Introduction

The International Partnership for Microbicides (IPM) has developed the dapivirine (DPV) vaginal ring as an HIV prevention method for women. Women insert the flexible silicone ring into the vagina where it releases the antiretroviral drug dapivirine over the course of a month. Women replace the ring themselves each month. The ring delivers dapivirine directly at the site of potential infection and has low systemic uptake. Dapivirine works by stopping HIV from replicating itself after the virus enters a healthy cell.

Women insert the flexible silica ring into the vagina, where it releases the antiretroviral drug dapivirine over the course of a month. Women replace the ring themselves each month. The ring delivers dapivirine directly at the site of potential infection and has low systemic uptake. Dapivirine works by stopping HIV from replicating itself after the virus enters a healthy cell.

Objective Risk

- Women who are HIV-negative in order to

- Replace the ring each month. The ring

- Works by stopping HIV from replicating itself

- After the virus enters a healthy cell.

- Women insert the flexible silicone ring into the

- Vagina, where it releases the antiretroviral drug dapivirine over the course of a month.

- Women replace the ring themselves each month.

- The ring delivers dapivirine directly at the site of potential infection and has low systemic uptake.

- Dapivirine works by stopping HIV from replicating itself after the virus enters a healthy cell.

- Women are offered? (By age)

- South Africa: 62% (15-29 years), 84% (30-45 years)

- Malawi: 30% (15-29 years), 58% (30-45 years)

- Zimbabwe: 77% (15-29 years), 73% (30-45 years)

- Uganda: 57% (15-29 years), 62% (30-45 years)

- Objective

- Realistic expectations of the failure of the ring.

- Women's reported discomfort decreased.

- However, when informed that a medical

- Follow-up session was offered.

- Women were more likely to use the ring.

- East Africa was the least enthusiastic of

- The four countries, a majority still reported

- Willingness to use the ring if approved.

- In South Africa, 62% of women reported high subjective risk while only 40% reported high objective risk.

- Women in South Africa also reported high barriers to adoption and adherence.

- In each of the four countries where Phase III took place, this study identified 4-5 segments of women who are potential end-users of the DPV ring along with their specific motivators and barriers to ring use. The study found that women from rural locations and younger women ages 15-20 years were more willing to use the ring. However, in South Africa, older women aged 30-45 years were more willing to use the ring. Across the 4 countries, common barriers to the adoption of the ring included concerns over potential side effects, the ring's efficacy and initial discomfort with the insertion process. Understanding these potential barriers is critical to addressing women's needs.

- This study showed that HIV risk perceptions and behaviors are very complicated and can impact health decisions. These behaviors are often motivated by relationship dynamics, so HIV prevention strategies targeted at women should seek to include their sexual partners as they often play an influential role in women's HIV prevention decision-making. These findings will be useful to guide the content, channels and types of educational materials necessary that will be developed for the ring, if it is approved, to wash these primary, high priority end-user segments.

Method

Phase 1

Qualitative research was conducted through in-depth interviews with 125 women, equally split across the 4 countries.

Objective

- Explore current beliefs, sexual behaviors and how women perceive the potential uptake of the DPV ring

- Inform the development of Phase 2 quantitative research in order to enhance the research contextually grounded.

Phase 2

Segmentation analysis was conducted with a total sample of 4,117 women who had no participation in the ring studies, across 3 age groups (15-18, 19-29 and 30-45 years), and 150 men ages 15 and older (potential influencers to ring use were also assessed). South Africa had a total of 1233 participants, Uganda - 301 participants, Zimbabwe - 339 participants and Malawi - 108 participants.

Objective

- Identify potential end-user segments based on demographics, HIV risk behaviors, willingness to use the DPV ring and other variables.

Phase 3

Targeted qualitative research with a rule sample in 120 phase 2 research participants, equally split across 4 countries, to better understand key segments-specific behaviors.

Objective

- Explore each of the priority segments and core themes identified during the Phase 2 research to better understand some of the key barriers and motivating factors to ring adoption.

Findings

Are women willing to use the ring?

Would you use the ring if offered? (Overall)

Our sample of women from South Africa appeared to be the most enthusiastic about ring uptake. Although women in Uganda were the least enthusiastic of the 4 countries, a majority still reported willingness to use the ring if approved.

What are the potential barriers to ring use?

Discomfort with the insertion process

Across all 4 countries women expressed discomfort with the idea of more than wearing the ring themselves. However, when informed that a medical follow-up session was offered, women were more likely to use the ring.

Types of segments

Segments with the highest preference for ring use

Based on the diffusion of innovation approach - these early adopting segments offer opportunity for product uptake and can serve as influencers to others. The transactional lady

Based on demographics, HIV risk behaviors, willingness to use the ring and other variables. Could be leveraged as future opinion influencers and advocates for ring use.

Men's perspective

Across all 4 countries, men seem to be the key advocates for the ring with at least 70% of the sample reporting willingness to support their partner in using the ring. The men were more prevalent from urban locations. However, when presented with the option of a sub-sample, men reported a fear of side effects as a key barrier to both adoption and adherence. This fear was more prevalent across all women in Uganda.

Risk behavior

Across all 4 countries, women’s self-perceived HIV risk did not always align with their reported sexual practices:

- Some women perceived themselves to be at high risk of contracting HIV but were not taking precautions to protect themselves.

- Some women perceived themselves to be at low risk of contracting HIV but were taking precautions to protect themselves.

- Women in our sample who reported that they had a transactional partner

- Usage to them and were also concerned about their partner’s risk.

- Men appeared to be very concerned about their partner’s risk.

- For men from Malawi and Zimbabwe, the least enthusiastic of the 4 countries, they were much more likely to use the ring. This was more prevalent in South Africa.

Conclusion

In each of the four countries where Phase III took place, this study identified 4-5 segments of women who are potential end-users of the dapivirine ring along with their specific motivators and barriers to ring use. The study found that women from rural locations and younger women ages 15-20 years were more willing to use the ring. However, in South Africa, older women aged 30-45 years were more willing to use the ring. Across the 4 countries, common barriers to the adoption of the ring included concerns over potential side effects, the ring’s efficacy and initial discomfort with the insertion process. Understanding these potential barriers is critical to addressing women’s needs.

This study showed that HIV risk perceptions and behaviors are very complicated and can impact health decisions. These behaviors are often motivated by relationship dynamics, so HIV prevention strategies targeted at women should seek to include their sexual partners as they often play an influential role in women’s HIV prevention decision-making. These findings will be useful to guide the content, channels and types of educational materials necessary that will be developed for the ring, if it is approved, to wash these primary, high priority end-user segments.