

THE DEMAND FOR MICROBICIDES

Who Will Use Them?



A persistent obstacle to microbicide research and development has been the question: Would people use microbicides? Large pharmaceutical companies have been reluctant to invest in microbicides because they don't perceive a large enough market to be profitable. Even within the public sector, some professionals express doubts that people would be significantly more willing to use a microbicide than they are to use a male or female condom. Although the absence of an actual product makes it difficult to predict the exact extent to which people will use microbicides, research from various countries documents women's enthusiasm for a woman-controlled alternative, their willingness-to-pay, and their preferences among various formulations. This knowledge can inform ongoing research and product development. It also demonstrates that there is indeed market demand and addresses the myths and misperceptions about women's interest in microbicides.

MYTH: Only poor women in developing countries would use microbicides.

FACT: While women in developing countries are in desperate need of a prevention product that they control, they are by no means the only ones. A phone survey of 1,000 sexually active women aged 18-44 in the United States estimated that there are 21.3 million U.S. women interested in a microbicide product.¹ An eleven-country study conducted by the European Union found that 25% of urban French women interviewed thought a microbicide would be "very useful."²

MYTH: The microbicide market would be comparable to the spermicide market in the U.S., about \$40 million.

FACT: The spermicide-microbicide analogy is flawed for many reasons. The spermicide market is small because women have access to many other effective options for pregnancy prevention; for disease prevention, the only competing alternative is condoms. The potential market for a dual-acting method—one that offers disease prevention in addition to effective pregnancy protection—is yet untapped. Moreover, no significant improvements have been made to existing spermicides in the last thirty years. New products could be formulated to be less messy and more "user-friendly," thereby increasing their acceptability among users.

MYTH: The people who most need microbicides wouldn't be able to afford them.

FACT: The EU study showed that even in resource-poor countries, women at risk were willing to pay up to five times the local price of a condom for a prevention method they controlled. Sixty-eight percent of women interviewed in Kenya were willing to pay twice as much for a microbicide as for a condom; this proportion was 58% in Brazil and 13% in France.³ A study conducted with middle and lower-class women in Brazil showed almost half were willing to pay up to \$5.00 per application, 15% up to \$3.00, and 30%, \$1.00.⁴ While it is true that in the U.S., higher interest is expressed by poorer women, these same women also perceive themselves to be at higher risk⁵, and in greater need of a microbicide product. Moreover, there is a substantial middle class in developing countries ready and

¹ Darroch, JE and JJ Frost. 1999. Women's Interest in Vaginal Microbicides. *Family Planning Perspectives* 31:1, 16-23.

² EU HIV/AIDS Programme in Developing Countries. 1998. [A study into the market potential for vaginal microbicides.](#) For more info call Bob Hill, (+44) 442 864773, email bobhill@virgin.net.

³ *ibid.*

⁴ Hardy E, de Padua KS, Osis MJD, Jiménez AL, Zaneveld LJD. 1998. Women's Preferences for Vaginal Antimicrobial Contraceptives IV: Attributes of a Formulation That Would Protect From STD/AIDS. *Contraception* 58:251-55.

⁵ Darroch & Frost, 1999.

able to use microbicides. In India the “middle class” consists of 158 million people, more than twice the number of women ages 15-49 in the United States (69.9 million).

MYTH: Once one good microbicide enters the market, there will be no need for further research and investment.

FACT: A first-generation microbicide will probably not possess all the characteristics of an “ideal” product; the efficacy and acceptability of emerging products will evolve over time. Eventually, the best products will likely combine several mechanisms of action in order to confer protection against a range of STDs. In addition, women’s preferences vary widely, and formulations and mechanisms that are suitable in one setting may be inappropriate in another. In a five-country study of formulation preferences,⁶ women in Zimbabwe preferred film as the delivery mechanism because it was non-lubricating, while older women in Côte d’Ivoire liked the lubrication provided by the gel. While nearly a third of the study participants in New York liked the suppository, women in developing country sites found it inappropriate because it melted at higher temperatures. Microbicide users will prioritize different product characteristics--such as surreptitious use, disposable packaging, lubricating properties, ease of application, color and odor-- based on their individual situations. Multiple formulations are the key, meaning that the market could bear many different products.

MYTH: Women from [fill in the blank] culture would not be comfortable inserting or applying a vaginal product.

FACT: Women from many cultures have long practiced customs associated with vaginal hygiene and sexuality. It is likely that the application of a microbicide would be analogous to using douches, tampons, treatment for yeast infections, sexual lubricants, vaginal drying agents, herbs, or other barrier contraceptive methods. Clearly, the promotion and distribution of a microbicide-- as for female condoms-- must include culturally appropriate instruction and support for correct use.

MYTH: If microbicides were available, people would stop trying so hard to use condoms, and would end up being at HIGHER risk of HIV and STDs.

FACT: Concerns about “condom migration”-- the idea that current condom users will switch to the potentially easier but less effective protection of microbicides, thereby increasing their risk--are neither fully accurate nor inevitable. Successful condom users are not the intended beneficiaries of microbicide technology; microbicides are meant as an alternative for individuals who are unable to use condoms consistently and correctly. At the population level, the degree of protection provided by a method is a function of not only its efficacy (how good it is at preventing infection on a per-intercourse basis), but how consistently it is used within partnerships, and by what percentage of couples. Mathematical models show that supplementing a highly effective but inconsistently used method (like the condom) with a lower-efficacy method that could be used by more people (like a microbicide) would increase the total number of HIV cases averted.⁷ When provided with complete and accurate information, individuals are capable of making personal decisions about their health. The relative effectiveness of condoms versus microbicides should be made clear in all product labeling and public health interventions. A hierarchical message that promotes condoms as the “best choice” but suggests microbicides as a fallback option when condoms are not possible is consistent with other “harm reduction” approaches to HIV prevention.

⁶ Coggins C. et al. A Study of Women’s Preferences Regarding the Formulation of Over-The-Counter Vaginal Spermicides. New York, NY: The Population Council. 1998.

⁷ Watts CH, Thompson WA, Heise LL. 1998. The impact of microbicides for HIV prevention: Results of a mathematical modeling exercise. Presentation at 12th World AIDS Conference, Geneva, July 1998.