A B S T R A C T

*Objectives.* This study assessed interest in female-controlled methods of HIV and sexually transmitted disease (STD) prevention.

*Methods.* Surveys were conducted with 168 African American women, aged 18 to 32 years, who had had unprotected sex and at least 3 sexual partners in the last 2 years.

*Results.* Of 44 potential features, "female control" (where women control the method by either wearing or applying it) ranked 22nd in average importance. Women who rated female control as highly important had fewer sex partners and fewer STDs and were more likely to use existing prevention methods frequently.

*Conclusions.* Female control may be of less interest to women most at risk for HIV and other STDs. This underscores the need to take the priorities and preferences of women into consideration when developing new prevention methods. (*Am J Public Health.* 2000; 90:1135–1137)

# Preaching to the Choir: Preference for Female-Controlled Methods of HIV and Sexually Transmitted Disease Prevention

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It has been argued that one reason underlying the rapid spread of HIV among women is that, with the possible exception of the female condom, no reliable HIV/sexually transmitted disease (STD) prevention method is available that women can use without their partner's consent.<sup>1–12</sup> This has led to a call within the health care community for the development of more "femalecontrolled" methods of HIV/STD prevention. But this assumes that female control is an important and personally desirable feature for sexually active women and, moreover, that women who are currently not using an HIV/STD prevention method would do so if female-controlled methods were available. The present research attempts to determine the level of interest in female-controlled methods of HIV/STD prevention.

# Methods

#### Respondents

Interviews were conducted with 168 African American women between 18 and 32 years of age who had had at least 3 sexual partners in the past 2 years and at least 1 incident of unprotected sex. (Copies of the complete survey instrument, as well as more detailed sampling information, can be obtained from the authors on request.) These criteria were selected to ensure that our sample had at least a moderate level of risk of HIV/STD transmission from a heterosexual partner.

## Data Collection

*Importance of female control.* Respondents were asked to rate, on a scale from 1 to 10, how important each of 44 features was to them personally. Of particular interest was the item "How important for HIV prevention is it to you that you use a method that YOU can control (you either wear it or apply it)?"

Sexual history. Respondents were asked at what age they became sexually active; how many sexual partners they had in the past month, in the past year, and in their lifetime; and how frequently they had had sex in the past month and the past year. History of STDs also was assessed. Methods of HIV and pregnancy prevention. Respondents were asked to rate, on a 7-point scale that ranged from never (0%) to absolutely every time (100%), how frequently they used condoms with their most recent partner. They also were asked if they had "ever" used each of the following 16 methods: abstinence, rhythm, female condom, the pill, the sponge, withdrawal, male condoms, oral sex, spermicide, Norplant, diaphragm, Depo-Provera, tubal ligation, intrauterine device, douching, and male sterilization (yes or no) and whether they would consider using each method in the future (on a 10-point scale).

*Demographics*. Information on age, education level, and income of the respondents was gathered.

# Results

## Importance of Female Control as a Feature of an HIV Prevention Method

The item "How important for HIV prevention is it to you that you use a method that YOU can control (you either wear it or apply it)?" resulted in a mean value of 7.30 (SD=2.96). In terms of relative importance, 21 of the 44 items received higher ratings.

Responses to this item, however, were not normally distributed. Rather, the majority of respondents fell into 1 of 2 groups: (1) women with a high desire for a female-controlled method (HDFM) (i.e., those who rated female control as 9 or 10 on a 10-point scale [n = 71, 42%; mean = 9.93]), and (2) women with a low desire for a femalecontrolled method (LDFM) (i.e., those who rated female control as 6 or less [n = 60,

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TABLE 1—Sexual History and Current Sexual Risk of Women With Low and High Desire for Female-Controlled Methods of HIV/STD Prevention

	Low	High
Sexual history		
Age at sexual initiation, y	14.82	15.57**
No. of partners in lifetime	17.76	11.89***
No. of partners in the last year	4.64	2.62***
No. of partners in the last month	1.73	1.36*
Frequency of sex in the past month, no. of times/week	3.27	2.80
Frequency of sex in the past year, no. of times per week	3.70	3.42
Frequency of condom use with most recent partner		
(on a scale from 1 to 7)	3.19	4.69***

36%; mean=3.88]). (Women who gave female control the median score of 8 [n=34, 20%] or 7 [n=3, 2%] did not fall cleanly into either the HDFM or the LDFM group and therefore were not included in the subsequent analyses.)

#### Comparisons of HDFM and LDFM Women

*Sexual history.* The *t* tests revealed that HDFM women, who rated female control as relatively important to them in their selection of an HIV/STD prevention method, initiated sex at a significantly later age than their LDFM counterparts ( $t_{111} = 1.80, P = .04$ ). As indicated in Table 1, HDFM women also tended to have significantly fewer sex partners than LDFM women in the past month  $(t_{113} = 1.78, P = .05)$ , in the past year  $(t_{117} = 0.05)$ 1.94, P = .01), and in their lifetime ( $t_{120} =$ 2.40, P = .01). However, no significant difference was found in the *frequency* of sex between the 2 groups during the past month  $(t_{123} = 1.50, P = .12)$  or the past year  $(t_{116} =$ 0.86, P = .39).

A statistically significant difference did emerge, however, in reported frequency of condom use, with HDFM women reporting more frequent male condom use with their most recent partner than did their LDFM counterparts ( $t_{120}$  = 4.48, P < .001). This differential frequency of condom use parallels a differential STD rate, with LDFM women reporting significantly higher rates of syphilis ( $t_{126}$  = 3.08, P < .001), gonorrhea ( $t_{126}$  = 1.79, P < .05), and herpes ( $t_{126}$  = 1.75, P < .04).

As shown in Table 2, HDFM women were more likely than LDFM women to have used oral sex instead of vaginal sex, abstinence, tubal ligation, Depo-Provera, the sponge, and the female condom at least once in the past. HDFM women also expressed significantly more willingness to consider using the female condom ( $t_{115}$  = 3.43, P < .03), abstinence ( $t_{103}$  = 2.37, P < .02), oral sex in place of vaginal or anal sex ( $t_{80}$  = 1.90, P < .05), male condoms ( $t_{112}$  = 1.80, P < .04), and the sponge ( $t_{107}$  = 2.07, P < .04).

*Demographics*. No significant differences emerged between the HDFM and LDFM groups in terms of education (12.45 vs 11.91 years;  $t_{117}$ = 1.55), personal or family income ( $t_{122}$ = 0.004 and  $t_{120}$ = 0.85, respectively), or age (25.33 vs 24.72 years;  $t_{122}$ = 1.68).

## Discussion

Of 44 potential features for HIV/STD prevention, a method that a woman can control by either wearing or applying it ranked 22nd in relative importance. Other features, such as safety, effectiveness, availability, and ease of use, were rated as more central to our respondents' choice of prevention method.

HDFM women generally appear to be at lower risk for contracting HIV than LDFM women. More specifically, HDFM women reported significantly lower rates of syphilis, gonorrhea, and herpes. HDFM women also had significantly fewer sex partners in the past month, in the past year, and in their lifetime. However, the 2 groups did not differ in terms of frequency of sex, suggesting that HDFM women may be involved in longer-term relationships with fewer men.

Further analyses revealed that HDFM women were approximately twice as likely to have used a variety of HIV/STD prevention methods, including oral sex in place of anal or vaginal sex, abstinence, the sponge, and the female condom, at least once. Ironically, HDFM women were significantly more likely to be currently using or to consider using male condoms, a method often criticized as being controlled by the male partner. Moreover, HDFM women were sig-

#### TABLE 2—Prior Use of Various HIV/STD and Contraceptive Methods as a Function of Desire for Female-Controlled Methods of HIV Prevention

	Used at Least Once		
	Low Desire, %	High Desire, %	Odds Ratio <sup>a</sup>
Oral sex instead of vaginal or anal sex	14	27	2.06***
Abstinence	23	47	2.04***
Tubal ligation	1	3	1.98**
Depo-Provera	6	13	1.92**
Sponge	15	26	1.73**
Female condom	17	30	1.71**
Rhythm	16	20	1.25
Douching	40	46	1.15
Pill	72	78	1.11
Pulling out	47	48	1.02
Male condom	82	82	1.00
Intrauterine device	10	10	1.00
Norplant	2	2	.95
Spermicide	40	33	.83
Male sterilization	1	0	0.59***
Diaphragm	28	14	0.50**

Note. STD = sexually transmitted disease.

<sup>a</sup>Odds ratios of 1.0 imply no significant difference between the 2 groups. Values > 1.0 indicate the ratio by which women with high desire for a female-controlled method are more likely than women with low desire for a female-controlled method to use a method. Values < 1.0 indicate the extent to which women with high desire for a female-controlled method are less likely than women with low desire for a female-controlled method to use a particular prevention method.

\**P*<.10; \*\**P*<.05; \*\*\**P*<.01.

nificantly more willing to consider using abstinence, oral sex, the sponge, and the female condom in the future. In other words, it appears that although the HDFM women may desire additional female-controlled HIV prevention methods, they are nevertheless willing and able to avail themselves of currently existing methods.

In summary, although female control may be of interest to a substantial percentage of women in their selection of an HIV/STD prevention method, it may, ironically, be of less interest to those most at risk. These data underscore the need to take the priorities and preferences of women into consideration when developing new prevention methods.

## Contributors

S. T. Murphy, L. C. Miller, J. Moore, and L. F. Clark jointly designed the survey in which the current data were collected. In addition, S. T. Murphy, L. C. Miller, and J. Moore oversaw data collection and entry. S. T. Murphy assumed primary responsibility for data analysis and the writing of the paper.

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