Consumer Preference Study of the Female Condom in a Sexually Active Population at Risk of Contracting AIDS

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Abstract : *During February 1989, in Khon Kaen, northeast Thailand,20 women at high risk of contracting sexually transmitted deseases were trained in the use of the female condom. Each voluntary participant in this trial was given a supply of 20 condoms and 4 bottles of lubricant. After two weeks, each of the women was interviewed by researchers. The 20 volunteers reported having 247 episodes of vaginal intercourse in the two weeks and used the female condom in 78, or 32%, of episodes. The female condom was tolerated well by the women users but was not popular with male partners. Men found the female condom unattractive and complained that it reduced sensation. Users reported that the (US manufactured) female condom was too long and wide and did not stay in place. The users generally expressed the view that, if the male partner did not object, the women would willingly use a female condom. The conclusion of the author is that the female condom will be acceptable to highly sexually active women in Thailand if (1) the partner does not object to the use of the female condom and (2) the design of the condom is appropriate for the Thai anatomy. (Thai J Obstet Gynaecol 1990; 2:103-109.)*

Key words : female condom, AIDS

HIV infection in Thailand is increasing most rapidly among intravenous drug users in Bangkok. Now it appears that AIDS is beginning to spread rapidly among female commercial sex workers who populate every province in Thailand.

This study was conducted in anticipation of the eventual spread of AIDS into the large population of

commercial sex workers (CSWs). The need for a method to help the women protect themselves from AIDS infection was clearly indicated by a previous study conducted by the authors in 1987[1]. In that study it was found that only half of the customers of female CSWs in Khon Kaen used condoms during vaginal intercourse. All the women in the study wanted complete protection from contracting AIDS and other sexually transmitted diseases (STDs) but were not always able to convince their partners to wear condom.

A vaginal sponge to prevent STDs and conception has already been tested in a Bangkok high-risk population with limited success[2]. However, to prevent STDs and HIV infection it is clear that a more comprehensive barrier method is needed. The invention of the female condom by a Danish gynaecologist offered the first opportunity to place effective STDs prevention in the hands of women themselves[3].

The manufacture of this condom was adapted by Wisconsin Pharmacal in the United States. Through Family Health International a supply of 400 female condoms were shipped to Khon Kaen, Thailand, in February, 1989 for a field trial among twenty highly sexually active women with multiple partners.

Objectives

The objective of this study is to determine the use-effectiveness of female condoms in Thai rural CSWs.

The goal of the study is to help the development of a greater variety of methods that can be used to prevent the contract and spread of AIDS.

Methodology

Twenty sexually active women who had multiple sexual partners were the subjects. These women were selected because they were at high risk of contracting STDs and because their profession enabled the collection of a variety of male partners' reactions to the female condom in a short period of time. Only women currently using contraception were eligible to participate.

As a pre-test, four CSWs who were not the 20 subjects were trained in the use of female condoms and given a supply of ten pieces plus two bottles of lubricant each and told to try using the condom for one week. The purpose of this pre-test was to gather practical information to enhance the content of the training instructions. In addition the pre-test was an exploratory step to determine that the female condom could, in fact, be used by this high-risk group.

The 20 subjects, all worked in the same establishment, volunteered to participate in a two-week trial of the female condom. Their employers gave full support and cooperation for the field trial.

During a period of three hours before they began to work, the 20 vol-

unteers were given an overview of AIDS by an experienced gynaecologist and how AIDS can be prevented. Next, the female condom was described to them. Then the 20 participants split into four groups of five to learn more about the female condom and practice inserting the condom by using a full scale pelvic model. Four nurses conducted these small group sessions.

At the end of the small group sessions, each participant was given a Thai-language pamphlet on how to insert and to remove the condom, a supply of ten unlubricated, female condoms and two bottles of lubricant supplied by the condom manufacturer. The participants were informed that they would be interviewed on their experiences after the first and second weeks. They were told how to obtain resupplies of condoms and lubricant and all women were instructed not to reuse the condoms and to return any unused supply.

To conserve time, the 20 women were interviewed at their place of employment by the same four nurses, who were split in conducting in-depth interviews and who also conducted the group training.

The questionnaire was developed through collaboration with FHI and went through a number of revisions before attaining the final version. Because of the small number of respondents and the use of some open-ended questions the data were hand-tabulated.

All subjects were offered free blood tests to screen for HIV infection and syphilis. Pelvic examination was perfomed once a week as a regular check up.

Results

A total of 17 of the 20 subjects were interviewed twice. Three were interviewed after one week but were not available at the end of two weeks. Similarly, three were not available at the end of one week but were interviewed at the end of the second week. For the 17 women who were interviewed twice, the results of the second interview were presented.

Patient characteristics

The twenty volunteers in this feasibility trial of the female condom have the following characteristics:

Age : ranged from 16 to 35 with a mean of 27.2 years.

Education : ranged from none to junior college; 14 had primary education (equivalent to sixth grade).

Fertility : 17 had been pregnant before, 11 had given livebirths, while 15 had a history of abortion. Mean gravida was 2.6, mean number of abortions was 2.3, and mean fertility was 0.7 livebirths.

STDs : 13 have had gonorrhea. The results of the blood tests did not find any HIV infection while 6 have had syphilis.

Contraceptions : 18 used the pills, 2 used the injectables.

Product used and women's perceptions

During the two weeks of the trial, the 20 volunteers had 247 acts of vaginal intercourse. The female condom was used in 78 (31.6%). All 20 participants tried to continue using the condom throughout the two weeks of the trial. The most common reason for discontinuing the use of the condom was the male client's objection. However, the general assessment of the condom from the female perspective was positive. Two–thirds of the volunteers had no aversion to the female condom although one-third said they disliked it.

Mechanically, the female condom performed well. No rips or tears during intercourse were reported, and no woman reported severe pain. The most uniform woman's objection to the condom was its large size. The US manufactured condom was reported to be too long and too wide for the Thai women in this trial. Virtually all women felt they had received adequate training in the insertion of the female condom but more than one-third found the process of inserting the condom to be a nuisance.

Male partner's reaction

In contrast to the women in this study, the man's reaction to the condom was negative (as reported by the women). No male partners were interviewed in this study. Ten out of the twenty volunteers reported that all their partners disliked the condom. Eight said some of their partners disliked the condom, while some liked it. Two of the twenty women reported that all of their partners liked the female condom.

Discussion

This study demonstrated that high-risk women for AIDS and other STDs can be rapidly and effectively trained in the use of a female condom. All twenty volunteers in this two weeks study were promiscuous and were compensated for their labour in proportion to their partner's sexual satisfaction. Yet, all the women were able to convince some of their partners to allow them to wear the female condom which is visible to the man and takes several minutes for the women to insert.

The least surprising finding of this feasibility trial of the female condom was the partner's objection. The men objected on aesthetic and sensual grounds. It is more noteworthy, perhaps, that the women were able to use the condom at all and that some reported that all their partners liked the female condom. All female participants were of the attitude that if the partner did not object, they would gladly use the female condom during each episode of intercourse. The major constraint to female condom acceptability is clearly partner's objection.

An unexpected finding of the study was that the US manufactured

Table 1 Product used

	No.	%
Using the female condom	*78*	*32*
Male condom was used	*82*	*33*
None	*87*	*35*
Total	*247*	*100*

Table 2 Overall assessment (15/65)

		No.
1. Did you like FC?	*no opinion*	*3*
	a great deal	*2*
	a little	*8*
	disliked	*7*
2. Did you use the FC throughout the weeks?		
	discontinued	*20*
	entire 2 weeks	*0*
3. If you stopped using it, what was the main reason?		
		No.
	caused discomfort to me	*6*
	caused discomfort to my partner (s)	*10*
	inconvenient	*11*
	sexual satisfaction	*6*
	partner (s) objected	*15*
	other reasons	*13*
4. Was it hard to insert properly?		
		No.
	No	*10*
	Yes, sometimes	*7*
	Yes, often	*3*
5. Did it bother you to insert the condom by yourself?		
		No.
	No	*8*
	Yes	*12*
6. Did the FC tear or rip during intercourse?		
		No.
	No	*20*
	Yes, how many?	*0*
7. Did your partner (s) know that you were using the FC?		
		No.
	No	*0*
	some did	*0*
	all did	*20*
	don't know	*0*
8. Did they like or dislike the condom?		
		No.
	all liked	*2*
	some disliked, some liked	*8*
	all disliked	*10*
	don't know	*0*
9. How convenient is the FC compared to the MC?		
		No.
	less convenient	*19*
	about the same	*0*
	more convenient	*1*
10. Did you have enough education/information to use this condom correctly?		
		No.
	No	*1*
	Yes	*19*
11. Would you advise others to use the FC?		
		No.
	No	*2*
	Yes	*18*
12. Do you think other women will use it?		
		No.
	No	*2*
	Yes, a few	*17*
	Yes, many	*1*
13. Would you like to use the FC in the future?		
		No.
	No	*7*
	Yes	*13*
14. Do you have any final comments about the FC?		
		No.
	No	*3*
	Yes, (specify)	*17*
	- new and interesting	
	- STDs prevention	
	- the woman is in control	
	- need a FC that the man cannot see	
	- hard to convince partner to agree to use it	
	- too long and wide	
	- take times to insert	
	- moves around in the vagina	
	- inconvenient to carry around, etc.	
15. Female condom versus male condom		

- *harder to put on*
- *more steps to follow*
- *must inspect the condom first to see if condition is good*
- *partner must be careful not to insert out side the condom*
- *must hold on the ring during intercourse and this spoils the mood*
- *partner objection*

condoms were too large for the Thai women in this study. The oversized length and diameter caused problems of insertion, lack of snug fit, too much mobility of the condom and slippage.

The high-risk women in this study fear venereal diseases and fear AIDS the most among STDs. The women also recognized the importance and effectiveness of the condom in STDs prevention. However, they are prevented from protecting themselves and their partners because the nature of their sexual relationships dictate that the man's pleasure and desires take priority over their own health.

When one volunteer was asked if she would agree to have unprotected intercourse with a man she knew had gonorrhea, she said she would not. Thus, when the danger of contracting STDs is visible and immediate the women make a rapid cost-benefit decision and become the assertive partner. Although the women might fear AIDS most, and realize that it can be spread by someone without symptoms, the threat of AIDS may still be too remote to motivate them to insist on using condoms or no sex. Thus, another volunteer suggested that the female condom should be promoted for prevention of syphilis and not AIDS because syphilis is a disease which they fear and which 6 out of the 20 volunteers have contracted before.

It is the conclusion of the investigators that the female condom will only become a viable alternative to high-risk women when their proximity to AIDS increases or if the male partners can be motivated to accept the female condom. Steps toward promoting increased acceptability of the condom would be 1) prelubrication of the condom to reduce insertion time and nuisance, 2) redesign of the condom to suit the Thai female anatomy and, ideally, 3) development of a new barrier technology for females that cannot be seen or felt by the man.

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