

DPV Ring: End-User Assessment, Segmentation, Messaging & Positioning

Malawi, South Africa, Uganda, Zimbabwe

Partner
(Fill partner name here)

Sector
Health

Project Type
Lab experiment

Sample Size
1,800 people

Behavioral Themes
Behavioural Segmentation

Photo Credit: Annie Spratt



Summary

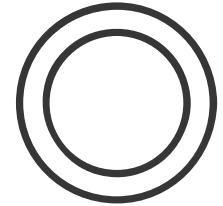
The purpose of this study was to understand and identify ways through which we could increase the demand for & adherence to the Dapivirine (DPV) ring among high-risk populations through an integrated Behavioral Economics and human-centred design approach. To achieve this, behavioral segmentation analysis was conducted with a sample of approximately 1,500 women end-users; in order to identify the most likely end-user population for the ring, as well as, the respective beliefs, barriers and behaviors that might influence women's potential uptake of the monthly Dapivirine Vaginal Ring, if approved

For each country, 4-5 segments were identified along with segment-specific motivators and barriers to ring use. Women from rural locations and younger women ages 15-29 years were more likely to use the ring. The age range preference had one notable exception within South Africa, where older women were more likely to use the ring. Common barriers included a fear of perceived side effects and concerns over the insertion process. Complex partner dynamics were shown to be influential, with a number of women expressing contradictory low perceived HIV risk levels due to trust in male sexual partners, followed by subsequent admissions of doubt in the partner's faithfulness.



A Behavioral Science Approach

Despite the significant progress that has been made to arrest the HIV pandemic in Eastern and Southern Africa, including the adoption of innovative approaches to prevent HIV infection, there is still significant work to be done. Existing products, such as oral Prep and post-exposure prophylaxis (PrEP and PEP) as well as dapivirine gel have experienced mixed levels of uptake and adherence amongst different population segments. The dapivirine ring is the latest entrant that targets women.



The purpose of this study, therefore, was to conduct market segmentation to better inform the launch of the Dapivirine ring in Eastern and Southern Africa in order to better target potential customers. Specifically, the study sought to address the following questions:

- *How does and end-users' risk profile affect their likelihood to adopt DPV rings, with users' risk as determined by their age, sexual behaviour, value towards protection from HIV versus family planning and their HIV status and that of their partner?*
- *Which factors in end-users' lives would compete or become barriers to adopting DPV rings?*
- *What are end-users' knowledge of preventive or mitigated methods when it comes to addressing risk in sexual reproductive health?*
- *What are the perceptions that end-users have towards DPV rings as it relates to their adoption and advocacy?*

Design

In order to identify the most likely end-user population for the ring and their beliefs, barriers and behaviours that might influence potential uptake the study was conducted through 3 phases.

Phase 1: Foundational Research

Qualitative research was conducted through in-depth interviews with 120 women equally split across the 4 countries. The objective of this phase was to explore current beliefs, sexual behaviours and how these might impact potential uptake of the DPV ring as well as inform the development of a Phase 2 quantitative instrument in order to ensure the research is contextually grounded.

Phase 2: Segmentation Analysis

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. The objective of this phase was to identify potential end-user segments based on demographics, HIV risk behaviours, willingness to use the DPV ring and other variables.

Phase 3: Targeted Qualitative Research

Targeted qualitative research was conducted with a sub-sample of 120 phase 2 research participants, equally split across 4 countries. The objective of this phase was to 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.



Photo Credit: Annie Spratt

Results

A. DPV Perceptions

Would end-users 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 in this sample, a majority still reported willingness to use the ring, if approved.



Would end-users use the ring if offered? (By age)

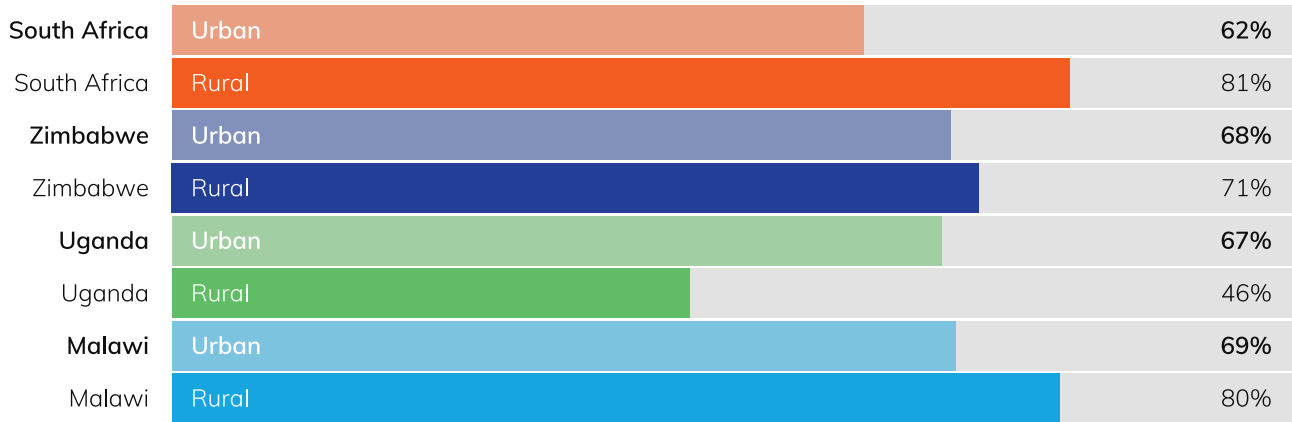
In Malawi, Zimbabwe and Uganda, younger women aged 15-29 years were most interested in using the ring, whilst interest in ring usage appeared to be more popular amongst older women aged 30-45 years in South Africa.





Would end-users use the ring if offered? (By location)

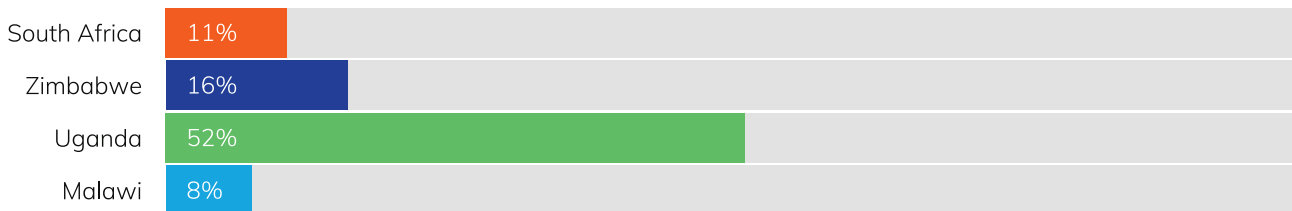
Rural women from South Africa and Malawi were significantly more likely to use the ring compared to rural women in Uganda. Only in Uganda, were urban women more likely to use the ring.



B. What are the potential barriers to ring use?

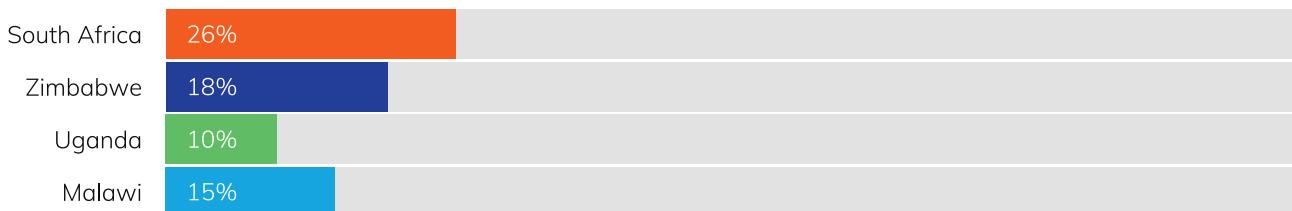
Fear of side effects

Based on phase 3 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

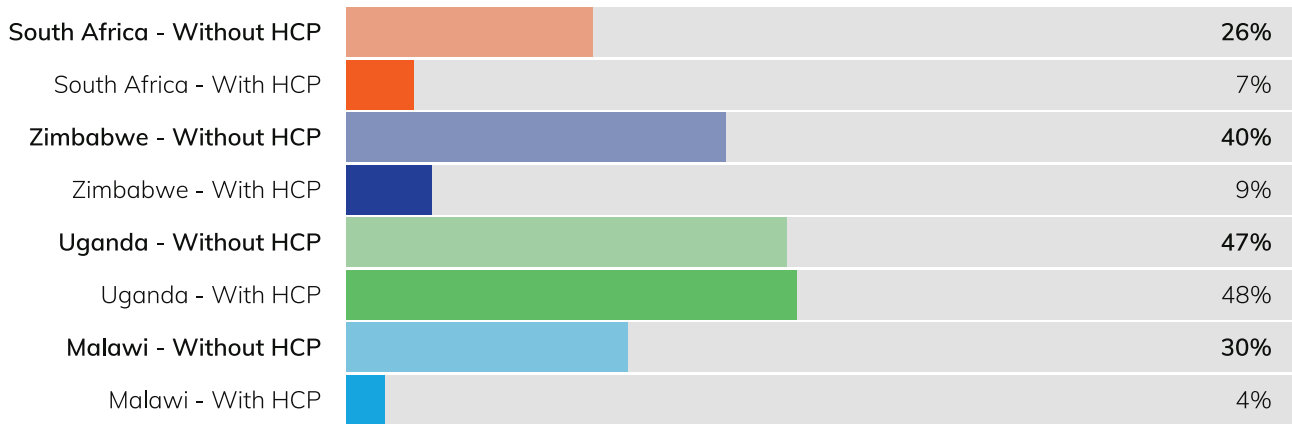
Women perceived the ring's efficacy as either a barrier or a lever depending on how well they understood the efficacy and it's comparison to other products. Across all 4 countries, concerns about the ring efficacy was highest for older women aged 30-45 years.





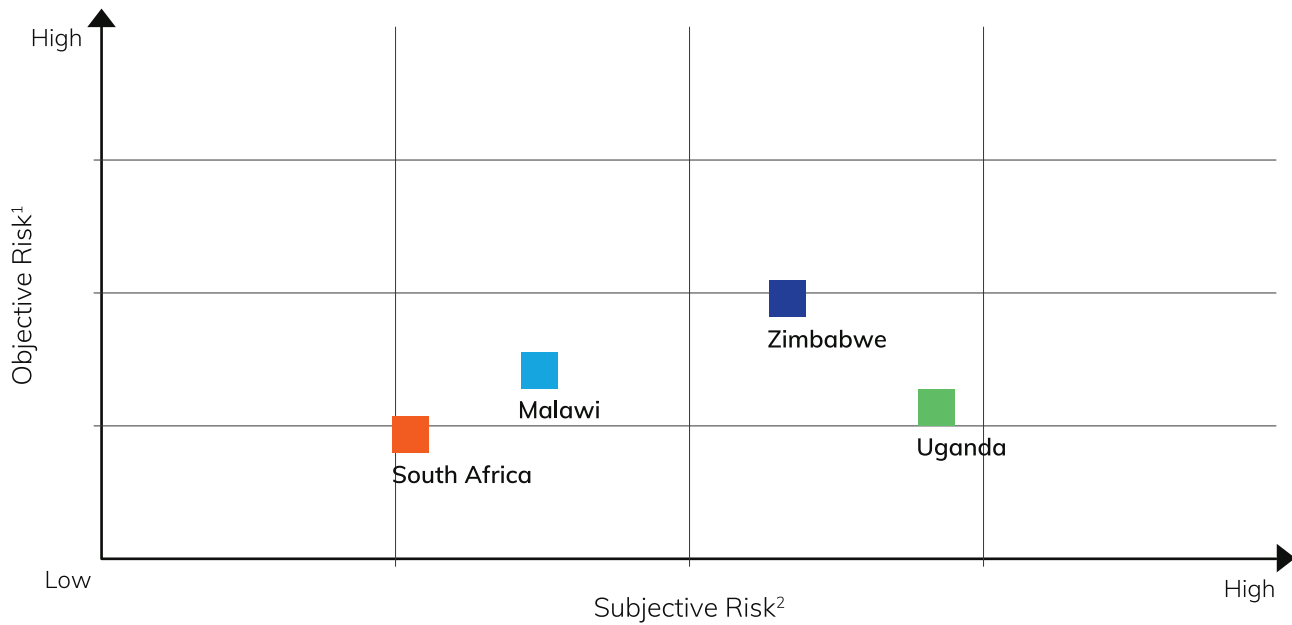
Discomfort with the insertion process

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.



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 while 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.



Discussion and Exploration

HIV risk perceptions and behaviors are very complicated, with some women who face high HIV risk perceiving they are at low risk and therefore perceiving little need to use preventive measures. By contrast, some women who face lower risk actively seek out methods to prevent HIV.

These behaviors are often motivated by relationship dynamics. HIV prevention strategies targeted at women should therefore seek to include their sex partners as they often play an influential role in women's HIV prevention decision-making. These findings guide the content, channels and types of educational materials necessary to reach this targeted audience.

