

## Intimate Partner Sexual Violence: A Comparison of Foreign- Versus US-Born Physically Abused Latinas

Courtenay E. Cavanaugh, Jill T. Messing,  
Yvonne Amanor-Boadu, Chris S. O'Sullivan,  
Daniel Webster, and Jacquelyn Campbell

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**ABSTRACT** *Men's violence against women—particularly intimate partner sexual violence (IPSV)—is associated with the transmission of HIV. Men who physically abuse their female intimate partners often also sexually abuse them. Latinas are one of the fastest growing populations in the USA and at high-risk for contracting HIV, though little is known about IPSV against physically abused Latinas, including whether there is an association between nativity of the victim and the likelihood of sexual violence by intimate partners. This study examined the (1) prevalence of recent (past 6 months) IPSV against 555 physically abused, help-seeking Latinas and (2) relationship of nativity to recent IPSV. This study used data collected in 2002–2003 from participants in one major city on the East Coast and one West Coast county, who were involved in the Risk Assessment Validation (RAVE) Study. The RAVE Study assessed the accuracy of four different methods for predicting risk of future intimate partner violence. IPSV was defined as an abusive male partner physically forcing sex (rape) or making the woman have sex without a condom. Recent IPSV was reported by 38 % of the sample. Among those reporting recent IPSV, multiple assaults were common: 30 % of women were raped and 51 % were made to have unprotected sex six or more times during the past 6 months. IPSV was significantly associated with nativity. Physically abused Latinas who were foreign born had two times greater odds of reporting recent IPSV than physically abused Latinas born in the USA, after controlling for other demographic covariates. Exploratory post hoc analyses examining all pairwise comparisons of IPSV against Latinas born in the USA, Mexico, Central America, South America, and the Caribbean also revealed some significant differences that warrant further study with larger samples. HIV prevention efforts aimed at reducing IPSV in this population are needed.*

**KEYWORDS** *Intimate partner violence, Sexual assault, Women, Nativity, Latina or Hispanic*

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Globally, the link between violence against women and HIV has been described as “undeniable”; research in developed and developing nations has documented links between intimate partner violence (IPV), intimate partner sexual violence (IPSV), and HIV transmission.<sup>1</sup> In the USA, HIV remains one of the leading causes of death among women between the ages of 15 and 54,<sup>2</sup> with most women contracting the virus through heterosexual contact.<sup>3</sup> Women who are physically abused by male intimate partners are particularly vulnerable to contracting HIV through heterosexual sex because abusive

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Cavanaugh is with the Rutgers University, Camden, NJ, USA; Messing is with the Arizona State University, Phoenix, AZ, USA; Amanor-Boadu is with the Andrews and Associates, Manhattan, KS, USA; O'Sullivan is with the VCS, Inc., New City, NY, USA; Webster is with the Johns Hopkins University, Baltimore, MD, USA; Campbell is with the School of Nursing, Johns Hopkins University, Baltimore, MD, USA.

Correspondence: Courtenay E. Cavanaugh, Rutgers University, Camden, NJ, USA. (E-mail: cocavana@camden.rutgers.edu)

male partners often repeatedly perpetrate sexual violence including rape and sexual coercion,<sup>4-8</sup> both of which increase abused women's risk for contracting HIV or other sexually transmitted infections if her partner is infected. There is also evidence indicating that physically abusive men engage in riskier sexual behavior than their nonviolent counterparts, including having multiple sexual partners.<sup>9,10</sup> Such behavior may lead to abusive men contracting HIV and passing it onto their female partners through IPSV. Thus, the substantial population-level risk for the transmission of HIV through the pathway of men's violence against women is due to IPSV (as compared with rape outside of the context of an intimate relationship) because a perpetrator, if infected, exposes his partner to HIV many times over the course of a relationship, increasing the likelihood of infection.<sup>1</sup>

Men who commit physical abuse often commit sexual abuse.<sup>11</sup> Between 41<sup>12</sup> and 68 %<sup>6</sup> of women who are physically abused by an intimate partner are also sexually abused by them. In studies of physically abused women recruited from the community, 44-48 % reported their abuser also sexually assaulted and/or coerced them into unwanted sexual activity,<sup>7,13,14</sup> including 15 % who reported that their partner physically forced them to have sex and 13 % who reported that their partner made them have sex without a condom.<sup>14</sup> In a study of women seeking protective orders, 68 % reported that their partner had sexually violated them. The higher prevalence of IPSV victimization among women who are physically abused by an intimate partner is especially troubling given that one in three women in the USA experiences physical IPV during her lifetime.<sup>15</sup>

The lifetime rates of physical violence for White, Black, and Latina women in the USA (31.7, 40.9, and 35.2 %, respectively) and rape (9.2, 12.2, and 8.4 %)<sup>15</sup> are fairly similar and no significant differences in the prevalence of IPSV have been found among African American, White, and Latina women seeking protective orders.<sup>6</sup> However, Black and Latina women have higher risk for contracting HIV than White women.<sup>3</sup> Therefore, there is a need to understand the nature of IPSV among abused Black and Latina women in order to inform prevention interventions aimed at reducing HIV among these high-risk women. Given that the Latino population in the USA grew by more than 40 % in the last decade<sup>16</sup> and by 2050, Latinos are expected to comprise 29 % of the US population,<sup>17</sup> studies focusing on IPSV against physically abused Latinas are especially needed in order to inform HIV- and violence-prevention interventions.

Understanding which Latinas are at greatest risk for experiencing IPSV may lead to more targeted HIV prevention interventions. Since many Latinas in the USA are immigrants or foreign born,<sup>17</sup> one important correlate of IPSV to consider in this population is nativity. Latina immigrants may be more vulnerable to IPV including IPSV because of various social and gender-political factors (e.g., social isolation and maintenance of Latino cultural norms regarding the acceptability of and community response to IPV).<sup>18-21</sup> If a Latina immigrant is undocumented, fear of deportation and consequent separation from her children, fear of her partner's deportation and loss of support, or fear of other family members' deportation may discourage a victim of IPV from involving the police or disclosing abuse.<sup>18,22</sup> Immigrant women also perceive more risks and barriers to leaving an abusive partner than non-immigrant women.<sup>23</sup> By contrast, US-born Latinas may be more vulnerable to IPV including IPSV than their foreign-born counterparts because of increased pressure to adjust to mainstream culture leading to acculturation stress.<sup>24</sup> US-born Latinas may be more likely to move away from traditional cultural norms, such as extended family social networks, which may be protective against violence victimization.<sup>25</sup>

There is a paucity of empirical research examining the influence of immigration or nativity on IPSV against Latinas who are physically abused by their partners. A number of studies have examined the influence of nativity on various types of IPV including psychological, physical, and/or sexual IPV,<sup>6,24–28</sup> however, only one study sample consisted solely of abused women.<sup>6</sup> McFarlane and colleagues examined the associations between nativity and IPSV against 148 African American, White, and Latina women seeking protection orders and found no significant relationships between nativity and IPSV.<sup>6</sup> Other studies using samples that included women who had not reported physical abuse have revealed higher rates of IPV against US-born Latinas,<sup>24,25,28</sup> Latino families,<sup>26</sup> and Mexican Americans<sup>27</sup> compared with foreign-born Latinas.

This study aimed to extend the extant literature, respond to calls for ethnicity-specific research on IPV,<sup>29</sup> including IPSV,<sup>30</sup> and inform HIV and violence prevention interventions by examining: (1) the prevalence of recent sexual violence by a recent or current physically abusive male intimate partner and (2) the influence of nativity on recent IPSV after controlling for other demographic variables (e.g., age, education, employment status, marital status, and maternal status) among a large sample of abused, help-seeking Latinas. An advantage of studying help-seeking women is that violence- and HIV-prevention interventions may be implemented in the agencies where women are seeking services. Given the aforementioned empirical literature indicating that US-born Latinas suffer higher rates of IPV than foreign-born Latinas, the authors hypothesized that higher rates of IPSV would be reported among US-born than foreign-born Latinas.

## METHOD

This study is a secondary data analysis of the Risk Assessment Validation (RAVE) Study (NIJ #2000WTVX0011).<sup>31</sup> The RAVE Study, which was funded by the National Institute of Justice and approved by the institutional review board of Johns Hopkins University, assessed the accuracy of four different methods for predicting risk of future IPV through structured in-person or telephone interviews. Women who were currently seeking or receiving services—including civil protection orders, domestic violence shelter/community services, hospital emergency care, or 911 calls—for a recent incident of physical abuse or threatening behavior by a current or former male intimate partner were recruited in person, by telephone, through referrals, or by posting flyers in one major city on the East Coast and one West Coast county.

At baseline, women recruited into the study were randomly administered two of four risk assessment instruments: the Danger Assessment,<sup>32</sup> the Domestic Violence Screening Inventory,<sup>33</sup> the DV-MOSAIC,<sup>34</sup> or the Kingston Screening Instrument for Domestic Violence.<sup>35</sup> During 2002–2003, 1,307 women participated in a baseline interview. Between 2002 and 2004, the researchers were able to contact and re-interview 60 % of women in the baseline sample an average of 9 months later about their experience of IPV since the baseline interview. For both the baseline and follow-up interviews, the referent partner was the one against whom the participant was seeking IPV services (e.g., a protective order, assistance from law enforcement, shelter, etc.) at baseline. In addition to the questions on the randomly administered risk assessment instruments, women were asked to report demographic information and social and relationship characteristics; respond to questions on the Conflict Tactics Scale-2 (CTS-2)<sup>36</sup> pertaining to physical, emotional, and sexual violence and additional questions on injury; provide information

about the psychological experience of abuse<sup>37</sup> and partner stalking behaviors;<sup>38</sup> answer questions about protective actions, safety seeking, and service utilization; and assess their own risk of reassault and injury. Baseline questions referenced the previous 6 months, and follow-up interviews referenced the time since the baseline interview. Only baseline data were used for this study.

The interviews were completed in either English or Spanish by female interviewers, the majority of whom were bilingual. Interviewers were Latina, African American, Haitian, and non-Latina White, and their ages ranged from 21 to 45 with most being 25 to 35. Interview procedures varied according to recruitment site: two thirds of baseline interviews were conducted in person and the remaining one third were conducted by telephone. In-person interviews were conducted when possible given the method of participant recruitment (e.g., from family courts or shelters) and telephone interviews were conducted with women who were recruited from 911 calls due both to safety issues and pragmatic considerations (e.g., difficulty reaching participants spread over large distances). Interviewers were trained in interviewing safety techniques, including safety techniques for telephone interviews that were developed for the Canadian domestic violence survey.<sup>39</sup> Participants provided written consent when possible. Verbal consent was obtained for those interviewed by phone. Participant safety was the first priority during contacts, and interviews were conducted only if women reported that it was a safe time for them to talk.

Of the 1,307 women who participated in the baseline interview, 693 identified as Latina. Of those, 560 reported recent (past 6 months) physical violence by a current or recent intimate partner, measured by an affirmative response to one of 13 questions adapted from the CTS-2<sup>36</sup> pertaining to physical IPV. Five of the 560 physically abused Latina women (<1 %) had missing data on pertinent variables and were removed from the present analysis, yielding a final analytic sample of 555.

## Measures

Two items adapted from the widely used CTS-2<sup>36</sup> pertaining to physically forced sex and sexual coercion were used to assess IPSV by a physically abusive recent/current male intimate partner. One question asked whether the partner had “used force (like hitting you, holding you down, or using a weapon) to make you have sex.”<sup>36</sup> The other question asked whether the partner had “made you have sex without a condom.”<sup>36</sup> Participants were asked how many times their partner had inflicted either of these behaviors on them during the previous 6 months. Response options ranged from 0 (never) to 4 (six or more times in the last 6 months) and 7 (this event had happened before, but not in the past 6 months). For each of these forms of sexual abuse, a variable was created where response options of 0 and 7 were recoded as ‘0’ to indicate no IPSV in the past 6 months; response options 1–4, which each indicated some frequency of this behavior in the past 6 months, were recoded as ‘1’ to reflect IPSV in the past 6 months. The two dichotomous variables created were then summed and a new dichotomous variable was created indicating whether the participants partner made them have sex without a condom and/or forced them to have sex during the past 6 months. The Phi correlation coefficient representing the association between these two indicators of IPSV was .489,  $p < 0.01$ .

Other study variables were assessed with questions about participants’ age, education, marital status, parent status, employment, and whether or not they were born in the USA. If participants reported being foreign born, they were asked to identify their country of origin. Respondents who reported their country of origin as Mexico were classified as such; respondents who reported their country of origin as

Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, or Panama were classified as having a Central American country of origin; respondents who reported their country of origin as Bolivia, Brazil, Colombia, Ecuador, or Peru were classified as having a South American country of origin; and respondents who reported their country of origin as Cuba, Dominican Republic, or Puerto Rico were classified as having a Caribbean country of origin. Although Puerto Ricans are US citizens, all but one of them in this study (28/29) self-identified as not having been born in the USA.

### Data Analysis

Variables were created as described above, and all statistics were run in SPSS version 20.<sup>40</sup> Descriptive statistics were used to describe the sample on variables of interest and to examine missing data. Chi-square and *t* tests were run to examine significant differences between US- and foreign-born Latinas on demographic variables, IPSV, and physical IPV victimization. Simple and multiple logistic regressions were also used to obtain unadjusted and adjusted odds ratios for the associations between variables of interest and IPSV. Given prior literature showing associations among age,<sup>25</sup> marital status,<sup>11</sup> education, employment,<sup>41</sup> and child status with IPV or IPSV,<sup>42</sup> these variables were included as control variables in the adjusted logistic regression model regardless of their statistical significance in the bivariate analyses with IPSV. Post hoc analyses (described in detail below) included two additional multiple logistic regressions and ten Chi-square tests.

## RESULTS

Participants were between 18 and 59 years of age ( $M=30.01$ ;  $SD=8.20$ ). As shown in Table 1, the majority had a high school education or equivalent (58.4 %), had children (90.8 %), and was born in the USA (54.1 %). A minority was married (37.7 %) or employed (46.3 %). Thirty-eight percent of women reported experiencing recent IPSV. Of the two types of IPSV examined—physically forced sex and being made to have sex without a condom—being made to have sex without a condom was more prevalent (30.6 versus 24.3 %). The most common form of physical IPV reported was being pushed or shoved while the least common was being burned or scalded.

Compared with US-born Latinas, foreign-born Latinas were significantly older, less likely to have a high school education or equivalent, and more likely to be married. There were no significant differences between foreign- or U.S-born women with respect to being employed or having children. Significantly more foreign-born Latinas reported recent IPSV (46.3 %) than US-born Latinas (30.7 %). Nearly one third of foreign-born Latinas reported recent forced sex (30.6 %) as compared with 19 % of US-born Latinas and significantly more foreign- (38.4 %) than US-born Latinas (24 %) reported their partner made them have sex without a condom in the past 6 months. US- and foreign-born Latinas significantly differed with respect to only three of the eleven types of physical IPV assessed in the past 6 months. US-born Latinas were more likely to report that their male partner had pushed/shoved (86.0 versus 76.5 %) or strangled them (42.0 versus 28.6 %) while foreign-born Latinas were more likely to report their male partner had beat them up (57.3 versus 49.0 %,  $p=0.05$ ).

The majority of women who were sexually victimized by their intimate partners were subjected to sexual violence multiple times. Of the 135 women who reported recent forced sex (rape), 17.0 % reported that their partner did this once in the past

**TABLE 1** Frequency (total number (*N*) and percentage value) of demographic characteristics, past 6 months of intimate partner sexual violence, and past 6 months of types of physical intimate partner violence (IPV) victimization for sample overall (*N*=555), US born (*n*=300), and foreign born (*n*=255) physically abused and help-seeking Latinas who participated in the Risk Assessment Validation Study in 2002–2003

	<i>N</i> (%) total ( <i>n</i> =555)	<i>N</i> (%) US born ( <i>n</i> =300)	<i>N</i> (%) foreign born ( <i>n</i> =255)	<i>p</i> value from <i>t</i> or Chi-square test
<b>Demographics</b>				
Age (mean (SD))	30.01 (8.20)	27.97 (7.83)	32.40 (7.97)	<0.01
Has high school education or equivalent	324 (58.4)	203 (67.7)	121 (47.5)	<0.01
Married	209 (37.7)	85 (28.3)	124 (48.6)	<0.01
Employed full-time, part-time, or seasonally	257 (46.3)	139 (46.3)	118 (46.3)	>0.05
Has children	504 (90.8)	270 (90.0)	234 (91.8)	>0.05
<b>Type of intimate partner sexual violence</b>				
Recent forced rape or made to have unprotected sex	210 (37.8)	92 (30.7)	118 (46.3)	<0.01
Recently physically forced to have sex	135 (24.3)	57 (19.0)	78 (30.6)	<0.01
Recently made to have unprotected sex	170 (30.6)	72 (24.0)	98 (38.4)	<0.01
<b>Type of physical IPV committed by abusive partners</b>				
Partner pushed or shoved you	453 (81.6)	258 (86.0)	195 (76.5)	<0.01
Partner grabbed you	427 (76.9)	238 (79.3)	189 (74.1)	>0.05
Partner twisted your arm or hair	355 (64.0)	200 (66.7)	155 (60.8)	>0.05
Partner beat you up	293 (52.8)	147 (49.0)	146 (57.3)	0.05
Partner slapped you	284 (51.2)	156 (52.0)	128 (50.2)	>0.05
Partner slammed you up against a wall	278 (50.1)	151 (50.3)	127 (49.8)	>0.05
Partner threw something at you that could hurt	273 (49.2)	156 (52.0)	117 (45.9)	>0.05
Partner punched you or hit you with something that could hurt	265 (47.7)	146 (48.7)	119 (46.7)	>0.05
Partner choked you	199 (35.9)	126 (42.0)	73 (28.6)	<0.01
Partner kicked you	180 (32.4)	93 (31.0)	87 (34.1)	>0.05
You needed to see a doctor because of a fight with your partner, but you couldn't	138 (24.9)	76 (25.3)	62 (24.3)	>0.05
Partner used a knife or a gun on you	98 (17.7)	56 (18.7)	42 (16.5)	>0.05
Partner burned or scalded you on purpose	24 (4.3)	13 (4.3)	11 (4.3)	>0.05

Physical IPV questions adapted from the Conflict Tactics Scale-2. *P* values also shown for tests of significant differences between US- and foreign-born Latinas on demographic and IPV variables

6 months, while 45.9 % reported being raped by their intimate partner six or more times in the past 6 months. Similarly, of the 170 women who reported that they had been forced to have a sex without a condom, 5.2 % reported that their intimate partner did this once in the past 6 months, but 12 times as many (62.9 %) reported

that their partner did this six or more times in the previous 6 months. Finally, of the women reporting any recent IPSV ( $n=210$ ), 29.5 % reported they were raped six or more times by their intimate partner during the past 6 months and 51.0 % reported that their intimate partner made them have sex without a condom six or more times during the previous 6 months.

Table 2 shows demographic characteristics of the 210 women who reported recent IPSV. As shown, nearly half of the women who had recently experienced IPSV were single. The majority was unemployed, had a high school education or equivalent, and had children. The table also shows the odds ratios and 95 % confidence intervals for the simple and multiple logistic regressions examining the associations between women's nativity (US versus non-US country of birth) and IPSV. There were no significant differences in the demographic characteristics of Latinas in the sample between those who experienced recent IPSV and those who did not.

Nativity status was, however, significantly associated with recent IPSV in both the simple (unadjusted) and multiple (adjusted) logistic regressions. In the simple logistic regression, Latinas who immigrated to the USA had 1.95 greater odds ( $p<0.01$ ) of having been recently sexually assaulted by their abusive intimate partner compared with Latinas who were born in the USA. In the multiple logistic regression, controlling for age, marital status, employment status, education, and child status, Latinas who were born outside the USA had 2.10 greater odds ( $p<0.01$ ) of having recently experienced sexual violence perpetrated by their abusive intimate partner than Latinas who were born in the USA.

**TABLE 2** Logistic regression analyses testing demographic variables associated with IPSV against physically abused, help-seeking Latinas ( $N=555$ ) who participated in the Risk Assessment Validation Study in 2002–2003

Variables (reference category (Ref.))	N (%) of 210 with recent IPSV	Unadjusted		Adjusted	
		Odds ratio	95 % confidence interval	Odds ratio	95 % confidence interval
Age	–	1.00	0.98–1.03	0.99	0.97–1.02
Marital status					
Single (Ref.)	108 (51.4)	1.00	–	1.00	–
Married	78 (37.1)	0.99	0.68–1.43	0.87	0.58–1.31
Separated/divorced	24 (11.4)	1.14	0.64–2.01	1.03	0.56–1.89
Employment					
Full or part-time/seasonal (Ref.)	94 (44.8)	1.00	–	1.00	–
Not employed	116 (55.2)	1.11	0.78–1.56	1.08	0.75–1.55
Education					
High school/equivalent (Ref.)	118 (56.2)	1.00	–	1.00	–
Less than high school/equivalent	92 (43.8)	1.16	0.82–1.64	0.99	0.68–1.43
Parent status					
No children (Ref.)	22 (43.8)	1.00	–	1.00	–
Has children	188 (89.5)	0.78	0.44–1.41	0.73	0.40–1.34
Foreign born					
No (Ref.)	92 (43.8)	1.00	–	1.00	–
Yes	118 (56.2)	1.95**	1.38–2.78	2.10**	1.44–3.07

\*\* $p<0.01$ ; the adjusted model controlled for all other variables in this table

In order to verify the consistency of these results for the two types of IPSV separately, we ran two post hoc multiple logistic regressions, one with recent forced sex as the outcome and one with recently being made to have sex without a condom as the outcome, controlling for demographic covariates. In this analysis, foreign-born Latinas had 2.05 greater odds of having been physically forced to have sex ( $p < 0.01$ ) and 1.99 greater odds of being made to have sex without a condom ( $p < 0.01$ ) during the past 6 months than US-born Latinas.

Given the higher rates of IPSV against foreign-born Latinas in this study and varying rates of IPV including IPSV among Latinas in the USA, Latin America, and Caribbean countries,<sup>42-44</sup> post hoc analyses to further examine recent IPSV according to participants' place of birth (i.e., the USA, Mexico, Central America, South America, or the Caribbean) were conducted. As shown in Table 3, South American-born Latinas had the highest prevalence of IPSV and US-born Latinas had the lowest prevalence of IPSV. Ten pairwise Chi-square tests were run to examine differences in IPSV according to place of birth. The Bonferroni correction was used to adjust for inflated type I error and thus significance was tested at  $p < 0.005$ . Three pairwise comparisons reached statistical significance at  $p < 0.005$ : significantly more Caribbean-born Latinas reported recent IPSV than Mexican-born Latinas ( $\chi^2(1, N=185)=8.597, p < 0.005$ ). In addition, significantly more South American- ( $\chi^2(1, N=332)=8.542, p < 0.005$ ) and Caribbean-born Latinas ( $\chi^2(1, N=386)=18.286, p < .005$ ) reported recent IPSV than US-born Latinas. Power analyses were conducted; the non-significant tests were underpowered and should therefore be interpreted with caution.

**TABLE 3** Frequency (total number (*N*) and percentage value) of IPSV against physically abused, help-seeking Latinas according to place of birth and pairwise comparisons of intimate partner sexual violence (IPSV) according to whether born in the USA, Mexico, Central America, South America, or the Caribbean

	No recent IPSV		Recent IPSV		<i>p</i> value
	<i>N</i> (%)	$\chi^2$	<i>N</i> (%)	<i>df</i>	
Place of birth					
US born	208 (69.3)		92 (30.7)		
Mexico	65 (65.7)		34 (34.3)		
Central America	19 (52.8)		17 (47.2)		
South America	14 (43.8)		18 (56.2)		
Caribbean	38 (44.2)		48 (55.8)		
Mexico versus Central America		1.863		1	>0.05
Mexico versus South America		4.848		1	<0.05
Mexico versus Caribbean		8.597		1	<0.005
Central America versus South America		.753		1	>0.05
Central America versus Caribbean		.447		1	>0.05
South America versus Caribbean		.002		1	>0.05
USA versus Mexico		.466		1	>0.05
USA versus Central America		4.020		1	0.05
USA versus South America		8.542		1	<0.005
USA versus Caribbean		18.286		1	<0.005

Note: with Bonferroni correction used significance assessed at  $p < 0.005$



## DISCUSSION

In this study of 555 physically abused Latinas, nearly 40 % reported IPSV during the previous 6 months (i.e., forced sex/rape or being made to have sex without a condom) and 30 % of the women who reported IPSV reported they were raped at least six times during this time period. We had hypothesized that US-born Latinas would report higher rates of recent IPSV given the empirical literature indicating higher rates of IPV among US- than foreign-born Latinas.<sup>24,25,28</sup> To the contrary, foreign-born Latinas were found to be twice as likely as their US born counterparts to have been subjected to recent IPSV.

The discrepancy between the findings reported here with those reported elsewhere may have to do with the help-seeking behavior of this study sample. Our study was comprised of physically abused Latinas seeking services for IPV while most of the empirical literature on IPV and nativity among Latinas has not consisted solely of physically abused and/or help seeking Latinas.<sup>24,25,28</sup> Several studies suggest that as the severity and frequency of violence increases, help seeking increases.<sup>45,46</sup> Thus, Latinas in our study may have experienced more severe IPV than Latinas who participated in studies that did not consist solely of women seeking help for IPV. Given the aforementioned barriers for foreign-born Latinas to seek services for IPV,<sup>18,22</sup> foreign-born Latinas in this study may have experienced the most severe IPV, which prompted them to seek services for IPV regardless of those barriers, and their abuse may have exceeded that of the US-born Latinas in this study. While few differences emerged between foreign- and US-born Latinas in this study in terms of the prevalence of different types of physical IPV, foreign-born Latinas may have experienced severe IPV that was not assessed in this analysis or that was more frequent. In addition, previous research has shown that women are more likely to seek services when they have experienced sexual assault<sup>47,48</sup> and perhaps more severe sexual assault led to help seeking among foreign-born Latinas.

Findings in this present study also contrasted with the one other study the authors are aware of that examined the nativity of women seeking help for IPV.<sup>6</sup> That study found no significant association between nativity and recent IPSV in a sample of African American ( $n=49$ ), Latina ( $n=60$ ), and White ( $n=39$ ) women seeking help for IPV. The different racial-ethnic compositions of the two study samples and statistical power may explain the discrepant findings. The findings of this study are consistent with theoretical arguments indicating that immigrants may be at greater risk for IPV and thus IPSV<sup>18,20,49,50</sup> and research pertaining to mixed racial/ethnic samples that found foreign-born women were more likely to be victims of intimate partner femicide.<sup>51,52</sup> Since the majority of immigrants in the USA are from Latin America,<sup>53</sup> more studies are needed to examine the influence of nativity on IPV including IPSV among Latinas.

Exploratory post hoc analyses revealed differences in IPSV according to country of origin. However, our post hoc pairwise examinations of IPSV by country or region of birth were underpowered and the Bonferroni correction may have been overly conservative. Therefore, these results should be interpreted with caution. Nevertheless, our post hoc findings are consistent with other reports indicating that IPSV is common and rates of IPSV vary around the world.<sup>42-44</sup> In this study, rates of recent IPSV ranged from 31 % for Latinas born in the USA to 56 % for those born in South America. The widely varying rates of IPSV by country of origin reported

here and elsewhere suggest the need for culturally specific violence and HIV prevention interventions that particularly target Latinas in and from countries with high rates of IPV and IPSV. Research aimed to better understand IPSV against women within and across different countries of origin may assist in these efforts.

Study findings suggest that interventions aimed at reducing sexual violence by intimate partners – particularly against foreign-born physically abused Latinas – could have a notable public health impact by reducing Latinas risk of contracting HIV and other sexually transmitted infections. Due to women's lack of control in abusive relationships, they have limited power to request that their partners use condoms during consensual, coerced and forced sex.<sup>4,54-56</sup> IPV has been related to a lower likelihood of using condoms and requesting condom use<sup>57</sup> and sexual coercion in intimate relationships has been associated with HIV risk.<sup>54,58</sup> Therefore, research must begin by closer examination of the perpetrators of sexual violence against Latinas, particularly the intimate partners of foreign-born Latinas and why those partners are more likely to perpetrate sexual violence. Previous research has found that more acculturated Latino men<sup>59</sup> and men who drink heavily<sup>60</sup> are more likely to perpetrate violence so additional research into the nativity, acculturation, and substance use of physically abusive intimate partners of Latinas is needed. Unfortunately, this information was not assessed in the parent study from which data were obtained for this research.

Despite the literature linking IPV and HIV<sup>5,61-63</sup> and the high rates of IPSV among physically abused women reported here and elsewhere,<sup>4,6,14,55,56,64-66</sup> there do not appear to be any best/good-evidence HIV risk reduction interventions specifically targeting victims or perpetrators of IPV.<sup>67</sup> Since victims of sexual violence by definition do not control the risky behavior of their intimate partners, including the behaviors that expose the victim to risk of HIV, behavioral HIV prevention interventions for abused women are insufficient to address their risk. Given that most perpetrators of sexual violence against women are male,<sup>15</sup> multimodal HIV prevention interventions are needed that aim to reduce men's IPSV against women. Best/good-evidence-based HIV risk reduction interventions are also needed that address other contextual factors associated with IPSV against women. One such factor suggested by this study is nativity of physically abused Latinas, and perhaps that of their partners.

Study limitations must be considered when interpreting these findings. Our sample consisted of service-seeking, physically abused Latinas; findings may not generalize to physically abused Latinas not seeking domestic violence services. This study also consisted of varied methods of data collection (i.e., in-person or by phone) and recruitment (e.g., family courts or shelters) that may have affected the data collected. This study was unable to examine the influence of other cultural factors on IPSV including acculturation, time since immigration, documentation status, and language fluency because these variables were not assessed in the parent study. Future studies should examine these factors in relation to vulnerability to and perpetration of IPSV as well as moderators of the relationship between nativity and IPSV. In addition, the parent study did not have data pertaining to alcohol and drug use, yet substance use is a known HIV risk factor;<sup>68</sup> for example, women may use drugs and alcohol to cope with IPV, but impairment may increase their vulnerability to violence and decrease their assertiveness regarding condom use in their intimate relationship.<sup>4</sup> Thus, future work studying the association between nativity and IPSV among physically abused Latinas should also take into account victims' and perpetrators substance use.

## CONCLUSIONS

This study is novel in documenting the association between nativity and recent IPSV in a large and diverse sample of physically abused Latinas who were seeking help for IPV. Findings reveal high rates of recent IPSV in this population and an increased risk for IPSV against abused Latina women who were foreign-born compared with those born in the USA. These findings may be used to develop culturally-tailored prevention (specific to cultures, not language groups) and intervention efforts aimed to reduce IPSV and thus HIV risk in the lives of abused Latina women living in the USA. Such interventions could be delivered in various systems where women in this study were seeking help (e.g., 911, protective orders, and domestic violence shelters).

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