

## **Rapid Review Response: Effectiveness of Female Condoms for preventing HIV/AIDS and Factors that Impact Uptake**

**Question** - This summary addresses the following questions:

1. How effective are female condoms for preventing HIV/AIDS?
2. What influences the use of female condoms?
3. Who primarily uses female condoms and what are their preferences?
4. What are the primary mechanisms for distributing female condoms?

### **The Issue and Why It's Important**

The use of prophylactics in the prevention of HIV transmission has traditionally centered on the male condom. Negotiation of condom use has therefore been largely male-centric. The creation of the female condom ushered in a new era of female-controlled condom usage, leaving people hopeful that condom negotiation in HIV and STI prevention would reach greater parity. Since the female condom was introduced, there has been little information gathered on its efficacy and its widespread use. According to the literature, female condom use is still quite low (Bull et al, 2003). However, community-based HIV programs in Ontario reported a significant increase in demand for female condoms in 2008-09. Greater knowledge about the populations accessing female condoms, as well as where they access them, and whether they are a truly effective in preventing the spread of HIV is important to inform policy and programs that may incorporate female condoms as a viable HIV prevention option.

### **Key Take Home Messages**

- Female condoms are effective at preventing the transmission of HIV/AIDS. (1;2)
- Female condoms are important for improving female control and confidence in the negotiation and practice of safe sex. (3;4)
- There is much discrepancy around the sociodemographic factors that make women more likely to use female condoms. (5;6)
- Interventions that focus on improving attitudes towards female condoms, through increased communication and education of both partners, increase their use. (4;7-9)

### **What We Found**

We found one systematic review by Vijayakumar et al. (2006) that examined the effectiveness, use and acceptability of female condoms.(2) We used the findings from this review as well as a limited number of other relevant studies to highlight findings from literature related to the effectiveness, use and interventions to promote the use of female condoms.

## Effectiveness:

- The systematic review by Vijayakumar et al. (2006) found that “considerable evidence exists to suggest that the female condom is effective both in increasing protected sex acts and possibly in reducing STI incidence. However, much more research is needed to support these conclusions, especially with respect to rural and community settings. Vijayakumar et al. also indicate that the female condom has “considerable potential for increasing protected sex acts if promoted in a well-informed and efficient manner”. (2)
- A study by French et al (2003) which examined the effectiveness of female condoms, found that women who were given the female condom in conjunction with counseling on its use experienced a non-significant reduction in STDs compared to those provided with male condoms. Thus, informed usage of female condoms is no worse than using male condoms. (1)
- As the only female-initiated prophylactic against HIV and pregnancy, female condoms improve female control and confidence during sex. (3;4)
- Local cost-effectiveness analyses are not widely available, although studies have been conducted in other areas of the world. A study in South Africa determined a female condom program to be a highly cost-effective intervention for commercial sex workers and other women with casual sexual partners. (10)

## Patterns of use of the female condom

Although exposure to female condoms is very high among women, their overall use is low, particularly when compared to the use of male condoms.(11) Positive attitudes towards female condoms are important for their uptake and use among women.(11)

Analyses of the impact of age on the use of female condoms have been mixed. For instance, one study found that African American women and younger women have more positive attitudes about potentially using female condoms.(5) However, another study contradicts this evidence and shows that women aged 25 and older are more likely to use female condoms.(6) In addition, the systematic review by Vijayakumar et al. (2006) found studies with mixed results with respect to whether there is a correlation between age and the use of female condoms. For instance they reported the following findings:

- Two US studies found that women under 25 years of age were less likely to use the female condom than older women
- One US study indicating that older women were more likely to try the female condom but younger women were more likely to be regular users
- The female condom was comparatively more popular among older women in Uganda but in Zimbabwe, it was more popular among younger women

A number of studies also report findings related to experiences with or use of male condoms. Key findings include the following:

- “Women reporting inconsistent or no use of the male condom were less likely than consistent male-condom users to use a female condom when a male condom was not used” (2)
- A study of drug users in Brazil found that those who had previously used a male condom were eight times more likely to try the female condom as compared to those reporting no use of male condoms. (2)
- Previous use of male condoms is associated with first-time use of female condoms.
- In a US study, unfavourable attitudes towards male condoms was associated with regular female condom use. (2)
- Female condoms may not be used as much as male condoms in sexual partnerships that exist outside of marriage. (12)

- Based on exit interviews conducted among a random sample of male and female customers visiting outlets that sell the female condom, men reported higher levels of male condom use than women but there were no gender differences in use of the female condom. (12)

Other findings impacting the use of female condoms include:

- Socioeconomic status influences the use of female condoms outside of marriage: female condoms are more likely to be used among men and women of lower socioeconomic status. (12).
- Among HIV-positive women, those who report more than one male sexual partner and who have more protected sexual intercourse are more likely to use female condoms.(11)
- Female condom use among female sex workers has been found to be associated with having a regular sexual partner, living with someone who is a drug or alcohol abuser, not being homeless, using alcohol or heroin, having heard of the female condom and having discussed the female condom with others.(13)
- Women are less likely to use the female condom if it is not available when having sex and when other contraception options are available.(14)
- Women prefer the male condom because it is easier to insert, easier to remove, fits better, feels better, and is easier to penetrate with it.(15)

#### Interventions to promote the use of female condoms:

- Affordability and availability of female condoms need to be improved in order to increase widespread use.(3;13)
- Interventions to increase positive attitudes and behaviours surrounding the female condom must not only focus on the woman, but also her partner(s).(4)
- Attitudinal and behavioural initiatives to implement greater use of the female condom have focused on communication strategies that engage women's sexual partners. For instance, mediation and partner negotiation in which the female condom was described as a sex toy or where women took the time to educate their partner about the female condom, increased its use.(7) In addition, women who use multiple strategies to promote the female condom to a male partner were more successful at negotiating female condom use.(9)
- Skills training for women increases the use of the female condom, without reducing the use of the male condom.(8)
- Research in Toronto with women who are at high risk for HIV or other STIs, has shown that focused interventions that promote the female condom can increase use.(6)

### **Factors That May Impact Local Applicability**

Although female condoms have been shown to be effective at preventing transmission of HIV and other STIs, knowledge about them is limited and many people still hold negative attitudes towards their use. The populations who are more likely to use them have varied throughout the limited studies that have been conducted so far. Local studies echo the results from the US, showing that targeted interventions that promote female condoms among women who are high risk for contracting HIV have the potential to increase their use.(6) Although there is research to show how female condom use may be improved, there is still little evidence surrounding its cost-effectiveness as an HIV prevention intervention.

### **What We Did**

To identify any systematic reviews we first conducted hand searches of the reviews and protocols from the HIV/AIDS Cochrane review group and searched [www.health-evidence.ca](http://www.health-evidence.ca) (entered 'female condom' as search term). We also searched the Database of Reviews of Effects (search terms used: HIV and

“female condom”) and the Reproductive Health Library from the World Health Organization. To locate additional reviews and primary literature we then searched Medline and Embase (1996 to 2009 Week 40) using the following MeSH terms: (HIV or Acquired Immunodeficiency Syndrome) AND (Condom, Female). We also searched the Cumulative Index to Nursing and Allied Health Literature using the subject heading ‘female condom’. From this, 488 titles and abstracts were reviewed to identify articles for this summary.

**Suggested Citation:**

Rapid Response Service. *Effectiveness of Female Condoms for preventing HIV/AIDS and Factors that Impact Uptake*. Toronto, ON: Ontario HIV Treatment Network; 2009.

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