

Frustrated Demand for Sterilization Among Low-Income Latinas in El Paso, Texas

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CONTEXT: Sterilization is the most commonly used contraceptive in the United States, yet access to this method is limited for some.

METHODS: A 2006–2008 prospective study of low-income pill users in El Paso, Texas, assessed unmet demand for sterilization among 801 women with at least one child. Multivariable logistic regression analysis identified characteristics associated with wanting sterilization. In 2010, at an 18-month follow-up, women who had wanted sterilization were recontacted; 120 semistructured and seven in-depth interviews were conducted to assess motivations for undergoing the procedure and the barriers faced in trying to obtain it.

RESULTS: At baseline, 56% of women wanted no more children; at nine months, 65% wanted no more children, and of these, 72% wanted sterilization. Only five of the women interviewed at 18 months had undergone sterilization; two said their partners had obtained a vasectomy. Women who had not undergone sterilization were still strongly motivated to do so, mainly because they wanted no more children and were concerned about long-term pill use. Among women's reasons for not having undergone sterilization after their last pregnancy were not having signed the Medicaid consent form in time and having been told that they were too young or there was no funding for the procedure.

CONCLUSIONS: Because access to a full range of contraceptive methods is limited for low-income women, researchers and providers should not assume a woman's current method is her method of choice.

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In the United States, female sterilization is the most widely relied on method among parous contraceptive users.¹ Moreover, low-income and minority women, particularly blacks and Latinas, depend more on female sterilization than do other groups. According to the 2006–2008 cycle of the National Survey of Family Growth, 50% of black women and 41% of Latinas who had at least one child and were using contraceptives reported female sterilization as their current method, compared with 35% of whites; in addition, 49% of women with incomes less than 150% of the federal poverty level used female sterilization, compared with 33% of those with higher incomes.¹

Research has approached female sterilization among low-income and minority women in the United States from two perspectives. The main concern is that the procedure is overused in these groups, either because providers are more likely to counsel minority than non-minority women about the method^{2,3} or because minority women are not fully informed regarding the alternatives to sterilization and the reversibility of the procedure.⁴ In addition, low-income and minority women, who may be insured only for pregnancy, may feel pressured to choose sterilization postpartum, as they may be unable to access contraceptives consistently following delivery.^{5,6}

An opposing concern is that low-income and minority women have a frustrated, or unmet, demand for female sterilization because of the barriers they face obtaining the procedure. Such barriers include the Medicaid-eligibility requirements for female sterilization: being aged 21 or older and having signed a consent form 30 days before the procedure. In a study of pregnant women who desired postpartum sterilization at three urban hospitals, more than 40% had not undergone the procedure within 10 months of delivery.⁷ The main reasons (cited by 32%) were bureaucratic and logistical barriers—for example, women delivered before Medicaid's 30-day waiting period had expired, and providers or operating rooms were unavailable. Additional research has found that the health care system obstructs access to the procedure.^{8–11} In a study conducted in San Antonio, 31% of women who had requested a postpartum tubal ligation did not undergo the procedure, largely because the hospital lacked funding and the women, a valid Medicaid consent form.¹¹

In addition to health care system barriers, providers may influence women's access to sterilization. A qualitative study of low-income minority women in Chicago found that providers dissuaded women from seeking sterilization for reasons that were unrelated to their pregnancy or

medical history.¹² Similarly, a qualitative study in Pittsburgh found that black women in particular frequently identified their provider as a barrier to obtaining the procedure.¹³

Evidence from a nationally representative survey of obstetrician-gynecologists indicates that patient and provider characteristics influence a physician's advice about and provision of sterilization.¹⁴ Forty-two percent of responding physicians said they would attempt to dissuade a woman from undergoing a postpartum sterilization if she was age 26 and about to have her second child, and neither she nor her husband wanted any more children. The proportion fell to 22% if the woman was having her fourth child, and 10% if she was 36 years old. Furthermore, the likelihood that a doctor would attempt to dissuade a woman from undergoing a postpartum tubal ligation varied with the doctor's level of religiosity.

In this article, we seek to determine what motivates low-income Latinas in a large border community to choose sterilization, as well as the barriers they encounter in trying to obtain the procedure. First, we use data from a prospective study of birth control pill users in El Paso, Texas, to assess what proportion wanted no more children, what proportion wanted a sterilization and what characteristics were associated with this desire. Next, using data from semistructured and in-depth interviews conducted 18 months later with a subsample of the women who had said they wanted to undergo sterilization, we address three questions: How many women had undergone the procedure? Among those who had not undergone the procedure and still wanted to, what were their reasons for wanting to do so? What prevented these women from having undergone sterilization?

METHODS

Prospective Study of Pill Users

The Border Contraceptive Access Study, conducted in El Paso from 2006 to 2008, aimed to find out how prescription versus over-the-counter access affected Latinas' birth control pill use. The study enrolled 1,046 pill users—532 women who obtained their pills in family planning clinics and 514 who got them over the counter from pharmacies in Mexico. Recruitment strategies—flyers, presentations and referrals—are described in detail elsewhere.¹⁵ Participants completed four face-to-face interviews at three-month intervals. Ninety percent of the baseline sample completed the final interview.

This analysis draws from data collected at the baseline and nine-month follow-up interviews with 801 women who had at least one child. In these interviews, we collected information on women's backgrounds, social networks (the number of relatives living in Mexico and whether the women visited them regularly), motivation for choosing their pill source, pill-related knowledge and practice, and childbearing intentions. Women who reported not wanting any more children at the final interview were asked whether they wanted to end childbearing with female sterilization. Specifically, we asked: "Do

you want to get a sterilization (get your tubes tied) so you won't be able to have more children?"

As a first step in this analysis, we assessed the proportions of women who reported at the baseline and final interviews that they wanted to limit childbearing, as well as the proportion who reported at the last interview wanting to undergo sterilization. We examined each measure by age, parity, marital status, educational attainment, a measure combining country of birth and country of last year of education, U.S. health insurance coverage and pill source. The last three of these variables refer to cultural and structural factors related to health care access that are pertinent in a border setting. The combination of country of birth and country of last year of education is a good proxy for acculturation in this sample and is strongly related to language use;¹⁵ being born and educated in Mexico may also serve as a proxy for undocumented status. Having U.S. health insurance is likely indicative of access to a full range of contraceptive methods, including sterilization, and we expected that women who had insurance would be less likely than others to be using the pill if they preferred sterilization. Finally, since measured socioeconomic characteristics differed between clinic and pharmacy users,¹⁵ we wanted to adjust for any unmeasured differences that might exist between these groups. We examined the three dichotomous outcomes by each of these variables, assessing the significance of differences using chi-square tests. We then used logistic regression to analyze the covariates associated with wanting sterilization; we report on a parsimonious model of significant predictor variables.

Follow-Up of Women Wanting Sterilization

Eighteen months after the final prospective study interview, we recontacted a subset of participants who had declared at the nine-month interview that they wanted to undergo sterilization. Our aim was to learn more about these women's reasons for wanting to permanently end childbearing with sterilization, as well as the barriers that may have prevented them from doing so. To limit this subsample to women who had had a reasonable chance of having undergone a tubal ligation in the intervening period, we attempted to recontact only those who met the Medicaid age requirement (at least 21 years old) and had two or more children. We excluded women with one child, since sterilization is infrequent in the United States among such women,¹ and only 21 primiparas in our sample wanted a sterilization. To be included, women also had to have provided written informed consent to be recontacted for future interviews, and identified themselves as either Hispanic or Latina (98% of sample). Of the 285 women we attempted to recontact, we reached 153, and 152 agreed to be interviewed.

Assuming that some women might have undergone sterilization or changed their minds about wanting more children, we screened them by asking a short series of questions about their childbearing intentions, current contraceptive method and sterilization desires. From

this screening, we identified five groups of women: 139 nonpregnant women who still wanted to undergo sterilization and whose partners had not gotten a vasectomy; six women who had undergone sterilization; two whose partners had gotten a vasectomy; one who was pregnant; and four who had changed their minds about wanting to undergo sterilization. In this study, we focus on women in the first three categories, since our main interests are women's reasons for wanting to undergo sterilization and the barriers they faced in obtaining one. After reaching a target sample size of 120, we stopped interviewing women who still wanted to undergo sterilization. We conducted these interviews between March and June 2010.

Using a combination of closed- and open-ended questions, we asked these 120 women about their reasons for wanting to end childbearing and undergo sterilization, their perceptions of the procedure's side effects and reversibility, and attempts they had made to undergo sterilization during or since their last pregnancy. To assess whether financial difficulties would obstruct future childbearing

and contraceptive choice, we asked women whether winning \$20,000 in the lottery would change their minds about having more children, and if they would use half of these winnings to pay for sterilization. Finally, we assessed women's current health insurance status, contraceptive use, and knowledge of and interest in methods other than sterilization. All interviews were recorded.

Responses to the closed-ended questions were entered into EpiData. Responses to the open-ended questions were transcribed, and transcriptions were reviewed for accuracy against the original recordings. Members of the research team read through all the interview transcripts for the open-ended questions and developed a preliminary set of codes based on common themes in the data. Using constant comparison and content analysis,¹⁶ they reread the transcripts and recoded transcript segments to refine the coding scheme. This analysis draws upon the common themes (i.e., codes) that emerged in women's responses.

In addition to these semistructured interviews, we conducted in-depth interviews with five of the six women who had undergone sterilization and with both of those whose partner had had a vasectomy. We asked these participants about the timing and location of the procedure, the process followed for obtaining it, and their or their partner's overall satisfaction with the outcome. Six of these seven interviews were completed in person, and the interviews were recorded and transcribed; the remaining interview was conducted via phone because of repeated difficulties in arranging an in-person meeting, and the interviewer took detailed notes of the conversation. The in-depth interviews took place between May and June 2010.

All aspects of this study received approval from the appropriate institutional review boards. Case summaries of how women and their partners ultimately obtained a sterilization or vasectomy are presented in these results.

RESULTS

Prospective Study

Among the 801 pill users with at least one child, 56% stated at baseline that they planned to have no further children (Table 1); an even greater proportion reported this at the final interview (65%). These proportions varied by social and demographic characteristics. Not surprisingly, differences according to age and parity were large. The proportion of women who reported at baseline wanting no more children ranged from 28% among the youngest to 80% among the oldest; and from 21% among women with one child to 76% among those with three children or more. In addition, greater proportions of women who had less than a high school education, finished their last year of education in Mexico, and lacked U.S. health insurance than of women who had never married, had some college education, were born and educated in the United States, and had health insurance stated they did not want additional children (57–68% vs. 41–49%).

TABLE 1. Percentage of parous low-income pill users who reported fertility-related preferences, by selected characteristics, Border Contraceptive Access Study, El Paso, Texas, 2006–2008

Characteristic	N	Want no more children at baseline	Want no more children nine months later	Want a sterilization nine months later
All	801	55.7	64.5	46.3
Age				
18–24	159	28.3	34.0	22.0
25–34	359	48.8	58.5	43.5
35–44	283	79.9	89.4	63.6
No. of children				
1	161	20.5	23.6	13.0
2	267	48.3	64.4	39.7
≥3	373	76.1	82.3	65.4
Marital status				
Never-married	122	43.4	54.1	38.5
Married/in consensual union	600	57.2	65.7	47.7
Previously married	79	63.3	72.2	48.1
Education				
<high school	179	68.2	74.9	57.5
Some high school	258	58.5	67.1	50.8
Completed high school	208	51.4	61.1	42.8
≥some college	156	42.3	53.2	30.8
Country of birth/country of last year of education				
U.S./U.S.	175	41.1	45.1	28.6
Mexico/U.S.	290	50.3	60.0	44.1
Either/Mexico	336	67.9	78.6	57.4
Has insurance				
Yes	115	48.7	52.2	32.2
No	686	56.9	66.6	48.7
Source of pills				
U.S. (clinic)	385	48.6	57.4	41.8
Mexico (over the counter)	416	62.3	71.2	50.5

Note: Percentages reporting each preference differed by characteristic at $p < .05$, with two exceptions: The percentages wanting no more children nine months later and wanting a sterilization nine months later did not differ by marital status.

TABLE 2. Adjusted odds ratios (and 95% confidence intervals) from logistic regression analysis examining associations between parous low-income pill users' desire to undergo sterilization and selected characteristics

Characteristic	Odds ratio
Age	
18–24 (ref)	1.00
25–34	1.55 (0.97–2.49)
35–44	2.65 (1.61–4.37)
No. of children	
1 (ref)	1.00
2	3.62 (2.12–6.16)
≥3	8.35 (4.92–14.2)
Country of birth/country of last year of education	
U.S./U.S. (ref)	1.00
Mexico/U.S.	1.37 (0.88–2.14)
Either/Mexico	1.75 (1.13–2.73)

Note: ref=reference group.

Of all parous women in this sample of pill users, 46% declared at the fourth interview that they wanted a sterilization; these women make up 72% of all those women not planning on having additional children. As with the proportion of women not wanting additional children, the proportion wanting to undergo sterilization varied sharply according to age, parity, educational attainment, country of birth and education, and insurance coverage. For example, the proportion ranged from 22% among the youngest women to 64% among the oldest; and from 13% among women with one child to 65% among those with three children or more. Moreover, greater proportions of women who had less than a high school education, finished their last year of education in Mexico, and lacked health insurance than of women who had never married, had some college education, were born and educated in the United States, and had health insurance wanted to undergo sterilization (49–58% vs. 29–39%).

In the multivariable logistic regression analysis, age, parity, and country of birth and education were associated with women's desire to undergo sterilization (Table 2). Women aged 35 and older were more likely than 18–24-year-olds to prefer sterilization over their current method (odds ratio, 2.7); also, compared with women who had one child, women with two children were more likely to prefer sterilization (3.6), as were women with three or more children (8.4). In addition, women who had completed their education in Mexico were more likely than those who were born and educated in the United States to want sterilization (1.8).

Follow-Up Interviews

•**Women still wanting sterilization.** Of the 120 women who still wanted to undergo sterilization at the 18-month follow-up, 63% were using pills; others were using condoms (11%), the IUD (10%) and other hormonal methods (7%). Twelve women reported having had a pregnancy since the end of the prospective study; of these, all but one had been using the pill or patch and

reported method failure or incorrect use as the reason for the pregnancy.

When asked why they wanted no more children, most of the women said they had had all the children they wanted (80%–Table 3). Some gave health- or age-related reasons (43%), cited conflicts with work or school (39%), or said they could not afford more children (37%). When women were pressed to give the single most important reason for not wanting any more children, the top two reasons they gave were having all the children they wanted (41%) and their health or age (25%). Ninety-seven percent said that winning \$20,000 in the lottery would not change their minds about having more children (not shown).

Many of the reasons respondents gave for wanting to undergo sterilization were closely related to their stated reasons for not wanting to have more children. Additionally, many women mentioned concerns about the effectiveness or side effects of their current contraceptive, while pill users said they felt they had been using the method for too long. One 38-year-old mother of two said she wanted to undergo sterilization “because it's permanent, because I don't have to keep checking [it]. . . . Accidents happen, and [the IUD] can move, and then there would be a pregnancy, and that's what you don't want.”

A mother of five, aged 37, worried about getting pregnant on the pill: “You can forget, and suddenly you are pregnant, because I've gotten pregnant twice on the pill. Even though I don't forget [to take] them, I am still a little afraid of getting pregnant.”

Another woman, aged 38 and with three children, said she preferred sterilization to taking hormones: “It wouldn't be more chemicals in the body. It would be a way, not a natural way, but not invasive like the pill that you have to keep taking.”

Finally, sterilization seemed safer than the pill to one 45-year-old mother of four: “With the pill, I run a risk, more of a risk than sterilization. I wouldn't have to be always bringing the pills from Mexico. At some point, the person who brings them for me won't be able to go. Maybe they won't be able to cross. I don't go [to clinics in El Paso] because they won't give them to me because I'm older than 40.”

Although women worried about side effects of other methods, they expressed few concerns about secondary effects of sterilization. Moreover, the majority knew that

TABLE 3. Percentage of parous low-income pill users, by reasons for not wanting more children

Reason	Any*	Most important
Has all the children she wants	80.0	40.8
Health/age	42.5	25.0
Wants to work/go to school	39.2	14.2
Cannot afford another child	36.7	15.8
Partner wants no more children	17.5	2.5
Children are a lot of work	9.2	1.7
Does not have a partner	4.2	0.0

*Participants could provide more than one reason. Note: Percentages are based on 120 women who still wanted sterilization at the 18-month follow-up.

the procedure was considered permanent and that little could be done if they changed their minds and wanted to have children afterward. Although some women mentioned that sterilization could be reversed, particularly if the tubes were “tied” rather than cauterized, most stated that this was very expensive and would not guarantee the ability to conceive again.

While most women clearly expressed their reasons for wanting to undergo sterilization and seemed intent on doing so, 35% had not talked to a health provider about the procedure during or since their last pregnancy. Among these women, some mentioned they had been unsure about ending childbearing at the time of their last pregnancy, but had since decided they did not want another child and would like to undergo sterilization. A few stated that their husbands wanted more children or did not want them to undergo sterilization. Others did not offer specific explanations for not having talked to a provider about the procedure.

Of the 78 women who had talked to a provider about sterilization, 81% reported having done so during their last pregnancy. Of these, one-fifth had received counseling about sterilization, 10 women had been put on a waiting list for the procedure, and only six women had signed consent forms. More than half had taken no steps to undergo sterilization beyond talking with their provider. While in the hospital following their delivery, 24 women had consulted a provider about sterilization. The majority had only talked with their doctor or nurse, and had taken no additional steps. Only two had received counseling, and four had been put on a waiting list. After their last delivery and hospital discharge, 29 women had talked to a provider about sterilization; nine of them had gotten on a waiting list for the procedure.

When women who had talked to a doctor or nurse about sterilization were asked why they had not undergone the procedure following delivery, the most common reason, as described by a 34-year-old mother of four, was lack of funds: “Well, I delivered, and I asked if they were going to sterilize me, and they told [me] that there weren’t any funds, but I had already signed the form.”

Some women were told that they could pay for the procedure themselves, but would have to pay the full cost prior to their delivery. Costs ranged from \$800 to \$2,000 and were beyond their economic means. One 35-year-old with six children related: “[They told me] that I would have to pay for it myself before I delivered in order for them to do it.”

Women also reported barriers related to the Medicaid consent form: They had requested sterilization too late in pregnancy to fulfill the 30-day waiting period, the form had not been available at delivery or they had delivered before the waiting period had passed.

Another common theme that emerged was that a woman’s doctor or nurse told her a sterilization would not be performed because she was “too young,” would want more children in the future or had not been married long

enough. However, the experiences of two mothers reveal that women across a range of ages were told they were too young to undergo sterilization. One woman, aged 37 and with three children, said she had been 23 years old when “[the doctor said that] I was still young and that I may want to continue having more children because I had three girls....[He] told me that often people change their minds and that they want to try for a boy.”

Another mother of three, aged 38, said that she had been considered too young for sterilization at age 30: “When they asked me how old I was, how long I’d been married, how many kids I had, they said it wasn’t very likely that they’d operate. [And they didn’t]...because I had been married for five years and I was 30 years old. That is, they told me that I was very young and perhaps [the marriage] wouldn’t last....and [whether they were joking or serious], they didn’t operate.”

Despite having been told she was too young, another woman mentioned that her doctor said she could undergo sterilization if she paid for it herself, but the nurse would not tell her the cost.

A few women mentioned additional reasons for not having undergone sterilization after their last delivery. Some had changed their minds because they feared surgery. Some had not discussed sterilization with their husband beforehand, or knew their husband wanted to have more children. Others did not undergo sterilization because of pregnancy- or delivery-related complications (e.g., preeclampsia).

Surprisingly, a substantial proportion of the women—most of whom had difficult economic circumstances—said they would be willing to spend a large amount of money to undergo sterilization: About half said they would be willing to spend half of a \$20,000 lottery win to do so.

•Women who had undergone sterilization. Of the 153 women whom we screened for the follow-up survey, only six reported having undergone sterilization. The five women we interviewed described a range of circumstances that had enabled them to obtain the procedure. Two had had unplanned pregnancies and postpartum sterilizations: One woman had been covered by Medicaid during her pregnancy and had not experienced difficulties with paperwork, provider willingness or funding; the other woman had not been offered enrollment in a program that would have covered her sterilization, and had been told that she would have to pay for it herself. Prior to delivery, she paid \$800 for the procedure. At the time of her delivery, however, the providers were unaware that she wanted to undergo sterilization; only after insisting on the procedure and showing her receipt of payment was she able to undergo the postpartum sterilization.

The remaining three women had had interval sterilizations. One had been referred to the main provider of sterilization services, asked to show proof of income and residency in the area, and obtained a sterilization without being put on a waiting list. Another woman had previously been told that she was too young to undergo

sterilization. She had had several health problems while using pills, experienced an unplanned pregnancy and, following the delivery of her third child, continued pill use. She reported that her health providers, after having noted a spike in her blood sugar, had advised her to stop taking pills immediately and said she would be able to undergo sterilization without going on a waiting list; two weeks later, she had the procedure. In the third case, the woman had crossed into Mexico to undergo sterilization after having been told the estimated cost for the procedure in El Paso would be between \$2,000 and \$3,000. Through her sister, she was referred to a private doctor in Ciudad Juárez, who performed the sterilization for \$150. All five women were very satisfied with having had the procedure.

•*Women whose partners had a vasectomy.* The two women whose partners had had vasectomies related similar experiences. Their partners had decided to undergo vasectomies when they had completed their families; they had three and four children, respectively. One husband had decided to undergo a vasectomy because he believed that his wife had always been responsible for contraception. At the time, he had insurance in Mexico and did not have to pay for the procedure, which he obtained in Ciudad Juárez. The other husband was concerned about his wife's difficulties with previous deliveries. After a physician had advised him that a vasectomy was simpler than female sterilization, and a male friend had reassured him that the procedure and recovery were easy and would not affect his sexual functioning, he decided to have it done. The couple visited several private physicians in Ciudad Juárez and, following a friend's referral, selected a private surgeon. Both women (and their partners) were very satisfied with their decisions.

DISCUSSION

In our prospective study of pill users, large proportions of women did not want to have more children and wanted a sterilization. Some of the characteristics that were associated with wanting to end childbearing this way (i.e., older age and higher parity) are not surprising. The elevated demand for sterilization among women born and educated in Mexico may reflect that women with the closest ties to Mexico are influenced by the very high reliance on this method in their country of origin.¹⁷

The most surprising result of this study was that the vast majority of women who had wanted to undergo sterilization had not done so by the time we reinterviewed them at the 18-month follow-up. This finding adds to a body of local studies pointing to low-income and minority women's inability to get a sterilization.⁷⁻¹³ Our study also points to several reasons why women in these groups may not be able to get a desired sterilization. Some of these reasons have been noted in other studies, while others are specific to low-income Latinas in border settings.

One of the main reasons for unmet demand was limited public funding. The financial constraints on providers in El Paso reflect the limited family planning funding for low-income women in Texas,¹⁸ as well as the impact of the state

legislature's reallocation of federal family planning funding to federally qualified health centers, none of which had the capability of providing surgical sterilization at the time of our study.¹⁹ Faced with limited financial resources, organizations that have the capacity to offer sterilization have had to adopt approaches that permit them to provide family planning services to as large a number of women as possible, mainly by offering contraceptives with lower up-front costs (e.g., hormonal methods) and rationing the small number of sterilizations that they can provide by creating waiting lists.¹⁹

We also found that the requirement to complete the Medicaid consent form 30 days prior to delivery prevented some women who qualified for subsidized services from undergoing sterilization. Such problems have also been reported in other studies of low-income women.^{7,8,12} However, the 30-day waiting period requirement is a barrier unique to low-income women and not required of women with private insurance. While the waiting period may be designed to ensure—appropriately—that low-income women are not rushed into the decision to undergo sterilization, more effort is needed to streamline the process of obtaining timely consent and make sure the paperwork is available on the day of surgery.

Another key barrier to sterilization was providers' ad hoc criteria, particularly regarding age and parity. Women were often told that they were too young or might want to have more children later, even when they had compelling reasons for wanting to end childbearing and a strong preference for sterilization. This result is consistent with research that found that providers' age and parity criteria may contribute to women's not undergoing a desired sterilization.^{8,14} It also adds to a growing body of literature showing that providers use restrictive, rather than evidence-based, criteria in deciding which method to offer women,^{20,21} thereby raising questions as to how able low-income and minority women are to access highly effective contraceptive methods and realize their childbearing preferences.

That only a few women in our follow-up study had undergone interval sterilization may reflect the impact of some type of barrier on the availability of the procedure in this community. Indeed, only one of the five sterilized women we interviewed had gone to a physician in El Paso stating that she wanted a sterilization, and had actually obtained one, without having experienced an unintended pregnancy or medical emergency. In addition, none of these women availed themselves of the state's Medicaid family planning waiver program, possibly because of a lack of awareness of this program and because of the residency restriction. In this setting, unauthorized migrants find themselves doubly disadvantaged: They do not qualify for most programs that fund sterilizations,¹¹ and they are not at liberty to cross back and forth between the United States and Mexico, where sterilization and vasectomy are available for free in public clinics, or at relatively low cost in the private sector.

Our results also point to the limited options and potential risks faced by some women who are unable to obtain sterilization. Most of the women interviewed were still using pills a year and a half after declaring that they would like to undergo sterilization. A small fraction of women were using an IUD, and only two had partners who had had a vasectomy; many of the remaining women were relying on condoms or using no method at all. The use of condoms or of no method likely reflects women's concerns about being on the pill for an excessive length of time—50% of women in the original sample for the prospective survey believed it was necessary to take a break from the pill to give their body a rest.²² Use of less effective methods may also reflect women's unwillingness to use long-acting reversible methods or their inability to access these methods (as well as vasectomy) because of the financial constraints on subsidized family planning services in the community.²³ In any case, the use of less effective (or no) methods is likely not a reflection of ambivalence toward continued childbearing in this population, given the strength of women's motivations to undergo sterilization and further underscored by the very small number who changed their mind. However, such unreliable contraceptive practices place women at risk for future unintended pregnancy. This risk is real: Several women in our study had become pregnant since declaring their desire for sterilization, and at least one other study has found a high pregnancy rate in the year following delivery among women who wanted a postpartum sterilization but did not obtain one.²⁴

Our study has several limitations. It focuses on interest in and barriers to sterilization among a particular group of women in one setting, and therefore may not reflect the experiences of low-income and minority women elsewhere. We were unable to recontact a considerable proportion of the women from our original sample. Finally, this study highlights only a portion of the women in the community who want a sterilization and does not reveal what fraction of all women who choose sterilization eventually undergo the procedure. Nevertheless, we were surprised that such a large fraction of the pill users in our original study would have preferred to be using a method they believed was both more effective and better for their health.

Despite these limitations, our study raises several important issues and questions. It suggests that researchers should not assume that a woman's current method is her method of choice; they need to ask users as well as nonusers about their method preferences. In addition, researchers should not assume that the relatively high prevalence of sterilization among low-income and minority women necessarily reflects misinformation about their contraceptive options and vulnerability to targeted medical counseling.

Furthermore, our study provides insight into structural factors underlying contraceptive inequity²⁵ and elevated rates of unintended pregnancy among Latinas in underserved

communities. In doing so, it underscores the economic implications of failing to increase sterilization access for low-income and minority women, and raises questions regarding reproductive rights for these groups in the United States. Although female and male sterilization have higher up-front costs than some of the most common methods, like birth control pills, these are ultimately more cost-effective forms of contraception;²⁶ and sterilization certainly costs less than an unwanted birth that could result from the failure to provide other methods.²⁷ Finally, the inability of some women to undergo sterilization because of their immigrant status or income contradicts the long-standing presumption that all women have the right to access their preferred method in order to achieve their reproductive goals.^{28–30}

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