Published in final edited form as:

J Health Care Poor Underserved. 2016 ; 27(2): 762–777. doi:10.1353/hpu.2016.0083.

Perceived Interest in Vasectomy among Latina Women and their Partners in a Community with Limited Access to Female Sterilization

Celia Hubert,

previously at the University of Texas, now at the National Institute of Public Health of Mexico

Kari White,

University of Alabama at Birmingham

Kristine Hopkins,

University of Texas at Austin

Daniel Grossman, and

Ibis Reproductive Health in San Francisco

Joseph E. Potter

University of Texas at Austin

Abstract

The low prevalence of vasectomy among Latino men in the United States is often attributed to cultural characteristics despite limited evidence supporting this hypothesis. We assessed male partners' perceived willingness to undergo vasectomy through surveys with 470 Mexican-origin women who did not want more children in El Paso, Texas. We conducted two focus groups on men's knowledge and attitudes about vasectomy with partners of a subsample of these women. Overall, 32% of women reported that their partner would be interested in getting a vasectomy. In multivariable analysis, completing high school (OR=2.03 [1.05, 3.95]), having some college education (OR=2.97 [1.36, 6.48]) or receiving US government assistance (OR=1.95 [1.1, 3.45]) was associated with partners' perceived interest. Despite some misperceptions, male partners were willing to get a vasectomy, but were concerned about cost and taking time off work to recover. Health education and affordable vasectomy services could increase vasectomy use among Mexican-origin men.

Keywords

Vasectomy; reproductive health services; Hispanic; health education; family planning services

Although vasectomy is less invasive, more cost effective, and carries fewer risks of complication than laparoscopic tubal ligation, the prevalence of vasectomy is lower than that of female sterilization.¹⁻⁵ In the United States (US), 13% of married men report vasectomy as their contraceptive method compared with 21% of married women who rely on female sterilization.⁶ The difference in the prevalence of sterilization use is particularly pronounced among racial/ethnic minorities.^{2,4,6-8} Among married respondents in the National Survey of Family Growth, 5.7% of Latino men had a vasectomy and 28.6% of Latina women were

sterilized, while rates of vasectomy and female sterilization were similar for non-Hispanic whites (17.4% and 17.7%, respectively).⁶

Some authors have hypothesized that racial/ethnic differences in the prevalence of vasectomy may be due to cultural factors, such as perceptions that masculinity is closely tied to the ability to father children and fears of losing respect in one's social network.^{2,7,9,10} However, very few studies have directly assessed these issues among Latino men, and one study found little support for the hypothesis that lack of interest in vasectomy among Latino men was due to concerns about masculinity and impotence.¹¹ Indeed, in Latin American countries like Mexico and Guatemala, where one might expect a widespread resistance to vasectomy because of so-called macho gender norms surrounding sexuality and contraceptive responsibility, men with higher levels of education are more likely to use vasectomy than less educated men, just as in the US.^{4,6,12-15} Several studies on vasectomized men in Mexican clinics reported that participants' average years of education ranged between 11.6 to 13.4^{12,14,16} considerably higher than the male national average of 8.8 years¹⁷. Additionally, there have been notable increases in vasectomy use in these countries following media campaigns and expansion of clinic services.^{13,18-21}

Other potential explanations for the limited use of vasectomy among Latino men in the U.S. are that they have more limited knowledge of the procedure and lack access to services.^{4,6,7,9} Past studies have reported that Latinos are less likely than non-Hispanic Whites to know what a vasectomy is, and few men in any racial/ethnic group report having received any counseling about the procedure.^{7,11,22} Additionally, Latino adults have the highest rates of being uninsured among adults of all ethnicities,²³ and access to subsidized reproductive health services for men are limited. Few states have included low-income, uninsured men in their Medicaid family planning expansion programs, and just 10% of publicly funded family planning clinics offer vasectomy services.²⁴ Furthermore, plans in the Health Insurance Marketplace are not required to cover any service related to men's reproductive capacity such as vasectomies.

However, Latinas can often access health insurance during pregnancy and the postpartum period, which may cover female sterilization and lead to greater use of this method compared with vasectomy.^{3,4} Unfortunately, it is difficult to evaluate these competing potential explanations because there have been few recent studies of Latino men's interest in vasectomy and perceived barriers to the procedure.

In the current study, we used mixed methods to explore factors associated with men's interest in vasectomy among Mexican couples in a US border community. From a secondary analysis of a prospective study of oral contraceptive users in the Border Contraceptive Access Study (BCAS), we assess whether women in El Paso, Texas believe their partner would be willing to get a vasectomy, and explore characteristics associated with partner interest in the method. We also analyze data from focus groups conducted with a subset of BCAS participants' male partners to gain insight into Latino men's attitudes towards vasectomy.

Methods

Study setting

El Paso is a city of 2.4 million inhabitants located on the US-Mexico border at the westernmost point of the state of Texas. The population is approximately 80% Hispanic, of which 93% are Mexican-origin.²⁵ Income and educational levels are well below the US average, and health insurance coverage is also very low.²⁵ For reasons such as cultural familiarity, convenience, lower cost, and perceived quality of care, cross-border use of healthcare is a common practice among El Paso residents.²⁶⁻²⁸

There are a number of publicly funded family planning providers in the metropolitan area, but only one offered vasectomy at the time of the study; provision of the method has been limited by financial constraints as well as difficulties finding trained physicians willing to perform the procedure for the amount that state funds would reimburse it. For men willing to pay out-of-pocket at a private clinic, vasectomies are available across the border in Ciudad Juárez for a price well below the \$1,000 or more charged by a urologist in private practice in El Paso.

Prospective study of oral contraceptive users

The BCAS prospective study of oral contraceptive users included 1,046 women aged 18 to 44 years who resided in El Paso, Texas and obtained their pills either by prescription at US family planning clinics (n=532) or over the counter at pharmacies in Mexico (n=514). Women were recruited at clinics offering family planning services and through flyers, presentations and referrals and, after entering the study, completed a series of four interviews about their contraceptive use over a nine-month period. Information about women's sociodemographic and partnership characteristics, fertility intentions, and knowledge about the pill were collected at the baseline and fourth interviews. The fourth interview also included questions about contraceptive preferences and discussions with health care providers about sterilization that women and their partners may have had. The study was conducted from December 2006 to December 2008, and 90% of the baseline participants completed the fourth interview.^{27,29}

As reported elsewhere,^{29,30} a large percentage of women stated in the fourth interview that they did not want more children and wanted to have a female sterilization or use a method more effective than oral contraceptives. In this analysis, we use data from 470 women who reported at the fourth interview that they were in a sexual relationship, had children and did not plan to have additional children (49.9% of the 941 women who completed the fourth interview).

As a first step in the analysis, we created a dichotomous variable for men's perceived interest in vasectomy based on women's responses to the following questions asked in the fourth interview: "Has your current partner ever asked to get a vasectomy?" and "Do you think your partner would be willing to get a vasectomy?" If a woman reported that her partner had neither asked nor would be willing to get a vasectomy, we considered her partner as not interested in vasectomy. If she reported that her partner had either asked for a vasectomy or had not asked but would be willing to get one, we considered her partner to be interested in

vasectomy. We combined positive responses to each of these questions into a single category of interest since preliminary analyses did not reveal significant differences between women whose partners had asked and those who would be willing to get a vasectomy.

Next, we computed frequencies of women's characteristics overall and according to their partners' perceived interest in vasectomy. We assessed a woman's partnership characteristics: whether she was married to her partner and if her relationship had lasted ≥ 5 years; no other partner-specific data were collected in the interviews. We used a woman's educational attainment, whether she had health insurance in the US, whether someone in her household received US government assistance (e.g., Women, Infant and Children's Nutrition Program, food stamps), and her source of oral contraceptive pills at baseline (US clinic, over-the-counter in Mexico) as indicators of her socioeconomic status and access to reproductive health services. To assess the strength of cultural ties to Mexico (cultural markers), we included language used at home (English, Spanish, both equally), whether she had relatives that she visited in Mexico at least once a month, and whether her partner was the sole economic provider for the household, which may reflect adherence to more traditional gender roles.³¹ Finally, the variables we selected to assess contraceptive knowledge and preferences were having ever received contraceptive counseling, desire for female sterilization, and how the respondent answered the true/false question, "Women sometimes need to take a break from pill use to let the body rest." We found in earlier work that women who believe the body needs a break are more likely to hold misperceptions about oral contraception.^{32,33} We also report the statistical significance of differences between women's characteristics and partners' willingness to get a vasectomy using chi-squared tests.

Next, we used multivariable adjusted logistic regression to assess the association between the variables described above (partnership characteristics, socioeconomic status and access to reproductive health services, cultural markers and contraceptive knowledge and preferences) and partners' perceived interest in vasectomy. Our dependent variable was coded as one if the partner was interested in vasectomy and zero otherwise. We did not adjust for age and parity because our sample only includes women who want to stop childbearing, and there was limited variation in these variables. Additionally, goodness-of-fit measures (not shown) in preliminary analyses provided very strong support for excluding these variables.

Focus groups with male partners of women who do not want more children

To understand Mexican-origin men's perspectives about vasectomy and ending childbearing, we recruited the male partners of 120 women who had been re-contacted eighteen months after the fourth prospective study interview about their barriers to obtaining a desired sterilization.²⁹ Women who were married or living with a partner that resided in El Paso (n=85) were asked if they and their partners agreed about ending childbearing and, if so, if they thought their partner would be willing to participate in a study about his opinions on sterilization and the availability of services in El Paso. Overall, 35 women (41%) thought their partners would be willing to participate, and in June 2010 we conducted two focus groups with male partners (n=13).

The focus groups were led by a native Spanish speaking female Mexican-origin moderator who was knowledgeable about the border setting and had extensive experience conducting qualitative research, and a non-Hispanic female assistant moderator took notes during the group. We do not believe that the gender discordance adversely affected rapport between the moderators and male participants since past research has found that men are comfortable discussing issues related to contraception with female researchers.^{34,35} The semi-structured focus group guide addressed the following topics: conversations between partners about childbearing and motivations to not have more children, perceptions of female and male sterilization, sterilization experiences of others, and knowledge about female and male sterilization services in El Paso. At the end of the focus group, men completed a self-administered sociodemographic questionnaire to provide information on their age, number of children, country of origin, educational level, and whether they had US health insurance. Both focus groups were conducted in Spanish, recorded and transcribed. Men provided their oral consent to participate and received \$50 for taking part in the group.

Two of the study's authors independently reviewed the focus group transcripts and identified a preliminary set of codes based on common themes that emerged in the groups. They then met to compare their coding, and through an iterative process of discussing the codes and rereading the transcripts, finalized the coding scheme. The data were coded by hand in both stages. Here, we summarize the common themes that emerged in men's knowledge of female sterilization and vasectomy, reasons to consider getting a vasectomy, and perceived barriers to undergoing the procedure. Quotes representative of these themes are presented below and were translated from the original Spanish by the authors.

This study received approval from the Institutional Review Boards at University of Texas at Austin and the University of Texas at El Paso.

Results

Of the 470 women who had a sexual partner and did not want more children at the fourth interview, the majority were over age 30, had three or more children, were married and had been with their partner for 5 years or more (Table 1). Less than 50% of women had completed high school. Few women reported having U.S. health insurance, and 77% received some kind of US government assistance. Most women reported speaking only Spanish at home, visiting relatives in Mexico at least once a month, and having a partner who was the sole contributor to the household income. The majority of women said they had received counseling about contraceptive methods (72%) and wanted to undergo sterilization (71%), and half thought women need to take a break from the pill to let their body rest.

Overall, 32% of women reported that their partner would be interested in getting a vasectomy. Compared with women whose partner was not interested in getting a vasectomy, women with interested partners were more likely to be married, in a relationship for 5 years or more, have a partner who was the sole contributor to household income, have at least a high school-level education, receive US government assistance, obtain their pills at US clinics, speak English at home, and visit relatives in Mexico at least once a month. A higher

percentage also reported that they wanted a female sterilization, had received counseling about contraception, and believed that women need to take a break from the pill.

In the multivariable-adjusted logistic regression, only indicators of socioeconomic status were significantly associated with women's perception of their partners' interest in vasectomy (Table 2). Women who had completed high school or some college had higher odds of reporting their partner was interested in vasectomy. In addition, women who received US government assistance were more likely to have a partner interested in the procedure than those who did not receive these benefits. Finally there was a sizeable, but not significant, association with insurance coverage. Notably, none of the cultural markers were significantly associated with women's perceived willingness of their partner to get a vasectomy after multivariable adjustment.

Focus groups with male partners

The 13 male focus group participants ranged in age from 28 to 49 years (mean 37 years), and 10 (77%) had three or more children. All of them identified themselves as Hispanic/Latino, and most were born in Mexico (n=10), usually spoke Spanish at home (n=12), and crossed the border into Mexico at least once a month (n=10). Approximately 70% (n=9) had not completed high school, and only three had U.S. health insurance.

Men's perceptions of female sterilization were very positive overall, and participants in both groups commented that it was the best method when couples had decided that they did not want more children. Although men knew it was a highly effective method, some did not have an accurate understanding of female sterilization, stating that it involves "*removal*" or "*cutting off the ovaries*," and others discussed how women they knew had had their uterus removed. Men also commented that some women experienced depression or regret, had changes in mood or sex drive, and gained weight after the procedure. Despite being a frequently used method, men were clearly aware that women faced barriers obtaining female sterilization in El Paso, largely due to their age and lack of economic resources:

"They refused to sterilize my sister because she was too young. She has 4 children and she is 25 years old... They said she is too young but it was her fourth [child]. Why should she wait?"

"Well, here the cost is supposedly \$1,200 ... and they don't give you the opportunity to make payments.... You have to pay \$800 as a deposit and then the rest. And now, in our current situation, we can't do it [because] we have to pay rent, we have to pay for school."

Most participants in the two groups had also heard of vasectomy and knew it was a permanent method for couples that did not want more children. Several men in both groups commented that vasectomy was simpler than female sterilization and a relatively quick procedure:

"I think that the operation for men is much easier because I have seen cases... [Like] my brother-in-law, I took him [to the clinic] in Juárez, it lasted 20 minutes, [and] he walked out."

Men also stated vasectomy was a good method to use, especially when their partners could not undergo sterilization or if they were having health problems.

“Sometimes, we also have to think about the woman, like when your wife has been sick during her last pregnancies, and we have to consider that if she gets pregnant again, she might not make it. If you have the solution, you can do it.”

Although men perceived that vasectomy had several advantages over female sterilization, not all them were interested in getting a vasectomy for themselves. Several participants expressed concern about possible changes in their libido following the procedure, though others in the groups disputed this idea, noting that they knew men who had a vasectomy and said that the procedure had no impact on their sex life:

P1: “[My] friend... has two friends who had surgery and they told him that they lost their desire to have sex, but I don't know.”

P2: “I don't think so because my boss got the surgery and ... he tells me that his girlfriends [still] call him. He tells me, ‘Get the surgery! Anyways, nothing happens.’”

Comments about *machismo* and ideas that vasectomy adversely affects one's masculinity only came up in one group. While acknowledging that machismo can be a barrier to getting a vasectomy, one participant also offered a counterargument:

“Many of us do not think like that because basically we are machos... ‘I won't get surgery, why am I going to get surgery?’ [But] then, why do you want your wife to get surgery? If you won't do it, why do you want her to do it?”

Other barriers to getting a vasectomy were noted by several men who seemed willing to have the procedure. For example, a few participants in both groups expressed concerns about having to take time off work to recover:

“Well in my case, I would like to get the surgery but I haven't because a friend of mine told me that you have to spend one or two weeks without doing heavy work, and my work is really heavy and I cannot spend one or two weeks without working.”

Cost was also viewed as a barrier to getting a vasectomy, and several men noted that getting medical services in El Paso was particularly expensive. In fact, those who knew other men who had undergone vasectomy said they had all obtained the procedure in Mexico, where services were cheaper:

“Well, I've honestly never seen or heard my friends here in El Paso saying to me ‘No, go here or go there [to get vasectomy],’ [but] they do say this for Juárez. Well my brothers-in-law, my cousins, all got vasectomy in Juárez, my friends from work were operated [on] in Juárez.”

Discussion

The low prevalence of vasectomy among Latino men relative to whites has often been attributed to cultural beliefs and attitudes that make them unwilling to undergo the

procedure,^{2,7} but there have been few studies that have specifically examined these issues. Analyses of our interviews with Mexican-origin women and focus groups with their male partners reveal that Latino men are indeed willing to get a vasectomy. More than 30% of women who wanted to stop childbearing reported that their partner would be willing to get or had inquired about getting a vasectomy. Although our sample is not representative of the US Latino population, this figure suggests a potential demand of vasectomy among a subset of Latinos in the U.S. Mexican-origin male partners also considered vasectomy to be an acceptable contraceptive option for couples who do not want more children. Similar to other recent studies,¹⁰ we found little support for cultural explanations of Latino men's limited use of vasectomy but identified other potentially important reasons that they may be unlikely to undergo the procedure.

We assessed a range of cultural markers in our regression models, but found that variables indicating stronger cultural ties to Mexico or adherence to traditional gender norms were not significantly associated with men's perceived willingness to get a vasectomy. Moreover, Mexican-origin focus group participants did not universally endorse attitudes about women having primary responsibility for contraception. Although men looked favorably upon female sterilization as an option for those who do not want more children, they also commented that vasectomy was a simple method and a good choice for couples, particularly to prevent their partner from risking another difficult pregnancy or when she faced other barriers to getting a sterilization. Using a sample of Mexican-origin participants from a border city may indicate that women and men in our study share similar attitudes and beliefs held by men and couples in Mexico. In fact, our results correspond with findings from an ethnographic study of men undergoing vasectomy in Mexico and highlight another aspect of macho cultural attitudes – that 'real men' will take the necessary steps to care for their families.³⁶

Despite demonstrating interest in vasectomy among Latino men of Mexican-origin, our study suggests that lack of accurate knowledge about vasectomy is an important barrier that may prevent men from undergoing the procedure. Unlike earlier studies of Latino men,¹¹ all the male participants in our study knew what vasectomy was, but several had misperceptions about adverse effects following the procedure, such as concerns about having a lower sex drive and being unable to take substantial time off from their physically demanding jobs. Men in Mexico have expressed similar reasons for their lack of interest in vasectomy;³⁶⁻³⁸ however, these concerns are not entirely unique to Latinos.¹⁰ The fact that these concerns are commonly held calls attention to the need for greater education about vasectomy and recovery from the procedure.

It is worth noting that men in our study who expressed more accurate knowledge and more positive attitudes about the method also had close social connections to other men who had undergone the procedure. By accompanying a brother-in-law to the clinic or hearing testimonials from uncles and co-workers, men observed that vasectomy was indeed a simple procedure and had trusted sources who could dispel myths and misinformation. This finding is supported by substantial evidence that social networks facilitate behavioral change,^{39,40} and that testimonials from men with positive experiences increase acceptability of the

method.^{10,13,41} Educational campaigns that adopt such strategies may be useful to improve Latino men's knowledge and adoption of the method.

Although we did not find evidence for cultural markers, our regression model demonstrated a strong association between socioeconomic status indicators and male partners' perceived interest in vasectomy. We found that women with higher levels of education were more likely to report that their partner would be interested in the procedure. This is similar to other studies in which vasectomy is more prevalent among women and men with more education compared to those who have a high school-level education or less.^{4,6,12,14,16} This might be due to the fact that more educated women have a better understanding of the procedure and are more likely to talk about contraception with their partners⁴². Interestingly, we also found that low-income women, as reflected by receipt of government assistance, were also more likely to report their partner would be interested in vasectomy. This may be related to couples' difficulties being able to financially support another child²⁹. Previous research reported economic problems as the main reason for wanting to stop childbearing among couples who decided to have a vasectomy⁴³.

Our focus groups with male partners also identified important barriers to accessing vasectomy services. Men pointed out that they did not know where they could get the procedure in El Paso and some commented that they could not afford it in the US. Stories of friends and relatives crossing into Mexico to get a vasectomy, where public clinics offer the procedure at no cost to everyone, further highlight the information and cost barriers on the US side of the border. A study by Haws and colleagues⁴⁴ found that providing vasectomy for free or at low cost, in combination with training staff to perform the procedure, was an effective approach to increase the use of the method among low-income men, and researchers have since emphasized the importance of increasing the availability of information and services in the US public sector.^{4,6,45}

The present study has several limitations. Our analysis of men's willingness to get a vasectomy is based on women's perceptions of their partner's interest in the method, and we had few characteristics of male partners that we could include in the regression model. Therefore, we only have an indirect assessment of men's unmet demand for the procedure. Future studies that assess men's interest directly are needed. In addition, our sample consisted of oral contraceptive users interested in female sterilization, and this interest may have predisposed our sampled women to think more favorably of vasectomy compared to women not interested in a permanent contraceptive method. Additionally, because we included the male partners of women who had been unable to get a sterilization and thought that their partners would be willing to participate in our study, the Mexican-origin men in our focus groups may have had more positive attitudes toward vasectomy than men whose partners had not experienced such barriers, or whose partners did not think that they would be willing to participate. However, another study of low-income men from diverse backgrounds also found that men who did not want more children expressed interest in getting a vasectomy in order to share contraceptive responsibility with their partner and noted few racial/ethnic differences in knowledge and attitudes about the procedure.^{10,22} Finally, our study was conducted in El Paso, Texas, a city in a medically underserved area in a state that has curtailed funding for subsidized family planning services in recent years,⁴⁶

and therefore access to affordable vasectomy services may be more limited in this setting than elsewhere. However, given that few publicly funded family planning clinics in the US provide vasectomy on-site and that family planning coverage for low-income men through Medicaid is quite limited,^{24,47} low-income men in other areas may face similar barriers to obtaining vasectomy.

Conclusions

Despite these limitations, our study fills an important gap in the literature regarding the reasons for the low prevalence of vasectomy among Latino men of Mexican-origin in the US. We found evidence that the high cost of vasectomy in the US private sector and limited access to subsidized services, along with misinformation about the procedure and concerns about recovery time, likely play key roles in Latino men's limited use of this method, and that cultural factors may be far less important than previously suggested. Increasing funding for subsidized vasectomy services and adapting education campaigns that have been successful in other settings may be effective strategies to assist Latino men meet their unmet demand for vasectomy.

Acknowledgments

This research was funded by grant R01HD047816 from the Eunice Kennedy Shriver National Institute of Child Health and Human Development, and by grant SFP3– 6 from the Society of Family Planning. Infrastructural support for the study was provided by a grant from the Eunice Kennedy Shriver National Institute of Child Health and Human Development (R24 042849) to the Population Research Center, University of Texas at Austin. Kari White also received support from the National Institute of Child Health and Human Development (K01 HD079563).

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Table 1

Percentage of parous low-income oral contraceptive users who reported having a partner and wanting no more children, by perceived partner interest in vasectomy

Characteristic	N	Partner is interested	Partner is not interested	χ^2 p-value
All	470	31.9	68.1	
Age				
18-24	50	30.0	70.0	0.262
25-29	85	31.8	68.2	
30-34	106	39.6	60.4	
35 +	229	28.8	71.2	
Parity				
1	27	29.6	70.4	0.743
2	164	34.2	65.9	
3	279	30.8	69.2	
Marital status				
Not married	172	23.8	76.2	0.004
Married	298	36.6	63.4	
Duration of relationship				
Less than 5 years	48	29.2	70.8	0.405
5 years or more	323	35.3	64.7	
Husband/partner is the sole provider of income				
No	194	28.4	71.7	0.141
Yes	264	34.9	65.2	
Education				
< High school	121	24.8	75.2	0.011
Some High school	159	27.0	73.0	
Completed High school	112	40.2	59.8	
some college	78	41.0	59.0	
U.S. Health insurance status				
No U.S. health insurance	417	32.9	67.2	0.221
U.S. Health insurance	53	24.5	75.5	
Receive U.S. government assistance				
No	109	23.9	76.2	0.039
Yes	361	34.4	65.7	
Source of pills				
Mexico (over the counter)	269	30.1	69.9	0.332
U.S. (clinic)	201	34.3	65.7	
Language used at home				
Spanish	369	32.0	68.0	0.576
Spanish and English	79	29.1	70.9	
English	22	40.9	59.1	
See relatives who live in Ciudad Juarez at least once a month				

Characteristic	N	Partner is interested	Partner is not interested	χ^2 p-value
No	168	29.2	70.8	0.340
Yes	302	33.4	66.6	
Ever received counseling about contraceptive methods				
No	130	24.6	75.4	0.036
Yes	340	34.7	65.3	
Body needs to take a break from the pill				
Agree/ Not sure	240	36.3	63.8	0.036
Disagree	228	27.2	72.8	
Wants to be sterilized				
No	135	28.9	71.1	0.372
Yes	335	33.1	66.9	

Table 2

Characteristics associated with male partners' perceived willingness to undergo vasectomy

Characteristic	Adjusted OR (95% CI)
Partnership characteristics	
<i>Marital status</i> (ref: not married)	
Married	1.33 (0.74, 2.38)
<i>Duration of relationship</i> (ref: less than 5 years)	
5 years or more	1.31 (0.62, 2.76)
Socioeconomic status and access to reproductive health services	
<i>Education</i> (ref: < High school)	
Some High school	1.46 (0.78, 2.73)
Completed High school	2.03 (1.05, 3.95) *
Some college	2.97 (1.36, 6.48) **
<i>U.S. Health insurance</i> (ref: No U.S. health insurance)	0.52 (0.22, 1.22)
<i>Receive U.S. government assistance</i> (ref: No)	1.95 (1.10, 3.45) *
<i>Source of pills: El Paso clinic</i> (ref: Mexican pharmacy)	1.13 (0.70, 1.82)
Cultural markers	
<i>Language used at home</i> (ref: Spanish)	
Spanish and English	0.85 (0.44, 1.63)
English	2.07 (0.67, 6.36)
<i>See relatives who live in Ciudad Juarez at least once a month</i> (ref: No)	1.33 (0.82, 2.15)
<i>Husband/partner is the sole provider</i> (ref: No)	1.22 (0.73, 2.04)
Contraceptive knowledge and preferences	
<i>Ever received counseling about contraceptive methods</i> (ref: No)	1.53 (0.90, 2.60)
<i>Disagree with "Body needs to take a break from the pill"</i> (ref: Agree/Not sure)	0.68 (0.43, 1.08)
<i>Wants to be sterilized</i> (ref: No)	1.22 (0.71, 2.10)
Constant	0.07 (0.02, 0.24) **

† p < .10

OR: Odds ratio; Odds Ratios are from a logistic regression model that adjusted for all variables in the table.

CI: Confidence Interval

**
p < .01*
p < .05