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"It's a Different Condom, Let's See How It Works": Young Men's Reactions to and Experiences of Female Condom Use During an Intervention Trial in South Africa

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Abstract

Although male partner cooperation is often essential for successful use of the female condom, only a few studies have directly assessed men's experiences of using the device. We examined barriers to and facilitators of female condom use via qualitative in-depth interviews with 38 young men (18 to 28 years) in South Africa whose partners, all university students, were enrolled in a female condom intervention trial. In all, 21 men used the female condom; the remaining 17 did not attempt use. The main facilitators to female condom use were convenience of use for men, curiosity to see how female condoms compared to male condoms, enhanced sexual sensation, and

perceptions of better safety and comfort of the device compared to male condoms. The main barriers were men's limited familiarity with the device, insertion difficulties, and men's concerns about loss of control over sexual encounters. We recommend that human immunodeficiency virus (HIV) prevention and condom promotion programs around the world target men directly for education on female condoms and that they also work with couples jointly around issues of safersex communication and negotiation.

Female condom use remains low in most parts of the world, despite approval by the U.S. Food and Drug Administration in 1993 and despite being shown to be highly effective against pregnancy and sexually transmitted infections (STIs), including the human immunodeficiency virus (HIV) (Vijayakumar, Mabude, Smit, Beksinska, & Lurie, 2006). According to estimates by the United Nations Population Fund, there were *nine* donor-provided male condoms for *every* man aged 15 to 49 in sub-Saharan Africa in 2011 and only *one* female condom for every *ten* women aged 15 to 49 in the region that year (UNAIDS, 2012). South Africa, the country with the highest number of people living with HIV in the world (Abdool Karim, Churchyard, Abdool Karim, & Lawn, 2009; UNAIDS, 2012), recently restated its commitment to promoting use and increasing the distribution of female condoms. The country's *National Strategic Plan on HIV, STIs, and TB: 2012–2016* includes female condoms as a key component of its combination prevention package (South African National AIDS Council [SANAC], 2011). South Africa is one of the countries in Africa that is promoting female condoms (Beksinska, Smit, & Mantell, 2012).

In the most recent population-based survey in South Africa, an estimated 6.4 million people were living with HIV/AIDS in 2012, with a 12.3% HIV prevalence (Shisana, 2013). HIV prevalence among young women ages 20 to 24 was more than three times that of young men in the same age group (17.7% vs. 5.6%) in 2012 (Shisana, 2013). Young women's disproportionate vulnerability to HIV infection has been attributed to a combination of biological (Chersich & Rees, 2008) and socioeconomic and cultural factors—particularly prevailing gender norms, which endorse male control in sexual decision-making and make it difficult for women to refuse unprotected sex with partners (Gupta, 2002). The female condom thus offers an HIV/STI and pregnancy prevention technology that women can initiate and potentially control as they-not men-are responsible for wearing the device during sex (Kaler, 2001). The female condom has the added advantage that it can be inserted into the vagina hours ahead of a sexual encounter and insertion is not dependent on an erect penis, as is the case with male condoms (Hoffman, Mantell, Exner, & Stein, 2004; UNAIDS, 1997). Our study examined female condom use and nonuse among a group of young men in South Africa to better understand facilitators and barriers to both first-time use (i.e., initial use) and continued use (i.e., sustained use) of the device. To date, South Africa's female condom promotion initiatives have primarily targeted women; little effort has been made to target men directly.

Structural and Cultural Factors Affecting Female Condom Use

A recent comprehensive analysis of why the female condom has not reached its full potential attributed this primarily to lack of political will in the international policy arena rather than to lack of acceptability among users (Peters, Jansen, & van Driel, 2010). Many

studies conducted in South Africa, however, also point to societal constructions of masculinities, which condone male dominance and female subservience and thus create gendered power imbalances in romantic and sexual relationships (Dworkin, Colvin, Hatcher, & Peacock, 2012; Pettifor, Measham, Rees, & Padian, 2004; Ratele, 2011; Shai, Jewkes, Nduna, & Dunkle, 2012). Hunter's (2005) study, for instance, showed that young Zulu men aspired toward an *isoka* masculinity, which defines "real men" as those who have multiple sexual partners and are sexually successful. Hunter argued that this goal encouraged men to engage in risk-taking behaviors, such as having unprotected sex with multiple partners. This version of masculinity has also been associated with some men's use of violence when their partners initiate or suggest condom use (Harrison, O'Sullivan, Hoffman, Dolezal, & Morrell, 2006; Jewkes, Sikweyiya, Morrell, & Dunkle, 2011; Kalichman et al., 2005; Kaufman, Shefer, Crawford, Simbayi, & Kalichman, 2008; Mantell et al., 2009). It has also been shown to make enforcing or introducing consistent condom use in an existing relationship and with a regular partner particularly challenging (Maharaj & Cleland, 2005).

Female condom studies confirm that male partner involvement and cooperation are essential for successful use of the device (Francis-Chizororo & Natshalaga, 2003; Kaler, 2004; Kerrigan, Mobley, Rutenberg, Fisher, & Weiss, 2000; Preston-Whyte, 1995; Ray et al., 1995; Welbourne, 2006). It is surprising, therefore, that only a small number of female condom studies to date (e.g., Meekers & Richter, 2005; Penman-Aguilar et al., 2002; Witte et al., 2006) have assessed men's experiences directly. Men's perspectives and experiences of female condom use can provide important insights into some of the key factors that impede or facilitate use of the device, particularly in sub-Saharan Africa, which continues to account for the majority of new HIV infections globally (World Health Organization, 2011).

Men and Female Condoms

In the majority of studies on female condoms, only women have been interviewed (see Beksinska, Smit, Joanis, & Hart, 2012; Feldblum et al., 2000; Joanis et al., 2011; Kulcyzki, Kim, Duerr, Jamieson, & Macaluso, 2004; Mathenjwa & Maharaj, 2012; Napierala, Kang, Chipato, Padian, & van der Straten, 2008; Sly, Quadagno, Harrison, & Eberstein, 1997; Weeks, Coman, Hilario, Li, & Abbot, 2013; Zachariah et al., 2003). As a result, much of what is known about men's perceptions and experiences of the device is based solely on women's accounts of their experiences with male partners. Women in these studies give varying accounts: some report mainly negative reactions to female condom use from their partners (Haignere et al., 2000; Ray et al., 1995; Pool et al., 2000), while in other studies women report predominantly positive reactions to the female condom from their partners. In the study by Kulcyzki and colleagues (2004), for instance, 95% of women in Alabama reported that "sex felt worse" for their partners with female condom use than it did with no condoms. In contrast, the majority of women (80%) in a South African study reported that their partners "liked" using the female condom as they had experienced "better sensation" and "increased sexual pleasure" during use of the device compared to the male condom (Smit et al., 2006). More than one-third of women in the same study also reported that their partners had assisted with female condom insertion and shown interest in the device (Beksinska, Smit, Mabude, & Vijayakumar, 2008).

The few studies that have directly assessed men's attitudes toward female condoms (e.g., Cecil, Pinkerton, & Bogart, 1999; Hirky et al., 2003; Koster, Groot Bruinderink, Kuijper, & Siemerink, 2012; Penman-Aguilar et al., 2002; Seal & Ehrhardt, 1999) show that most men have no information on the female condom, including where to access it or how to use it correctly (Cecil et al., 1999; Seal & Ehrhardt, 1999). These studies also show that while many men have heard about the female condom, few have actually seen or used one (Hirky et al., 2003). Men who used the female condom in these studies reported various challenges. These included partner difficulties with female condom insertion (Koster et al., 2012), discomfort due to the inner ring rubbing against the penis during sex (Ray et al., 1995), and complaints about the "loud noise" that the female condom made during sex (Kerrigan et al., 2000). Men also reported positive experiences of female condom use, such as better comfort compared to male condoms, longer-lasting erections, and increased sexual sensation due to the soft texture of female condoms (Hirky et al., 2003).

The main limitation of these studies with men is that many are dated, were conducted in developed country contexts, and were often not based on men's actual use of the device. In Cecil and colleagues' (1999) study, for example, men were shown a six-minute video that described the female condom and then were asked to complete a questionnaire, which assessed, among other things, their perceptions of the advantages and disadvantages of the device, including their interest in using it. A number of studies suggest, however, that men's negative attitudes improve over time with repeated use and that men often express interest in using the device in the future (Witte et al., 2006).

Method

Participants

In-depth interviews were conducted with 38 men who were the current sexual partners of undergraduate female students enrolled in a female condom intervention trial. The intervention was conducted at a university campus in South Africa between September 2007 and May 2010. Men in our study were interviewed between March 2008 and November 2009, following their female partners' final quantitative assessment. The intervention had two components. Women were randomized to either a one-session control group, which consisted of a didactic information-only session on the female condom, or to an enhanced two-session cognitive-behavioral intervention, which included the didactic information that the control group received *plus* skills development on female condom insertion and partner negotiation (see Smit et al., 2012). The intervention promoted use of the polyurethane female condom (commonly referred to as FC1), as the synthetic latex female condom (known as FC2) was not yet available on the South African market when the study was undertaken in 2007. Production of the FC1 has since stopped, following approval of the FC2 by the FDA in 2009 (Beksinska, Smit, Joanis, & Potter, 2012).

Men in our study were recruited indirectly via their female partners enrolled in the trial. A subset (n = 38 of 296) of female students in the trial—both the intervention and control arms—was randomly selected to participate in qualitative in-depth interviews with their partners. The men who ended up in our study were therefore those whose female partners consented to participate in the qualitative interviews. Men were interviewed, separately from their

female partners, by a South African male research assistant with extensive experience in qualitative interviewing. Interviews were held in a private room in the project research office located on the university campus. Interviews were conducted in English or *isiZulu* based on the men's preferences, lasted between 60 and 90 minutes, and were audio-taped to allow for verbatim transcription.

A structured interview guide was used to explore, among other issues, men's experiences of female condom use, reasons for using or not using the device during the study, perceptions toward female condoms prior to and after use, and attitudes regarding continued use. Some of the questions that men were asked during the interview included the following: Did your partner ever tell you about or show you the female condom? What was your reaction when she told you about the female condom? Did your partner ever use the female condom with you? Did your partner ask you to help her insert the female condom? Did you feel the female condom made sex more pleasurable for you or less pleasurable? How was sex with the female condom compared to the male condom? What is it about the female condom that you really dislike? What did you like about the female condom? Do you prefer using a female or a male condom? How has learning about or using the female condom changed the way you feel about female condoms, if at all? How much, if at all, did your partner share with you what she learned in the female condom workshop?

Data Analysis Strategy

Interview recordings were translated (where necessary), transcribed, and quality checked by the South African research team. Data analysis was conducted by two researchers who used the constant comparison method, developed by Glaser (1965), to examine men's varying experiences with the female condom. This involved reading a subset of interview transcripts and then identifying and writing down recurrent ideas or "themes" that emerged from each interview concerning different aspects of men's experiences with the female condom. The researchers used both deductive and inductive techniques to identify major themes in the data, which allowed us to confirm and build on the extant literature on gender, power, and sexual decision-making in South Africa. The inductive approach involved initially reading the transcripts with an open mind and identifying recurrent ideas and sorting them into major themes. These themes formed the basis of a codebook that was developed and used to systematically code interview transcripts in NVivo 9, an electronic software program for qualitative data management and analysis. After all transcripts were coded electronically, a coding report for each of the six thematic codes was generated in NVivo 9, and the deductive approach was employed for further analysis. This involved rereading the transcripts and using the concepts of masculinities, gender, and power to interpret the data and inform our main conclusions about the main facilitators and barriers to female condom use among men in the study.

This article is based on the analysis of six themes, which were selected for the insights they shed into the potential barriers and facilitators of female condom use among men. These themes are (a) first impressions and initial reactions to the female condom; (b) awareness of and experience with female condoms prior to the study; (c) reasons for using or not using female condoms during the study; (d) effects of female condom use on sexual pleasure; (e)

advantages and disadvantages of female condoms; and (f) attitudes toward future female condom use. Rigor during data analysis was ensured through the use of two researchers who met regularly to compare, review, and reach consensus on data interpretation. To facilitate the latter process, the two researchers worked independently and kept memos and summaries of their key impressions of the data during all stages of the data analysis process. The researchers then met to discuss their key impressions and to agree on data interpretation and key conclusions.

The study was approved by the institutional review board at the New York State Psychiatric Institute at Columbia University and by two research ethics committees at South African institutions, including the institution where the study was conducted.

Results

We first describe the sample and then organize results about the female condom into two parts: the first focuses on men's perceptions and attitudes regarding the female condom prior to use, men's reactions to their partners suggesting female condom use, and men's reasons for using or not the female condom during the study. The second part of the results section focuses specifically on the experiences of a subset of men (n = 21) who used the female condom during the study period. We use the terms FC users and FC nonusers to refer to men who used the female condom with a female partner enrolled in the trial and to men who did not, respectively.

Participant Characteristics

Men ranged in age from 18 to 28 years: the majority (n = 23) fell into the 20 to 24 age group, nine men were between 18 and 19 years, and six were between the ages of 25 and 28. The sample was predominantly Black African: 31 identified as Zulu, 5 as Xhosa and 2 as Ndebele and Pedi, respectively. With regard to occupational status, all but two of the men were enrolled as university students.

Men's Reactions on Seeing the Female Condom for the First Time

Only two men had actually seen the female condom in person (not just a picture) prior to the study. The rest had only heard about the device but had never seen or touched one. The most common reaction reported by almost all the men in our study, upon seeing the female condom for the first time, was that the device was "too big" and would be difficult to use. Some men seemed especially concerned that the "big size" of the female condom would be uncomfortable, even unsafe, for women to use. According to one participant, "I was scared because it was so big, so big. I was asking myself, What if a girl is a virgin? How can you put that thing [on]? What is the risk ... because it is so big" (FC non-user, age 21). A number expressed the view that the "big size" of the female condom was inconvenient because it was difficult for men to carry discreetly.

No, the whole packaging and its nature it's big, huge, as compared to male condoms which are small You could even put them [i.e., male condoms] in your pocket, but that one [i.e., female condom], you cannot hold like more than one

in your pockets. You could only have one of them because they are quite huge [even] in their packaging. (FC nonuser, age 21)

The second most common reaction reported by men pertained to the shape of the female condom, especially the inner ring, which many found confusing: "The first thing, I notice these ring are inside and the first question that comes to my mind is how does the ring get inside there, and what is the ring for?" (FC user, age 19). Finally, some men seemed unsure about who wears the female condom, whether the woman or the man, as the two excerpts that follow illustrate.

I can't say if it [female condom] is good or bad, but I can say that it is good for women but not for me as a man to put on. (FC user, age 23)

I wasn't prepared to have sex with that thing I don't know how to insert it. It just stresses you. (FC nonuser, age 19)

Men's Reactions to Partners Suggesting Female Condom Use

More than half of the men in our study reported that they had refused to use the female condom when their partner first suggested it. A few explained that it had taken weeks before they were willing to try out the device. Men gave various reasons for their initial reluctance. One reason was that they did not understand why their partners were interested in using the device, especially since the couple was already using male condoms:

I didn't expect her to come with the female condom, so at first I didn't like it We argued about why she wanted to use the female condom when we have the male condom. Something happens to men when you are given a gift by women. It doesn't make me feel like a man [I feel like] maybe my condom is not as perfect as her female one. (FC user, age 23)

Some men were uncomfortable with their partners introducing a new technology and took it to mean that their partners were dissatisfied with male condoms or that they suspected them of infidelity: "I wondered whether she had seen something, maybe an illness that I came with, and maybe she didn't trust me, or thought I'm cheating somewhere, sleeping with other people" (FC user, age 24).

Another common reason men gave was that they did not like the manner in which their partners had introduced the female condom. One man, for instance, did not like that his partner came to him having already inserted the female condom. He explained that this had made him feel like he was expected to have sex, whether or not he was in the mood:

No, she came with it already inserted Then it frightens me I asked her to take it out. Sometimes it is disgusting that a person comes to you with the condom already inserted. Maybe I wasn't into plans for sex and she already inserted the condom ... it makes you not trust the female. (FC nonuser, age 21)

Only a small minority of men—less than five—indicated that they had been in favor of female condom use from the outset and were interested in trying out the device because they had heard that it was safer than male condoms.

I said okay, well, it's a different condom—let's try it and see how it works. I've tried male condoms ... you get the free male condoms [and they] actually burst if you don't put them properly, you see. But I don't think there is such pressure using a female condom Everything is safe; it doesn't burst. (FC user, age 22)

Men's Reports of Strategies Women Used to Negotiate Female Condom Use

Men reported that their partners had used a variety of strategies to persuade them to use the female condom. These included emphasizing the comparative safety of the female condom over the male condom, particularly the fact that the former was made of stronger material and would not break as easily as male condoms. Men further reported that their partners had highlighted the pregnancy and disease prevention (dual protection) advantages of the female condom. Some men, like the participant quoted next, explained that their partners tried to set the stage by creating a receptive environment before suggesting female condom use. "Okay, like she tried to calm me, like you know women, like, if they want you to do something that you don't like to, they have other ways to calm you down. Like massage you" (FC user, age 19).

In the majority (n = 9) of cases where the female condom was not used, men reported that they, rather than their partners, had made the final decision regarding nonuse. In contrast, only a minority (n = 2) reported that the decision to not use the female condom had been made jointly with their partners; the remaining six did not say.

Men's Reasons for Using and Not Using the Female Condom During the Study

The 21 men who used the female condom during the study gave four reasons for this decision. The first was that they wanted to see how the female condom compared to the male condom in terms of comfort and sensation. As one respondent said, "I was curious to use the female condom and see what the difference is with my male condom" (FC user, age 22).

The second reason was that the female condom presented men with an opportunity to share responsibility for condom use in their relationships: "I was tired of using [male] condoms and thought that no, if she uses her condom as well, then it is good. It may be good for me" (FC user, age 24).

Third, men who had been especially reluctant to use the female condom explained that they eventually agreed "for study purposes," as the following participant noted: "At first I was against using the female condom, but ... she explained that she is in a study, and I don't want to be unfair to her and say I cannot do it" (FC user, age 19).

Fourth, other men reported that they had used the female condom because their partners had pressured them into trying it out.

I refused to use it at first, because I did not believe that [sex] would be the same as using the male condom It took three weeks before we used it. She wanted to use it, and if I refuse it means we are not going to have sex, so I'm forced to use it. (FC user, age 27)

In contrast, 17 men did not use the female condom during the study, and they attributed this to two factors: lack of opportunity and perceived difficulty of use. Five men explained that their partners did not have the female condom with them when they suggested its use. However, these five expressed willingness to use the female condom in the future.

She tried to negotiate by talking about the pros of the female condom, for example, that it's stronger than the male condom, it will not break easily, and is more protective. She succeeded because I agreed to use it; however, we did not have any on us at the time. (FC nonuser, age 21)

The remaining 12 men reported that they did not use the female condom because it looked "too complicated" to use, which they worried would lead to incorrect use, thereby limiting the effectiveness of the device.

She tried to negotiate, but as much as she did try, I was not into the female condom I feel that if one partner is clumsy, he could miss the female condom and a bad thing could happen. You need to be highly careful when you use it. That's why I didn't want to use it. (FC nonuser, age 21)

She [partner] told me all about the female condom and that we must try it, but when we opened it and we saw that it's too big and the procedures look a little bit complicated For instance, you have to wear it like thirty minutes before. We decided not to use it. (FC nonuser, age missing)

Effect of Female Condoms on Men's Sexual Pleasure

The 21 men who used the female condom during the study reported one of three experiences with regard to the device's effect on their sexual pleasure: increased sexual pleasure, decreased sexual pleasure, and "no difference" in sexual pleasure. In their responses to the question, "Did you feel the female condom made sex more pleasurable for you or less pleasurable?," most men spontaneously mentioned male condoms as their comparison.

Increased sexual pleasure—Six men reported increased sexual pleasure with female condom use compared to male condoms. They attributed their positive experiences to the convenience of not having to wear the male condom during sex, increased sensation due to the texture of the female condom, and the more comfortable fit of the female condom compared to the male condom. Men further explained that these factors had made them feel like they were engaging in "condomless" sex and that this had substantially enhanced their sexual enjoyment. As one man noted, "When I entered her through that condom, I felt different. It felt like as if we were not using a condom at all at first" (FC user, age 25). Convenience of female condom use for men had two components: for some, it referred to shifting the responsibility for wearing condoms during sex to the woman: "I enjoyed everything It is much quicker for you as a male [because] you don't have to really sit there and put it on" (FC user, age 19). For other men, convenience of female condom use was mentioned in relation to the erroneous belief that a couple can use the same female condom multiple times during a sexual act unlike male condoms, which have to be changed with each sexual act: "I enjoyed it because ... you don't have to put the condom after each round [i.e., each sexual act], because you can use this single condom and you can have sex

for several rounds [i.e., several sexual acts]" (FC user, age 25). Men in this group further attributed their increased sexual pleasure to the female condom feeling roomier and hence more comfortable than male condoms, which sometimes felt too tight.

Decreased sexual pleasure—Nine men in our study reported decreased sexual pleasure during female condom use compared to male condoms. The most common reason men gave for their negative experience was reduced sensation and loss of "connection" to their partners during sex. Men complained especially about the "big" size of the device and about the fact that the female condom was not placed directly on the penis.

It's too big. You end up not feeling it. You cannot feel the warmth. The male condom is attached to the man so you feel more, but with the female condom, you lose that connection. There was nothing easy [about using the female condom] except going in and out. (FC user, age 26)

The second reason men gave for their decreased sexual pleasure was related to the difficulties they experienced during use. Two men reported that their partners held the female condom during sex to keep it in place.

During sex I didn't feel right; it didn't feel comfortable for me. I find it difficult. I think she also found it difficult [because] you have to hold it while having sex The thing is uncomfortable while having sex, nothing else. (FC user, age 20)

Men also reported discomfort because the inner ring rubbed against the penis during sex, while others were bothered by the noise the device made during sex.

Sex is boring It's that inner ring over there It was rubbing like—I end up touching it and it touches me badly. (FC user, age 24)

It wasn't really pleasurable. It makes funny noises—it makes funny noises and it doesn't really feel right compared to a male condom. (FC user, age 23)

No difference in sexual pleasure—Six men reported "no difference" in their sexual pleasure while using the female condom compared to male condoms. All six men, however, complained that certain aspects of female condom use had tempered their overall enthusiasm for the device. The most common challenge men mentioned was the insertion process, which they indicated had taken too long. Estimates ranged from a few minutes to as long as 10 minutes: "Let me see, how long does it take to put a male condom on, maybe, okay. Even a minute But the female condom, maybe two times or three times longer" (FC user, age 22). Men in this group further complained that female condom insertion transferred control and the responsibility for safer sex to women and had left them feeling powerless.

The problem was with me, my brother, you see. I wasn't feeling comfortable. You see ... it's that she is the one who inserts it on herself, not me. I feel like I am less of a man. Because you also know that thing, the control must be with me, you see. I have to insert it. I was scared that ... it can happen that, maybe it burst. [So] I told her that okay, you wanted us to feel this female condom, you have felt it, so we can take it out and use the male condom. (FC user, age 21)

Men's Views Regarding Future Female Condom Use

Regardless of the effect that the female condom had on men's sexual pleasure, the majority of men who used the female condom (18 out of 21) reported that they preferred male condoms to female condoms. They explained that this was mostly because they were more experienced in using male condoms and felt confident about their ability to use them correctly. Most men, however, indicated that they would consider using female condoms in the future, particularly if their partners initiated use or in the event that female condoms were the only device available at the time of sex.

Discussion

This study examined young men's experiences with the female condom in order to better understand facilitators and barriers to use of the device. To our knowledge, our study is one of a few to focus specifically on young men's use of the device in Africa. Six key facilitators of female condom use among men emerged in our study. These were (a) shared responsibility for condom use in relationships; (b) convenience of use for men, as the responsibility for wearing a condom was transferred to the woman; (c) enhanced sexual sensation due to the texture of the female condom; (d) better comfort, because the female condom did not feel as tight around the penis as the male condom; (e) perceived better safety of the device compared to the male condom, which was said to break easily; and (f) men's curiosity to see how the female condom felt compared to the male condom in terms of comfort and sensation. Three barriers to female condom use among men identified in our study were (a) lack of familiarity with the female condom; (b) the difficult insertion process; and (c) concerns about loss of control over sexual encounters.

Men in our study typically reported both positive and negative experiences at different points of their female condom use trajectory. For example, the majority of men initially had negative views of the female condom because of its size, which many men described as "too big." Despite these initial concerns, most men in our study (21 out of 38) eventually tried it out and one-third of them found it very pleasurable. In contrast, a few men who reported that they were initially excited to try out the female condom lost their enthusiasm after using it, for reasons that ranged from insertion difficulties to reduced sexual sensation because of the texture of the device, among others. Furthermore, some men liked that the female condom was convenient for men because it transferred the responsibility of wearing a condom during sex to the woman, while others believed—incorrectly—that the same condom could be used multiple times during a sexual encounter, thus allowing men to focus on other aspects of the sexual encounter. Our study shows, however, that these various advantages did not necessarily ensure that men would have positive views after using the device. We posit, therefore, that the facilitators and barriers of female condom use among men often coexist and overlap and that specific situational factors surrounding each sexual encounter also may account for men's complex experiences with the device.

In our study, threatened masculinities emerged as significant barriers to female condom use. A number of men, for instance, reported that they felt "less manly" when their partners suggested female condom use. They took this suggestion to mean that their partners either suspected them of infidelity or of having STIs. Others viewed the suggestion to use female

condoms as an indirect indictment of male condoms by their partners. Some men seemed perturbed by the concept of a "condom for women" and especially by the idea of women wearing condoms during sex. These men argued that "condoms are for men" and should therefore always be under male control. Threatened masculinities of this kind have also been reported in microbicide studies, which show that men are usually uncomfortable when women introduce new technologies, especially when they are designed to be female-controlled (Kaler, 2004; Matthews & Harrison, 2006).

The association between masculinities and men's sexual practices, which has been written extensively about in the South African context (e.g., Hunter, 2005; Jewkes et al., 2011; Morrell, Jewkes, & Lindegger, 2012; Pettifor et al., 2004; Kalichman et al., 2005), was further evident in the remaining two barriers that emerged from our study, namely, the difficult insertion process and men's limited familiarity with the female condom. Despite the fact that their partners had been taught how to use the female condom, many men still attributed their unwillingness to try out the device the first time or to use it again in the future to the fact that they did not have information on correct use. The facilitators and barriers of female condom use among men in our study reinforce the central yet complex role that notions of masculinity play in shaping men's sexual practices, particularly as they concern HIV/STI prevention. Pool and colleagues' (2000) study in Uganda showed that men's attitudes toward the female condom often were characterized by both ambivalence and anxiety as men wanted women to be protected against disease, on the one hand, and yet wanted to retain control over the means of protection used, on the other.

Although men's limited familiarity with the female condom has been reported in other studies in the region (Mantell et al., 2011; Pool et al., 2000; Ray et al., 1995), men in our study seemed to have especially low levels of awareness and knowledge of the device. This could be due to the relative youth of the men in our study, three-quarters of whom were between the ages of 18 and 24. Only two men, for instance, had ever seen a female condom prior to the study, a few had never heard of a female condom, and none had ever used the device prior to the study. Men also had a number of misconceptions about the female condom, for example, that the same condom could be used for multiple acts of sex or that the female condom had to be worn at least half an hour prior to sex, which is a local myth, as instructions clearly indicate it can be inserted directly before any sexual contact in the same way as a male condom.

Three men seemed under the impression that it is the man who wears the female condom during sex. This could explain many men's initial negative reactions to the size of the female condom, which they described as being "too big." Some studies have reported that one deterrent to consistent use of male condoms is the perception among some men that these do not fit properly over their penises (Reece, Herbenick, & Dodge, 2009). It is possible that men's comments about the "big" size of female condoms in our study masked similar concerns about penis size. However, such comments also could reflect that men were concerned that the female condom would not be retained in the vagina.

Safety came up frequently in our study as both a facilitator of and barrier to female condom use. A number of men indicated that they had experienced male condom breakages on

numerous occasions and were therefore interested in the female condom because it was made of a stronger material and would not break as easily as male condoms. Many studies show that male condom breakage, due to user error rather than poor product quality, is rather common (Albert, Warner, Hatcher, Trussell, & Bennett, 1995; Mukenge-Tshibaka, Alary, Geraldo, & Lowndes, 2005; Rosenburg & Waugh, 1997; Sanders et al., 2012). Our study shows, however, that men found various aspects of female condom use cumbersome, which caused them to lose interest in the device. One complaint was that the female condom required men to exercise greater caution than they typically would with male condoms during penetration to avoid invagination (i.e., inadvertently pushing the female condom into the vagina) or misdirection (i.e., bypassing the vagina altogether during penetration) (Beksinska et al., 2007). Some men had thus taken extra measures to avoid these problems, such as having their partners hold the device during sex to secure it.

Another use-related challenge that negatively affected men's sexual enjoyment and heightened their fears about incorrect use of the device was the insertion process. The latter was a source of frustration for many men who used the female condom. Men complained that female condom insertion had interrupted foreplay and sexual spontaneity because their partners had "struggled" with insertion and had taken anywhere from "a few minutes" to more than "ten minutes" before they succeeded. Female condom insertion difficulties have been reported extensively in the literature. One study noted that as many as 25% of women were unable to insert the female condom on the first try despite having practiced self-insertion with guidance from intervention facilitators (Artz, Demand, Pulley, Posner, & Macaluso, 2002). However, a recent study found that female condom use failures decreased "substantially after the first five condoms" as women become more confident and skilled at using the device (Beksinska, Smit, Joanis, & Hart, 2012). Intensive training for women could thus play a key role in addressing many of the use-related concerns the men in our study had.

The generalizability of our findings is limited by three factors. First, our intervention used the FC1, a first-generation female condom made of polyurethane, and not the FC2, which is made of synthetic latex and became available on the South African market only after our study had been conducted. Polyurethane has been shown in many studies to be stronger than latex, to enhance men's sensation (Coffey, Kilbourne-Brook, Austin, Seamans, & Cohen, 2006; Joanis et al., 2011), and be noisy during sex (Zachariah et al., 2003), all of which affect its acceptability. It is not clear, however, what effect synthetic latex will have on some of these acceptability issues, although some speculate that the FC2 should be much less noisy during sex because of its material (Peters et al., 2010). To date, there have been few studies on the FC2, and these have reported similar levels of function (Beksinska et al., 2008) and acceptability (Smit et al., 2006; Wanyeze et al., 2011) as the FC1. We recommend more interventions similar to ours to investigate men's and women's experiences with the FC2, including other types of female condoms, such as the Women's Condom and Cupid condoms, that are currently being developed worldwide.

Second, the men who participated in our study were a very select group. For instance, all but two were university students; hence our sample was comprised of young, highly educated men. Men were also recruited into the study indirectly, via their female partners who, as

fellow students, were also young and highly educated. Both male participants and their partners were therefore not representative of the general population of sexually active young people in South Africa. Only men whose female partners were willing to enroll in the intervention trial and whose female partners agreed to participate in the in-depth interviews (after being randomly selected) were eligible to participate in our study. It is possible that, due to our indirect recruitment strategy, some men's views and experiences of the female condom were influenced by how their partners introduced the device to them. Not all men approached by their female partners agreed to be in the study, which further biases our sample. We did not keep records of the number of women who agreed to participate in the in-depth interviews but whose partners declined. However, some women explained that their partners had moved out of the area while some women were hesitant to ask their partners as they were in a new relationship. We do not think, however, that the men who refused to participate in the study were unusual in any way regarding their opinions of female condoms.

Third, our study focused primarily on initial female condom use within the context of existing couple relationships and may therefore not be immediately relevant for understanding factors that influence female condom use with casual partners or for understanding sustained or ongoing use of the device in existing couple relationships. Numerous studies conducted in South Africa (e.g., Dworkin et al., 2012; Pettifor et al., 2004) show that consistent condom use is generally lower with regular partners than it is with casual partners. Studies further show that the introduction of any type of safer-sex method into an existing relationship is fraught with challenges, as it can be viewed as an allegation of infidelity (Hattori, Richter, & Greene, 2010; MacPhail et al., 2009) and sometimes results in intimate partner violence directed toward the woman (Dunkle et al., 2004). It is promising, however, that a substantial number of men (21 out of 38) agreed to use the female condom when their partners suggested it.

Conclusion: Implications for Future Interventions

Our study highlights the urgent need to target men directly and educate them on the female condom and its correct use. We suggest that many of the barriers to female condom use among men in our study are not insurmountable, as they were largely due to men's limited familiarity with the device and to user-related difficulties experienced by their partners. These barriers can be overcome in two ways: by targeting men directly for education on female condom use and by working with couples jointly around issues of safer-sex communication and negotiation. Workshops for men would equip them with practical skills in correct insertion procedures and thus place men in a position to be able to assist their partners when the need arises. In a recent South African study, for instance, a substantial number of women (44%) reported that their partners had assisted with various aspects of female condom insertion (Beksinska et al., 2008).

Training workshops would also address men's limited knowledge on women's reproductive anatomy, which was apparent in some of the questions that men had regarding the safety of the device for women. We further believe that men-only workshops would be especially ideal for exploring and addressing aspects of female condom use that men found threatening

to their masculinity. Finally, we strongly recommend that female condom promotion be incorporated into South Africa's other HIV prevention initiatives, such as the HIV Counseling and Testing campaign, national condom campaign, and those campaigns that target men directly, such as for medical male circumcision. This will help ensure that female condoms are viewed as a complementary HIV-prevention technology, as advocated by the United Nations Population Fund (UNFPA), which has been championing the cause for improved female condom uptake globally.

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