Published in final edited form as:
Am J Prev Med. 2009 January ; 36(1): 43–48. doi:10.1016/j.amepre.2008.09.027.

Intimate Partner Violence in Latina and Non-Latina Women

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INTRODUCTION

A growing literature has shown a high prevalence of intimate partner violence (IPV) in Latina women (*lifetime*: 21% to 35%;[1–3] *past-year:* 4% to 33%); [2–7] and increased prevalence of substance abuse,[4, 8] injury,[9] HIV infection,[6] depressive symptoms,[10–12] posttraumatic stress disorder,[2, 11, 13] and poor physical and mental health[5, 14] in Latina women with abuse histories. However, prior studies did not delineate the period-prevalence of IPV over multiple time periods (lifetime, past 5 years and past year) in a single population of Latina women. Moreover, with the exception of one study showing higher rates of suicidal ideation in abused Latina compared to abused non-Latina women,[14] studies did not compare the health of *abused Latina women* to the health of *abused non-Latina women* using multiple health indicators. The present investigation examined IPV period prevalence (lifetime, past 5 years and past year) and the association between lifetime IPV exposure and multiple health indicators among Latina and non-Latina women.

METHODS

Study Sample and Data Collection

The study was approved by the institutional review board of Group Health Cooperative, a large health care delivery system in the Pacific Northwest U.S. The study population comprised English-speaking women ages 18 to 64, randomly sampled from enrollment files to participate in a telephone survey to assess IPV and health status.[15, 16] A letter was mailed to women describing the study's focus on women's health issues, followed by telephone contact to ascertain interest and consent to participate.[15, 16] Details of the study protocol, including safety procedures, were published previously.[15, 16]

Of 6,666 women sampled, 345 were excluded because they: did not meet the sampling criteria (209); were deceased (3); were too ill (15); or did not speak English or had a hearing impairment (118). Of the 6,321 remaining women, 1829 (28.9 percent) refused participation when initially

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contacted, 539 (8.5 percent) started but did not complete the interview, 385 (6.1 percent) could not be located, and 3,568 (56.4 percent) completed the interview. A propensity score analysis showed that the probability of participation was similar for women with and without an IPV history.[17]

Of the 3,568 survey respondents, 139 women were excluded because they never had an intimate partner, and 3 women were excluded for not responding to the question on Hispanic ethnicity, reducing the analytic sample to 3,426. Consistent with the western Washington metropolitan area,[15] 4% (n=139) of the sample reported Hispanic ethnicity.

Women were first asked about their health and then about their IPV history.[16]

Measures

General health, physical, social and psychological functioning—Women reported on their physical, social and psychological well-being by responding to 20 questions from the Short Form-36 (SF-36) Health Survey, version 2.[18] These 20 questions were used to create four of the eight SF-36 validated subscales (vitality, mental health, emotional functioning, and social functioning in the past four weeks) and two overall health component summaries (physical component and mental component).[16] One question from the SF-36 was used to assess women's general health.[16] The SF-36 subscale scores and the physical component summary (PCS) and mental component (MCS) continuous scores were standardized to have a mean of 50 and standard deviation of 10, with higher scores indicating better functioning; these standardized scores allow for easy comparisons across subscales and clinical populations.[18] The general health item was dichotomized (fair/poor versus good/very good/excellent health).[19]

Depression—Women rated the frequency of depressive symptoms (0=less than 1 day per week to 3=five or more days per week) using five validated questions from the 20-item Center for Epidemiological Studies-Depression (CES-D) scale.[20, 21] Scores for each of the five items were summed and the summary score was dichotomized to categorize women according to their depressive symptom status; a summary score of four or higher (range, 0–15) indicated minor depressive symptoms, and six or higher indicated severe depressive symptoms.[20]

Physical symptoms—Using questions from the National Institute of Mental Health Diagnostic Interview Schedule, women indicated how frequently they were bothered by 14 common physical symptoms in the past six months (range, 1=none of the time to 5=all of the time).[22] We estimated the mean number of symptoms experienced by women at least "some of the time."

Sociodemographic variables and child abuse history—Women were asked about their age, household income, employment status, educational level, and number of children living in the home using questions from the U.S. Census Bureau.[23] Women were asked about their history of childhood physical abuse ("before you were 18, was there any time when you were punched, kicked, choked or received at more serious physical punishment from a parent or other adult guardian") and childhood sexual abuse ("before you were 18, did anyone ever touch you in a sexual place or make you touch them when you did not want them to") using two questions from the Behavioral Risk Factor Surveillance System (BRFSS).[15]

Intimate partner violence—IPV victimization since age 18 was assessed using the Women's Experience with Battering (WEB) Scale, and 5 questions from the BRFSS on physical (1 question), sexual (2 questions) and psychological abuse (2 questions) (Table 1).[24, 25] The 10-item WEB Scale was designed to ascertain women's experience of loss of power

and control in relation to an abusive partner. To minimize respondent burden, the WEB questions were asked for women's three most recent heterosexual or homosexual intimate partners, including their current partner.[15] Women who scored 20 or higher on the WEB (score range, 10 to 60) for any given partner were considered positive for abuse.[25] After women completed the WEB for each partner, they were asked what year and month they first started and stopped feeling this way about their partner; this information was used to construct past-year and past 5-year abuse exposure according to the WEB.

To establish period-prevalence for each type of IPV assessed by the BRFSS questions, women were first asked if they ever experienced each particular abuse type since age 18; if they had, they were asked if the abuse occurred during the past 5 years, and during the past year. To further comment on the *type of abuse* women reported, we defined two categories of abuse based on the BRFSS questions. Women were defined as having experienced "physical IPV" if they reported physical and/or sexual abuse, and they were defined as having experienced "psychological IPV" if they reported threats and/or controlling behavior. The data were collapsed into these two broad abuse categories (physical and psychological) in order to provide meaningful estimates due to the small number of Latina women.

Analytic Methods

Chi-square tests were used to compare the demographic characteristics of Latina versus non-Latina women. IPV prevalence (including 95% confidence intervals) was estimated for Latina and non-Latina women for lifetime, past 5 years and past year. Lifetime prevalence was estimated using the BRFSS questions only (since the WEB questions were only asked with regards to the three most recent partners), and past-year and past 5-year IPV estimated using both the BRFSS and WEB questions. Prevalence estimates with relative standard errors (RSE) over 30% are considered unstable. Although estimates with RSE > 30% are reported, unstable estimates are marked with an asterisk; caution should be exercised when referring to these estimates.

Multivariable models included indicator variables for the main effects of IPV exposure and Hispanic ethnicity and their interaction term to allow estimation of the relationship between lifetime IPV and current health separately for Latina and non-Latina women. In these models, the exposed group included women with any IPV since age 18 according to the BRFSS or WEB questions and the unexposed (reference) group comprised women without such histories. Generalized linear models with a log link were used to obtain prevalence ratios (PR) for dichotomous health indicators for women with a lifetime IPV history compared to women without a lifetime IPV history. Multivariable ordinary least squares regression was used to estimate mean differences in SF-36 scores and number of symptoms. Models were adjusted for age and income, factors, which could confound the relationship between IPV history and health.

RESULTS

Characteristics of Participants

Compared to non-Latina women, Latina women tended to have lower household income (50.4% versus 38.0% reported annual income of less than $50,000), were less likely to have completed at least some college (77.7% versus 87.9%), were younger (30.2% versus 17.9% were less than age 35), and were more likely to have experienced physical or sexual child abuse (47.8% versus 33.2%) (Table 2).

Prevalence of Intimate Partner Violence

As ascertained by the BRFSS questions, lifetime IPV prevalence was comparable in Latina (44.6%) and non-Latina (44.0%) women (Table 3). Similar lifetime prevalence rates were observed for both physical IPV (38.8% vs. 34.0%) and for psychological IPV (37.4% vs. 35.3%) According to the BRFSS and WEB questions, IPV prevalence tended to be higher for Latina versus non-Latina women in the past 5 years (20.1% vs. 14.5%, p=0.06) and past year (11.5% vs. 7.8%, p=0.11), but the differences were not statistically significant. The exception was for physical abuse within the past 5-years, which was significantly higher among Latina women (11.5% vs. 4.9%, p<.05).

Health Associated with Intimate Partner Violence History

In adjusted models, women who reported any exposure to IPV (lifetime BRFSS or WEB for any of 3 most recent partners) reported worse health compared to non-abused women (Table 4).

Short Form-36 subscale scores for abused Latina women ranged from a mean of 5.62 (mental health) to 7.77 (vitality) points lower than scores for non-abused Latina women, and the Mental Component Summary score was 7.52 points lower for abused Latina women versus non-abused Latina women. Moreover, Latina women with a lifetime IPV history had significantly more physical symptoms, depression prevalence more than twice that of non-abused Latina women, and were more likely to report distrust of people in their residential community (prevalence ratio: 1.84).

Non-Latina women with IPV histories also had worse health across many indicators compared to non-abused women, but the differences were not as pronounced. For example, for non-Latina women, SF-36 scores ranged from a mean of 0.96 (PCS) to 3.87 (MCS) points lower for women with abuse histories compared to non-abused women.

The significance of the interaction term between Hispanic ethnicity and IPV exposure was tested, to determine if the association between IPV and health differed by ethnicity. Latina women suffered significantly more adverse IPV-related mental health issues compared to abused non-Latina women, in their overall mental health functioning (Mental Component Summary) (p<0.02) and the specific areas of vitality (p<0.01) and role emotional functioning (p<0.01) (last column, Table 4).

DISCUSSION

Similar lifetime IPV rates were found for Latina and non-Latina women. Rates of recent abuse (past year and past 5 years), however, tended to be more common in Latina versus non-Latina women, but the differences were not statistically significant. In models adjusted for race/ethnicity, women with a lifetime IPV history had compromised health compared to non-abused women. Adverse IPV-related mental health issues were more pronounced in Latina women.

IPV prevalence varies widely depending on how, where and when women are asked about abuse, how abuse is categorized, and according to the characteristics of women; these methodological considerations constrain cross-study comparisons. These limitations noted, the lifetime IPV rate we observed among Latina women (44.6%) was higher than the rate reported for roughly 250 Latina women (35%) recruited from community hospital emergency departments,[3] and was within the range of lifetime IPV reported in a survey of 292 Latina women receiving community health services (33.9% physical assault; 20.9% sexual coercion; and 82.5% psychological aggression).[26] The rate of past-year IPV in Latina women (11.5%) was consistent with prior estimates (4% to 33%),[2–7] particularly one study which showed past-year physical or sexual IPV of 10.8%.[5]

The results corroborate prior findings of higher rates of depression, [10–12] and poor mental health and somatic symptoms[5,12] among Latina women with IPV histories. For example, Hazen found a significant relationship between depression and physical assault and psychological maltreatment and between somatization and emotional abuse in Latina women.[12] The results also confirm poor overall health associated with IPV in women in general.[16, 25, 27–29]

In addition, findings suggested that abused Latina women had more compromised mental health than abused non-Latina women, in overall mental health functioning, vitality and emotional functioning—a significant addition to the sparse literature focused on IPV-related health in Latina compared to non-Latina women. In one other study, suicidal ideation tended to be more common in abused Latinas compared to other abused women.[14] While Latina participants had access to mental health services through their insurance, they may perceive greater barriers to accessing these services.[30–32]

Caution should be used in generalizing the findings because of the small number of Latina women, the inability to assess subgroups and acculturation status of Latinas, the insured nature of the sample, and the data collection method. While telephone surveys are widely used to assess violence and health,[33–35] it is possible that the most severely abused women do not participate in such surveys because they are isolated.[36] Our response rate was low; however, a propensity score analysis showed the likelihood of response was similar for women with and without IPV histories.[17] The cross-sectional nature of the study precluded statements about causality.

The present study provides information to warrant larger investigations of abuse in Latina women, and supports the ongoing case for screening and intervention development in women with abuse histories.[37] We recommend screening Latina women for abuse in health care settings, particularly those presenting with mental health concerns, and the development of abuse interventions that are sensitive to the cultural needs of Latinas.[38–48]

REFERENCES

1. Centers for Disease Control and Prevention. Adverse health conditions and health risk behaviors associated with intimate partner violence--United States. MMWR Morb Mortal Wkly Rep 2008;57 (5):113–117. [PubMed: 18256582]
2. Fedovskiy K, Higgins S, Paranjape A. Intimate Partner Violence: How Does it Impact Major Depressive Disorder and Post Traumatic Stress Disorder among Immigrant Latinas? J Immigr Minor Health 2008;10(1):45–51. [PubMed: 17503184]
3. Dearwater SR, Coben JH, Campbell JC, Nah G, Glass N, McLoughlin E, et al. Prevalence of intimate partner abuse in women treated at community hospital emergency departments. JAMA 1998;280:433–438. [PubMed: 9701078]
4. Lown AE, Vega WA. Alcohol abuse or dependence among Mexican American women who report violence. Alcohol Clin Exp Res 2001;25(10):1479–1486. [PubMed: 11696668]
5. Lown EA, Vega WA. Intimate partner violence and health: self-assessed health, chronic health, and somatic symptoms among Mexican American women. Psychosom Med 2001;63(3):352–360. [PubMed: 11382262]
6. Wu E, El-Bassel N, Witte SS, Gilbert L, Chang M. Intimate partner violence and HIV risk among urban minority women in primary health care settings. AIDS Behav 2003;7(3):291–301. [PubMed: 14586191]
7. Bauer HM, Rodriguez MA, Perez-Stable EJ. Prevalence and determinants of intimate partner abuse among public hospital primary care patients. J Gen Intern Med 2000;15(11):811–817. [PubMed: 11119174]
8. McFarlane J, Malecha A, Gist J, Watson K, Batten E, Hall I, et al. Intimate partner sexual assault against women and associated victim substance use, suicidality, and risk factors for femicide. Issues Ment Health Nurs 2005;26(9):953–967. [PubMed: 16203648]

9. Duncan MM, Stayton CD, Hall CB. Police reports on domestic incidents involving intimate partners: injuries and medical help-seeking. Women Health 1999;30(1):1–13. [PubMed: 10813264]
10. Caetano R, Cunradi C. Intimate partner violence and depression among Whites, Blacks, and Hispanics. Ann Epidemiol 2003;13(10):661–665. [PubMed: 14599729]
11. Rodriguez MA, Heilemann MV, Fielder E, Ang A, Nevarez F, Mangione CM. Intimate partner violence, depression, and PTSD among pregnant Latina women. Ann Fam Med 2008;6(1):44–52. [PubMed: 18195314]
12. Hazen AL, Connelly CD, Soriano FI, Landsverk JA. Intimate partner violence and psychological functioning in Latina women. Health Care Women Int 2008;29(3):282–299. [PubMed: 18350428]
13. McFarlane J, Malecha A, Watson K, Gist J, Batten E, Hall I, et al. Intimate partner sexual assault against women: Frequency, health consequences, and treatment outcomes. Obstet Gynecol 2005;105 (1):99–108. [PubMed: 15625149]
14. Krishnan SP, Hilbert JC, Pase M. An examination of intimate partner violence in rural communities: results from a hospital emergency department study from Southwest United States. Fam Community Health 2001;24(1):1–14. [PubMed: 11275567]
15. Thompson RS, Bonomi AE, Anderson M, Reid RJ, Dimer JA, Carrell D, et al. Intimate partner violence: Prevalence, types, and chronicity in adult women. Am J Prev Med 2006;30:447–457. [PubMed: 16704937]
16. Bonomi AE, Thompson RS, Anderson ML, Reid RJ, Carrell D, Dimer JA, et al. Intimate partner violence and women's physical, mental, and social functioning. Am J Prev Med 2006;30:458–466. [PubMed: 16704938]
17. Rivara FP, Anderson ML, Fishman P, Bonomi AE, Reid RJ, Carrell D, et al. Healthcare utilization and costs for women with a history of intimate partner violence. Am J Prev Med 2007;32(2):89–96. [PubMed: 17234483]
18. Ware, JE.; Kosinski, M.; Dewey, JE. How to score version two of the SF-36 health survey. Lincoln, RI: Quality Metric Inc.; 2000.
19. Diehr P, Patrick DL, McDonell MB, Fihn SD. Accounting for deaths in longitudinal studies using the SF-36: The performance of the Physical Component Scale of the Short Form 36-item health survey and the PCTD. Med Care 2003;41:1065–1073. [PubMed: 12972846]
20. Shrout PE, Yager TJ. Reliability and validity of screening scales: Effect of reducing scale length. J Clin Epidemiol 1989;42:69–78. [PubMed: 2913189]
21. Bonomi AE, Kernic MA, Anderson ML, Cannon EA, Slesnick N. Use of brief tools to measure depressive symptoms in women with a history of intimate partner violence. Nurs Res 2008;57(3): 150–156. [PubMed: 18496100]
22. Robins LN, Helzer JE, Croughan J, Ratcliff KS. National Institute of Mental Health Diagnostic Interview Schedule: Its history, characteristics, and validity. Arch Gen Psychiatry 1981;38:381–389. [PubMed: 6260053]
23. U.S. Census Bureau. 2000 Census of Population and Housing, Summary Population and Housing Characteristics, PHC-1-2. Washington, D.C.: U.S. Census Bureau; 2002.
24. Smith PH, Earp JA, DeVellis R. Measuring battering: Development of the Women's Experience with Battering (WEB) scale. Womens Health 1995;1:273–288. [PubMed: 9373384]
25. Coker AL, Pope BO, Smith PH, Sanderson M, Hussey JR. Assessment of clinical partner violence screening tools. J Am Med Womens Assoc 2001;56:19–23. [PubMed: 11202067]
26. Hazen AL, Soriano FI. Experiences with intimate partner violence among Latina women. Violence Against Women 2007;13(6):562–582. [PubMed: 17515406]
27. Coker AL, Smith PH, Bethea L, King MR, McKeown RE. Physical health consequences of physical and psychological intimate partner violence. Arch Fam Med 2000;9:451–457. [PubMed: 10810951]
28. Nicolaidis C, Curry M, McFarland B, Gerrity M. Violence, mental health, and physical symptoms in an academic internal medicine practice. J Gen Intern Med 2004;19:819–827. [PubMed: 15242466]
29. Ellsberg M, Jansen HA, Heise L, Watts CH, Garcia-Moreno C. Intimate partner violence and women's physical and mental health in the WHO multi-country study on women's health and domestic violence: an observational study. Lancet 2008;371(9619):1165–1172. [PubMed: 18395577]

30. Alegría M, Canino G, Ríos R, Vera M, Calderón J, Rusch D, et al. Inequalities in use of specialty mental health services among Latinos, African Americans, and non-Latino whites. Psychiatr Serv 2002 Dec;53(12):1547–1555. [PubMed: 12461214]
31. Bauer HM, Rodriguez MA, Quiroga SS, Flores-Ortiz YG. Barriers to health care for abused Latina and Asian immigrant women. J Health Care Poor Underserved 2000;11(1):33–44. [PubMed: 10778041]
32. Lipsky S, Caetano R. The role of race/ethnicity in the relationship between emergency department use and intimate partner violence: findings from the 2002 National Survey on Drug Use and Health. Am J Public Health 2007;97(12):2246–2252. [PubMed: 17971560]
33. Coker AL, Davis KE, Arias I, Desai S, Sanderson M, Brandt HM, et al. Physical and mental health effects of intimate partner violence for men and women. Am J Prev Med 2002;23:260–268. [PubMed: 12406480]
34. Tjaden, P.; Thoennes, N. Full report of the prevalence, incidence, and consequences of violence against women: Findings from the National Violence Against Women Survey: U.S. Department of Justice/Centers for Disease Control. 2000. Report No.: NCJ-183781
35. Bensley L, Van Eenwyk J, Wynkoop Simmons K. Childhood family violence history and women's risk for intimate partner violence and poor health. American Journal of Preventive Medicine 2003;25:38–44. [PubMed: 12818308]
36. Johnson MP. Conflict and control: gender symmetry and asymmetry in domestic violence. Violence Against Women 2006;12(11):1003–1018. [PubMed: 17043363]
37. Pearlman DN, Waalen J. Violence against women: charting the impact on health policy, health care delivery, and the law. Am J Prev Med 2000;19(4):212–213. [PubMed: 11064222]
38. Brown SA, Garcia AA, Kouzekanani K, Hanis CL. Culturally competent diabetes self-management education for Mexican Americans: the Starr County border health initiative. Diabetes Care 2002;25 (2):259–268. [PubMed: 11815493]
39. Lorig K, Ritter PL, Villa F, Piette JD. Spanish Diabetes Self-Management with and without Automated Telephone Reinforcement: Two Randomized Trials. Diabetes Care. 2007
40. Lorig KR, Ritter PL, Gonzalez VM. Hispanic chronic disease self-management: a randomized community-based outcome trial. Nurs Res 2003;52(6):361–369. [PubMed: 14639082]
41. Lorig KR, Ritter PL, Jacquez A. Outcomes of border health Spanish/English chronic disease self-management programs. Diabetes Educ 2005;31(3):401–409. [PubMed: 15919640]
42. Vincent D, Pasvogel A, Barrera L. A feasibility study of a culturally tailored diabetes intervention for Mexican Americans. Biol Res Nurs 2007;9(2):130–141. [PubMed: 17909165]
43. Lorig K, Gonzalez VM, Ritter P. Community-based Spanish language arthritis education program: a randomized trial. Med Care 1999;37(9):957–963. [PubMed: 10493473]
44. Zuniga de Nuncio ML, Nader PR, Sawyer MH, De Guire M, Prislin R, Elder JP. A prenatal intervention study to improve timeliness of immunization initiation in Latino infants. J Community Health 2003;28(2):151–165. [PubMed: 12705316]
45. Peragallo N, Deforge B, O'Campo P, Lee SM, Kim YJ, Cianelli R, et al. A randomized clinical trial of an HIV-risk-reduction intervention among low-income Latina women. Nurs Res 2005;54(2):108–118. [PubMed: 15778652]
46. Navarro AM, Raman R, McNicholas LJ, Loza O. Diffusion of cancer education information through a Latino community health advisor program. Prev Med 2007;45(2–3):135–138. [PubMed: 17604831]
47. Tejeda S, Thompson B, Coronado GD, Rees JM. A cervical cancer curriculum for Hispanic adolescents in rural high schools: a pilot study. J Health Care Poor Underserved 2006;17(4):734–744. [PubMed: 17242527]
48. Beach ML, Flood AB, Robinson CM, Cassells AN, Tobin JN, Greene MA, et al. Can language-concordant prevention care managers improve cancer screening rates? Cancer Epidemiol Biomarkers Prev 2007;16(10):2058–2064. [PubMed: 17932353]

Table 1

Intimate Partner Violence Questions

Measure	Response Scale	Content
Women's Experience With Battering (WEB) scale *	10 questions 1 (strongly disagree) to 6 (strongly agree)	My partner made me feel unsafe even in my own home. I felt ashamed of the things my partner did to me. I tried not to rock the boat because I was afraid of what my partner might do. I felt like I was programmed to react a certain way. I felt like my partner kept me a prisoner. My partner could scare me without laying a hand on me. I hid the truth from others because I was afraid not to. I felt owned and controlled by my partner. My partner made me feel like I had no control over my life. My partner had a look that went straight through me and terrified me.
Behavioral Risk Factor Surveillance System (BRFSS) survey **	5 questions (yes/no)	**Sexual** Has an intimate partner ever forced you to participate in a sex act (e.g., oral, vaginal or anal penetration) against your will? Ever threatened, coerced or physically forced you into any sexual contact that did not result in intercourse or penetration? **Physical** Ever hit, slapped, shoved, choked, kicked, shaken or otherwise physically hurt you? **Psychological** Ever been frightened for your safety, or that of your family or friends because of anger or threats of an intimate partner? Ever put you down, or called you names repeatedly, or controlled your behavior

* Women were asked to name their three most recent adult intimate (heterosexual or homosexual) partners. They answered the WEB questions for each partner, and about the start and stop times of abuse in order to determine duration of abuse.

** For each BRFSS question, women were first asked if the IPV occurred ever, and then whether the IPV occurred in the past five years and the past year.

Table 2

Characteristics of study participants

	Latina n=139		Non-Latina n=3287	
	n	%	n	%
Age[+]				
18–24	21	15.1	250	7.6
25–34	21	15.1	338	10.3
35–44	27	19.4	663	20.2
45–54	39	28.1	1116	34.0
55–64	31	22.3	920	28.0
Household income[+]				
<$25,000	21	16.0	345	10.8
$25,000 – $49,999	45	34.4	866	27.2
$50,000 – $74,999	33	25.2	837	26.3
≥ $75,000	32	24.4	1136	35.7
Employed (at least part time)				
No	25	18.0	637	19.4
Yes	114	82.0	2648	80.6
Education[+]				
High school graduate or less	31	22.3	397	12.1
At least some college	108	77.7	2889	87.9
Number in household (mean, SD)	3.0 (1.5)		2.9 (1.5)	
Children in home for whom respondent is guardian				
No	92	66.2	2187	66.6
Yes	47	33.8	1099	33.4
Intimate partner relationship status				
In past, but not current	22	15.8	584	17.8
Current	117	84.2	2703	82.2
History of Abuse as a Child				
Physically abused as a child[*]				
No	110	79.7	2823	86.5
Yes	28	20.3	442	13.5
Sexually abused as a child[+]				
No	82	60.3	2363	73.0
Yes	54	39.7	875	27.0
Physically or sexually abused as a child[+]				
No	72	52.2	2186	66.8
Yes	66	47.8	1087	33.2

Significance for differences between Latina and non-Latina women

[*] $p<.05$

[+] $p<.01$

Table 3

Period-prevalence of IPV, by instrument of detection and time period[†]

	Latina n=139				Non-Latina n=3287			
	N	**%**	**(95% CI)**	**RSE**	**n**	**%**	**(95% CI)**	**RSE**
Lifetime								
BRFSS	62	44.6	(36.2, 53.3)	9	1447	44.0	(42.3, 45.7)	2
BRFSS physical	54	38.8	(30.7, 47.5)	11	1116	34.0	(32.3, 35.6)	2
BRFSS psychological	52	37.4	(29.4, 46.0)	11	1160	35.3	(33.7, 37.0)	2
Past 5-years								
Any IPV (BRFSS and/or WEB)	28	20.1	(13.8, 27.8)	17	476	14.5	(13.3, 15.7)	4
BRFSS	24	17.3	(11.4, 24.6)	19	377	11.5	(10.4, 12.6)	5
BRFSS physical	16	11.5	(6.7, 18.0)	24	160	4.9	(4.2, 5.7)	8
BRFSS psychological	20	14.4	(9.0, 21.3)	21	330	10.0	(9.0, 11.1)	5
WEB	18	12.9	(7.9, 19.7)	22	260	7.9	(7.0, 8.9)	6
Past 1-year								
Any IPV (BRFSS and/or WEB)	16	11.5	(6.7, 18.0)	24	256	7.8	(6.9, 8.8)	6
BRFSS	10	7.2[*]	(3.5, 12.8)	30	187	5.7	(4.9, 6.5)	7
BRFSS physical	4	2.9[*]	(0.8, 7.2)	49	51	1.6	(1.2, 2.0)	14
BRFSS psychological	8	5.8[*]	(2.5, 11.0)	34	167	5.1	(4.4, 5.9)	8
WEB	8	5.8[*]	(2.5, 11.0)	34	130	4.0	(3.3, 4.7)	9

BRFSS=Behavioral Risk Factor Surveillance System; WEB=Women's Experience with Battering Scale; RSE = Relative standard error;

[*] Estimates with RSE > 30% are considered unstable, and should be used with caution.

[†] Categories of abuse are not mutually exclusive; for example, women who are positive for BRFSS psychological abuse, may also have BRFSS physical abuse. Additionally, we could not measure lifetime exposure to abuse with the WEB. Thus, the Any IPV (BRFSS and/or WEB) and the WEB rows of the table are not included for lifetime exposure.

Table 4

Health status, symptoms, and social connectedness by IPV exposure

	IPV Exposure Status						IPV effect:
	Latina			Non-Latina			
	No IPV Ever n=75	IPV‡ n=64	IPV vs. No IPV ever β (95% CI)	No IPV Ever n=1760	IPV‡ N=1527	IPV vs. No IPV ever β (95% CI)	Latina vs. Non-Latina p-value
SF-36 Subscale Scores (mean, s.d.)†							
Role emotional	51.3 (6.7)	44.1 (10.1)	−6.85 (−9.56, −4.15)	51.2 (7.0)	47.8 (9.0)	−3.07 (−3.63, −2.51)	<.01
Vitality	53.8 (8.4)	46.0 (10.9)	−7.77 (−10.91, −4.62)	52.9 (8.6)	49.1 (9.9)	−3.47 (−4.12, −2.83)	<.01
Mental health	52.7 (7.2)	46.7 (11.0)	−5.62 (−8.51, −2.74)	53.8 (7.6)	49.7 (9.5)	−3.68 (−4.28, −3.09)	.20
Social functioning	50.6 (8.9)	44.3 (12.6)	−5.90 (−8.99, −2.80)	51.5 (8.1)	47.6 (10.0)	−3.48 (−4.12, −2.84)	.13
Physical Component Summary	50.4 (9.7)	48.4 (10.4)	−0.39 (−3.52, 2.74)	51.2 (8.8)	49.6 (9.9)	−0.96 (−1.60, −0.31)	.73
Mental Component Summary	52.4 (7.9)	45.2 (11.6)	−7.52 (−10.56, −4.47)	52.8 (7.7)	48.7 (10.1)	−3.87 (−4.49, −3.24)	.02
Physical Symptoms (%)			PR (95% CI)			PR (95% CI)	
Joint pain in arms, legs, hands or feet	46.7	50.0	0.95 (0.68, 1.32	36.1	46.6	1.18 (1.09, 1.28)	.21
Back pain	30.7	45.3	1.38 (0.88, 2.15)	28.2	37.1	1.26 (1.14, 1.40)	.71
Insomnia	29.3	46.9	1.54 (1.00, 2.37)	23.0	35.7	1.47 (1.31, 1.64)	.83
Fatigue	14.7	31.3	2.04 (1.03, 4.04)	13.3	24.4	1.66 (1.42, 1.94)	.57
Stomach ache or abdominal pain	17.3	21.9	1.23 (0.61, 2.51)	14.4	20.3	1.34 (1.14, 1.57)	.83
Severe headache or migraine	22.7	23.4	1.01 (0.54, 1.91)	15.4	19.5	1.22 (1.04, 1.42)	.58
Numb hands or feet	18.7	28.1	1.20 (0.64, 2.26)	14.0	18.4	1.19 (1.01, 1.40)	.98
Diarrhea	8.0	20.3	2.01 (0.79, 5.15)	12.0	16.8	1.28 (1.08, 1.53)	.36
Constipation	14.7	31.3	1.93 (1.00, 3.73)	12.0	15.8	1.24 (1.04, 1.49)	.20
Shortness of breath	10.7	17.2	1.18 (0.48, 2.87)	8.9	14.9	1.50 (1.24, 1.83)	.60
Facial ache or pain in jaw or ears	5.3	21.9	3.40 (1.16, 9.98)	6.9	13.1	1.81 (1.45, 2.27)	.27
Dizziness	12.0	15.6	1.19 (0.52, 2.75)	6.0	8.9	1.42 (1.09, 1.85)	.70
Nausea or vomiting	6.7	7.8	0.85 (0.24, 3.00)	5.2	8.1	1.39 (1.06, 1.84)	.45
Chest pain	8.0	4.7	0.52 (0.14, 1.95)	3.6	6.2	1.48 (1.08, 2.05)	.13
Fair/poor health (%)	9.3	18.8	1.39 (0.57, 3.42)	6.8	10.4	1.30 (1.02, 1.66)	.89
Depressive symptoms (%)	16.0	43.8	2.44 (1.35, 4.39)	13.6	26.6	1.85 (1.59, 2.15)	.37
Severe depressive symptoms (%)	8.0	23.4	2.53 (1.07, 6.00)	6.3	15.4	2.18 (1.74, 2.73)	.74
Not active in group activities (%)	44.0	53.1	1.11 (0.84, 1.45)	37.0	45.7	1.21 (1.11, 1.31)	.74
Do not trust people in community (%)	30.7	51.6	1.84 (1.18, 2.89)	22.8	30.6	1.31 (1.17, 1.47)	.15

β = beta coefficient; 95% CI=95% confidence interval; SF-36=Short Form-36 Survey.

†The SF-36 scores were standardized to have a mean of 50 and standard deviation of 10, with higher scores indicating better functioning.

‡IPV exposure included women who reported any IPV since age 18 according to the BRFSS or WEB questions.