

Dapivirine Vaginal Ring

End-user Assessment | Segmentation | Messaging | Positioning

Amongst Women End-Users and Male Influencers

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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.

The dapivirine ring was designed for use by women who are HIV-negative in order to decrease the risk of HIV-1 infection through vaginal intercourse. The ring is currently under regulatory review.

Objective

- Understanding the **beliefs, barriers and behaviors** that might influence women's potential uptake of the monthly Dapivirine Vaginal Ring, if approved.
- Identifying the most likely end-user population for the ring through **segmentation analysis**.

Method



This study was conducted in three phases in rural and urban locations in the countries where Phase III ring trials took place:

- Uganda
- Malawi
- Zimbabwe
- South Africa

Phase 1

Qualitative research was conducted through in-depth interviews with **120 women** equally split across the 4 countries.

Objective

- Explore current beliefs, sexual behaviors and how these might impact potential uptake of the DPV ring.
- Inform the development of Phase 2 quantitative instrument in order to ensure the research is contextually grounded.



Phase 2

Segmentation analysis was conducted with a total sample of **1,117 women** who had not participated in the ring studies, across 3 age groups (15-18, 19-29 and 30-45 years), and **150 men** ages 15 and above (potential influencers to ring use) were interviewed. South Africa had a total of 333 participants, Uganda - 301 participants, Zimbabwe - 303 participants and Malawi - 300 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 sub-sample of **120 phase 2 research participants**, equally split across 4 countries, to better understand key segment-specific behaviors.

Objective

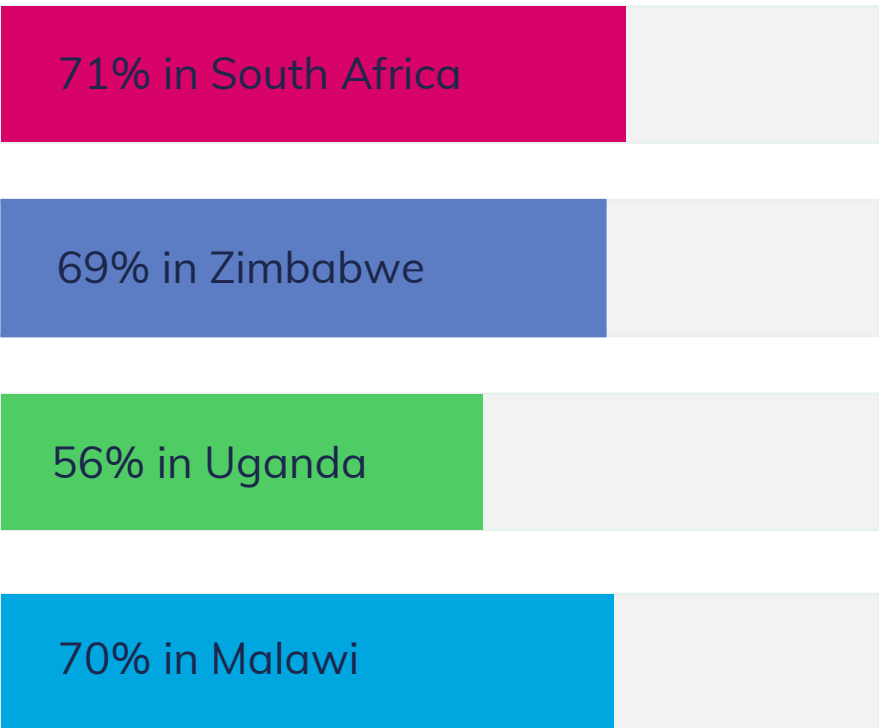
- Explore each of the priority segments and core themes identified during the Phase 2 research to better understand some of the **key barriers and motivating factors** to ring adoption.

Findings

Are women willing to use the ring?

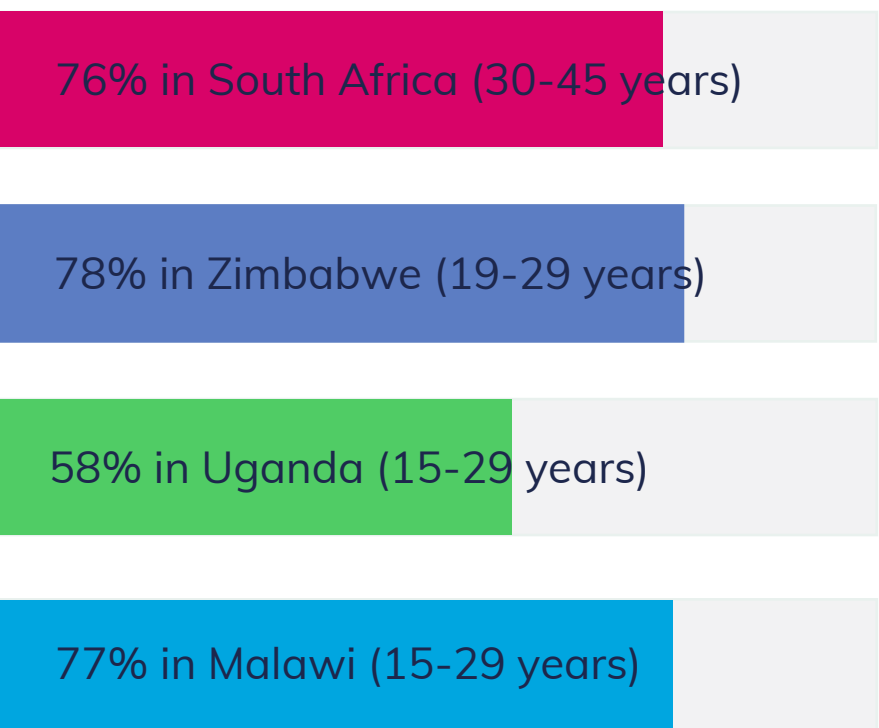
Would you use the ring if offered? (Overall)

Our sample of women from **South Africa** appeared to be **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.



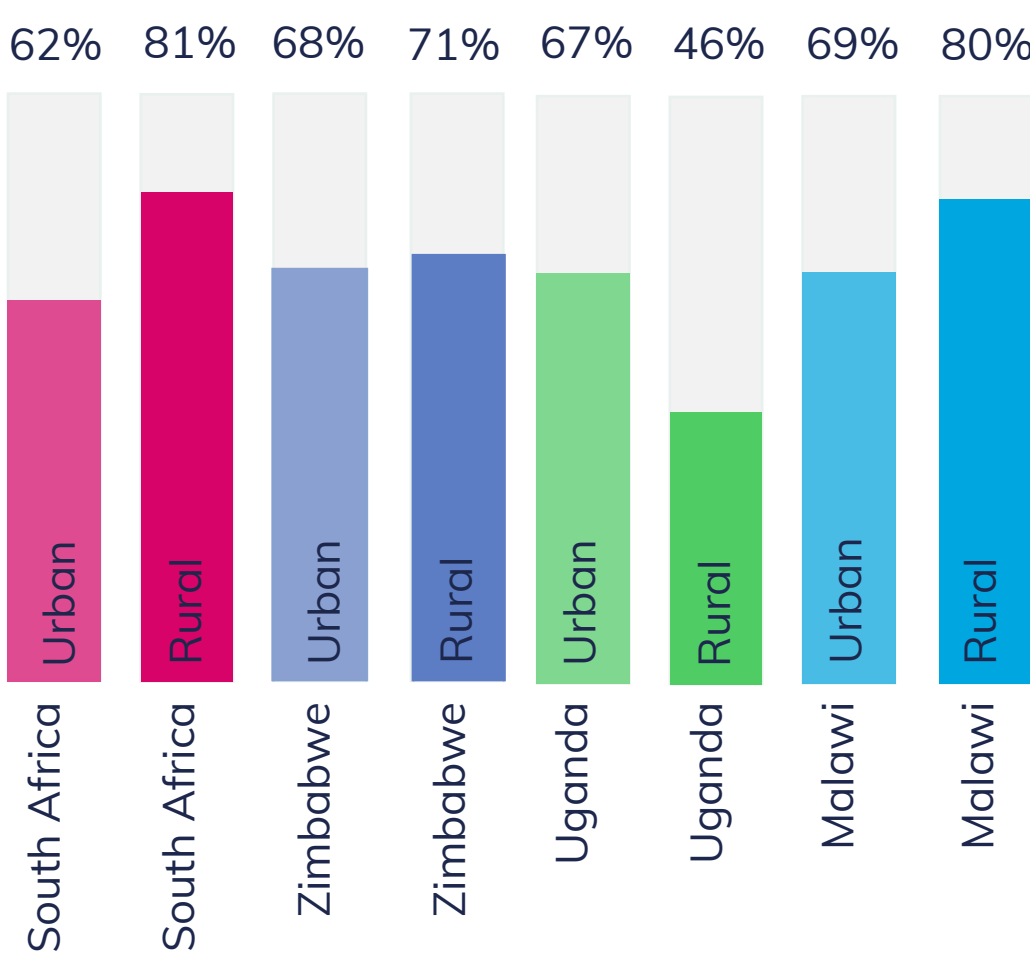
Would you use the ring if offered? (By age)

In **Zimbabwe, Malawi and Uganda**, younger women **aged 19-29 years** were **most interested** in using the ring, whilst interest in ring usage appeared to be more popular amongst older women aged **30-45 years** in **South Africa**.



Would you use the ring if offered? (By location)

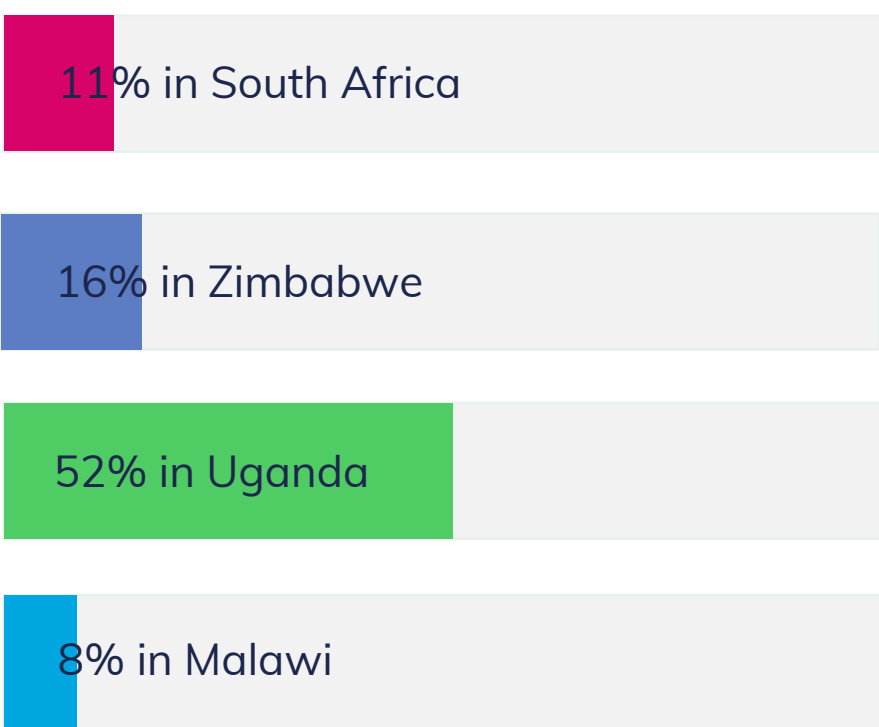
Rural women from **South Africa and Malawi** were **significantly more likely** to use the ring compared to rural women in Uganda. Only in Uganda, were **urban women** more likely to use the ring.



What are the potential barriers to ring use?

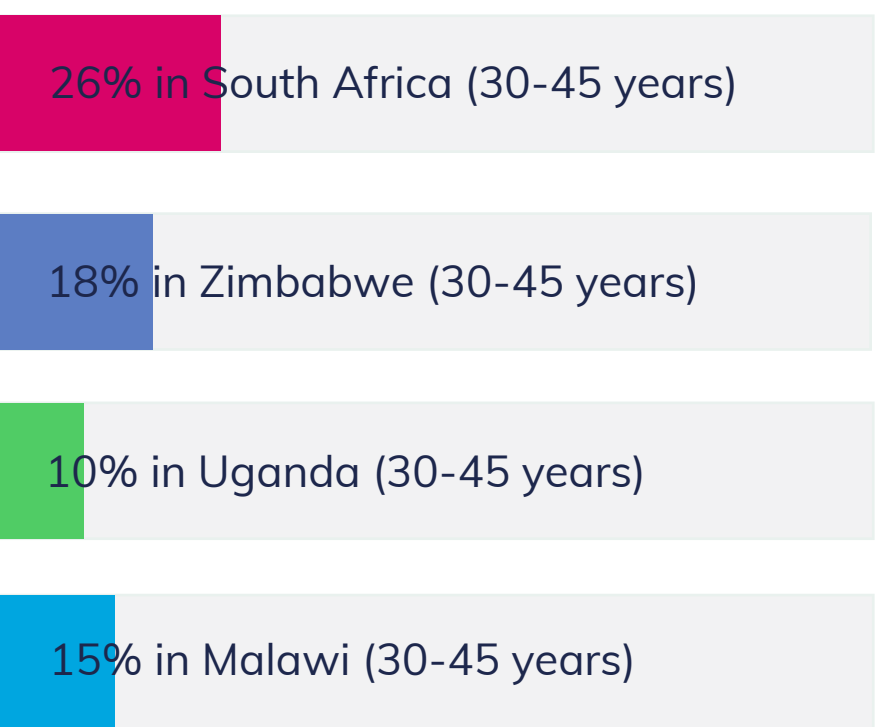
Fear of side effects

Based on phase III clinical trial data, the ring was found to be well tolerated; however, when participants were introduced to the concept, most women 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



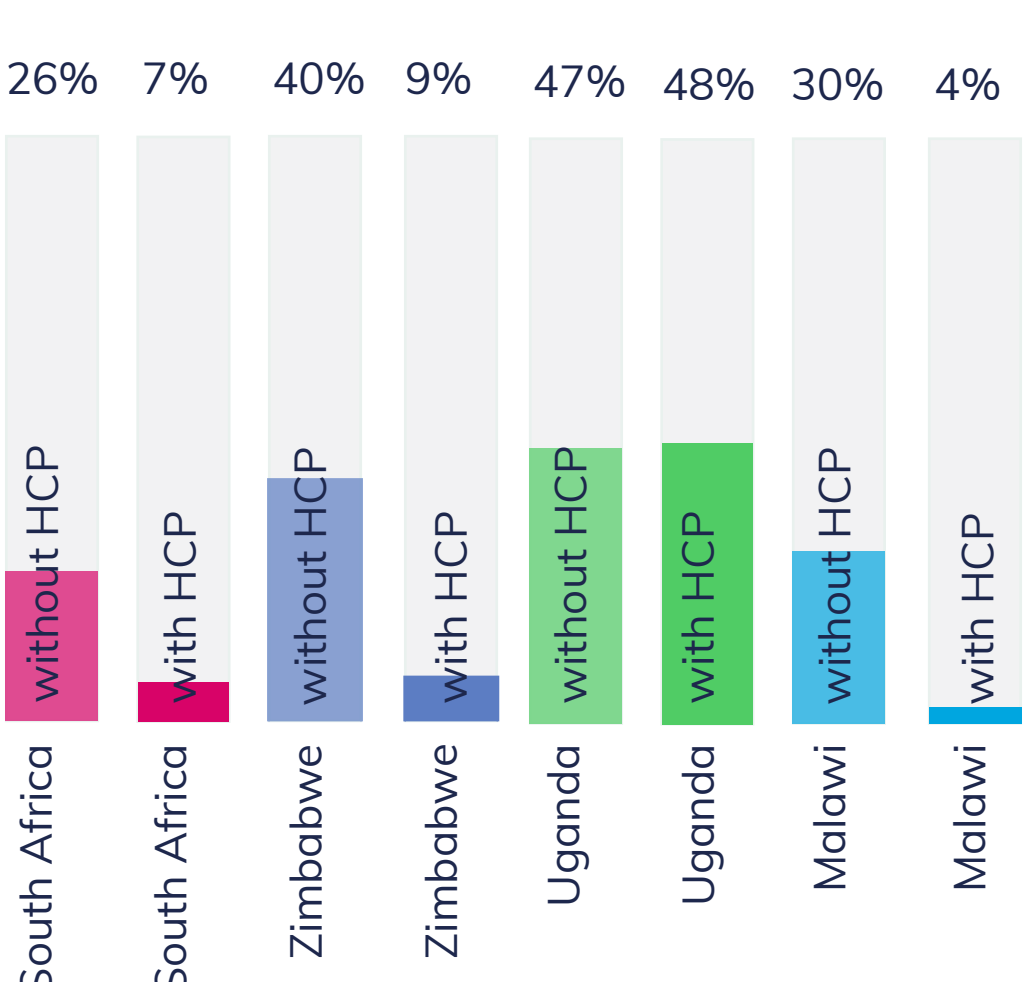
Ring efficacy

Women perceived the ring's efficacy as either a barrier or a lever depending on how well they understood the efficacy and it's **comparison to other products**. Across all 4 countries, concerns about the ring efficacy was highest for **older women aged 30-45 years**.



Discomfort with the insertion process

Across all 4 countries women expressed discomfort with the idea of inserting the ring themselves. However, when informed that a medical practitioner (HCP) would perform the insertion process, women's reported discomfort decreased.

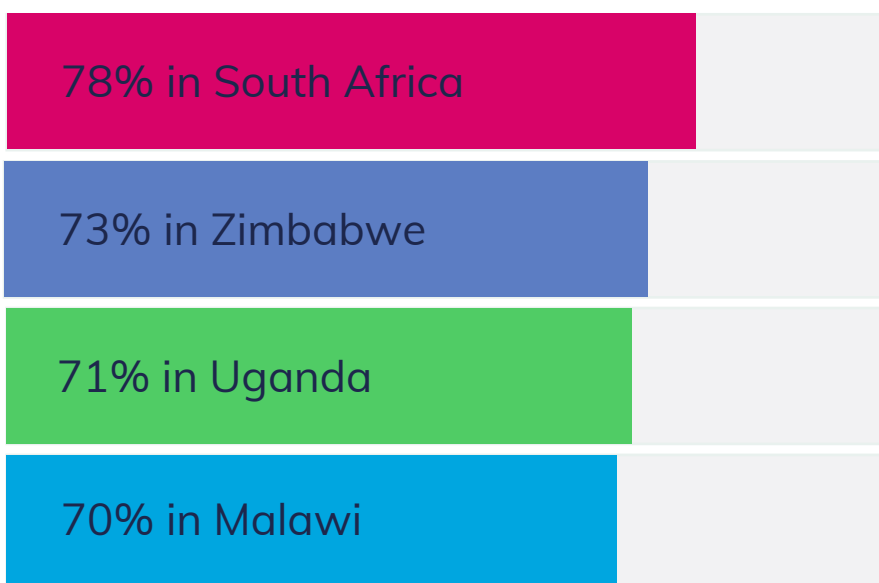


What else would affect ring use?

Men's perspective

Across all 4 countries, men seem to be key advocates for the ring with **at least 70%** of the sample reporting willingness to support their partner in using the ring. This was more prevalent for men from **rural locations**. However, men appeared to be very concerned about their partner **not disclosing** ring usage to them and were also concerned with the **efficacy of the ring**.

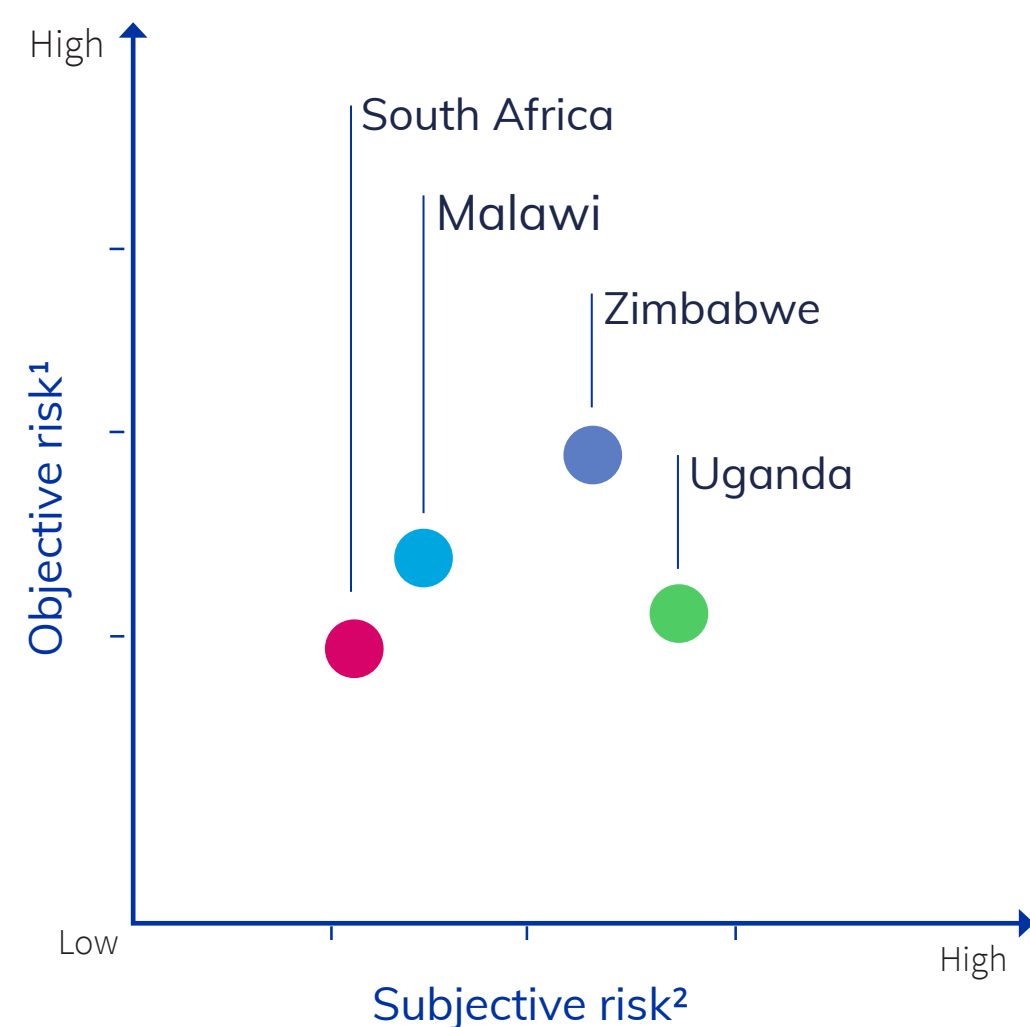
Men in our sample who reported willingness to support their partner's use of the ring if offered.



Risk behavior

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

- 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



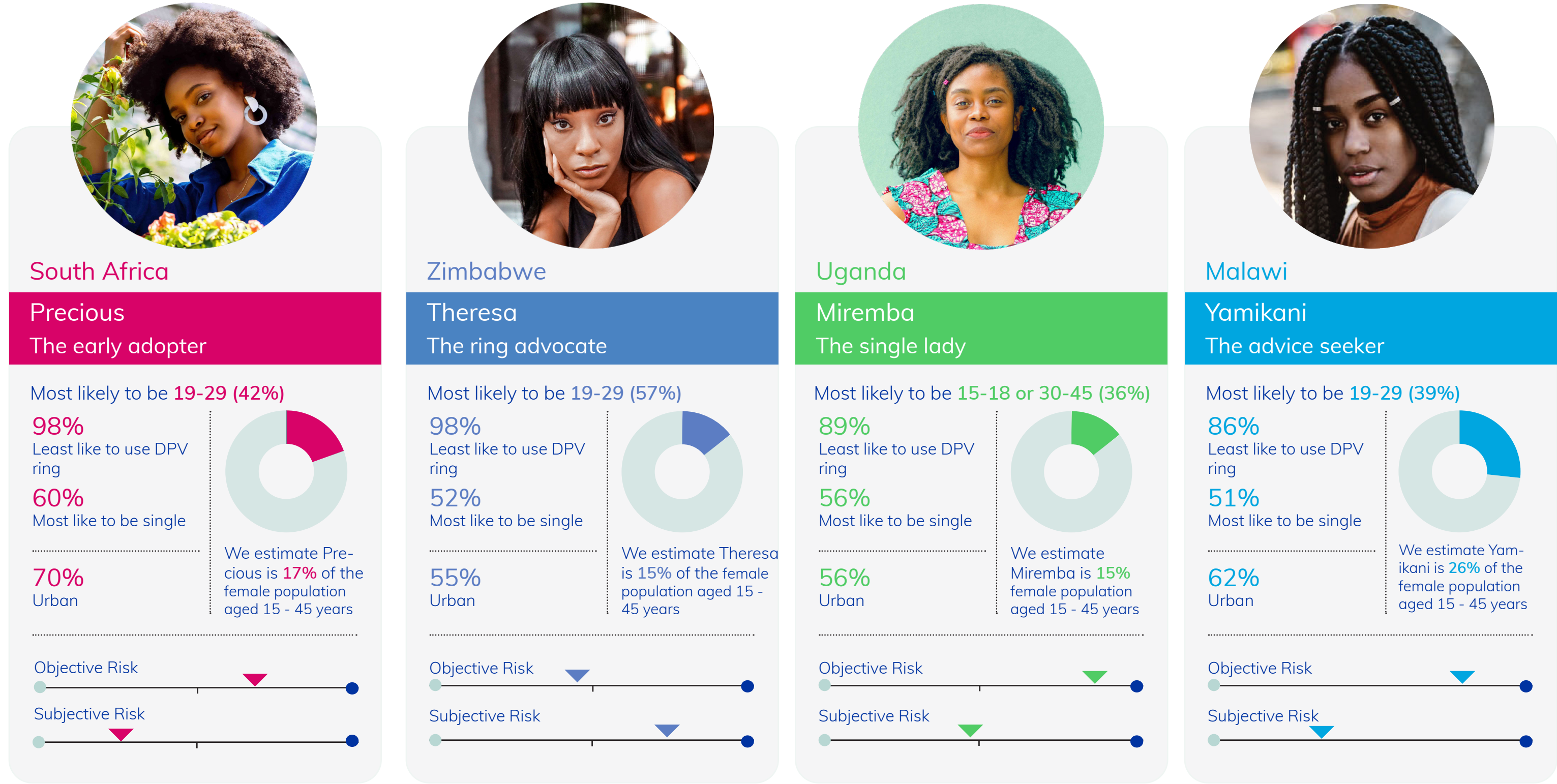
¹This was measured as the proportion of women who reported never to use a condom with their sexual partners.

²This was measured as the proportion of women who perceived themselves to be at a high risk of contracting HIV.

Types of segments

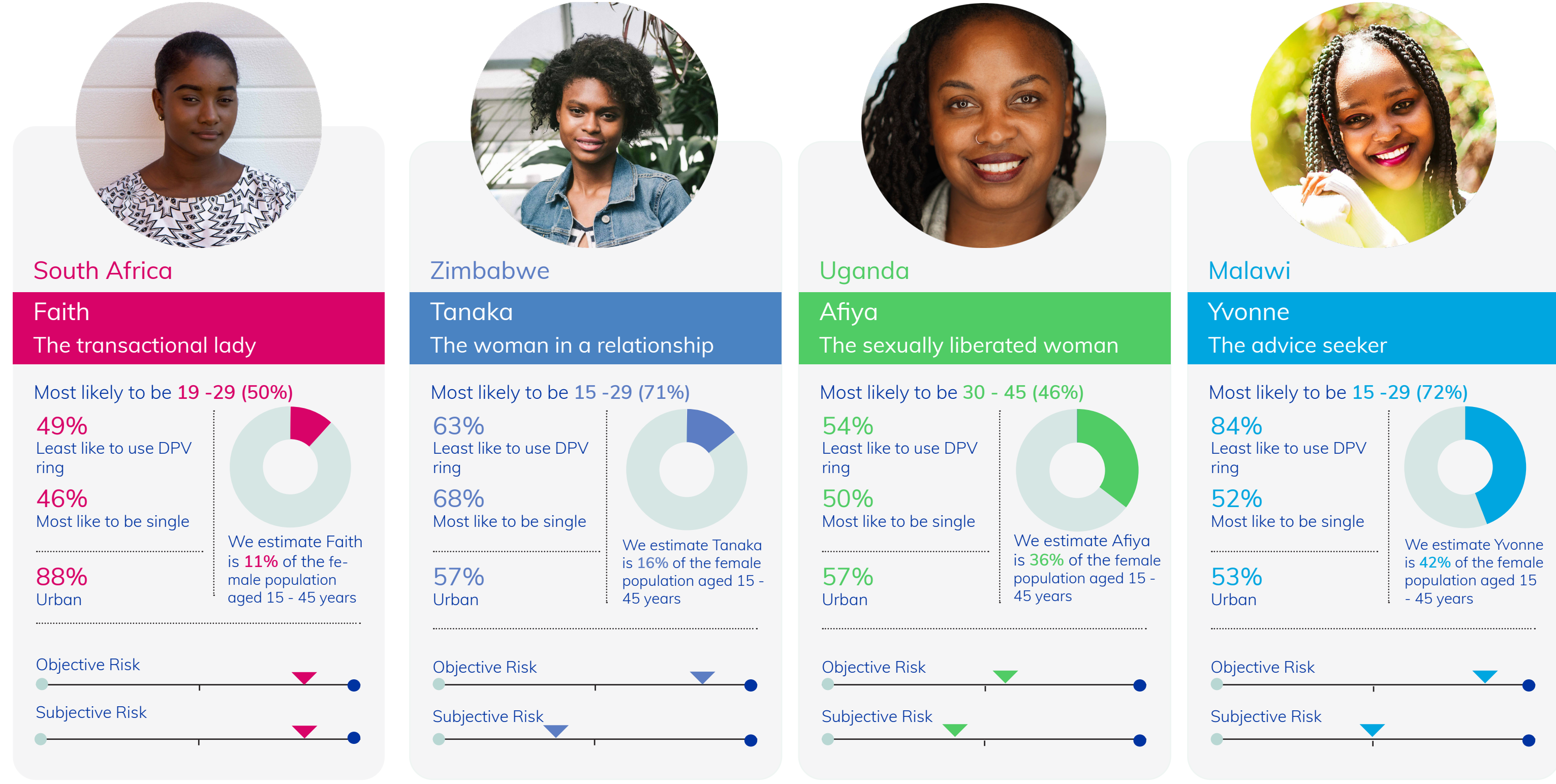
Segments with the highest preference for ring use

Based on the diffusion of Innovation approach - these early adopting segments offer **opportunity** for product **uptake** and can be leveraged as future opinion influencers and advocates for ring use.



Segments most affected by cross-cutting barriers

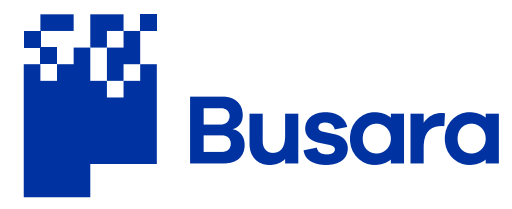
These segments had a comparatively **lower preference** for ring use but all shared **common barriers** to ring uptake and adherence. By prioritising these segment there would be lower future costs in shifting their preference to ring use.



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 15-29 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 used to guide the content, channels and types of educational materials necessary that will be developed for the ring, if it is approved, to reach these primary, high priority end-user segments.



The International Partnership for Microbicides receives generous support from the Danish Ministry of Foreign Affairs, Flanders Department of Foreign Affairs, Irish Aid, the German Federal Ministry of Education and Research (BMBF) through the KfW Development Bank, the Ministry of Foreign Affairs of the Netherlands, UK aid from the British people, the American people through the United States Agency for International Development (USAID) in partnership with the US President's Emergency Plan for AIDS Relief (PEPFAR), and the Bill & Melinda Gates Foundation. The contents of this presentation are the responsibility of IPM and do not necessarily reflect the views of its donors.