Relationship Dynamics, Ethnicity and Condom Use Among Low-Income Women

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Context: *Women's protection against HIV and sexually transmitted diseases (STDs) depends upon their ability to negotiate safer sex. It is important to know how cultural norms and gender roles, which vary by ethnicity, may either constrain or encourage negotiation of condom use.*

Methods: *Questionnaires were completed by 393 low-income non-Hispanic black, Hispanic and non-Hispanic white women who were sexually active and attending family planning and STD clinics and other public health and social service centers in Miami in 1994 and 1995. Multivariate logit techniques were used to identify ethnic differences in relationship dynamics and to determine couple- and individual-level factors associated with consistent use, occasional use or nonuse of condoms.*

Results: *Black and Hispanic women reported higher levels of consistent condom use (15–17%) than did white women (4%). Nearly all black and white women (90–95%) said that they were extremely or somewhat comfortable talking about condoms with their partner, whereas 76% of Hispanic women did so. A larger proportion of Hispanic women (55%) reported joint contraceptive decision-making than did black women (26%) or white women (31%). Among women who reported that their partner made contraceptive decisions, 28% used condoms consistently or occasionally, compared with 24% among women who made the decision themselves. When the couple made the decision jointly, 41% of them were condom users. Hispanic women scored the lowest on a scale of condom-related self-efficacy, yet also reported the highest levels of confidence in their condom negotiating skills. Multivariate analysis indicated that, compared with white women, black and Hispanic women were more likely to be consistent condom users than nonusers (odds ratios, 10.2 and 18.9, respectively). Women who shared financial decision-making with their partner were almost 80% less likely to be a consistent condom user, and women who did not participate in financial decisions were more than 90% less likely to do so, than were women who made monetary decisions independently.*

Conclusions: *HIV prevention and intervention programs should emphasize birth control discussion between partners and the development of condom-related self-efficacy and negotiation skills, and these programs also should customize prevention messages according to ethnicity and social context.*
Family Planning Perspectives, 2000, 32(2):82–88 & 101

Recent data confirm the continuing rise of HIV infection among U.S. women, who now account for close to one-fourth of new AIDS cases in the United States.[1] Nonwhite women are overrepresented among those who are HIV-infected; although they most commonly become infected with HIV through injection drug use (43%), this cause may soon be replaced as the leader by heterosexual contact (39%). This has already occurred in Florida, where the proportions are 27% and 43%, respectively. Nationwide, the majority of heterosexually infected women had partners whose risk was not identified (i.e., partners were not injection drug users, bisexual, hemophiliac or infected through a blood transfusion).[2]

Monogamy (regardless of marital status) has been advocated as a safe strategy against infection with sexually transmitted diseases (STDs).[3] This rationale may be flawed, however, since it ignores serial monogamy[4] and covert sex outside the main relationship. Delayed marriage and high divorce rates mean that growing numbers of individuals experience multiple sexual partners in a lifetime, and this greatly increases their exposure to infection. Furthermore, National Health and Social Life Survey data show that around 25% of men and 10% of women report extramarital or extracohabitational affairs.[5] However, such figures vary widely across surveys, and the behavior tends to be underreported. We assume multiple partnership to be substantially more common among noncohabiting couples.

It is becoming increasingly apparent that women in stable relationships are at greater risk for HIV and STDs than previously thought. One key reason for this is that condoms are used less frequently in more committed relationships.[6] Given the higher rates of infidelity among men and the greater vulnerability of women when exposed to a sexually transmitted infection, it is important for women to protect themselves in all relationships, even the apparently more committed.

Women's health depends upon their ability to negotiate safer sex with all partners.[7] This negotiation may encounter barriers, such as cultural and gender-role expectations. For instance, black, Hispanic and white women vary regarding their sexual decision-making and their comfort level in discussing such issues as sex and condom use with their main sexual partners.[8] These variations are likely to translate into different levels of condom use.[9]

In this article, we define relationship dynamics as the attitudes, behaviors and beliefs that are present in a couple's relationship and that are likely to vary by extent of condom use. These dynamics may reflect cultural influences and gender-role expectations, and may act as constraints on, and opportunities for, diminishing risks.

First, we examine the extent to which relationship dynamics vary by ethnicity; second, we look at the relationship between each dynamic and type of condom user. These dynamics include sexual communication, decision-making on financial and reproductive issues, self-efficacy concerning condom use and the nature of the relationship. We also explore concerns related to AIDS, pregnancy and companionship. We expected that sexual communication, self-efficacy concerning condom use, relationship quality, and concern about AIDS and unintended pregnancy would increase the likelihood of being a condom user; that consistent condom

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users would have more decision-making power than would occasional users, and that occasional users would have more than nonusers; and that women worried about having a man in their life would be less likely than other women to use condoms, in order to make sexual relations more pleasurable.

We build in this article upon previous studies that have examined the importance of social and demographic characteristics, attitudes towards condom effectiveness against HIV, fertility intentions and power dynamics as predictors of condom use.[10] Relationship dynamics are the logical next step in the identification of characteristics associated with different types of condom users among low-income, culturally diverse women. We pay particular attention to Hispanic women because of their unexpectedly high level of condom use compared with white women, and because of their greater likelihood than either black or white women of being HIV-infected through heterosexual contact.[11] We argue that although certain relationship dynamics may act as barriers, they also may be adapted by some women to increase consistency of condom use.

Methods

Sample

Data analyzed here come from a project designed to develop and evaluate a culturally sensitive intervention for reducing HIV and AIDS risk among low-income non-Hispanic black, Hispanic and non-Hispanic white women.[12] Subjects were recruited in Miami, Florida, from September 1994 through February 1995 at 21 state economic service centers,* public health units, and STD and family planning clinics. At the time of recruitment, women were approached by trained female interviewers, matched by race and ethnicity. Hispanic interviewers were bilingual, so respondents could choose to have the questionnaire administered in English or Spanish.

Approximately 24% of the 1,917 women who were approached refused screening,† and 33% did not meet project inclusion criteria. To be eligible, women had to be between the ages of 18 and 45 and to not be pregnant or knowingly HIV-positive. They had to have engaged in at least one of the following behaviors in the last six months: to have had sex with three or more partners, to have had commercial sex, to have had sex without a condom, or to have had sex shortly after drinking alcohol or using drugs. Other risk factors included ever having had a male partner suspected of having had homosexual sex or having injected drugs, and ever having had an STD.

Of the 840 eligible women, 552 (76%) completed a pretest survey. Roughly 50% of the 552 participants reported one risk behavior; another 21% reported two and 29% reported three or more. Forty-four percent were eligible because they had not been consistent condom users during the preceding six months, while the other 56% reported other or additional sexual and substance-use risks. Half of the sample was recruited from public health and STD clinics, and half came from various economic service centers and multiservice centers.

Toward the beginning of the questionnaire, respondents reported whether they had a main partner.‡ Because of our focus, we included in our analyses only women who reported vaginal sex with their main partner during the month prior to the interview and who were not trying to become pregnant. We included all women who met these criteria, regardless of marital status, report of any other sex partners (casual or commercial) or reported condom use.

The final sample consisted of 393 respondents: 89 non-Hispanic black women, 172 Hispanic women (10% Puerto Rican, 22% Cuban, 2% Mexican, 30% Central American, 29% South American and 8% other Hispanic) and 132 non-Hispanic white women. The racial and ethnic breakdown of this subsample mirrors the larger one of 552 women and represents low-income, sexually active women with a main partner who visited service centers and agreed to participate, and whose sexual or drug behaviors put them at risk for HIV.

Table 1 shows sample characteristics by ethnicity. Roughly three-quarters of Hispanic and white respondents were married or cohabiting, whereas less than half of black women were. Forty-seven percent of white women worked full- or part-time, while 40% of black women and 32% of Hispanic women did so. When asked about their labor force participation compared with their partner, 72% of Hispanic women reported that their partner works more. In contrast, 54% of black women and 60% of white women reported that they worked less than their partner. Thirty-four percent of black and Hispanic respondents, compared with 50% of white women, had more than a high school degree.

Table 1. Percentage distribution of respondents, by social and demographic characteristics, according and ethnicity (N=393)

Characteristic	Non-Hispanic black	Hispanic	Non-Hispanic white
All	**22.6**	**43.8**	**33.6**
Age			
<25	37.1	32.1	25.0
25–34	41.6	33.2	49.2
≥35	21.3	33.7	25.8
Living arrangements			
Married	20.2	55.2	43.2
Cohabiting	28.1	18.0	28.8
Noncohabiting	51.7	26.7	28.0
Income			
<$10,000	48.3	32.6	25.0
$10,000–$24,999	24.7	47.6	29.5
≥$25,000	27.0	19.8	45.5
Labor force participation			
Full-time	19.1	15.7	26.5
Part-time	21.3	16.3	20.5
From time to time	2.2	1.2	1.5
No paid labor	57.4	66.9	51.5
Relative labor force participation†			
Woman works more	9.0	6.4	6.1
Both work same	37.1	21.5	34.1
Man works more	53.9	72.1	59.8
Education			
<high school	36.0	35.5	19.7
High school graduate	30.3	29.7	30.3
>high school degree	33.7	34.3	50.0
Language assimilation			
High	na	23.5	na
Low	na	76.5	na
Total	100.0	100.0	100.0

†Compared with partner's participation. *Note:* na=not applicable.

Measures

This analysis focuses on women's (self-reported) frequency of condom use during vaginal sex with a main partner, in the month prior to the interview. Respondents were classified into three mutually exclu-

*State economic service centers are multiservice centers for low-income individuals that include public assistance and food stamp offices, as well as public health clinics.

†Although exact percentages are not available, most women who chose not to participate gave reasons such as not having time and not being interested in the project.

‡The question read: "During the last month, was there someone you considered to be your main man or steady sexual partner?"

Table 2. Percentage distribution of women, by type of condom use, and percentage of women giving specified response, by relationship dynamics variables and control variables, all according to ethnicity

Variables	Non-Hispanic black	Hispanic	Non-Hispanic white
Condom use			
Consistent	16.9***	15.2***	3.8
Occasional	12.4	20.3***	12.9
Nonuse	70.7***	64.5***	83.3
Total	100.0	100.0	100.0
Relationship dynamics variables			
Comfort talking about sex†	94.4	88.4*	94.7
Comfort talking about condoms†	89.9	75.6***	94.7
Joint decision on birth control	25.6	54.7***	31.1
Condom self-efficacy score‡	0.70	0.56***	0.75
Saying the "right words" is all it takes to get him to use condoms§	46.1*	61.6***	30.3
Worried about getting AIDS††	83.1*	97.1***	69.7
Worried about getting pregnant††	48.3	73.3***	54.5
Worried about no man in life††	28.1	65.1***	37.1
Feelings for partner (some fear)‡‡	23.6	10.5***	24.2
Control variables			
Friends ask men to use condoms§§	46.1**	30.2	28.0
Condoms are effective against HIV*†	92.1*	88.9**	97.7
Ever had an STD	37.8*	11.0***	25.0

*Difference from non-Hispanic white women is significant at p<.05. **Difference from non-Hispanic white women is significant at p<.01. ***Difference from non-Hispanic white women is significant at p<.001. †Combines extremely and somewhat comfortable. ‡Average score. §Those reporting strongly agree. ††Combines a great deal and some. ‡‡Combines mixture of love and fear and mostly fear. §§Those reporting yes. *†Combines very effective and somewhat effective. *Note:* Significance was determined using two-tailed test (chi-square).

sive categories: nonusers (those who reported no condom use); occasional users (those who reported using a condom at least once, but less than every time); and consistent users (those who reported using condoms during all acts of vaginal intercourse). By this classification, we acknowledge that negotiation tactics of occasional users may be quite different from those of consistent users, and that the three types of condom users may have different motivations, goals and constraints regarding contraception and condom use. Occasional use may frequently be situation-specific—as, for example, when condoms are used as a backup method for a missed pill, as extra protection during the most fertile days of the menstrual cycle or for periodic herpes episodes. We focused on condom use for vaginal intercourse because we were interested in condom-use dynamics between partners in need of both contraception and protection from STDs.

The questionnaire contained a number of questions concerning relationship dynamics. Most were straightforward. Sexual communication was measured by two questions ("How comfortable are you talking with your main man about sex?" and "How comfortable are you talking with your main man about using condoms?"), each answered on a four-point scale ranging from extremely comfortable to extremely uncomfortable.

Several questions examined the power dynamics in sexual, family planning and economic issues. One asked who made the decision to use a condom, if one had been used in the past month. In addition, a separate question asked who mainly decides on such issues as spending money, when to have sex, what type of sex to have and whether a method of family planning is used. Potential responses for these five items were "you, your partner, both or no decision made."

The concept of self-efficacy (derived from social learning theory[13]) refers in this context to the woman's level of confidence that she can perform, or her intent to perform, behaviors leading to condom use. Behaviors included planning ahead by having condoms around, requesting condoms from clinics, discussing the subject with her main partner, stopping unprotected sex, using condoms consistently and refusing sex if the partner would not use a condom. We coded responses on a scale from zero (for no confidence) to three (for a great deal of confidence). We then added these values for each individual for a maximum possible score of 18. In order to facilitate the interpretation of these scores, we standardized them by dividing by 18, resulting in a continuous scale with values ranging from zero to one. Thus, a score of one represents very high self-efficacy and a score of zero represents no self-efficacy. Cronbach's alpha, a measure of the scale's reliability, equals .87 (with one being perfect reliability).

When we recoded items, we first dichotomized confidence in skills at negotiating condom use ("If you want to use a condom, most of the time if you say the right words you can get your man to use one"), to compare those who strongly agreed with the statement and everyone else (agreed, disagreed, strongly disagreed and did not know). Second, we took three items reflecting "how much you worry about…" three issues (contracting AIDS, getting pregnant and not having a man in her life) and dichotomized responses to contrast those who worried "a great deal" or "some" with those who worry "hardly at all." Third, we structured an item reflecting the nature of the relationship with the respondent's partner ("Thinking about your relationship [with your main partner], would you say you feel mostly love, mixture of love and fear, mostly fear, or neither love nor fear") into three outcomes of "mostly love," "some fear" and "neither love nor fear."

Lastly, we asked women whether most of their friends (more than half) ask their man to use a condom when they have sex, to which they could respond "yes, no or don't know." Potential responses to a question regarding condoms' effectiveness against HIV-transmission ("How effective do you think a condom is to prevent getting AIDS?") were "very effective," "somewhat effective" or "not at all effective."

The multinomial regression model contained two sets of control variables. One set consisted of variables related to condom use, including awareness of friends' condom use, perceptions of the condom's effectiveness against HIV transmission, coital frequency, STD history (ever having been diagnosed with syphilis, gonorrhea, genital herpes, chlamydia or venereal warts) and current contraceptive status (whether the respondent uses a highly effective method, i.e., a hormonal method, the IUD or sterilization). The other set included demographic variables, such as age, living arrangements, education, household income, the respondent's labor-force participation relative to her partner's (as a measure of potential power imbalances between partners generated in the labor market), parity, desire for a child and level of language assimilation of Hispanic respondents (as measured by the Marín and Marín acculturation scale[14]).

We tested the hypotheses that relationship dynamics vary by ethnic group and that relationship dynamics are associated with type of condom user, regardless of ethnicity.

Statistical Analyses

We used chi-square analyses to test bivariate ethnic differences in type of condom user and in relationship dynamics. We then used multivariate techniques (linear and logistic regressions) to test for ethnic differences in relationship dynamics, while controlling for demographic variables, and for the effects of assimilation on relationship dynamics among Hispanics. Control demographic variables included income, age, education and living arrangements. Finally, we used multinomial lo-

gistic regression techniques[15] to identify associations between relationship dynamics and consistency of condom use. In this analysis, we included ethnicity, relationship dynamics, and demographic and condom-use–related control variables as independent variables.

We compared consistent users with nonusers and with occasional users, and we compared occasional users with nonusers. Because some variables seemed to measure similar concepts or constructs, we ran multicollinearity diagnostics.[16] The statistics showed no evidence of this potential problem. In the multivariate analyses, we replaced missing data with the mean value specific to that ethnic group.[17] We tested interactions between ethnicity and all independent variables and found none.

Results

Bivariate Analysis of Differences

According to Table 2, black and Hispanic women reported higher levels of consistent condom use (15–17%) than did white women (4%). On most items concerning relationship dynamics, black and white women tended to be relatively similar, while Hispanics differed in the expected direction, based upon past literature. For example, 94–95% of black and of white women reported being extremely or somewhat comfortable talking about sex with their partner, whereas 88% of Hispanic women did so. Among black and white respondents, 90–95% said they felt extremely or somewhat comfortable discussing condoms, compared with 76% of Hispanic participants. A larger proportion of Hispanic women (55%) reported joint decision-making about contraceptive use than did black women (26%) or white women (31%).

A larger proportion of Hispanic women reported being worried about contracting AIDS and getting pregnant (97% and 73%, respectively) than did black women (83% and 48%, respectively) or white women (70% and 55%, respectively). This may, in part, explain Hispanic women's different contraceptive use patterns. Hispanic respondents were as likely as other women to use a highly effective contraceptive method (not shown). More than 25% of Hispanic women combined highly effective methods and condoms, almost half consistently, compared with 6% of white women.

Discussing contraception and arriving at a decision, rather than who made the decision, differentiated consistent and occasional condom users from nonusers. Among women who reported that their partner made birth control decisions, 28%

Table 3. Regression coefficients and odds ratios from a multinomial logistic estimation of type of condom user, by ethnicity, condom-use variables and demographic variables

Variable	Consistent user vs. nonuser		Consistent user vs. occasional user		Occasional user vs. nonuser	
	Coefficient	Odds ratio	Coefficient	Odds ratio	Coefficient	Odds ratio
Ethnicity						
Non-Hispanic black women	2.32**	10.17	1.65	5.23	0.66	1.94
Hispanic women	2.94***	18.86	1.63	5.08	1.31**	3.71
Non-Hispanic white women	na	1.00	na	1.00	na	1.00
Comfort talking about using condoms	0.55	1.74	0.16	1.17	0.40	1.49
Who decides how to spend money						
Woman	na	1.00	na	1.00	na	1.00
Man	0.35	1.42	0.80	2.22	–0.45	0.64
Both	–1.45**	0.23	–0.93	0.39	–0.52	0.59
No decision	–2.86*	0.06	–2.68	0.07	–0.18	0.83
Who decides birth control method						
Woman	na	1.00	na	1.00	na	1.00
Man	–11.99	0.00	–12.10	0.00	0.15	1.16
Both	0.80	2.22	0.57	1.76	0.23	1.26
No decision	–1.65*	0.19	0.93	2.54	–2.59***	0.07
Condom self-efficacy index	4.18***	65.20	5.51***	248.24	–1.34	0.26
Saying the "right words" is all it takes to get him to use condoms						
Strongly agree	1.32**	3.75	1.75**	5.75	–0.43	0.65
Other	na	1.00	na	1.00	na	1.00
Worried about getting AIDS						
Not at all	na	1.00	na	1.00	na	1.00
Great deal or some	1.47*	4.37	1.79*	6.01	–0.32	0.73
Worried about getting pregnant						
Not at all	na	1.00	na	1.00	na	1.00
Great deal or some	–0.19	0.82	–1.24*	0.29	1.04**	2.83
Worried about not having a man						
Not at all	na	1.00	na	1.00	na	1.00
Great deal or some	–0.12	0.89	–1.18*	0.31	1.06**	2.89
Feelings for partner						
Mostly love	na	1.00	na	1.00	na	1.00
Love and fear or mostly fear	0.82	2.27	2.05**	7.73	–1.22*	0.29
Neither love nor fear	0.14	1.15	–0.18	0.83	0.32	1.38
Friends ask men to use condoms						
Yes	0.90*	8.02	1.31*	3.70	–0.40	0.67
Don't know	0.49	1.64	0.19	1.21	0.30	1.35
No	na	1.00	na	1.00	na	1.00
Condoms' effectiveness against HIV	1.53***	4.61	1.58**	4.84	–0.05	0.95
Coital frequency (previous month)	–0.04*	0.96	–0.03	0.97	–0.01	0.99
Ever had an STD						
Yes	1.27*	3.55	0.42	1.52	0.85*	2.33
No	na	1.00	na	1.00	na	1.00
Current birth control method						
Hormonal, IUD or sterilization	–1.76***	0.17	–0.31	0.74	–1.45***	0.23
Other/none	na	1.00	na	1.00	na	1.00
Age	–0.02	0.98	0.00	0.99	–0.02	0.98
Living arrangements						
Married	na	1.00	na	1.00	na	1.00
Cohabiting	0.70	2.02	–0.63	0.53	1.33**	3.80
Noncohabiting	0.64	1.89	–1.03	0.36	1.67***	5.30
Income						
<$10,000	na	1.00	na	1.00	na	1.00
$10,000–$24,999	–0.13	0.88	–0.61	0.54	0.48	1.62
≥$25,000	–0.70	0.50	–2.05**	0.13	1.36**	3.88
Relative labor force participation						
Woman works more hours than man	na	1.00	na	1.00	na	1.00
Both partners work same	–0.18	0.84	–2.18	0.11	2.01*	7.43
Man works more hours than woman	–0.48	0.62	–2.20*	0.89	1.72*	5.60
Education						
<high school	na	1.00	na	1.00	na	1.00
High school graduate	–0.12	0.89	0.05	1.05	–0.17	0.84
>high school	–0.68	0.51	–0.31	0.73	–0.37	0.69
Parity	–0.28	0.76	–0.26	0.77	–0.02	0.98
Constant	*–11.9570*		*–7.5682*		*–4.3885*	
Model chi-square (d.f.)	*236.95 (64)*					
Log likelihood function	*–187.787*					
Restricted log likelihood	*–306.2635*					

*Difference from reference category is significant at p<.05. **Difference from reference category is significant at p<.01. ***Difference from reference category is significant at p<.001. *Note:* All significance was determined through one-tailed tests. No interactions with ethnicity were statistically significant. na=not applicable.

said they used condoms consistently or occasionally. In contrast, 24% did so when the women made contraceptive decisions herself. When the couple made the decision jointly, 41% of them were condom users.

We did not find any differences in condom use or relationship dynamics by assimilation among Hispanic respondents. This may have been the result of the highly skewed distribution of Hispanic women according to our assimilation measure (more than 75% had a low score). In addition, the strong language component of the assimilation scale may substantially reduce the validity of the measure when it is used in a well-established Hispanic enclave such as Miami, where assimilation to the local culture may occur without the adoption of English.

Ethnicity and Relationship Dynamics

The first set of multivariate analyses show that Hispanic participants were significantly less comfortable than black or white women discussing sex and condoms with their main partner (not shown). In terms of decision-making, however, Hispanic women were over five times more likely than white women to report deciding birth control jointly with their partner rather than by themselves. Ethnicity was not associated with decisions regarding spending money, when to have sex or what type of sex to have.

Although Hispanic women scored the lowest on the condom-related self-efficacy scale, they reported the highest levels of confidence in their negotiation skills, followed by black women and then by white women. They were more likely than white women to report worrying about getting HIV (odds ratio, 1.6), getting pregnant (odds ratio, 2.4) and not having a man in their lives (odds ratio, 3.3) and were less likely than black or white women to report being afraid of their partner.

Relationship Dynamics and Condom Use

Table 3 (page 85) shows results of the multivariate analyses comparing the three types of condom users. For each comparison, our analyses included ethnicity, relationship dynamics items and control variables (condom-use–related characteristics and demographic characteristics).

•*Consistent users versus nonusers.* Black and Hispanic women were more likely than white women to be consistent users rather than nonusers (odds ratios, 10.2 and 18.9, respectively). Compared with women who made spending decisions independently, women who shared these decisions with their partner had reduced odds of being a consistent condom user (by 77%), and women who reported no financial decision-making responsibility were even less likely to be a consistent user (94% less). Similarly, the odds of being a consistent condom user were decreased by 81% among women who reported that no decision had been made regarding birth control, when compared with those who reported making this decision themselves. Both a high score on condom-related self-efficacy and strong confidence in one's ability to negotiate condom use were associated with increased odds of being a consistent user (odds ratios, 65.2 and 3.8, respectively). Finally, women who worried about getting AIDS were about four times more likely to be consistent condom users than were women who did not.

•*Consistent versus occasional users.* There were no ethnic differences in consistent condom use contrasted with occasional use. Again, higher scores on condom self-efficacy significantly improved the odds of being a consistent rather than an occasional user (odds ratio, 248.2). Women with strong confidence in their ability to negotiate condom use were nearly six times more likely than those who expressed little or no confidence to be consistent users. Respondents worried about getting AIDS also were six times more likely than those unconcerned to report consistent use. Compared with women who reported feeling mostly love for their partner, those who reported feeling at least some fear were almost eight times more likely to be consistent users. Finally, the probability of being a consistent user decreased by almost 70% for women who worried about not having a man in their life.

•*Occasional users versus nonusers.* Hispanic women were almost four times more likely than white women to be occasional users rather than nonusers. Reporting that no decision was made regarding contraception or being afraid of their partner substantially decreased the odds of occasionally using condoms (by 93% and 71%, respectively). In contrast, being worried about getting pregnant or about not having a man in her life nearly tripled the odds of being an occasional condom user.

•*Condom-related control variables and consistency of condom use.* It is worth noting that those who reported trusting condoms' effectiveness against HIV transmission were almost five times more likely to be consistent users versus occasional users or nonusers. Additionally, having had an STD increased the odds of consistent or occasional condom use over nonuse (odds ratio, 3.6 and 2.3, respectively). Finally, women who knew that their friends asked their partners to use condoms were more likely to be consistent users than other women (odds ratios, 8.0 and 3.7, respectively). Interactions between ethnicity and independent or control variables were not significant at the .05 level, and none were included in the multinomial analyses.

Discussion

Our goal was to identify associations between relationship dynamics and consistency of condom use as a way of better understanding ethnic differences in condom use with a main partner. In our sample, black and Hispanic women were more likely than white women to report consistent condom use, which challenges the stereotypical images of machismo and sexual powerlessness of ethnic minority women and contributes to the inconclusive evidence regarding ethnic differences in condom use.[18]

It is frequently assumed that women at risk, especially ethnic minority women, lack the power to negotiate safer sex practices.[19] Barriers to condom use may originate from machismo for Hispanic women[20] or from sex-ratio imbalances and gender roles for black women.[21] National trends in contraceptive use from 1982 to 1995, however, suggest a faster increase in condom use among racial and ethnic minorities than among white people, resulting in current rates that are similar across these populations.[22] In low-income groups, condom use tends to be more common among nonwhite women than among white women, but both groups have similar rates of consistent condom use.[23]

Measuring the rate of consistent use is important because it is the only protection against HIV and STD transmission for those who are sexually active. Factors associated with higher levels of condom use within ongoing relationships are being black, having a low income and being from large metropolitan areas.[24] Our findings contribute to this literature by implying that low-income, nonwhite individuals are overcoming cultural and gender role barriers to condom use in general and to consistent condom use in particular.

Although Hispanic respondents had the lowest condom-related communication comfort levels and self-efficacy scores, their stronger confidence in their ability to negotiate condom use, their higher levels of joint decision-making about birth control and their greater concern about HIV infection and unintended pregnancy may explain their higher levels of con-

dom use. Whereas these dynamics may seem somewhat contradictory, they may reflect Hispanic people's high adaptability to their environment.[25] Anecdotal data collected during intervention sessions suggested that Hispanic women had a preference for indirect methods of approaching issues such as condom use, whereas black and white women found it "appropriate and desirable to make a direct request of their partners to wear a condom."[26] Hispanic women may rely on indirect methods so as to remain within the constraints imposed by machismo. Ironically, machismo's view of sex outside the main relationship as men's prerogative[27] provides women with a strong incentive to insist on condom use, especially those living in a metropolitan area with high HIV and STD rates.

Hispanic women in Miami seem to have adapted to the "complex and contradictory culture"[28] in which they live by adjusting their relationship dynamics to overcome cultural barriers without clashing with their normative environment. Hispanic respondents were as likely as the other two groups to use a highly effective contraceptive method, which suggests that condoms may be supplementing rather than replacing more effective methods. In addition to the health concerns mentioned above, Hispanic women's higher rates of dual use may reflect less confidence in effective methods or higher rates of inconsistent contraceptive pill use, although research on the latter is inconclusive.[29]

Within the Hispanic population, women may approach contraception from a *familismo* perspective (i.e., that men are expected to take an active role in protecting their families).[30] Condom use can be regarded as a *machista* measure[31] to protect the family against unwanted pregnancies. Thus, women may introduce condoms as a backup method or as the only contraceptive, regardless of whether they are already using another method. Focus-group data and personal interviews conducted during the preliminary phase of an HIV-prevention intervention project for Hispanic couples in San Francisco led researchers to conclude that the practice of concealing the use of an effective method (e.g., the pill, injectables and the IUD) to increase condom use was not uncommon.[32]

What makes the gap in the level of condom use between Miami Hispanic women and white women wider than the national one? Ethnic variations in sexuality reflect basic differences in cultural norms and attitudes, gender relations, and political and economic power within communities.[33] The Hispanic community not only accounts for half of the population of Dade County, but it also holds more political and economic power than any other Hispanic group in the United States.[34] The unique sociopolitical characteristics of Miami's Hispanic community may influence the contraceptive behavior of women in this population. The strong social network, the political power, the easy access to information and the economic opportunities created by such a large and strong Hispanic enclave may influence the role Hispanic women play not only in their communities and families but also in their relationships with their partners. Multilevel research linking socioeconomic context and contraceptive choice, dual method use, concealed contraception and inconsistent pill use across ethnic groups is needed to further investigate this issue.

Our results should be interpreted with caution for at least three reasons. First, by design, the sample is not representative of all women, nor are women in an ethnic group representative of that group overall in Miami. This is especially true regarding the Hispanic population; this, in turn, may have implications for both black and white groups. (For example, how does decreasing economic power and political representation affect white individuals' personal relationships?)

Second, generalization of the results is further hindered by the low-income status of the sample and the high rates of HIV and STDs in the area. Our findings, therefore, may not apply to the general population, where protection from HIV and STDs may be of less concern. Finally, our data set includes basic social and demographic information on respondents' partners, but nothing on their attitudes or behavior. Thus, the variables on couple communication, interaction and decision-making reflect, at best, women's perceptions.

Our findings have important implications for designing STD and HIV interventions for at-risk women. Typically, education, prevention and intervention programs have targeted only women and have encouraged condom use. Emphasis has been placed on developing behavioral tools for women, such as planning, assertiveness and negotiation skills. Although our work confirms the importance of these tools, it also highlights the importance of encouraging women to discuss and actively involve their partners in contraceptive issues. The assumption that most men will resist using condoms if given the choice may not be accurate. Based on how differently birth control and financial decision-making was related to condom use, HIV and STD prevention interventions should address and measure various dimensions of household power dynamics separately, since each may affect safer sex differently.

Further, interventions should be sensitive to cultural differences, and messages and approaches should be customized for specific audiences and social contexts. For instance, encouraging open discussion about sex and condoms with a partner may be more appropriate and useful for black and white couples than for Hispanic ones, who may feel more comfortable with less-direct methods. Finally, the association between relationship dynamics and condom use indicates that there is a need for more studies involving couples rather than individual partners. Collecting data on relationship dynamics and attitudes toward HIV prevention from both partners independently would substantially increase the variety of issues and the depth at which they could be examined. Couple data also allow researchers to check the reliability of reports, learn about risk behaviors the other partner may not be aware of and, in sum, see a more accurate picture of the relationship as a whole.

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