

Patterns in Contraceptive Use Among Women of Mexican Origin in the United States and in Mexico

Kate Coleman-Minahan, PhD, FNP-BC, Emily R. Boniface, MPH, Evelyn Fuentes-Rivera, MSc, Biani Saavedra-Avendaño, PhD, MSc, Fernando Riosmena, PhD, and Blair G. Darney, PhD, MPH

OBJECTIVE: To examine current contraceptive use by parity among four ethnicity and nativity groups: non-Latina White women in the United States, Mexican-American women in the United States, foreign-born women of Mexican origin in the United States, and Mexican women in Mexico.

METHODS: We combined nationally representative data from sexually active women, aged 15–44 years, and not seeking pregnancy from the U.S. National Survey of Family Growth and the Mexican National Survey of

From the College of Nursing, University of Colorado Anschutz Medical Campus, Aurora, and the University of Colorado Population Center and the Population Program and Geography Department, University of Colorado Boulder, Boulder, Colorado; the Health Research Consortium (CISIDAT), Cuernavaca, Mexico; and the Department of Obstetrics and Gynecology, Oregon Health & Science University, and the OHSU-PSU School of Public Health, Portland, Oregon.

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Corresponding author: Kate Coleman-Minahan, PhD, FNP-BC, College of Nursing, University of Colorado Anschutz Medical Campus; Aurora, CO; email: kate.coleman-minahan@cuanschutz.edu.

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Demographic Dynamics. This is a secondary binational analysis. Using multivariable logistic regression, we estimated the prevalence of moderately or most effective contraceptive method use (compared with least effective or no contraceptive method) by ethnicity and nativity and tested the interaction between ethnicity and nativity and parity.

RESULTS: Compared with non-Latina White women, women of Mexican origin had lower odds of using a moderately or most effective contraceptive method (adjusted odds ratio [aOR] [95% CI] Mexican-American women: 0.69 [0.54-0.87]; foreign-born women: 0.67 [0.48-0.95]; Mexican women in Mexico: 0.59 [0.40-0.87]). Among parous women, the adjusted probability of using a moderately or most effective contraceptive method was approximately 65% among all four groups. Contraceptive method use did not differ by parity among non-Latina White women. However, parous Mexican-American women were 1.5 times more likely to use moderately or most effective contraceptive methods than nulliparous Mexican-American women (adjusted probability 66.1% vs 42.7%). Parous foreign-born women were 1.8 times more likely to use most or moderately effective contraceptive methods than their nulliparous counterparts (64.5% vs 36.0%), and parous Mexican women in Mexico were three times more likely to use moderately or most effective contraceptive methods (65.2% vs 21.5%).

CONCLUSION: Findings suggest that access to effective contraception is limited outside the context of child-bearing for women of Mexican origin in the United States and, to an even larger extent, in Mexico.

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A ccess to the full range of contraceptive methods is necessary for people to meet their reproductive goals. Yet, there are persistent inequities in contraceptive access and use in the United States by race and ethnicity, nativity, socioeconomic status, and health insurance status. $^{1-3}$ Latina individuals, who comprise 25% of reproductive-aged women in the United States, 4 experience structural inequities, including barriers to health insurance 5 and sexual and reproductive health care services, 6 that limit their access to contraception.

The Latina population is diverse; yet, most studies on contraceptive use in the United States do not disaggregate this population by important markers of access, such as nativity^{2,3} or national origin.6 Given that the majority of Latina individuals in the United States are of Mexican origin,⁷ research is needed to capture the complexity of the Latina population by disaggregating by national origin and nativity and comparing outcomes of women of Mexican origin in the United States with those of women in Mexico. Prior research has found that access to and use of effective contraception in Mexico usually occurs after a woman's first birth.^{8,9} Yet, the few studies that compare Latina individuals in the United States with women in Mexico^{10,11} do not examine contraceptive use between parous and nulliparous women, so it remains unknown how childbearing is related to contraceptive use among women of Mexican origin in the United States.

In this study, we describe patterns of contraceptive use and assess the role of parity across four ethnicity and nativity groups of sexually active women who are not seeking pregnancy: non-Latina White women, Mexican-American women, foreignborn women of Mexican origin in the United States, and Mexican women living in Mexico.

METHODS

We used publicly available data from two nationally representative surveys to conduct this secondary binational analysis: the National Survey of Family Growth (NSFG)¹² in the United States and the National Survey of Demographic Dynamics (ENA-DID)¹³ in Mexico. We combined multiple survey waves of each survey, covering a similar time period: the 2013–2015, 2015–2017, and 2017–2019 NSFG and the 2014 and 2018 ENADID. We created a binational data set, permitting direct comparison of U.S.-residing women of Mexican origin with Mexican women in Mexico.

Our study sample included female survey respondents aged 15–44 years who were sexually active and not seeking pregnancy. We excluded respondents who were pregnant, seeking pregnancy, sterile for nonsurgical or unknown reasons, or who had never had sex. Respondents in our sample belonged to one

of four ethnicity and nativity groups: U.S.-born non-Latina White women, Mexican-American women, foreign-born women of Mexican origin in the United States, and Mexican women in Mexico. Data for the first three groups came from the NSFG, and data for Mexican women in Mexico came from the ENADID. We included data from non-Latina White women as a comparator because they are more likely to have health insurance and use sexual and reproductive health services than Latina women.³ Consistent with the way in which sex and gender are ascertained in both samples, we refer to participants as "women" and use gender-inclusive language when describing people outside of the sample.

Our primary outcome was current contraceptive method use, which we measured in two ways. For both samples (NSFG and ENADID), we first categorized contraceptive method into four groups by effectiveness,14 prioritizing the most effective contraceptive method used in cases of dual use: 1) most effective methods (female or male sterilization, intrauterine device, implant), 2) moderately effective methods (oral contraceptive pills, injectables, patch, ring), 3) least effective methods (emergency contraception, condoms, diaphragm, spermicide, lactational amenorrhea, natural family planning, withdrawal, abstinence in previous 3 months, other method), and 4) no method. Second, because use of moderately or most effective contraceptive methods can be considered an indicator of contraceptive access because they require interaction with the health care system, 14,15 we collapsed current contraceptive method use into two categories for regression modeling: moderately or most effective contraceptive methods compared with least effective or no contraceptive method.

Our primary independent variable was ethnicity and nativity group, classified by participants themselves (NSFG) or based on the sample from which we drew participants (ENADID), as described above. We included age at time of survey in 5-year categories (15-19, 20-24, 25-29, 30-34, 35-39, and 40-44)years). For descriptive analyses, we categorized parity into four groups (0, 1, 2, and 3 or more) and then collapsed it into a binary variable (parous vs nulliparous) for modeling. We also included other sociodemographic variables. We categorized marital status as: 1) married or cohabitating; 2) widowed, divorced, or separated; and 3) never married. Given that Latino households in the United States are larger and experience more instability than non-Latino White households, 16 as an indicator of socioeconomic status, we classified household size as 1-2, 3-4, 5-6, or greater than 6 people. We separated place of residence into

urban or suburban compared with rural based on population greater than or less than 15,000, a cutpoint available in both surveys. We included two education variables: completion of 12 years of education and whether or not the respondent was currently in school. We classified primary language based on the first report of language spoken at home in the NSFG (English, Spanish, or other), and included all ENA-DID respondents in the Spanish category. Finally, we grouped health insurance status as private or employer-based, public, or none. The United States and Mexico have different health systems; we included Mexican respondents with formal sector social security (Mexican Institute of Social Security and Institute for Social Security and Services for State Workers) in the employer-based category to make the data more comparable.¹⁷ These social security systems in Mexico are publicly run but serve formally employed and public sector employees, making them more comparable with private, employer-based insurance in the United States.

We used the NSFG's final poststratified, fully adjusted case weights for combining the 2013-2019 waves. 18 Because the ENADID does not issue weights for combining its different cross-sections, we generated a scaling factor based on the number of reproductive-aged (15-44 years) female respondents, which we then used to adjust the 2014 and 2018 survey weights. 19 These adjusted weights created a sample that reflects the approximate population of Mexico in 2016, the midpoint of the two surveys. After adjusting the ENADID weights, we combined data from the NSFG and the ENADID. This binational data set produced estimates that were identical to those from analyses before combining but allowed us to compare across all four ethnicity and nativity groups in a single model.

We first described all independent variables by ethnicity and nativity group, then assessed the contraceptive method mix within each ethnicity and nativity group overall and by parity. All descriptive statistics were compared using Pearson's χ^2 test. We developed logistic regression models, using a dichotomous variable for current contraceptive use (moderately or most effective contraceptive method vs least effective or no contraceptive method) as the outcome. The base model included ethnicity and nativity group, parity (parous vs nulliparous), and all other sociodemographic variables; the final model also included an ethnicity and nativity and parity interaction. To improve the interpretability of the interaction terms, we calculated the absolute adjusted probability²⁰ of using moderately or most effective contraceptive methods for each ethnicity and nativity and parity group. Due to the differences in sociodemographic characteristics among groups, we performed a sensitivity analysis balancing the groups on age, marital status, place of residence, household size, educational attainment, and whether the respondent was currently in school using covariate-balancing propensity score (CBPS) weighting.²¹ CBPS weights were created using R 4.1.3 and WeightIt 0.13.0; all analyses were conducted using Stata 15.1. The Oregon Health and Science University IRB approved this study as minimal risk human subjects research.

RESULTS

Participant characteristics varied significantly across ethnicity and nativity groups (Table 1). Mexican-American women were the youngest group (40.4%) were aged 15-24 years), and foreign-born women were older (only 13.7% were aged 15–24 years). Our sample of Mexican women in Mexico was the most rural (35.5% lived in places with 15,000 or fewer inhabitants); Mexican-American women and foreignborn women of Mexican origin were the least rural (7.0% and 9.2%, respectively, lived in places with 15,000 or fewer inhabitants). The proportion of women who completed 12 years of schooling varied by group: non-Latina White women 87.9%, Mexican-American women 78.2%, foreign-born women 50.2%, and Mexican women in Mexico 39.4%. Nearly half (47.4%) of foreign-born women did not have insurance, compared with 10.3% among U.S.-born non-Latina White women, 18.7% among Mexican-American women, and 16.6% among Mexican women in Mexico.

Current contraceptive use varied across ethnicity and nativity groups (Table 2). Use of most effective contraceptive methods was highest among Mexican women in Mexico at 48.2%, compared with foreignborn women in the United States (45.6%), non-Latina White women (40.9%), and Mexican-American women (37.5%). Sterilization was the most common most effective contraceptive method used among all four ethnicity and nativity groups; although a smaller proportion (19.1%) of Mexican-American women reported using sterilization compared with all other groups, where 26.8-31.9% used sterilization. Use of moderately effective contraceptive methods was highest among non-Latina White women (25.9%) compared with all other groups (Mexican-American women 17.8%, foreign-born women 14.2%, and Mexican women in Mexico 7.7%). Use of least effective contraceptive methods was slightly higher among Mexican-American women, foreign-born women,

Table 1. Demographics and Participant Characteristics Among Sexually Active Women Not Seeking Pregnancy*

Characteristic	Non-Latina White Women	Mexican-American Women	Foreign-Born Women	Mexican Women in Mexico	Р
Unweighted n	5,441	971	719	117,904	
Weighted n	26,029,129	2,958,960	2,540,513	20,365,583	
Age group (y)	, ,	, ,	, ,	, ,	<.001
15–19	7.7 (6.8–8.8)	15.7 (13.0-18.8)	2.3 (1.4-3.7)	6.6 (6.4–6.8)	
20–24	15.8 (14.2–17.7)	24.7 (20.8–29.2)	11.4 (8.3–15.3)	15.7 (15.4–16.0)	
25–29	18.6 (17.1–20.2)	19.2 (15.8–23.2)	17.7 (14.5–21.4)	18.4 (18.1-18.7)	
30–34	18.8 (17.4–20.3)	16.8 (13.9–20.1)	18.3 (15.3–21.6)	18.8 (18.5-19.1)	
35–39	19.5 (18.0–21.1)	13.3 (9.4–18.5)	22.4 (18.0–27.6)	20.0 (19.7–20.3)	
40–44	19.5 (17.9–21.2)	10.3 (7.2–14.4)	28.0 (22.8–33.8)	20.6 (20.3-20.9)	
Marital status					<.001
Married or cohabitating	61.9 (60.1–63.7)	48.7 (43.7-53.7)	74.2 (69.2–78.7)	68.4 (68.0-68.8)	
Widowed, divorced, or separated	8.4 (7.4–9.5)	8.5 (6.2–11.6)	9.5 (6.6–13.5)	11.6 (11.4–11.9)	
Never married	29.7 (27.8-31.8)	42.8 (37.8-48.0)	16.3 (12.5–21.0)	20.0 (19.6-20.4)	
Place of residence					<.001
Fewer than 15,000 people (rural)	22.4 (17.3–28.6)	7.0 (2.8–16.7)	9.2 (4.8–16.8)	35.5 (34.8-36.2)	
15,000 people or more	77.6 (71.4–82.8)	93.0 (83.3-97.2)	90.8 (83.2–95.2)	64.5 (63.8–65.2)	
(urban or suburban)					
No. of people in household					<.001
1–2	29.4 (27.0-32.0)	14.0 (10.8–18.0)	8.1 (5.9–11.1)	7.8 (7.6–8.1)	
3–4	49.3 (46.9–51.7)	39.5 (34.9-44.2)	38.1 (32.9–43.5)	45.7 (45.3-46.2)	
5–6	18.8 (16.9–20.7)	38.1 (32.6–43.9)	44.7 (38.7–50.9)	33.1 (32.7–33.5)	
More than 6	2.5 (1.9–3.3)	8.4 (6.5–10.9)	9.2 (6.7–12.4)	13.4 (13.0–13.7)	
Currently in school					<.001
No	79.5 (77.6–81.2)	69.0 (65.1–72.7)	89.6 (85.8–92.5)	91.3 (91.1–91.5)	
Yes	20.5 (18.8–22.4)	31.0 (27.3–34.9)	10.4 (7.5–14.3)	8.7 (8.5–8.9)	
Completed 12 y education	,	(,	(2.2.2.7)	<.001
No	12.1 (10.8–13.6)	21.9 (17.2-27.3)	49.8 (43.9–55.6)	60.6 (60.1-61.1)	
Yes	87.9 (86.4–89.2)	78.2 (72.7–82.8)	50.2 (44.4–56.1)	39.4 (38.9–39.9)	
Primary language at home	,	(, , , , , , , , , , , , , , , , , , , ,	(<.001
English	99.8 (99.6–99.9)	82.2 (77.1-86.4)	30.1 (24.9–36.0)	0.0	
Spanish	0.1 (0.0–0.2)	17.8 (13.6–22.9)	69.1 (63.4–74.3)	100.0	
Other	0.2 (0.1–0.4)	0.0	0.8 (0.2–3.6)	0.0	
Insurance	(011 011)		010 (012 010)		<.001
Private	70.0 (67.3–72.5)	49.8 (44.3-55.3)	30.6 (24.8–37.1)	38.9 (38.5-39.4)	
Public	19.7 (17.7–21.9)	31.5 (26.8–36.6)	22.0 (17.2–27.8)	44.5 (44.0–45.0)	
None	10.3 (8.8–12.0)	18.7 (15.1–22.9)	47.4 (40.6–54.2)	16.6 (16.2–16.9)	
Parity		(1011 ==10)	(<.001
0	41.8 (39.3–44.3)	40.3 (35.2-45.5)	11.5 (8.7–15.2)	18.1 (17.8–18.5)	
1	16.6 (15.4–18.0)	16.7 (12.9–21.2)	12.0 (8.5–16.8)	21.7 (21.4–22.0)	
2	24.3 (22.5–26.1)	19.0 (16.0–22.5)	30.5 (25.8–35.6)	28.1 (27.8–28.5)	
3 or more	17.4 (15.8–19.1)	24.1 (19.4–29.6)	46.0 (40.7–51.4)	32.1 (31.7–32.4)	

Data are column % (95% CI) unless otherwise specified.

and Mexican women in Mexico (34.6%, 30.0%, and 32.3% respectively) than non-Latina White women (25.0%). Grouping moderately or most effective contraceptive methods together, we found that use of a moderately or most effective contraceptive method was highest among non-Latina White women (66.8%) compared with all other groups (Mexican-American women 55.3%, foreign-born women 59.8%, and Mexican women in Mexico 55.9%).

Examining unadjusted trends in contraceptive use by parity (Fig. 1), 62.0% of nulliparous non-Latina White women were using moderately or most effective contraceptive methods compared with 36.5% of Mexican-American women, 28.3% of foreign-born women, and 14.4% of Mexican women in Mexico. Compared with nulliparous women of the same ethnicity and nativity, among women with one child, the prevalence of use of moderately or most effective

^{*} Weighted column percentages using complex survey weights, combined 2013–2019 U.S. National Survey of Family Growth and 2014–2018 Mexican National Survey of Demographic Dynamics.

Table 2. Current Contraceptive Method Use Among Sexually Active Women Not Seeking Pregnancy*

Characteristic	Non-Latina White Women	Mexican-American Women	Foreign-Born Women	Mexican Women in Mexico
Unweighted n	5,441	971	719	117,904
Weighted n	26,029,129	2,958,960	2,540,513	20,365,583
Current contraceptive method				
Most effective	40.9 (39.0-42.8)	37.5 (32.3-42.9)	45.6 (39.4-51.9)	48.2 (47.8-48.6)
Sterilization	26.8 (24.8-28.9)	19.1 (14.7–24.5)	29.6 (24.4-35.5)	31.9 (31.5-32.3)
IUD	11.4 (10.3–12.7)	14.4 (11.4–18.0)	13.0 (9.3–17.7)	12.3 (12.0-12.5)
Implant	2.6 (2.1–3.3)	4.0 (2.8–5.7)	2.9 (1.8-4.9)	4.0 (3.8-4.2)
Moderately effective [†]	25.9 (24.1-27.9)	17.8 (14.3–22.1)	14.2 (10.8–18.4)	7.7 (7.5–7.9)
Least effective [‡]	25.0 (23.3-26.7)	34.6 (29.6–40.0)	30.0 (25.3-35.1)	32.3 (31.9-32.7)
None	8.2 (7.2–9.3)	10.1 (7.7–13.0)	10.2 (7.2–14.3)	11.9 (11.6–12.1)

Data are column % (95% CI) unless otherwise specified.

contraceptive method was twice as large among foreign-born women (28.3–59.7%) and three times as large among Mexican women in Mexico (14.4-43.8%). Sterilization, in particular, increased considerably with parity in all nativity and ethnicity groups.

Our multivariable analyses showed that, compared with non-Latina White women, women in all

three Mexican-origin groups had lower odds of using a moderately or most effective contraceptive method compared with a least effective or no contraceptive method (adjusted odds ratio [aOR] [95% CI] Mexican-American women: 0.69 [0.54-0.87];foreign-born women: 0.67 [0.48-0.95]; Mexican women in Mexico: 0.59 [0.40–0.87]) (data not shown).

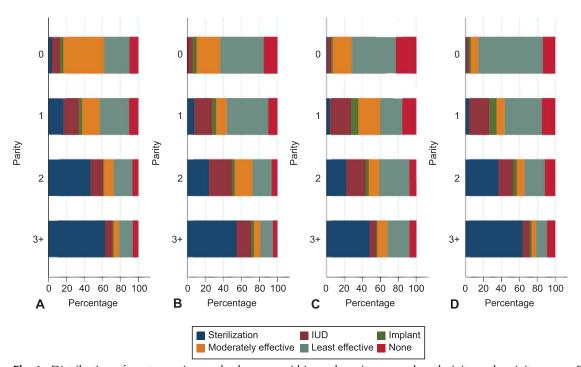


Fig. 1. Distribution of contraceptive method groups within each parity group, by ethnicity and nativity group. Estimates are weighted with complex survey weights. Non-Latina White (A), Mexican-American (B), foreign-born (C), and Mexican (D). IUD, intrauterine device.

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Weighted column percentages (95% Cls) using complex survey weights, combined 2013-2019 U.S. National Survey of Family Growth and 2014–2018 Mexican National Survey of Demographic Dynamics.

Includes birth control pills, injectables, patch, and ring.

^{*} Includes emergency contraception, condoms, diaphragm, spermicide, lactational amenorrhea, natural family planning, withdrawal, abstinence in prior 3 months, and "other" contraceptive methods.

Table 3. Logistic Regression Modeling Results for Use of Moderately or Most Effective Contraceptive Method Compared With Least Effective or No Contraceptive Method, Without and With an Interaction Between Ethnicity and Nativity and Parity*

Characteristic	aOR	95% CI	P
Ethnicity and nativity and parity interaction			
Non-Latina White women			
Nulliparous	Ref	_	_
Parous	1.12	0.87-1.43	.385
Mexican-American women			
Nulliparous	0.42	0.29-0.60	<.001
Parous	2.44	1.56-3.83	<.001
Foreign-born women			
Nulliparous	0.31	0.17-0.58	<.001
Parous	3.04	1.61–5.73	.001
Mexican women in Mexico			
Nulliparous	0.15	0.10-0.23	<.001
Parous	6.57	5.31–8.13	<.001
Age group (y)	0.07	3.3.1 0.1.5	
15–19	Ref	_	_
20–24	1.07	0.87-1.31	.531
25–29	0.94	0.75–1.18	.598
30–34	1.08	0.87–1.34	.477
35–39	1.31	1.05–1.64	.019
40–44	1.26	0.99–1.60	.062
Insurance	1.20	0.55-1.00	.002
Private	Ref	<u></u>	
Public	0.85	0.76–0.94	.002
None	0.65	0.57-0.75	<.001
Completed 12 y education	0.03	0.37 -0.7 3	<.001
No	Ref	<u></u>	
Yes	0.91	0.82–1.00	.049
Marital status	0.91	0.02-1.00	.043
Married or cohabitating	Ref		
Widowed, divorced, or separated	0.66	0.58–0.75	<.001
Never married	0.49	0.43-0.55	<.001
Place of residence	0.49	0.45-0.55	<.001
Fewer than 15,000 people (rural)	Ref		
15,000 people or more (urban or suburban)	0.93	0.85–1.02	.119
No. of people in household	0.93	0.03-1.02	.119
1–2	Ref		
3–4	0.89	 0.76–1.05	.154
5–6	1.18	0.76-1.03	.077
More than 6	0.94	0.78–1.43	.548
Currently in school	0.94	0.76-1.14	.540
	Ref		
No Yes	ker 1.42	— 1.19–1.70	 <.001
	1.42	1.19-1./0	<.001
Primary language	Dof		
English	Ref	— 0.53, 1.30	
Spanish	0.80	0.53–1.20	.280
Other	0.35	0.07–1.65	.185

aOR, adjusted odds ratio; Ref, referent.

However, when we added an interaction of nativity and ethnicity group and parity (Table 3), we found that inequities in the use of moderately or most effective contraceptive methods between ethnicity and nativity groups appeared to be almost entirely driven by nulliparous women. Among parous women, the adjusted probability of moderately or most effective contraceptive method use was approximately equal among all groups, at roughly 65% (Fig. 2). Use of moderately or most effective contraceptive methods

^{*} Estimates are weighted with complex survey weights, combined 2013–2019 U.S. National Survey of Family Growth and 2014–2018 Mexican National Survey of Population Dynamics.

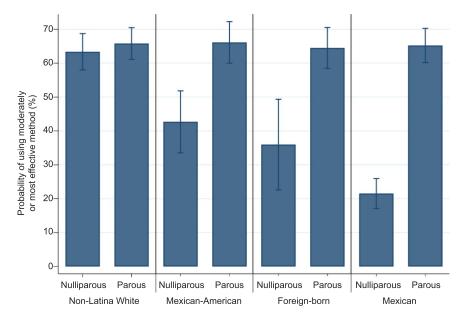


Fig. 2. Adjusted predicted probability of using a moderately or most effective contraceptive method (vs least effective or no contraceptive method) from multivariable logistic regression model, with an interaction between ethnicity and nativity group and parity.

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among non-Latina White women did not substantially differ by parity: the adjusted probability of moderately or most effective contraceptive method use was 63.4% (95% CI 58.0–68.7%) among nulliparous women and 65.8% (95% CI 61.1-70.5%) among parous women. However, parous Mexican-American women were 1.5 times more likely to use a most or moderately effective contraceptive method than their nulliparous counterparts (66.1% [95% CI 60.0–72.3%] vs 42.7% [95% CI 33.5–51.8%]). Parous foreign-born women were 1.8 times more likely to use a most or moderately effective contraceptive method than their nulliparous counterparts (64.5% [95% CI 58.5–70.5%] vs 36.0% [95% CI 22.6-49.3%]). Among Mexican women in Mexico, parous women were three times more likely to use a moderately or most effective contraceptive method than nulliparous women (65.2% [95% CI 60.1–70.3%] vs 21.5% [95% CI 17.1– 26.0%]). The sensitivity analysis balancing ethnicity and nativity groups on potential confounders did not substantially alter our results (data not shown).

Regarding covariates (Table 3), participants aged 35–39 years were the only age group significantly more likely than those aged 15–19 years to use a moderately or most effective contraceptive method compared with a least effective or no contraceptive method (aOR 1.31, 95% CI 1.05–1.64). Participants with public insurance or with no insurance were less likely to use a moderately or most effective contraceptive method (aOR 0.85, 95% CI 0.76–0.94; and aOR 0.65, 95% CI 0.57–0.75, respectively) compared with women with private insurance. Participants in school were more likely than those not in school to use a

moderately or most effective contraceptive method (aOR 1.42; 95% CI 1.19–1.70).

DISCUSSION

Using population-based national samples in the United States and in Mexico, we found that non-Latina White women in the United States were more likely to use moderately or most effective contraceptive methods than were women of Mexican origin in the United States and in Mexico. However, by disaggregating ethnicity and nativity and parity, we found that this inequity is almost entirely driven by parity; there was no difference in use of moderately and most effective contraceptive methods by ethnicity and nativity among parous women. Nulliparous women had lower probabilities of using moderately or most effective contraceptive methods compared with parous women only among women of Mexican origin (Mexican-American women, foreign-born women, and Mexican women residing in Mexico); there was no difference by parity among non-Latina White women. Findings suggest that access to contraception before childbearing may be limited for people of Mexican origin in the United States and in Mexico.

Our study provides more nuance in contraceptive method use by ethnicity and nativity than prior research. Despite national data suggesting that there are few differences in the mix of contraceptive methods used between Latina individuals overall and non-Latina White women in the United States,^{2,3} disaggregating by nativity, we found that Mexican-American women and foreign-born women were less

likely than non-Latina White women to use moderately or most effective contraceptive methods. However, this difference held true only for nulliparous women. This finding underscores the importance of addressing parity; a recent study reports that foreign-born Latina individuals were more likely to use highly effective contraceptive methods than U.S.-born Latina individuals, which obscures the inequity we uncovered by examining the intersection of ethnicity, nativity, and parity.

In the United States, women of Mexican origin may have limited access to health care outside of pregnancy²² due to lack of health insurance,²³ exclusion of immigrants from most state Medicaid proother than emergency Medicaid pregnancy, xenophobic immigration and social policies that reduce utilization of health services due to fear, 24,25 language barriers, structural inequity, and poor quality of health care for foreign-born and U.S.-born Latina individuals.^{22,26,27} In Mexico, prior work highlighted gaps in contraceptive access outside the context of pregnancy and delivery.^{8,9} Effective contraceptive methods require interaction with the health system, and many women enter the health system when they are already pregnant; nulliparous women of Mexican origin may rely on less effective contraceptive methods, such as withdrawal, due to challenges accessing more effective contraceptive methods. Unlike all three Mexican-origin groups, there was no difference in use of a moderately or most effective contraceptive method by parity among non-Latina White women. This may illustrate how the U.S. health care system does not center care at the margins²⁸ and, rather, centers care on the dominant White population; in this case, meeting their contraceptive needs at all ages and parities.

To eliminate inequities in contraceptive method use among nulliparous people, we can expand contraceptive access by expanding state Medicaid programs to include undocumented and new immigrants outside of pregnancy and by expanding the federal Title-X family planning program and state-funded family planning programs that provide free or lostcost sexual and reproductive health care regardless of documentation or health insurance status. These efforts must also include attention to social and structural determinants of health, xenophobic immigration policies and racism, and diversifying the workforce to reduce inequities in access, utilization, and quality of reproductive health care.²⁸ Only then may people of Mexican origin feel safe accessing contraceptive services before pregnancy becomes an entry to the health care system.

Despite our innovative use of a binational sample, our study has several limitations. The two surveys differed considerably on sample size, definitions of some variables, and variable distribution, although balancing the sample on several key covariates did not alter our findings. Pooling years of data may obscure nationally occurring trends in contraceptive use over time, such as the substantial increase in implant and intrauterine device use in the United States in the past decade.³ However, use of age groups at the time of the survey allowed us to track and adjust for temporal trends in contraceptive method use. The NSFG public-use data do not allow us to assess immigrant generation or timing of migration. Moreover, the small sample size of the foreign-born women reduced our power to detect differences. Although data suggest that access is a main reason for inequities in contraceptive use given that effective contraceptive methods require health care access, we did not specifically measure access or other important factors such as social context and cultural norms. Finally, measuring contraceptive use does not mean that a person is using their preferred contraceptive method, and immigrant women are less likely than U.S.-born women to be using their preferred contraceptive method.²⁹

The substantial variation in contraceptive method use patterns among ethnicity and nativity groups revealed by parity suggests that inequitable access to contraception in the United States and in Mexico plays a large role in inequitable use of contraception. Efforts are needed to expand equitable access to high-quality sexual and reproductive health care in the United States and in Mexico and to address social and structural determinants of health, including the xeno-phobic immigration policies and structural racism that affect people of Mexican origin in the United States.

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