



## Reproductive Health Differences Among Latin American- and US-Born Young Women

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**ABSTRACT** *Investigations of reproductive health within Latinos living in the United States suggest that sexual behaviors and contraception use practices vary by ethnicity and between foreign- and US-born adolescents. This article compares high-risk sexual behaviors and reproductive health among foreign-born Latinas, US-born Latinas, and US-born non-Latinas aged 15–24 years. We recruited 361 females from reproductive health clinics in the San Francisco Bay Area of California between 1995 and 1998; these women completed an interview that assessed sexual risk behaviors and history of pregnancy, abortion, and sexually transmitted infections. Current chlamydial and gonococcal infections were detected through biological testing. Among participants aged 15–18 years, US-born Latinas were more likely to have been pregnant (odds ratio [OR] comparing US-born Latinas and US-born non-Latinas = 3.9, 95% confidence interval [CI] 1.3, 11.4), whereas among respondents aged 19–24 years, foreign-born Latinas were more likely to have been pregnant than US-born Latinas (OR = 11.3, 95% CI 1.0, 130.8) and US-born non-Latinas (OR = 64.2, 95% CI 9.9, 416.3). US-born Latinas were most likely to have had an abortion (OR comparing US-born Latinas and US-born non-Latinas = 2.0, 95% CI 0.9, 4.7). They were also most likely to have chlamydial infection at study enrollment (8.2% prevalence compared to 2.2% and 1.0% for foreign-born Latinas and US-born non-Latinas, respectively;  $P = .009$ ). Reproductive health differences between foreign and US-born females and within the US-born population warrant further examination and highlight the need for targeted prevention.*

**KEYWORDS** *Abortion, Adolescence, Hispanic Americans, Immigrants, Pregnancy, Sex behavior, Sexually transmitted diseases.*

### INTRODUCTION

Latinos are the fastest growing ethnic population in California.<sup>1,2</sup> Conservative estimates based on 1996 legal immigration data suggest that the San Francisco metropolitan area receives approximately 3,000 legal and 2,400 undocumented new Latino immigrants annually.<sup>3</sup> Moreover, during the period 1995–2005, California's adolescent population aged 10–19 years is estimated to increase more than 2.5 times faster than in the rest of the US (34% compared to 13%). The Latino adoles-

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cent population is anticipated to have the highest growth pattern, a 58% increase.<sup>4</sup> Indeed, reports from the 2000 US Census indicate that, in the 1990s, California experienced the largest population increase of any state (4.1 million), and that Latinos now constitute 32.4% of California's population compared to 12.5% of the US population.<sup>5,6</sup>

Rates of sexually transmitted infections (STIs), including human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS), illustrate racial/ethnic disparities in health status.<sup>7</sup> A household sample of chlamydia prevalence in 10 US counties, for instance, found that, among female and male teens aged 15–19 years, 12% of African Americans and 6% of Mexican Americans were infected compared to 4% of whites.<sup>7</sup> Similarly, elevated pregnancy rates among Latino adolescents compared to all other ethnic groups point to high levels of unprotected sexual behavior and the accompanying risk for STIs.<sup>8,9</sup> National birth rates in 1997 per 1,000 women aged 15–19 years were 97.3 for Latina women, 88.2 for black women, and 36.0 for non-Latina white women.<sup>10</sup>

Investigations of sexual behaviors and reproductive health within Latino subgroups living in the United States demonstrate that sexual practices vary by ethnicity and between foreign- and US-born adolescents.<sup>11–13</sup> Higher acculturation among youth, often measured as length of residence in the United States and primary language spoken, appears to be associated with earlier age of sexual activity and increased nonmarital births.<sup>14,15</sup> Some conflicting evidence exists, however, with regard to the direction of these patterns. A population-based sample of Los Angeles County Mexican American and non-Latino white adolescent females revealed that onset of sexual activity, contraception use, and abortion rates may vary between Mexican American adolescents born in the United States and those born in Mexico.<sup>11</sup> Mexico-born Mexican Americans reported the lowest levels of early sexual intercourse, the highest levels of pregnancy and the lowest use of abortion. In a population of public high school students in San Jose, California, US-born teens (both Latino and non-Latino white) engaged in significantly fewer sexual risk behaviors than Latin American immigrant teens, who were the most likely to engage in sexual intercourse and were the least likely to use contraception.<sup>12</sup>

We examined high-risk sexual behavior and reproductive health outcomes (pregnancy, abortion, and STIs) among foreign- and US-born young women aged 15–24 years residing in the San Francisco Bay Area. Foreign-born women included in the study immigrated from a broad range of countries in Latin America. Our study is the first to investigate pregnancy, abortion, and STI patterns among an immigrant population of young Latina women in California and to compare them with those among both US-born Latinas and US-born non-Latinas. We selected a racially diverse group of US-born non-Latinas for comparison as opposed to the majority non-Latina racial/ethnic group (whites) because we wanted to compare Latina participants to a group that reflected the racial/ethnic mix of the communities in which they lived. Although acculturation encompasses a diverse range of dynamic processes, we elected to focus solely on differences defined by foreign and US birth as these comparisons permit independent assessment of the effects of ethnicity and immigration. Differences within one ethnic group are often greater than those between them; however, due to sample size considerations, we were not able to evaluate differences by country of origin.

We hypothesized that the prevalence of high-risk sexual behaviors and STIs would be higher among US-born females.<sup>11,15</sup> In contrast, given documented contraception use patterns,<sup>16</sup> we anticipated that foreign-born Latinas would be more like-

ly than US-born Latinas and non-Latinas to have been pregnant. As Latino adolescents in California experience the highest pregnancy rates and disproportionate rates of STIs, investigating the role that immigration might play in differentiating risk groups within the Latino adolescent and young adult population in our geographic area remains essential.

## **METHODS**

### **Study Population**

We recruited women aged 15–24 years for this study at three San Francisco Bay Area reproductive health clinics in Marin and Alameda Counties and through community outreach as part of a larger study on contraceptive choice and acceptability.<sup>17</sup> Women seeking family planning services were recruited by research staff in clinic waiting rooms, at youth service agencies, and at local health fairs and community events. Individuals were eligible if they could provide informed consent; spoke Spanish or English; were sexually active (defined as having had vaginal sex at least three times in the previous 3 months); and were neither pregnant nor trying to get pregnant. These inclusion criteria were selected so we could evaluate barrier contraceptive method use among a population of sexually active women who would be motivated to use a contraceptive method for pregnancy, in addition to STI, prevention. Eligibility was determined through a screening questionnaire, and eligible participants were enrolled from March 1995 through March 1998. The institutional review boards at University of California San Francisco and University of California Berkeley approved the study protocol and consent procedures.

### **Study Protocol**

After providing written informed consent, all participants completed an in-person, interviewer-administered HIV and STI risk assessment questionnaire; participated in an interactive, one-on-one contraception educational session led by a research health educator; and provided a urine specimen for STI testing. The study design and protocol are described in greater detail elsewhere.<sup>17</sup> The questionnaire assessed factors relevant to evaluating the relationship between immigrant status and reproductive health and to identifying potentially confounding factors such as sociodemographic variables and childhood and family factors that might affect sexual risk behaviors and reproductive health outcomes. We also measured sexual behavior; current contraceptive behavior; reproductive health history (history of STIs, pregnancy, and abortion); and current prevalence of STIs (chlamydia and gonorrhea).

### **Statistical Analysis**

The statistical analysis included all foreign-born Latina and US-born young women in the study sample. Foreign-born participants of other ethnic backgrounds were excluded because of insufficient numbers (see below). Individuals were classified into one of three groups defined by country of birth and ethnicity. Participants who self-identified as Latina and reported a Latin American country as their country of birth were classified as foreign-born Latinas. Individuals who self-identified as Latina and stated they were born in the United States were classified as US-born Latinas; all other US-born participants were classified as US-born non-Latinas. Current and childhood socioeconomic status were assessed using several factors, including being a public assistance beneficiary within the previous year and parents'

educational levels. We also examined whether the participant had a religious upbringing and her mother's age when she had her first child. Self-reported history of diagnosed STI was classified as history of bacterial, viral, and vaginosis infections that included chlamydia and gonorrhea; herpes simplex virus 2, hepatitis B, and human papilloma virus; and bacterial vaginosis and trichomoniasis.

We present distributions of sexual risk behaviors and reproductive health outcomes for foreign-born Latinas, US-born Latinas, and US-born non-Latinas. We examined differences across these groups using Pearson chi-square statistics, Fisher exact tests, and the nonparametric Kruskal-Wallis test for differences in median values. In addition, we report results of multivariate logistic regression analyses that estimated the odds of each reproductive health outcome we measured in the study—pregnancy, abortion, and STI history—comparing all groups: foreign-born Latinas to US-born non-Latinas, US-born Latinas to US-born non-Latinas, and foreign-born Latinas to US-born Latinas. Model explanatory factors were included based on their hypothesized confounding role, on their variability across the three groups, and on the results of contingency table analysis. A linear representation of the relationship between pregnancy prevalence and age did not fit the data well; thus, we dichotomized age as 15–18 versus 19–24 years. We selected this cut point for multivariate analysis because the groups were relatively homogeneous with regard to whether they were living with their parent(s), which we believed would influence their sexual behavior and pregnancy history (74% of young women aged 15–18 years lived with their parent[s] compared to 3% of those aged 19–24). We investigated the effects on our results of collapsing all US-born non-Latinas into one racially heterogeneous reference group. We repeated the analysis with only non-Latina whites as the reference category, and our conclusions were unchanged. We selected final models using likelihood ratio tests.

## RESULTS

### Study Participant Characteristics

Of 471 eligible females aged 15–24 years, 398 young women enrolled in the study (84.5%). Eligible females who chose not to enroll were comparable to the study population with regard to age and ethnicity, but were more likely to have been born outside the United States (32.7% vs. 13.3%) and to have completed their eligibility screening interview in Spanish (20.9% vs. 9.1%). There were 37 females excluded from these analyses because they were non-Latina immigrants to the United States; these numbers were too small to permit analysis (the majority, 71%, were Canadian/European or were from one of six Asian countries [30% and 41%, respectively]). Thus, the final sample analyzed here includes 361 young women.

Most study participants were non-Latinas born in the United States (72.9%) (Table 1). This group includes 73.9% white, 8.9% black/African American, 9.9% Asian, 2.5% American Indian, and 4.9% multiracial/other. We could not ascertain the specific racial groups to which individuals who identified as Latina belonged. Foreign-born Latinas were older than US-born participants, with a median age of 21 compared to 19 years ( $P = .003$ ). Foreign-born Latinas were also more likely to be married and to have completed their interview in Spanish. Latinas, both foreign- and US-born, were more likely to have had a religious upbringing ( $P = .001$ ).

### Sexual Risk Behaviors

US-born respondents, regardless of ethnicity, reported a higher risk sexual history compared to foreign-born Latinas (Table 1). A higher proportion of US-born partic-

**TABLE 1. Background characteristics, sexual risk behaviors, and reproductive health outcomes: foreign-born Latinas, US-born Latinas, and US-born non-Latinas, San Francisco Bay Area, 1995–1998**

	Foreign-born Latinas*		US-born Latinas		US-born non-Latinas†		P
	n	(%)	n	(%)	n	(%)	
Total	48	(13.3)	50	(13.8)	263	(72.9)	
Sociodemographic factors							
Age (median and IQR)	21	(19–23)	19	(17–21)	19	(17–21)	0.003
Currently married	13	(27.1)	3	(6.1)	3	(1.2)	0.001
Interview conducted in Spanish	31	(64.6)	2	(4.0)	0	(0)	0.001
Religious upbringing	37	(77.1)	34	(68.0)	128	(48.7)	0.001
Mother's first birth when <20 years old	19	(46.3)	16	(36.4)	28	(12.4)	0.0001
Father completed some college	9	(18.8)	17	(34.0)	165	(62.7)	0.001
Mother completed some college	7	(14.6)	18	(36.0)	171	(65.0)	0.001
Sexual risk behaviors							
Early age first intercourse (≤15 years)	17	(22.9)	29	(58.0)	139	(52.9)	0.001
Multiple partners last 6 months	11	(16.5)	23	(46.0)	114	(43.4)	0.022
Contraceptive method use: previous 6 months (ever used)							
Condom	36	(75.0)	44	(88.0)	229	(87.1)	0.079
Spermicide	6	(12.5)	11	(22.0)	45	(17.1)	0.459
Birth control pill	10	(20.8)	20	(40.0)	106	(40.3)	0.035
Nothing	16	(33.3)	27	(54.0)	87	(33.1)	0.017
Emergency contraception (lifetime)	2	(4.3)	9	(18.4)	38	(14.5)	0.101
Reproductive health outcomes							
Pregnancy history	32	(66.7)	15	(30.6)	49	(18.8)	0.001
Abortion history (among pregnant)	9	(28.1)	12	(80.0)	35	(71.4)	0.001
Sexually transmitted infection(s) history							
Bacterial infections	3	(6.3)	8	(16.0)	24	(9.1)	0.221
Viral infections	3	(6.3)	2	(4.0)	26	(9.9)	0.326
Bacterial and/or viral infection	6	(12.5)	10	(20.0)	43	(16.4)	0.604
Vaginosis	8	(16.7)	2	(4.0)	27	(10.2)	0.118
Chlamydial infection at enrollment‡	1	(2.2)	4	(8.2)	2	(1.0)	0.009

IQR, interquartile range.

\*Countries of origin for foreign born include 47.9% Mexico, 27.1% Central American country, 14.6% South American country, 10.4% country not reported. Length of time lived in the US: median number of years = 4, IQR = 1.5–7 years.

†Includes 73.9% white, 8.9% black/African American, 9.9% Asian, 2.5% American Indian, and 4.9% other.

‡Chlamydial infection detected using ligase chain reaction techniques.

ipants reported having their first vaginal intercourse at age 15 years or younger ( $P = .001$ ) and having had multiple partners in the previous 6 months ( $P = .02$ ). At least 75% of participants in each group reported having used male condoms during the previous 6 months, although this proportion was higher among US-born participants ( $P = .08$ ). Similarly, pill use was higher among US-born young women (40% each for Latinas and non-Latinas) compared to foreign-born Latinas (21%,  $P =$

.04). US-born Latinas were most likely to have had vaginal intercourse without using contraception (54% compared to 33% each for foreign-born Latinas and non-Latinas born in the US,  $P = .02$ ).

### Reproductive Health Outcomes: Pregnancy, Abortion, and Sexually Transmitted Infections

The relationships among foreign birth, ethnicity, and pregnancy history varied by age, with US-born Latinas most likely among participants aged 15–18 years to report having been pregnant and foreign-born Latinas most likely among participants aged 19–24 years to have been pregnant (Table 2). These differences persisted with multivariate adjustment for marital status, parental educational levels, having a foreign-born parent, young age at first intercourse ( $\leq 15$  years old), and a measure of current sexual risk behavior: ever having had unprotected vaginal intercourse during the previous 6 months (Table 2). Religious upbringing and other measures of sexual risk behavior that varied across the three groups were not significantly associated with pregnancy history and did not influence the other relationships we examined. In comparing foreign- and US-born Latinas directly, we found no significant differences among teens aged 15 to 18 years; however, foreign-born Latinas aged 19–24 years were more likely to have been pregnant than US-born Latinas in the same age group (odds ratio [OR] = 11.3, 95% confidence interval [CI] 1.0, 130.8).

Although not statistically significant, use of abortion varied (Table 3), with US-born Latinas more likely than US-born non-Latinas to have had an abortion regardless of age (OR = 2.0, 95% CI 0.9, 4.7). The association among foreign birth, Latina ethnicity, and history of abortion was significant prior to adjusting for the educational level of the respondent's father. Thus, this measure of socioeconomic status partially confounded the association, and including it in the multivariate

**TABLE 2. Results of multivariate logistic regression for history of pregnancy comparing foreign-born Latinas, US-born Latinas, and US-born non-Latinas, San Francisco Bay Area, 1995–1998**

	Model 1, comparison of Latina and non-Latina females (N = 348)		Model 2, comparison of foreign- and US-born Latinas (N = 96)	
	Odds ratio	95% CI	Odds ratio	95% CI
Foreign-born Latinas				
Aged 15–18 years	2.5	0.6, 11.0	0.5	0.1, 2.7
Aged 19–24 years	64.2	9.9, 416.3	11.3	1.0, 130.8
US-born Latinas				
Aged 15–18 years	3.9	1.3, 11.4	Reference	—
Aged 19–24 years	3.0	0.6, 14.2	Reference	—
Father completed some college	0.3	0.2, 0.6	0.6	0.2, 2.1
Mother completed some college	1.5	0.7, 2.9	0.7	0.2, 2.4
Currently married	3.1	0.7, 13.6	3.9	0.7, 22.5
First intercourse $\leq 15$ years	4.6	2.3, 9.3	3.5	0.9, 12.7
Unprotected intercourse last 6 months	1.6	0.9, 2.9	1.2	0.4, 3.4

CI, confidence interval.

**TABLE 3. Results of multivariate logistic regression for history of abortion comparing foreign-born Latinas, US-born Latinas, and US-born non-Latinas, San Francisco Bay Area, 1995–1998**

	Model 1, comparison of Latina and non-Latina females (N = 351)		Model 2, comparison of foreign- and US-born Latinas (N = 97)	
	Odds ratio	95% CI	Odds ratio	95% CI
Foreign-born Latinas	1.7	0.6, 4.7	0.8	0.3, 2.4
US-born Latinas	2.0	0.9, 4.7	Reference	—
Age (years)				
15–18 (reference)	1.0	—	1.0	—
19–24	6.0	2.8, 12.9	4.5	1.2, 16.7
Father completed some college	0.4	0.2, 0.8	0.7	0.2, 2.6
Mother completed some college	1.2	0.6, 2.6	0.7	0.2, 2.7
Currently married	0.2	0.04, 1.0	0.3	0.005, 1.6
First intercourse ≤ 15 years	5.6	2.6, 11.9	4.0	1.2, 13.7

CI, confidence interval.

analysis resulted in a slightly reduced magnitude of effect. Participants aged 19–24 years were six times more likely than those aged 15–18 years to have had an abortion, as were those who initiated sexual intercourse by age 15 years. Although we found no differences in history of abortion between foreign- and US-born Latinas, among participants who reported a history of pregnancy, foreign-born young women were less likely than US-born females of all ethnic backgrounds to have elected an abortion (28.1% vs. 80.0% of US-born Latinas and 71.4% of US-born non-Latinas; Table 1).

Despite relatively low levels of STIs detected through biologic testing, current chlamydia infection was highest among US-born Latinas (8.2% vs. 2.2% and 1.0% among foreign-born Latinas and US-born non-Latinas, respectively;  $P = .009$ ). Nonetheless, there were too few infections to permit multivariate comparisons by immigrant status and ethnic groups; instead, we examined variations in STI history. No significant differences in STI history (categorized separately as bacterial, viral, and vaginosis infections and combined as bacterial and/or viral infections) were observed in bivariate or multivariate analyses adjusted for age, young age at first intercourse, and practice of unprotected intercourse during the previous 6 months. The data are not shown here, but may be summarized. The ORs and 95% CIs for combined bacterial and/or viral STI history are as follows: foreign-born Latinas versus US-born non-Latinas, OR = 0.7, 95% CI 0.2, 1.8; US-born Latinas versus US-born non-Latinas, OR = 1.2, 95% CI 0.5, 2.8; foreign-born Latinas versus US-born Latinas, OR = 0.5, 95% CI 0.1, 1.7.

## DISCUSSION

The inconsistent findings we observed highlight the complexities of investigating the effects of ethnicity and foreign birth on reproductive health outcomes. Like some previous studies, we found that foreign-born Latinas had a higher median age of first intercourse than did US-born Latinas and US-born non-Latinas (median =

17 years, interquartile range [IQR] = 15–18 years; median = 15 years, IQR = 13–16 years; and median = 15 years, IQR = 14–17 years, respectively). However, the decreased use of hormonal contraception and abortion, regardless of age, point to a higher risk for pregnancy and childbearing.

In addition to overall differences by ethnicity and immigration for both abortion and current STIs (increased history of abortion and increased proportion with current STIs among US-born Latinas), for pregnancy, these differences varied further by age. We noted an apparent interaction between age and foreign versus US birth. Among participants aged 15–18 years, the increased history of pregnancy for US-born Latina females suggests that this group of primarily second-generation immigrants may experience unique barriers to contraception use during their first few years of sexual activity. That 80% of US-born Latinas with a history of pregnancy also reported a history of induced abortion underscores that many of these pregnancies were unplanned. In contrast, the increased likelihood of pregnancy among foreign-born young women highlights a distinct pattern of pregnancy risk. Although US-born Latinas aged 15–18 years were most likely among females in this age group to have been pregnant, among females aged 19–24 years, foreign-born Latinas were most likely to report a history of pregnancy.

The study by Aneshensel et al.<sup>11</sup> of fertility among 13–19-year-old Mexican American and non-Latino white teenagers in Los Angeles, California, also examined age effects on fertility patterns. Although they observed age differences in the onset of sexual activity, with marked increases in the probability of first intercourse occurring later for Mexico-born compared to US-born teens, they found only minimal differences in the age at first pregnancy. Unlike previous investigations, our study included adolescent and young adult females representing a broad age range, so that this interaction among age, ethnicity, and immigration could be revealed. No clear, linear pattern of risk associated with ethnicity and foreign-birth emerges from these findings. The assumption that acculturation, as defined by longer time in the United States, leads to greater risk<sup>11,13,15</sup> was not plainly evident. The effect of immigration and ethnicity in shaping contraceptive behavior and reproductive decisions must be elucidated further.

These pregnancy patterns could exist for several reasons. First, pregnancy among young adult (aged 19–24 years) foreign-born Latinas could be intended. Alternatively, methods to prevent pregnancy might be inaccessible or unacceptable. Conflicts between cultural values maintained by immigrant families and norms defined by US-born peers may ultimately influence the dynamics within sexual partnerships and a young woman's ability to use contraception. Length of time in the United States appears to be an important component of these relationships. Indeed, pregnancy history was more common among females who had lived in the US for a shorter period of time (median [females with history of pregnancy] = 3 years, IQR = 1–5 years vs. median [females with no history of pregnancy] = 7 years, IQR = 2–10 years). The majority of these pregnancies occurred after migration to the US (86% who reported a history of pregnancy became pregnant for the first time after moving to the US).

Several attitudes toward family encompassed in the cultural concept of *familism* (i.e., familial obligations, perceived family support, and family as referents) have been shown to diminish with greater acculturation.<sup>18</sup> Strong family relationships, as well as religiosity, appear to promote healthy behaviors among adolescents.<sup>19</sup> In our study, among participants aged 15–18 years, a higher proportion



of foreign-born Latinas (76.9%) compared to US-born Latinas (58.3%) and non-Latinas (45.6%) were raised in a religious household. Among those aged 19–24 years, however, this proportion was the same for foreign- and US-born Latinas. That a religious upbringing (with multivariate adjustment) was not predictive of any reproductive health outcomes we examined may reflect insufficient statistical power and should be examined in other populations. Nonetheless, the direction of these associations appears to be mixed. Females aged 10–13 years from urban middle schools in northern California classified as less acculturated based on language use were more likely to have an older boyfriend, which was associated with early onset of sexual activity and unwanted sexual advances.<sup>20</sup> In this investigation, a low level of acculturation, which is hypothesized to signal stronger family ties and religiosity and is believed to encourage lower risk behaviors among youth,<sup>13</sup> did not appear to be protective. Finally, among immigrant adolescents and young adults, disrupted social structures that accompany immigration likely influence sexual relationships and reproductive health outcomes.

That US-born Latinas were most likely to have been infected with chlamydia at study enrollment underscores the high-risk profile of this group of study participants. Although we did not find statistically significant differences in history of STIs across groups, US-born Latina respondents, who reported the highest level of unprotected vaginal intercourse in the previous 6 months (54%), also reported the highest prevalence of bacterial STI history (16%). These young women, then, may be at particularly high risk for other adverse reproductive health outcomes. In addition, while beyond the scope of our investigation, it may highlight US-born Latina participants' membership in higher risk sexual networks that might be linked to populations with a higher prevalence of STIs.

One of the primary limitations of this investigation was our inability, due to sample size, to examine differences by country of origin within the cohort of foreign-born Latinas, as well as to examine foreign-born cohorts from other parts of the world. We recognize that there are often greater differences within one ethnic group than between ethnic groups, and our findings suggest that foreign birth and the experience of immigration may be one factor that differentiates reproductive health risks among Latinas in our geographic area. Future studies should include sufficient numbers of Latinas from varied backgrounds to permit an examination across some of these factors, such as length of time in the United States, age at immigration, geographic area of origin, and cultural aspects of acculturation, including gender norms.

In addition, our study population was a convenience sample recruited primarily from reproductive health clinics. Although our findings cannot be generalized to young women in our study communities who did not visit clinics or other youth service agencies, our recruitment strategies did not vary by site and thus are unlikely to have varied across the three groups compared here. The observed differences, then, are likely not the result of the participant selection methods.

Furthermore, we had differential study participation rates between foreign- and US-born females, with foreign-born respondents less likely to enroll. Like the foreign-born participants in our study, these young women were more likely to have completed their screening in Spanish than English. We cannot know how comparable their reproductive health history was to other foreign-born study participants. As a result, while we cannot dismiss the possibility of differential bias, our observed associations are likely biased toward the null association.

Finally, due to low current rates of our reproductive health outcomes and the cross-sectional design of the study, for multivariate analysis, we relied on self-reports of pregnancy and STI histories.<sup>21</sup>

While this study offers only a preliminary examination of reproductive health differences among foreign- and US-born young women in the San Francisco Bay Area, it suggests that sexual behaviors and the prevalence of pregnancy, abortion, and STIs vary among these groups. The patterns point to an increased use of abortion and risk of STIs among US-born Latinas; an increased history of pregnancy among teenage US-born Latinas (aged 15–18 years); and an increased history of pregnancy among young adult foreign-born Latinas (aged 19–24 years). Furthermore, the findings highlight a need to identify and address the distinct factors that may act as barriers to reducing risk among these populations.

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