

# Characteristics Related to Effective Contraceptive Use Among a Sample of Nonurban Latinos

**CONTEXT:** A better understanding of effective contraceptive use among Latinos is needed to reduce their high rate of unintended pregnancy. Most research has focused on urban Latinas and has overlooked the relationship context of effective contraceptive use.

**METHODS:** Interviews were conducted among a sample of 450 Latino women and men aged 18–25 in sexual relationships, who were recruited from community sites in four rural Oregon counties in 2006. Bivariate and multinomial logistic regression analyses were used to examine the associations between effective contraceptive use and individual, cultural and relationship characteristics.

**RESULTS:** Half of participants reported effective contraceptive use in their primary relationships: Thirty-six percent consistently used a female method, and 15% consistently used condoms. Acculturation and confidence in one's ability to practice contraception with a primary partner were associated with female method use rather than no effective use (risk ratios, 0.7 and 1.7, respectively). Participation in sexual decision making was positively associated with condom use rather than no effective method use (2.2) or female method use (1.9); partner involvement in birth control was positively associated with condom use rather than female method use (1.8).

**CONCLUSIONS:** Variations in effective contraceptive use among nonurban Latinos appear related to relationship characteristics and dynamics. Contraceptive counseling and unintended pregnancy prevention programs that are tailored to reflect relationship contexts and to include male partners where appropriate could improve the quality and cultural relevance of services among nonurban Latinos.

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Unintended pregnancy can have profound consequences for women and their families, including long-term adverse outcomes for mothers and children.<sup>1,2</sup> Among young adults, the inability to plan pregnancies and practice contraception effectively may interfere with educational and economic advancement. In the United States, more than one in 10 women aged 18–24 had an unintended pregnancy in 2001, a rate twice that among women overall.<sup>3</sup> Unintended pregnancy rates also were elevated among low-income and minority women; Latinas' rates of unintended pregnancy and unintended birth were more than double those of non-Hispanic white women. At current rates, 52% of Latina adolescents will be pregnant at least once before age 20.<sup>4</sup> Although Latinas' overall pregnancy rate declined between 1994 and 2001, the proportion of their pregnancies that were unintended increased from 48% to 54% over that period.<sup>3</sup> Furthermore, disparities in unintended pregnancy have the potential to widen as the Latino population continues to increase. From 1970 to 2006, the U.S. Hispanic population grew from 5% to 15% of the total population; by 2050, an estimated 24% of the U.S. population will be Latino.<sup>5</sup>

The Latino population is an extremely diverse group in terms of country of origin, length of time in the United States and level of acculturation.<sup>6</sup> To improve efforts

to reduce unintended pregnancy among young adult Latinas, more information is needed on the context of contraceptive use among Latino subgroups. Between 1990 and 2000, Latino populations in some rural areas experienced dramatic growth: statewide increases of 316% in Oregon, 268% in Washington and 178% in Idaho.<sup>7</sup> The use of effective contraceptives in rural and other nonurban areas may be unlike that in large urban centers. Rural Latinos could have greater difficulty than their urban peers in using contraceptive methods, accessing family planning services and finding providers that are culturally competent. Rural Latino populations include disproportionate numbers of people who have emigrated from economically depressed regions of Mexico, have little or no formal education, and speak little or no English.<sup>8</sup> Rural areas often lack the informal social networks of traditional immigrant neighborhoods that meet newcomers' needs for cultural affinity, affordable housing, and help in finding work and social services.<sup>9</sup> In addition, rural areas often do not have the systems in place to accommodate the needs of recent immigrants, including family planning services.

To date, research on correlates of contraceptive use among Latinos has focused primarily on individual-level demographic characteristics, such as nativity status (U.S.-born vs. foreign-born),<sup>10,11</sup> years in the United States<sup>12</sup> and

language spoken.<sup>12–14</sup> In addition, findings on the association between acculturation and contraceptive use among U.S. Latinas have been inconsistent. Some studies have found a positive association between acculturation and both effective use of contraceptives and having a positive attitude toward birth control methods;<sup>15</sup> others suggest an inverse relationship between acculturation and contraceptive use.<sup>16–18</sup>

The focus on individual characteristics, however, does not take into account that contraceptive use often takes place within relationships. Theoretical models and interventions for the prevention of HIV have begun to focus on the relationship context of HIV risk, recognizing that condom use is influenced by relationship characteristics and dynamics.<sup>19,20</sup> Relationship context could be equally important in understanding contraceptive use, as some studies conducted in urban areas suggest. Among a sample of young Latinas in Los Angeles, relationship duration, involvement in contraceptive decision making and discussion of contraception with a partner were positively associated with effective contraceptive use.<sup>21</sup> In a study of low-income women recruited from clinics in Dallas, a greater proportion of foreign-born Hispanics than of non-Hispanic whites reported negative partner influences on contraceptive use (e.g., “my partner doesn’t want to use birth control”);<sup>11</sup> the proportion did not differ between U.S.-born Hispanic and white women. Whether contraceptive use itself was related to partner influence was not explored.

Because Latinos also have disproportionately high rates of HIV,<sup>22</sup> condom use has been the focus of studies that have explored the role of relationship dynamics in preventive behavior. Among low-income women recruited from clinics in Miami, those who reported joint decision making were more likely than those who did not to be consistent condom users.<sup>14</sup> In the same study, Hispanic women were more likely than non-Hispanic whites and non-Hispanic blacks to report joint decision making. In a study of decision-making dominance and condom use among a multicity sample of primarily Hispanic and black women aged 18–25, more than half reported making contraceptive decisions with their partner;<sup>23</sup> condom use was lower among women who reported that their partner alone makes the decisions about using condoms than among those who make the decisions themselves or with their partner. Participation in decision making and other relationship measures, including partner norms and communication, also were associated with condom use among a community sample of young adult Latino men in Los Angeles.<sup>24</sup> Other studies suggest that men participate in contraceptive decision making and take responsibility for pregnancy prevention;<sup>25–29</sup> however, few studies that include men have examined the particular variables associated with use of contraceptives other than condoms.

Gender-based power imbalances in heterosexual relationships may be especially salient for Latina women because of the cultural values of a traditionally *machista*

society, in which men are defined by their ability to control and dominate sexual behavior and family life.<sup>23,30</sup> A growing body of research examines how Latino cultural values of *familismo* (strong feelings of loyalty to and the importance of the family as a social unit and source of support), *simpatia* (maintenance of harmony), *personalismo* (value of personal character), *respeto* (adherence to authority) and the gendered role of *machismo* influence HIV prevention.<sup>31–37</sup> These values may affect relationship processes of Latino men and women, which could, in turn, influence contraceptive behavior.<sup>38</sup>

This study was part of a larger project, Proyecto de Salud Para Latinos, which examined the social and cultural characteristics related to contraceptive use, sexual risk behavior and HIV prevention behavior among young adult Latinos, primarily of Mexican heritage, living in rural Oregon. In this study, we examined whether relationship characteristics and dynamics were independently associated with participants’ effective contraceptive use. We build on previous research by including men, and by examining relationship and partner-specific measures. According to prior research, individual measures such as pregnancy intention and perceived vulnerability to pregnancy or STDs vary by partner type, or by whether a respondent is asked questions in a general format or with respect to a particular partner.<sup>39–41</sup>

In addition, we extend previous research by distinguishing between consistent male condom use and the use of female contraceptive methods. The interdependent nature of male condom use—requiring the participation of two individuals<sup>42</sup>—has been the focus of a number of studies that examine the role of relationship dynamics in HIV prevention.<sup>14,23,43–45</sup> Whether relationship dynamics are related to condom use for contraception, however, has received less attention. Furthermore, it is not known whether relationship dynamics are associated with men’s and women’s choice of other common methods, such as oral contraceptives and long-acting reversible methods (i.e., injectable, IUD, patch and ring).

A better understanding of any such association can contribute to improving the quality and cultural relevance of contraceptive counseling and programs designed to reduce unintended pregnancy.

## METHODS

### Sample and Data Collection

Between July 1 and November 1, 2006, we recruited participants from farms, health clinics, health fairs and other community locations in four rural counties of Oregon using both passive strategies (e.g., posters and fliers) and active strategies (e.g., recruiters approaching potential participants). All printed materials included a toll-free number that potential participants could call to ask questions or to enroll in the study. Trained recruiters briefly described the study to potential participants, explained about eligibility screening and asked if they were willing to be screened.

To be eligible for the study, individuals had to be 18–25 years old, identify themselves as Latino and report having had sexual intercourse within the past three months. We excluded individuals who currently were pregnant or had a pregnant partner, those who planned to become pregnant in the next year or had a partner who planned to do so, those unable to understand informed consent or other aspects of the project description, and those not fluent in English or Spanish. In addition, recruiters were directed to exclude partners of participants from enrolling. Written informed consent was obtained from each eligible participant. The research protocol was approved by the institutional review board of Oregon State University.

Interviews were conducted by trained, bilingual, bicultural staff members, who were matched to participants by gender; a computer-assisted survey interviewing system was used. Training included an initial two-day session, two short follow-up sessions to reinforce skills, as well as ongoing training and supervision through weekly team meetings. The instrument was available in English and Spanish; the Spanish version was prepared using forward-translation and back-translation by different translators.<sup>46</sup> All interviews were approximately 60 minutes in length; participants were paid for their time and compensated for travel and child care costs.

Of the 952 women and men screened, 65% were eligible; 19% of these declined to participate. In all, 499 individuals (254 women and 245 men) completed an interview.

## Measures

Measures included validated scales from previous studies, as well as items developed for this study on the basis of formative work with the population of interest. Most measures were partner-specific, asking about participants' current boyfriend or girlfriend, husband or wife, or lover. For constructs measured with multi-item scales, we computed Cronbach's alphas to assess internal reliability.

•**Outcome variable.** We asked participants what, if anything, they or their primary partner (defined as a "boyfriend/girlfriend, husband/wife or lover") had used to prevent pregnancy in the past three months. The question was open-ended. Depending on the method reported, an additional method-specific question was asked to assess consistency of use. For example, we asked individuals who relied on the pill if they had missed more than two pills in any of the past three months; likewise, we asked those who relied on the male condom if they had had sex without one in the past three months. We then created a variable that consisted of three categories of effective contraceptive use: male condom, female method and no effective method. The male condom category comprised only consistent users. The female method category comprised only those who consistently used the pill or a long-acting reversible method, as no respondents reported use of the diaphragm or female condom. Respondents who reported inconsistent use of an effective method, and those who reported using no method, withdrawal, spermicides,

rhythm or the sponge, were classified as not using an effective method.

•**Independent variables.** We included dichotomous measures of gender, education (fewer than 12 years of school vs. more), U.S. nativity status, health insurance status, multiple partnership (one sexual partner in the previous three months vs. more), marital status and cohabitation status; because marriage and cohabitation were highly correlated, we combined them into a single category for our multivariate analysis. Demographic characteristics also included mean age, household size and annual household income. In addition, we asked participants whether they had a religious preference and, if so, what that preference was.

Perceived barriers to birth control services were measured by respondents' agreement with eight statements about the accessibility of services (e.g., convenience of clinic hours, waiting times, transportation and child care needs). The response options were on a five-point Likert-type scale that ranged from "do not agree at all" to "completely agree" (Cronbach's alpha, 0.75). Responses were averaged to create a mean score; higher scores indicated greater perceived barriers to birth control access.

Acculturation was measured through use of the Short Acculturation Scale for Latinos, a 12-item unidimensional scale that assesses language use, media use and ethnic social relations.<sup>47</sup> For example, questions asked "In general, what language(s) are the movies, TV and radio programs you prefer to watch and listen to?" and "You prefer going to social gatherings/parties at which people are..." Response options were on five-point scales that ranged from "only Spanish" to "only English" for the language and media use items, and from "all Latinos" to "all non-Latinos" for the ethnic social relations items (Cronbach's alpha, 0.91). Responses were averaged; higher scores indicated greater acculturation.

*Machismo* was measured with a scale developed by Cuéllar and colleagues,<sup>48</sup> which uses 17 items to measure the level of endorsement of several dimensions of machismo—for example, "I would be more comfortable with a male boss than with a female boss," "Men are more intelligent than women" and "For the most part, it is better to be a man than a woman." The response options were on a five-point Likert-type scale that ranged from "do not agree at all" to "completely agree" (Cronbach's alpha, 0.89); higher scores indicated greater machismo.

Partner-specific contraceptive use self-efficacy was measured using a five-item scale adapted from a diaphragm use self-efficacy scale.<sup>49</sup> This scale assesses respondents' confidence in their ability to take such actions as discussing birth control with their primary partner and using a method correctly. Respondents rated each item on a five-point scale ranging from "not at all confident" to "extremely confident" (Cronbach's alpha, 0.77). A mean score was calculated; higher scores indicated greater contraceptive use self-efficacy.

Partner-specific perceived vulnerability to pregnancy was based on one item asking respondents how likely it

**TABLE 1. Percentage distribution of Latino young adults participating in a health study in rural Oregon, by effective contraceptive use, according to gender, 2006**

Method	All (N=450)	Female (N=230)	Male (N=220)
Male condom	15.1	12.6	17.7
Female method**	35.6	42.6	28.2
No effective	49.3	44.8	54.1
Total	100.0	100.0	100.0

\*\*Significantly different by gender at  $p < .01$ . Notes: Female methods are the pill, injectable, patch, ring and IUD. No effective use includes inconsistent use of condoms or female methods, use of ineffective methods and nonuse.

was that they or their partner would become pregnant in the next year if they did not use birth control. Response options were on a five-point scale ranging from “extremely unlikely” to “extremely likely.” Because more than 60% of respondents answered “extremely likely,” we constructed a dichotomous measure that compared those who answered “extremely likely” with all others.

Partner-specific relationship commitment was assessed with items adapted from the commitment component of the Investment Model Scale.<sup>50–51</sup> Respondents were asked, with respect to their relationship with their primary partner, how much they agreed with each of nine statements: for example, “I want our relationship to last a very long time” and “I feel very attached to our relationship—very strongly linked to my partner.” Items were rated on a nine-point scale ranging from “do not agree at all” to “agree completely” (Cronbach’s alpha, 0.92). Responses were averaged; higher scores indicated greater commitment.

Partner-specific sexual decision making was measured with six items adapted from the PARTNERS Project.<sup>52</sup> Participants were asked, with regard to their relationship with their primary partner, how much they take part in deciding whether to get pregnant, to use something to pre-

vent pregnancy, to use a condom, to protect themselves against STDs and to have sex, and what kinds of sexual activities they engage in. Response items were on a five-point scale ranging from “not at all” to “a great deal” (Cronbach’s alpha, 0.81). Responses were averaged; higher scores indicated greater participation in sexual decision making.

Finally, partner involvement in birth control was measured with items adapted from a previous study.<sup>53</sup> Respondents reported their agreement with six statements that gauged their partners’ support of and involvement in using birth control, such as “My partner participates in our efforts to prevent pregnancy by helping me use my method” and “My partner participates in our efforts to prevent pregnancy by helping me pay for services” (Cronbach’s alpha, 0.74). The response options were on a five-point Likert-type scale that ranged from “do not agree at all” to “completely agree”; higher scores indicated greater partner involvement.

**Data Analysis**

For our analyses, we excluded 17 respondents who did not have a current sexual partner and six who reported that they or their partner had been sterilized. In addition, 26 respondents who reported using male condoms along with a female method were excluded, because the group was too small to analyze separately, leaving a total of 450 participants (230 women and 220 men) in our final analytic sample.

We used chi-square tests to assess significant differences in effective contraceptive use by gender. Descriptive statistics were generated for all variables of interest, first for the total sample, and then by contraceptive use category. Bivariate associations between the independent variables and contraceptive use were examined using chi-square and Spearman’s rank coefficient; demographic measures that were significant in the bivariate analyses ( $p < .05$ ) or judged to be possible confounders were included as controls in the multivariate analyses and are shown in the tables. Multivariate associations were assessed in multinomial logistic regression analysis. All analyses were conducted using Stata version 10.

**RESULTS**

Overall, 58% of participants had completed 12 or more years of school; the average age was 21 years. Twenty-five percent of participants were married, and 46% were living with their partner. About two-thirds (64%) were born outside the United States, primarily in Mexico. Fifty-four percent identified as Catholic; 30% reported no religious preference. Six in 10 lacked health insurance. Fifteen percent reported having had more than one sexual partner in the previous three months. On average, participants’ household size was 3.3 persons; their median annual household income was \$16,800.

Half of participants reported effective use of contraceptives in their primary relationship during the past three

**TABLE 2. Selected characteristics of Latino young adults, by effective contraceptive use**

Characteristic	All (N=450)	Male condom (N=68)	Female method (N=160)	No effective (N=222)
Female**	51.1	42.7	61.3	46.4
>12 years of school	58.0	58.8	55.0	59.9
Married*	24.7	16.2	30.6	23.0
Cohabiting***	46.2	27.9	60.6	41.4
Mean perceived barriers to birth control (range, 1–5)	1.8 (0.8)	1.7 (0.7)	1.9 (0.9)	1.8 (0.8)
Mean acculturation (range, 1–5)*	2.5 (0.9)	2.5 (0.9)	2.4 (0.9)	2.6 (0.9)
Mean machismo (range, 1–5)*	2.1 (0.7)	2.2 (0.8)	2.0 (0.7)	2.1 (0.7)
Mean contraceptive use self-efficacy (range, 1–5)**	3.9 (0.8)	4.1 (0.8)	4.0 (0.8)	3.8 (0.8)
High perceived vulnerability to pregnancy	61.3	67.7	65.6	56.3
Mean relationship commitment (range, 0–8)*	6.1 (2.1)	6.0 (1.9)	6.4 (2.0)	5.9 (2.2)
Mean sexual decision making (range, 1–5)*	4.2 (0.8)	4.5 (0.7)	4.3 (0.7)	4.1 (0.9)
Mean partner involvement in birth control (range, 1–5)	3.9 (0.8)	4.1 (0.8)	3.9 (0.8)	3.9 (0.8)

\*Significantly different across contraceptive use categories at  $p < .05$ . \*\*Significantly different across contraceptive use categories at  $p < .01$ . \*\*\*Significantly different across contraceptive use categories at  $p < .001$ . Notes: Data are percentages unless otherwise noted. Means are unstandardized; figures in parentheses are standard deviations. Chi-square and Spearman’s rank correlation were used to test differences by contraceptive use for categorical and interval variables, respectively. Female methods are the pill, injectable, patch, ring and IUD. No effective use includes inconsistent use of condoms or female methods, use of ineffective methods and nonuse.

months (Table 1): Fifteen percent consistently used male condoms, and 36% a female method. A greater proportion of women than of men reported relying on a female method (43% vs. 28%); the proportions reporting male condom use and no effective use did not differ by gender.

A smaller proportion of male condom users than of female method users or those not using an effective method were married (16% vs. 31% and 23%, respectively) or cohabiting (28% vs. 61% and 41%, respectively; Table 2). In general, participants perceived low barriers to birth control (mean, 1.8 on a five-point scale); the mean did not differ across groups. The two cultural variables—acculturation and machismo—were associated with contraceptive method use: Those not using an effective method had the highest mean acculturation score (2.6), whereas female method users expressed the weakest support for traditional machismo attitudes (2.0).

The average partner-specific birth control self-efficacy score was 3.9 out of 5.0, which indicated participants' overall high confidence in their ability to use birth control with their primary partner; however, condom users and female method users had higher self-efficacy than did those not using an effective method (4.1 and 4.0 vs. 3.8). Sixty-one percent of participants thought that it was extremely likely that they or their partner would get pregnant in the next year without using birth control.

Scores for relationship commitment and sexual decision making were high overall (6.1 out of 8.0, and 4.2 out of 5.0 respectively), but varied by contraceptive use. Both measures were lowest among those not using an effective method (5.9 and 4.1, respectively); however, commitment was highest among female method users (6.4), whereas decision making was highest among condom users (4.5). Partner involvement in birth control was also fairly high overall (3.9 out of 5.0), but did not vary by group.

In multivariate analysis (Table 3), only two individual or cultural variables were related to contraceptive use. Being married or cohabiting was associated with participants' having a lower likelihood of condom use than of no effective use and female method use (risk ratios, 0.3 and 0.2, respectively), and a higher likelihood of female method use than of no effective use (2.0). In addition, the more acculturated participants were, the less likely they were to use a female method rather than no effective method (0.7).

Among the partner-specific and relationship variables, birth control self-efficacy was positively associated with the likelihood of female method use, rather than no effective use (risk ratio, 1.7). In contrast, the greater participants' involvement in sexual decision making, the more likely they were to use condoms rather than no effective method or a female method (2.2 and 1.9, respectively). However, partner involvement in birth control was negatively associated with participants' likelihood of using a female method rather than no effective method (0.6), but positively associated with their use of male condoms rather than female methods (1.8).

**TABLE 3. Risk ratios (and 95% confidence intervals) from multinomial regression analysis assessing associations between effective contraceptive use and selected characteristics of Latino young adults**

Characteristic	Male condom vs. no effective	Female method vs. no effective	Male condom vs. female method
Female	1.2 (0.6–2.6)	0.9 (0.5–1.6)	1.3 (0.6–2.6)
>12 years of school	0.9 (0.4–1.7)	0.8 (0.5–1.3)	1.1 (0.5–2.3)
Married/cohabiting	0.3 (0.2–0.7)**	2.0 (1.1–3.4)*	0.2 (0.1–0.4)***
Perceived barriers to birth control	1.0 (0.7–1.5)	1.2 (0.9–1.5)	0.8 (0.6–1.3)
Acculturation	0.8 (0.5–1.2)	0.7 (0.5–0.9)*	1.1 (0.7–1.7)
Machismo	1.1 (0.7–1.7)	0.8 (0.5–1.1)	1.4 (0.9–2.4)
Contraceptive use self-efficacy	1.2 (0.8–2.0)	1.7 (1.2–2.5)**	0.7 (0.4–1.2)
High perceived vulnerability to pregnancy	1.4 (0.7–2.7)	1.2 (0.7–1.8)	1.2 (0.6–2.5)
Relationship commitment	1.1 (0.9–1.3)	1.1 (0.9–1.2)	1.0 (0.8–1.2)
Sexual decision making	2.2 (1.3–3.7)**	1.2 (0.8–1.6)	1.9 (1.1–3.2)*
Partner involvement in birth control	1.1 (0.7–1.7)	0.6 (0.4–0.9)**	1.8 (1.1–2.9)*

\*p<.05. \*\*p<.01. \*\*\*p<.001. Notes: Female methods are the pill, injectable, patch, ring and IUD. No effective use includes inconsistent use of condoms or female methods, use of ineffective methods and nonuse.

## DISCUSSION

In this study of Latino young adults living in rural areas, the proportion practicing contraception effectively was low, a finding that is consistent with previous studies of Latinos.<sup>10–11,54</sup> Although participants were in sexual relationships and none were seeking to become pregnant in the next year, only half were using an effective method. The gap between pregnancy intentions and contraceptive behavior in this population is not well understood and requires further research.

This study extends previous research by focusing on the interpersonal context of contraceptive use. Other studies have identified marital status and cohabitation status as predictors of contraceptive use, and our findings confirm previous results.<sup>10,12,24</sup> Individuals in relationships may transition from condoms to hormonal and long-acting methods of contraception over time as sexual frequency increases and the perception of vulnerability to STDs decreases.<sup>55</sup>

Relationship variables other than marital and cohabitation status also distinguished effective contraceptive users from others. Participants with greater confidence in using birth control were more likely to use a female method rather than no method, while those with greater involvement in sexual decision making were more likely to use male condoms rather than no method or a female method. Under Gutierrez, Oh and Gilmore's framework,<sup>56</sup> self-efficacy and sexual decision making both measure perceived power. Self-efficacy can be considered an aspect of individual power, and decision making, an aspect of interpersonal power. The female methods used by members of our sample do not necessarily require joint decision making, and thus, it makes sense that individual power would be particularly salient. In contrast, condom use requires the participation of both partners in the sexual encounter.<sup>42</sup> Our results add to the literature linking participation in sexual decision making to condom use for disease protection,<sup>23–24,57–59</sup> and suggest that greater participation in sexual decision making is associated with

consistent condom use. The interdependent nature of condom use likely also explains why partner involvement was positively associated with the likelihood of the use of male condoms rather than female methods.

Our finding regarding acculturation is consistent with previous research among Latina adolescents and young adults suggesting that acculturation is positively associated with risky sexual behavior.<sup>18</sup> This relationship may be a function of the lower acceptability and social support for contraception noted among more acculturated Latinos.

### Strengths and Limitations

This study has several strengths in addition to its focus on rural Latinos and inclusion of relationship variables. Although most research on contraceptive use has not included men, this study includes both men and women who reported being in sexual relationships. Furthermore, our measure of contraceptive use, which is more specific than measures employed in previous research, allowed us to identify effective contraceptive users and distinguish between users of male- and female-controlled methods.

The categorization of effective contraceptive use also has implications for interpretation of the results. The male condom is currently the only effective male method; in this study, it was the only barrier method used consistently. As a consequence, the distinction between the types of effective methods used could be characterized as coitus-dependent and non-coitus-dependent, and the relationships of the explanatory factors to use of methods driven by characteristics other than female control versus male control.

The use of self-reported data is a limitation; for example, some men may have been unaware of their partners' use of female-controlled methods. Another limitation is the measure of partner involvement in birth control, which was originally developed for use with women to determine the extent of a male partner's involvement.<sup>53</sup> Although the internal consistency was acceptable within our sample, the measure may not be valid for male respondents or have the same meaning for males as it does for females. Further research on partner involvement in contraceptive use and family planning services is needed. Finally, this study focused on primary relationships. The majority of participants had had one partner in the previous three months; however, studies with adolescent and adult women suggest that effective contraceptive use is lower among women with multiple partners.<sup>60</sup> Future research should focus on individuals with multiple partners to determine whether relationship characteristics and dynamics or other factors explain low rates of protective behavior.

### Implications

Interventions to prevent unintended pregnancy among Latinos in rural areas should address the potential role of partner and relationship characteristics in the sexual risk

and protective behaviors of women, men and couples. Widening the scope of contraceptive counseling to include men and a full discussion of the attributes of various methods may help achieve the goal of finding a good fit for individuals and couples.

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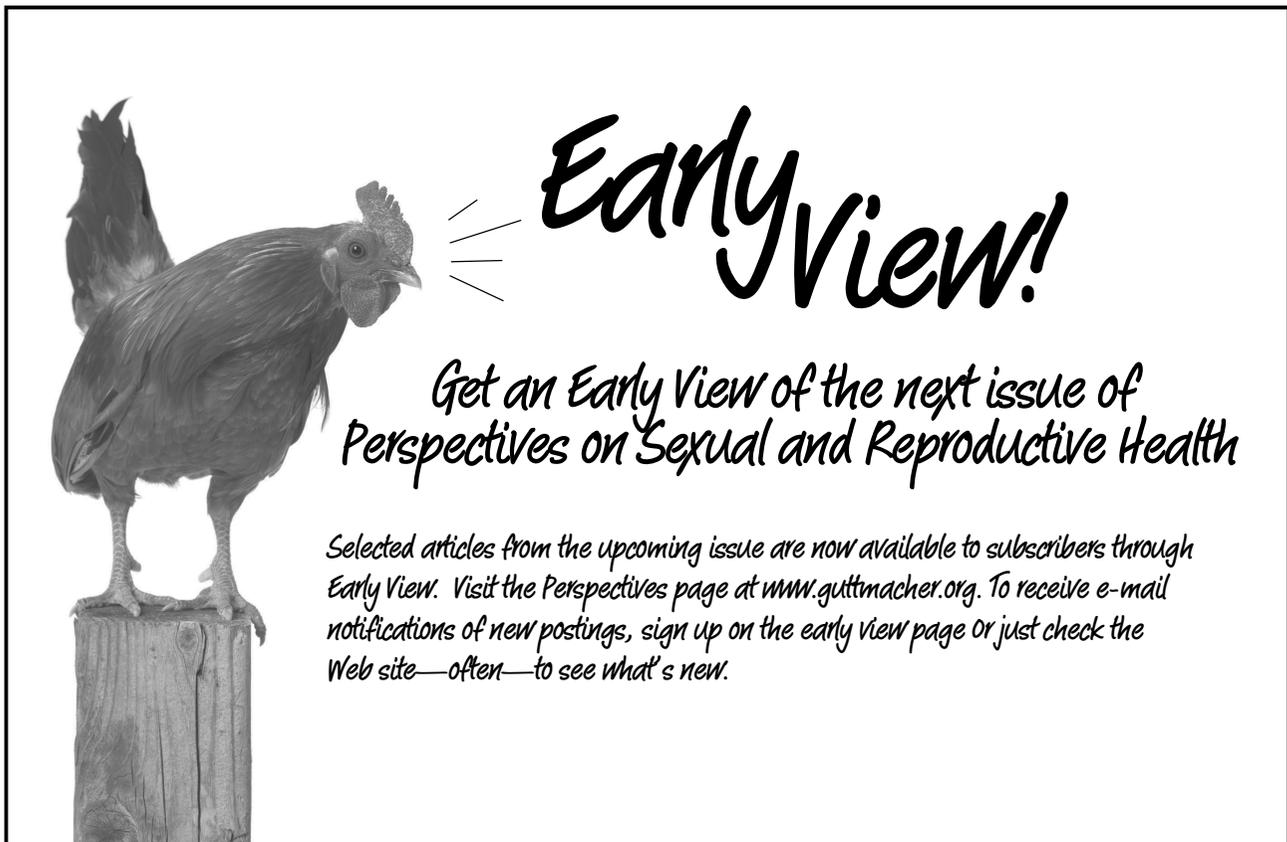
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