice were similar. Details about the characteristics of the 202 participants have been reported previously.²⁹ For the purpose of this analysis, the analytic sample included 146 Hispanic women. Non-Hispanic (N=56) women were excluded from the analysis. The numbers for each form of abuse for non-Hispanic women were too small for those women to serve as a comparison group.

Survey instruments. *Domestic violence.* Victim status of DV in the current relationship was determined by three screening instruments: HITS (Hurt, Insulted, Threatened with harm, and Screamed at), the revised Index of Spouse Abuse (ISA) modified by Cook et al., and the Spanish version of Woman Abuse Screening Tool (WAST).^{30–32} One of the investigators (MV), a certified translator, translated HITS and the revised ISA into Spanish; back-translation of the HITS and the revised ISA (i.e., translation from Spanish back to English) was conducted to ensure accuracy. Then HITS and the revised ISA were reviewed by the three bilingual medical students, and modifications were made in response to those reviews.

The HITS instrument comprises the following four items about the respondent's relationship with her current partner: (1) How often does your partner physically hurt you? (2) How often does your partner insult you or talk down to you? (3) How often does your partner threaten you with harm? and (4) How often does your partner scream or curse at you? Participants answered these questions using a five-point scale from *never* (1) to *frequently* (5). Answers were summed to form an interval scale of the total HITS score, which could range from 4 to 20. Sherin et al. reported that the English HITS version had a sensitivity of 86% and a specificity of 99% using a cutoff score of 10.5.³⁰ Previous research indicates that Hispanic women may view certain types of behavior as less abusive than do other ethnic groups.^{30,33} A study conducted by the authors that tested the accuracy of English and Spanish versions of HITS indicated that different scoring criteria should be used to detect accurately DV in the two groups.²⁹ We found that a cutoff score of 5.5 for the Spanish HITS version achieved a sensitivity of 100% and a specificity of 86%.²⁹

The revised ISA modified by Cook et al. measures the severity of DV by the current partner with three subscales.³¹ In the revised ISA, the two items about sexual abuse were removed.³⁴ An additional six items from the ISA were not included because of low factor loadings in exploratory factor analysis. The remaining items forming the revised ISA were classified into nonphysical abuse, physical abuse, and controlling behaviors. The physical abuse subscale has four items, including *punches me*, *slaps me around*, *frightens me*, and *would like to kill me* (alpha=.70). Nonphysical abuse has 11 items, typical of which are *belittles me*, *stingy*, and *screams and yells* (alpha=0.88). Controlling behaviors has seven items, and typical items include *demand obedience*, *orders me around*, and *personal servant* (alpha=0.79). For the purpose of this study, nonphysical abuse and controlling behaviors were combined into psychological abuse (18 items; alpha=0.91). Women were asked to indicate the frequency of behaviors using a five-point scale ranging from 1 (*never*) to 5 (*very frequently*). Answers were

dichotomized into whether the participant had experienced each behavior with the current partner. For each subscale, items are summed to form an interval scale (from 0 to 4 for physical abuse and 0 to 18 for psychological abuse). No clinical cut-off scores have been developed yet for the revised ISA.³¹

The WAST is an eight-item questionnaire on the current relationship that has been administered to samples of English and Spanish speaking women. Women responded to these items with a three-point response set. Answers were summed to form an interval scale. Different scoring criteria were used for English and Spanish WAST.^{32,35} For the English version of WAST, the two least threatening questions, determined by patient comfort level, were selected to form a short version of the scale (WAST-Short). Scores were summed to form an interval scale. A cut-off score of 1 correctly classified 92% of the victims and 100% of the non-victims.³⁵ For the Spanish version of WAST, the two most reliable questions were used to form WAST-Short. A cut-off score of 2 was used to determine victim status, which yielded a sensitivity of 89% and a specificity of 94%.³²

We used a two-step approach to determine victim status of emotional, physical, and sexual abuse in the current relationship. First, we determined overall victim status of DV using HITS and WAST. Women who screened positive on HITS or WAST were defined as victims (i.e., above a cut-off score of 5.5 for the Spanish HITS or 10.5 for the English HITS, or above a cut-off score of 2 for the Spanish WAST-Short or 1 for the English WAST-Short). Second, victims identified from HITS and WAST were then organized into emotional, physical, or sexual abuse. Identified victims who experienced at least one item of psychological abuse from the revised ISA were classified as victims of emotional abuse. Similarly, identified victims who ever experienced physical abuse from the revised ISA were classified as victims of physical abuse. Due to the lack of assessment of sexual abuse, we created a sexual abuse scale using two items set aside from ISA and one item from WAST. Responses were recoded to whether the woman had experienced each behavior with a current partner, and then summed to form an interval scale from 0 to 3 ($\alpha = .69$). Identified victims who experienced any item on the sexual abuse scale were classified as victims of sexual abuse.

The two-step approach reflects screening protocols for identifying victims in busy practices.^{33,35} Victims are identified using short screening instruments, followed by more specific questions of abuse. Another consideration is that the revised ISA is long and does not have the clean cut-off values that HITS and WAST do. The revised ISA provides valid measurement of psychological and physical abuse, while HITS and WAST were not developed to differentiate among types of abuse.

Physical and mental health. Physical and mental health were measured with the Medical Outcomes Study SF-36 health status survey.³⁶ The SF-36 is widely used in various clinical settings. Reliability and validity of the SF-36 have been well documented in English and Spanish.³⁶⁻³⁸ The SF-36 has eight subscales. Four subscales are related to physical health: physical function, role limitation due to physical problems, bodily pain, and health perception. Mental health is also measured by four subscales: energy and vitality, social function, role limitation due to emotional problems, and mental health symptoms. Scoring used here was based on published protocols. Each subscale is standardized from 1 to 100. Higher scores indicate better functioning. In addition, weighted summary scores of physical health and mental health status were calculated,

and standardized from 1 to 100. In the present analyses, women were defined as having physical limitations if they scored in the lowest quartile on the physical summary scale based on general population norms (i.e., 41.1) for females. The mental summary scale has been proven to be valid in screening for depression and other mental disorders. Women who scored 42 or below on the mental summary scale were classified as having depressive symptoms.³⁶

Health risk behavior. To assess health risk behavior we inquired about tobacco, alcohol, and drug use in the past year. Women who smoked daily were classified as daily smokers. Problem drinking was measured by a modified version of the Alcohol Use Disorders Identification Test (AUDIT). The AUDIT has been extensively used as a screening tool in primary care settings to identify problem drinkers.^{39,40} Its sensitivity and specificity are well documented.⁴¹ The National Institute on Alcohol Abuse and Alcoholism suggests that a score of 4 or more for women represents problem drinking.⁴² Similar translation steps to those described above for the HITS were used to produce a modified Spanish version of AUDIT. Drug use was determined by use of any illegal drugs in the past year.

Socioeconomic factors. Socioeconomic factors included country of origin, age, education, income, employment, marital status, length of current relationship, pregnancy, and acculturation. Acculturation was measured by a preference for conducting the interview in Spanish (i.e., women who chose to be interviewed in Spanish were classified as less acculturated).²⁸

Statistical analysis. We performed analyses using SPSS (version 14.0 for Windows; SPSS Inc., Chicago, IL). For comparisons of sample characteristics, we conducted chi-square tests or analyses of variance (ANOVA). We then presented means and standard deviations of subscales of physical and mental health for each form of abuse. Linear regression analyses were used to examine the association of overall victim status and each form of DV with subscales of physical and mental health. Each of the eight subscales of physical and mental health was compared between non-victims and victims of any psychological abuse, physical abuse, or sexual abuse. In addition, we conducted subgroup analyses to compare the eight subscales between non-victims and victims of psychological abuse alone, then between victims of psychological abuse alone and victims of physical or sexual abuse. Significance levels are presented. We conducted logistic regression analysis to assess the relationship of DV to physical limitations and depressive symptoms. Four models were tested: any psychological abuse, any physical abuse, any sexual abuse, and physical and/or sexual abuse. Non-victims served as the reference group in each model. Adjusted odds ratios and 95% confidence intervals are presented. For all linear and logistic regression analyses, we developed a fully adjusted model that controlled for socioeconomic factors. These socioeconomic factors included country of origin, age, education, income, employment, marital status, length of the relationship, pregnancy, and acculturation. Health risk behavior variables were not included in regression analyses because they may be in the causal pathway between DV and health status. We then used a stepwise backwards elimination variable selection procedure to develop a reduced model. Variables with $p < .10$ were retained in the multivariable analysis. Victim status of DV was forced into the final reduced model.

Results

Participants. Table 1 presents the demographic characteristics of the study participants (N=146). Victims and non-victims were similar with respect to all socioeconomic factors and health risk behaviors. Of the participants, 35% were Puerto Rican, 39% were Cuban or Cuban American, and 26% were from other Latin American countries. The mean age was 37.2 years. Almost two-thirds did not complete high school. Over half of the participants were employed (52.1%) and the average yearly income was \$8,380. Less than half (43.2%) were married, and the average length of the current relationship was 9.6 years. Fifteen percent were currently pregnant. The majority (61%) chose to complete the interview in Spanish, indicating low acculturation in this sample.

The Hispanic sub-groups were homogeneous in our sample. Hispanic sub-groups were similar in demographic factors except for acculturation (not shown). Puerto Ricans were more acculturated than Cuban/Cuban Americans and other Latin Americans ($p<.001$). Non-victims and victims did not differ in health risk behavior ($p>.05$). Among all participants, 16.4% were daily smokers, 11.6% had drinking problems, and 3.4% used illegal drugs.

Prevalence of domestic violence. Figure 1 presents the prevalence of DV by form of abuse. One fifth of the participants (21.3%) screened positive for DV, of whom all

Table 1.

CHARACTERISTICS OF VICTIMS AND NON-VICTIMS IN STUDY

Variable	Total	Non-victims	Victims	P-value
	N=146	N=115	N=31	
Country of origin (%)				0.206
Puerto Rican	34.9	35.7	32.3	
Cuban/Cuban American	39.0	35.7	51.6	
Other Latin American	26.0	28.7	16.1	
Age (mean, in years)	37.2	37.3	37.0	0.911
Completed high school (%)	37.0	36.5	38.7	0.823
Income (mean, \$)	8380	8770	6935	0.362
Employed (%)	52.1	53.0	48.4	0.645
Married (%)	43.2	46.1	32.3	0.168
Length of the relationship (mean, years)	9.6	10.2	7.7	0.250
Currently pregnant (%)	15.1	13.9	19.4	0.452
Acculturation (% Spanish interview)	61.0	60.0	64.5	0.647
Smoking daily (%)	16.4	17.4	12.9	0.550
Problem drinking (%)	11.6	11.3	12.9	0.805
Illegal drug use in the past year (%)	3.4	3.5	3.2	0.945

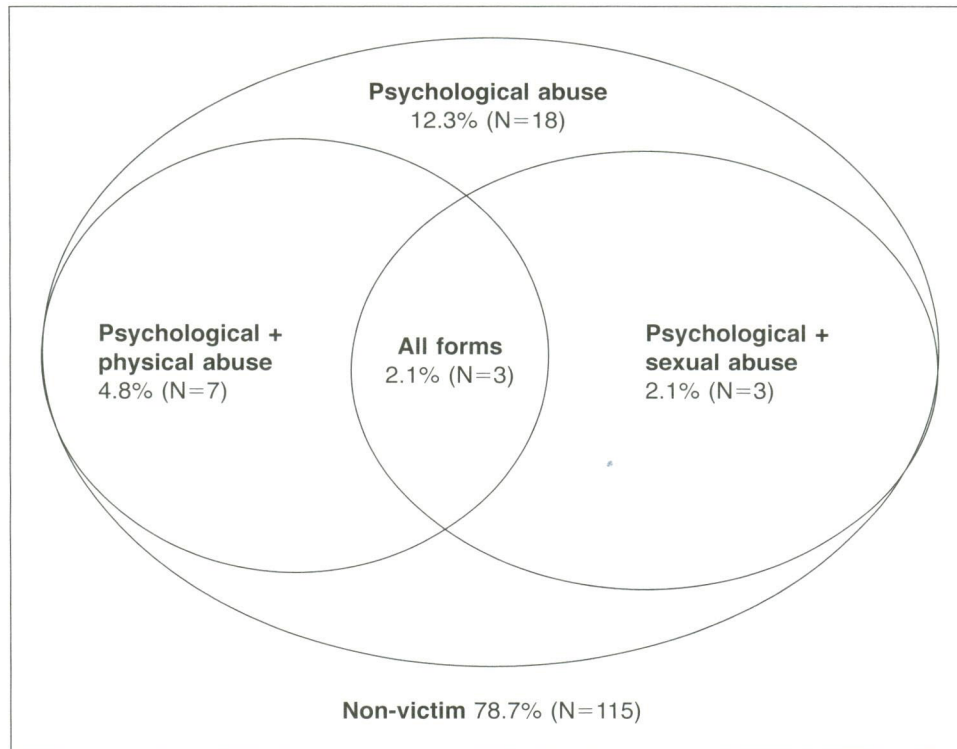


Figure 1. Prevalence of domestic violence by type of abuse (N=146).

reported experiencing psychological abuse in their current relationships. Seven percent of the women reported experiencing physical abuse, and 4.2% sexual abuse. Overlap of different types of violence indicated that 4.8% were victims of both physical and psychological abuse, 2.1% were victims of both sexual and psychological abuse, and 2.1% were victims of all types of abuse. Two out of five abused women experienced physical and/or sexual abuse.

Physical health and mental health among victims and non-victims. Table 2 presents mean scores of SF-36 subscales between victims and non-victims. Non-victims were similar to victims of every form of violence on physical function, physical role limitation, bodily pain, and perception of health. Compared with non-victims, victims of psychological abuse showed significantly lower scores on energy and vitality (mean (SD): 62.0(22.7) vs. 47.6(22.1); $p < .01$), social function (mean (SD): 79.1(24.4) vs. 64.1(22.8); $p < .01$), and mental health symptoms (mean (SD): 70.0(21.7) vs. 49.7(23.5); $p < .001$). Nonetheless, no statistically significant difference was found in the eight subscales between non-victims and those who experienced psychological abuse alone (not shown in table). Victims of physical abuse were more likely than non-victims to report less energy and vitality (mean (SD): 38.5(25.8) vs. 62.0(22.7); $p < .01$), more emotional role limitation (mean (SD): 30.0(48.3) vs. 63.8(42.0); $p < .05$), and poorer mental health status (mean (SD): 37.2(16.3) vs. 70.0(21.7); $p < .001$). Those who experienced sexual

abuse had significantly lower scores on energy and vitality (mean (SD): 35.0(23.5) vs. 62.0(22.7); $p < .01$) and mental health symptoms than non-victims (mean (SD): 38.7(16.9) vs. 70.0(21.7); $p < .001$). Victims of psychological abuse alone were similar to victims of physical or sexual abuse in the eight subscales. The only exception was that victims of physical abuse had poorer mental health status than victims of psychological abuse alone (mean (SD): 37.2(16.3) vs. 58.4(23.7); $p < .01$; not shown in table).

Domestic violence, physical limitation, and depressive symptoms. Table 3 presents the associations between various types of DV, physical limitations, and depressive symptoms, after adjusting for socioeconomic factors. The prevalence of physical limitations was 30.4% for non-victims, and ranged from 45.2% to 66.7% for the different types of DV. Physical limitations were not significantly associated with any type of DV, or physical and/or sexual abuse. Almost 30% of non-victims reported having depressive symptoms; however, the majority of victims reported depressive symptoms, ranging

Table 2.

**PHYSICAL AND MENTAL HEALTH SUBSCALES
BY TYPE OF VIOLENCE^{a,b}**

Mean score of short form-36 subscale	Non-victims (N=115)	Any abuse/any psychological abuse ^c (N=31)	Any physical abuse (N=10)	Any sexual abuse (N=6)
Physical function	78.1 (21.9)	71.5 (24.7)	74.5 (22.2)	65.8 (23.3)
Physical role limitation	62.2 (43.1)	46.8 (44.1)	42.5 (50.1)	25.0 (41.8)
Bodily pain	62.9 (28.1)	53.3 (28.2)	48.1 (32.2)	61.3 (35.8)
Health perception	66.3 (26.7)	59.5 (22.6)	59.3(22.4)	63.7 (14.0)
Energy and vitality	62.0 (22.7)	47.6 (22.1)**	38.5 (25.8)**	35.0 (23.5)**
Social function	79.1 (24.4)	64.1 (22.8)**	62.5 (25.0)	60.4 (21.5)
Emotional role limitation	63.8 (42.0)	43.0 (46.5)	30.0 (48.3)*	38.9 (49.1)
Mental health symptoms	70.0 (21.7)	49.7 (23.5)***	37.2 (16.3)***	38.7 (16.9)***

* $< .05$

** $< .01$

*** $< .001$

^aMeans presented, standard in parentheses

^bSignificance level of each analysis was based on backward stepwise linear regression analysis, controlling for country of origin, age, education, income, employment status, marital status, length of the relationship, pregnant status, and/or acculturation.

^cAll the victims of DV in the sample experienced psychological abuse.

Table 3.**RELATIONSHIP OF DOMESTIC VIOLENCE TO
PHYSICAL LIMITATIONS AND DEPRESSIVE SYMPTOMS^a**

	Physical limitations		Depressive symptoms	
	Prevalence (%)	Odds ratio ^b	Prevalence (%)	Odds ratio ^b
Non-victims	30.4	1.00	29.6	1.00
Model 1: Any psychological abuse ^c	45.2	1.83 (0.73–4.61)	64.5	5.83 (2.11–16.16)
Model 2: Any physical abuse	50.0	2.42 (0.55–10.60)	80.0	10.28 (1.54–68.77)
Model 3: Any sexual abuse	66.7	4.59 (0.74–29.89)	83.3	42.60 (2.39–758.61)
Model 4: Physical and/or sexual abuse	46.2	2.11 (0.57–7.78)	84.6	27.75 (3.85–200.15)

^aBased on backward stepwise logistic regression, controlling for country of origin, age, education, income, employment status, marital status, length of the relationship, pregnant status, and/or acculturation.

^bOdds ratios presented; 95% Confidence Interval (CI) in parentheses.

^cAlso representing all victims.

from 64.5% to 84.6% based on the types of DV. Compared with non-victims, those who experienced any psychological, physical, or sexual abuse were more likely to have depressive symptoms (OR, 5.83, 10.28, 42.60, respectively). Women who reported physical and/or sexual abuse were more likely than non-victims to have depressive symptoms as well (OR, 27.75).

Discussion

An important finding of this study is that DV is common among the Hispanic women who participated. Approximately one fifth of the women in this study reported experiencing DV, of whom all experienced psychological abuse. Seven percent of the women experienced physical abuse, and 4.2% experienced sexual abuse. Two fifths of the abused women experienced physical and/or sexual abuse along with psychological abuse. These findings are similar to those from previous studies of Hispanic populations and ethnically diverse populations.^{3,4,14,18,43} Notably, Hispanic women have been found to be less likely than White women to report abuse.⁴³ Our findings shed light on the importance of including psychological abuse in assessing DV. As with a previous study conducted in ethnically diverse populations, psychological abuse was the most common form reported by Hispanic women in our sample.⁴ The fact that all the victims of DV in

the sample experienced psychological abuse suggests that inquiry about psychological abuse could serve as an important practice for providers screening for DV.

Our findings indicate that various forms of violence reported by the women were not associated with their reported physical health. In contrast, studies using ethnically diverse samples have reported that psychologically abused women have poorer physical health,^{2,14} that victims of physical abuse are more likely to report bodily pain,^{4,5,14} and that victims of sexual assault report poorer physical functioning than non-victims.⁴⁴ In addition, physical and/or sexual abuse by intimate partners is associated with poorer physical health.^{5,15,18} It is worth noting that the scores of physical health scales were lower for all victim types than for non-victims. Similar results were found concerning physical limitations. Certain types of abuse may show a statistically significant impact on physical health as the sample size increases. For example, victims of psychological abuse reported significantly greater physical role limitation than non-victims, without adjusting for socioeconomic factors (62.2 vs. 25.0; $p < .04$). Similarly, results of our study show that two-thirds of sexually abused women experienced physical limitations on their daily activities, compared with 30.4% in non-victims ($p = 0.06$). As the number of victims reporting sexual abuse in our study is small ($n = 6$), larger-scale studies must be conducted to assess more accurately associations between DV and physical health.

As in other studies, poorer mental health is associated here with all forms of abuse. Studies have found that DV is linked to mental health problems, including depression.^{2-4,6,13,15} Most victims in this study, regardless of type of abuse, reported depressive symptoms. Victims of DV may experience social isolation and control by their partner, which in turn increases risk for depression.¹⁵ These findings indicate that our health care system must acknowledge the relationship of mental health problems to DV, and design a health care protocol for DV patients. Perhaps, depressive symptoms could be used as an indication to screen for DV, or *vice versa*.

Hispanic women in this study were disadvantaged, regardless of ethnic sub-group or victim status; participants reported low incomes, educational attainment, and acculturation. Compared with White women, Hispanic women are more likely to live in poverty.^{45,46} Hispanic women also tend to have poorer physical and mental health than non-Hispanic women. Compared with findings from another study that reported on subscales of the SF-36 for abused White and African American women, we found lower scores on all subscales for abused Hispanic women in our study.⁷ A previous study indicated that abused Hispanic women were less likely than abused White and African American women to obtain services for DV intervention.²¹ Relatively low socioeconomic status and acculturation level may lead to disparities in using community resources to deal with abuse.⁴ Access to health care services and social resources could support abused Hispanic women by providing information about DV advocacy organizations as well as charity care and welfare programs. Further studies are needed to examine barriers to accessing health care services and community resources among abused Hispanic women and Hispanic women generally.

Our study has several limitations. First, this is a cross-sectional study. Any conclusions regarding causal relationships between DV and health status must be interpreted with caution. Second, the number of women reporting physical abuse and sexual abuse is extremely small. Insufficient power due to sample size may result in statisti-

cal insignificance. Larger-scale studies are needed to examine differences in health status among victims of psychological abuse alone, physical abuse, and sexual abuse. Third, using these tools, those who experienced sexual abuse may not be classified as victims. The HITS instrument does not ask about sexual abuse. The WAST screening tool has only one item on sexual abuse, but it is not used as a criterion to distinguish victims and non-victims. Research is needed to detect sexual abuse in patient populations. Fourth, our response rate is low, which was related to long waiting periods to complete the interview because it was difficult to secure private rooms for the interviews in the busy urban practice where the research took place. Nonparticipants and participants might differ in demographic characteristics and in abuse. It is possible that the prevalence rate of DV might be higher in non-respondents than in respondents because victims would be more likely to refuse to participate in the study. It is also likely that non-victims chose not to participate because they felt that the issue does not pertain to them. Therefore, it remains unclear whether and how our low response rate affected the outcomes. Finally, this study was in one urban clinical setting, and may not be generalizable to clinical settings in other regions or with other populations. Future research should continue to investigate the relationship of DV to health status in diverse ethnic and geographic areas.

Implications

The findings that a fifth of the Hispanic women studied experienced DV and that two fifths of the victims reported physical and/or sexual abuse underscore the need to develop DV screening and intervention plans. Professional medical organizations have recommended that physicians routinely screen for, recognize, and document DV.⁴⁷⁻⁴⁹ Depressive symptoms of patients may help providers recognize DV, and *vice versa*. Mental health symptoms may serve as important indicators of physical and/or sexual abuse. Culturally appropriate protocols must be designed and tested to prevent and intervene in DV among Hispanic women.

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