



INTERNATIONAL PARTNERSHIP *for* MICROBICIDES

# Gel Product Attribute Study

## Results Report

International Partnership for Microbicides  
8401 Colesville Road, Suite 200  
Silver Spring, Maryland 20910  
[www.ipm-microbicides.org](http://www.ipm-microbicides.org)

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IPM believes women are more likely to use a microbicide product designed to suit their needs and preferences. However, market research has not typically been used to test microbicide candidates, despite a long history of use in testing other consumer products. Using a consumer market research approach, IPM commissioned a Product Attribute Study (PAS) to determine whether microbicides formulated into gels will be acceptable to, and used by, women in developing countries. Results from this and other planned studies are expected to inform microbicide gel design and development. All gels in this study were placebos and contained no drug.

Fieldwork was conducted in three African countries among women and their male partners. It began in February 2006 and was completed in May 2006. The study was conducted with funding from the World Bank.

### ***Objective***

The study's main objective was to see what prospective consumers thought of the test gels. Among the questions that were asked:

- Which gel do women prefer?
- How do the gels compare in terms of their key characteristics, such as consistency and leakage?
- What do women like and dislike about the gels?
- How do male partners react to the gels?

IPM also wanted to establish a base of information for future reference and to inform product development. Through this study, market research protocols, values and limitations were introduced to IPM's microbicide development program. IPM also established valuable relationships with market research partners in the United States and Africa.

### ***Partnerships***

IPM conducted the PAS in partnership with three consumer market research organizations: MR Solutions, based in New Jersey, U.S.; Research IQ, based in Johannesburg, South Africa; and the Steadman Group based in Nairobi, Kenya.

### ***Study Conduct***

Through a series of four in-person interviews between February and May 2006, IPM assessed the preferences of 543 sexually active 18- to 30-year-old women on three personal lubrication gels in three African countries with high rates of HIV infection: Kenya, South Africa and Zambia. The water-based lubricants varied in viscosity:

- KY gel (low viscosity),
- HEC (intermediately viscosity, universal placebo gel), and
- 002p (high viscosity, IPM gel).

IPM was planning to conduct the PAS in the following four countries: Botswana, South Africa, Nigeria and Zambia. However, due to last-minute customs and shipping issues that occurred in Botswana and Nigeria, and not wanting to delay the study, IPM moved study locations from these two countries to Kenya.

Women were recruited at their homes by trained interviewers who went door-to-door in two to three major urban areas of each country. Follow-up interviews took place in locations selected by the study

participants (most in their homes). The participants were paid approximately US\$4 at the time they were recruited, and an additional US\$30 at the end of the study.

In Kenya, 213 women were recruited, including 143 in Nairobi and 70 in Nakuru. In South Africa, 172 women were recruited, including 53 in Cape Town, 52 in Durban and 67 in Johannesburg. Of the 158 women interviewed in Zambia, 77 were in Kitwe while 81 were in Lusaka.

About half the women were married or living with a partner, and the other half were single. About half were of higher, and half of lower, socio-economic status. None were pregnant, all were proficient in English and all signed a participation agreement. Usage of the gels was suspended while women were menstruating.

During the first of the four interviews, women were screened to ensure they met the study's qualification criteria and were informed about what the study entailed. The three subsequent interviews focused on the women's opinions about and experiences with a particular gel. Interviewers gave one of three gels to each woman at the end of the first, second and third interviews.

At enrolment, women were told that the gels were being developed for potential use as an unspecified women's health product. Questions about specific health benefits, including HIV prevention, were raised in the final interview with each woman.

The women used each gel once daily for a week, and were asked (though not required) to use each gel at least once shortly before or during sexual intercourse. Information gathered was supplemented with focus groups of participating women in Nairobi and Johannesburg, as well as with surveys of male partners (a total of 45) and focus groups with male partners in Nakuru and Johannesburg.

### ***Findings***

Women in all three countries used each gel equally. Still, there were distinct differences in personal likes and dislikes between countries. The differences were not significantly tied to women's age, marital or socio-economic status. Cultural differences and comfort levels speaking about sex seemed to account for many of the differences.

Women were asked to rate each gel on a variety of specific characteristics including the applicator, consistency, leakage, impact on sexual pleasure, gel smell, gel color and their likelihood to use the product.

*Overall:* HEC was the best-received, with 51.0% of women saying they "like using it a lot," compared with 40.7% for KY and 39.6% for 002p. The three gels ranked about the same in terms of women who said they "like using it a little." Women ranked KY the lowest in terms of those who said they disliked using it either "a little" or "a lot."

*Applicator:* One in five women in Kenya, more than a third in Zambia, but fewer than one in 10 in South Africa, found the applicator to be less than "very easy" to use. It became easier for most women as they got used to using it. Most issues with the applicator had to do with how it felt when inserted, not with difficulty understanding how to use it.

*Consistency:* HEC did best overall in comparative consistency scores. Half (51.0%) of the women said HEC's consistency was "just right," while 002p and KY consistently ranked second.

*Leakage:* HEC again scored high among women in terms of leakage, with 53.0% reporting “no leakage” and another 35.4% saying there was “some, but not a problem.” 002p was second, with 50.1% of women reporting “no leakage” and 35.0% saying there was “some, but not a problem.” KY ranked last, with 36.1% women reporting it leaked “some, but not a problem,” another 21.9% saying leakage was “a little too much,” and still another 18.0% saying it leaked “much too much.”

*Impact on own sexual pleasure:* All three gels were reported either to increase or have no impact on sexual pleasure for a large majority of the women. HEC still led overall, with 30.9% reporting it increased their pleasure “a lot” and 21.9% saying it increased “a little.” KY similarly increased pleasure “a lot” for 29.3% of women, and “a little” for another 24.7%. Kenyan women preferred KY over HEC and 002p. Yet in Zambia, 27.3% said KY actually decreased sexual pleasure. Overall, 002p ranked last, with the highest numbers reporting “no impact” (41.1%) or “decrease a little” (8.6%). South African women report “no impact” more for all three gels than women in the other countries.

*Gel smell:* IPM found dramatic differences between the countries in terms of the women’s perception of the presence or absence of an odor or fragrance in the gels. Zambian women were most likely to report an odor or fragrance, followed by Kenyans and then South Africans. Since most women did not detect any smell, it wasn’t surprising that 42.7% said they equally liked the smell of all three gels. Still, when asked to state a preference, KY was the leader, followed by HEC and then 002p.

*Gel color:* All the gels were clear, and almost all the women (82.1%) said they liked the clear color “a lot” or “a little” (13.6%).

*Likelihood to use product:* Although the likelihood to use a specific gel varied by the gel and country, the most notable finding was the high number of women in all three countries who said they would “definitely use” one of the gels—assuming it was available, affordable and offered a health benefit such as protection against HIV, other STIs or pregnancy. The majority of the women in all three countries also felt they could “definitely” or “probably” use the gels without their male partner knowing.

*Male partners’ awareness of gel usage:* Women reported that just over 40% of their partners were aware that they were using the gels. They were most likely to be aware if the woman used a gel during sexual intercourse and/ or if they were married. Levels of awareness varied little by gel. Focus group discussions illustrated why many women hesitated to tell their male partners—including fear the man would think they were not trusted, fear he would think the woman promiscuous or fear that he would not understand. Women typically kept their gel usage from men with either excuses or by hiding it. However, the majority of men that were aware of gel use had been informed by their female partner.

*Male partners’ reactions:* Most women felt male partners who were aware they were using the gels actually liked them. The men’s reasons for liking or disliking the gels centered largely on whether the gels increased sexual pleasure. Men’s reactions generally followed a pattern similar to the women’s overall ratings, with 63.2% saying they liked using HEC “a lot,” and 27.5% disliking KY “a lot.” Nearly all (97.8%) of the men said they would “definitely” (75.6%) or “probably” (22.2%) want their wife or girlfriend to use a gel if it offered protection against HIV.

### ***Lessons Learned***

IPM learned that women prefer a gel that is not more viscous than 002p. HEC’s intermediate viscosity level was the best-received, while the already widely used KY should not be considered to have optimal viscosity.

The clear color of the gels is important because it lets a woman “hide” it from her partner if she feels it necessary, and it prevents staining if there is leakage. Smell is more complex, and the large differences between countries in the extent to which the gels were perceived to have an odor or fragrance revealed there may need to be variations in fragrance between countries if a gel cannot be completely odorless.

It is important to note that protecting against HIV overrode some of the less-than-optimal product characteristics.

There are ongoing barriers to developing microbicides, particularly many women’s reluctance to tell their male partner about using it or fear he will find out. This was revealed in the substantial majority of women participating in the study who declined to grant permission to contact their male partner to see if he would participate in the study.

### ***Limitations***

It is important to point out that the PAS study was not designed to be a “scientific” investigation or to yield findings that can be projected to the population as a whole even within the three countries examined. It looked only at selected urban areas, and the poorest women were under-represented. Still, country-specific sample sizes were large enough to provide a reasonable degree—even if not a highly rigorous level—of statistical reliability.