Using Research to Inform the Development of Social Marketing Campaigns for HIV Self-Testing in Kenya and South Africa

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Aims and Objectives

The aim of this abstract is to describe how recent research in Kenya and South Africa may inform the design of social marketing campaigns to introduce oral HIV self-testing in these countries and elsewhere in sub-Saharan Africa.

Increasing HIV testing in sub-Saharan Africa, which carries 64% of the global HIV burden, is of critical importance (Bateganya et al., 2007). It is estimated that 19 million of the 35 million people living with HIV today (54%) do not know that they have the virus (UNAIDS, 2014). In Kenya, 72% of people have ever tested for HIV (KAIS, 2012), while in South Africa, only 65.5% of the adult population have ever received an HIV test and knows their status (Shisana et al., 2014). Increased HIV testing facilitates earlier initiation of antiretroviral treatment (ART) which has been shown to dramatically reduce the risk of HIV transmission from a HIV positive person to uninfected sexual partners (Cohen, et al., 2011).

Preliminary research suggests that HIV oral self-testing is a viable and acceptable solution to increasing HIV testing uptake in the African context (Choko et al., 2011; Kalibala, 2011). An HIV self-test kit allows individuals to test themselves using an oral swab, at a time and location convenient to them, and provides results within minutes (Pai et al., 2013).

The research described here, which used both qualitative and quantitative methods, was conducted by Population Services International (PSI), in collaboration with Ipsos Public Affairs (Kenya) and the Centre for HIV and AIDS Prevention Studies (South Africa). In both Kenya and South Africa, these study findings are being used to inform the design of pilot projects for HIV self-testing. Findings have also informed the development of HIV self-testing research in Zambia, Zimbabwe and Malawi, including randomized trials to evaluate the impact of HIV self-testing.

Behavioral Objectives and Target Group

The overall behavioural objective of an HIV self-testing intervention is to increase uptake of HIV testing among adult populations including specific programs for at risk populations, such as men who have sex with men. The secondary behavioural objective is to ensure individuals testing HIV positive using a self-test access HIV treatment. The research described here was formative in nature and will be used to inform the design of interventions targeting these testing uptake and treatment access behavioural objectives. The objective of the research outlined here was to understand user preferences related to HIV self-testing in order to develop social marketing programs for HIV self-tests.

In Kenya, research was conducted among men and women from the general population, as well as men who have sex with men (MSM), and female sex workers (FSW) in Mombasa and Siaya county. All participants were aged 18 to 49 years and had an unknown or negative HIV status. In South Africa, the target group was men and women from Braamfontein and Soweto aged 20 to 49 years.

Citizen/customer orientation

Identified barriers to HIV testing and counseling (HTC) uptake through existing delivery models include: HIV-related stigma, lack of confidentiality, costs (e.g. travel, waiting, etc.)
and inconvenience of attending test sites and inconvenient location or hours (Krause Subklew-Sehume, Kenyon & Colebunders, 2013; Pai et al., 2013; Tabana et al., 2012; Anaya et al., 2008; Matovu & Makumbi, 2007; Kalichman & Simbayi, 2003). While newer testing models, such as mobile and home-based testing, address some of these barriers, these delivery models are resource intensive, provide limited coverage and are still subject to some of the aforementioned barriers. Oral HIV self-testing provides an opportunity to increase coverage by overcoming key barriers to HIV testing for clients.

**Nature of the Social Offering**

HIV testing plays an important role in HIV prevention by connecting HIV-positive individuals to treatment services and reducing HIV risk behaviours (Denison, O’Reilly, Schmid, Kennedy & Sweat, 2008; Weinhardt, Carey, Johnson & Bickham, 1999). HIV self-testing gives the target audience the opportunity to undergo a HIV test in a manner they may find more comfortable because it addresses concerns about privacy and confidentiality, as well as issues related to availability of HIV testing (UNAIDS, 2013).

**Engagement and Exchange**

Ease-of-use, privacy, and convenience were the top three incentives for using HIV self-testing kits. Barriers to self-test use included: the lack of counseling and emotional preparedness, misinformation about HIV transmission, concerns about side effects, and cost and accuracy of kits. Messaging should leverage identified motivators to use and address the barriers. The methods of engagement may range from interpersonal communications to mass media. All exchanges with users (or potential users) must include information to ensure links to counselling and treatment are made clear. In both the Kenya and South African studies, people from the general population who felt they had partner support to seek HIV testing services were more likely to use the kits. Hence, partners will form an important secondary target audience that should be engaged.

**Competition Analysis**

A self-testing program under development in the region, will socially market HIV self-test kits in an effort to increase overall HIV testing coverage. Self-tests are intended to grow the HIV testing market by reaching individuals not likely to test through current offerings. In this way, other testing methods are alternatives rather than competition. These alternatives, and their barriers to use, among potential customers, are detailed below.

<table>
<thead>
<tr>
<th>HIV Self-Test Alternative</th>
<th>Key Barriers to Use</th>
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</thead>
<tbody>
<tr>
<td>Facility Based Testing</td>
<td>Concerns about confidentiality, as well as limited accessibility in some places</td>
</tr>
<tr>
<td>Mobile/Outreach Testing</td>
<td>Increased accessibility (over facility based testing), but high concerns about confidentiality due to the community-based natured of the model.</td>
</tr>
<tr>
<td>Home-based Testing</td>
<td>Increased accessibility and confidentiality, but high operating costs limit reach.</td>
</tr>
</tbody>
</table>

In both Kenya and South Africa, a key benefit of self-testing may be in reaching individuals interested in re-testing—potential consumers who had already tested for HIV highlighted the
convenience the HIV self-test kit offers in not needing to go through the counseling process every time they test. Our research suggests that there are high levels of interest and intention to use HIV self-test kits among the general population and FSW in Kenya. In both studies, data suggests that once HIV self-testing is made available, there would continue to be demand for traditional HTC services from consumers who perceive these methods as the most accurate HIV testing service available.

The option not to test is considered competition. This could be due to target audience members not being emotionally prepared to know their HIV status or because the financial cost of the HIV testing is perceived as too high.

**Segmentation and Insight**

In South Africa, the study recommended that people who believed they were emotionally ready to accept an HIV-positive test result should be targeted. The insight driving this is that people who expressed not needing pre-test counseling were more likely to use the product. Relationship dynamics may also affect emotional readiness. In Kenya, those reporting their spouse would support their decision to test for HIV were more likely to desire self-testing.

In both countries, the confidentiality of the test and convenience of its use were cited as key product benefits. Fear of stigma associated with HTC and lack of privacy for test results were barriers to testing uptake, as was concern about long queues and time away from work. Segmenting the audience by emotional connection to these benefits is also likely to reach individuals who are not testing through current models.

In both countries, people who had ever tested for HIV were more likely to express interest in HIV self-test kits than those who had never tested. Further studies are needed to understand what efforts should be taken to reach the segment of the target audience that has never tested for HIV and those who test infrequently. In Kenya, people that were already familiar with other self-test products, such as pregnancy kits, also formed an important segment. Familiarity with the benefits of self-testing made HIV self-test kits less intimidating, more approachable and easier to integrate into a health routine.

Demographics may also influence segmentation. In Kenya, individuals with lower education levels were more likely to report HIV self-test interest. Respondents also heavily emphasized the need for pictorial instructions with limited text due to low literacy levels. Urban versus rural residence may also have segmentation and placement implications; in urban areas of Kenya, individuals were more likely to cite confidentiality as a benefit of HIV self-testing; however rural residents were most likely to report interest in using an HIV self-test kit.

**Integrated Intervention Mix**

The integrated intervention mix for self-testing was examined through product, place, price and promotion.

The actual product, specifically its packaging and labeling, will need some design improvements, as evidenced in the Kenya study, in order to ensure proper use and correct interpretation of the result. Suggestions included specifying the types of pictures and instructions to include with the product to help guide the consumer through the testing
process. The product must also include linkages to follow-up services, particularly HTC to confirm the diagnosis and link to appropriate prevention, treatment and care service. In both countries, potential consumers liked the idea of a toll-free hotline they could call before or after using the HIV self-test kit and recommended that hotline information be included on the packaging of the product as well as highlighted during purchase. Potential consumers also suggested that information about local HIV services be included with the HIV self-test kit.

Both studies revealed that users would be most likely purchase the product for themselves. Potential consumers in Kenya preferred and expected to see the product in private and public clinics and pharmacies. Among the general population, 68% preferred purchasing the product in a public clinic, while 83% preferred private clinics or pharmacies. Both MSM and FSW reported a preference for accessing the product in private clinics or pharmacies versus public clinics. In South Africa, potential consumers had mixed opinions about potential retail outlets. Some thought that it would be best to purchase HIV self-test kits in pharmacies where they could use their medical insurance, while other preferred having the kits available in supermarkets where they would be more accessible and the buying experience more anonymous. Still others favored accessing the product at a doctor’s office where they could receive counseling and be sure of a kit’s integrity. This view that location determined quality of the product was also expressed by some consumers who were concerned that if the kits were sold in smaller shops or “tuck shops,” the quality of the product might be compromised. In addition to the place of purchase, purchasing decisions may also be driven by how the product is displayed in the store, pharmacy, or clinic. Consumers struggled with the desire that the product be displayed somewhere that is both private and convenient. In Kenya, consumers reported that placing the product behind the counter would denote better quality but would also make purchase of the product less discreet.

In Kenya, the median maximum price for willingness to pay was 100 KSH (about 1.12 USD) among the general population and MSM. The median maximum price was 150 KSH (about 1.68 USD) among FSW. Among all target groups, those with previous HIV testing experience were willing to pay more for the self-test kit. In South Africa, a few of the research respondents did not think they should buy an HIV self-test kit since HTC was free at the clinics and they would still need to attend a clinic for follow-up services. Those that were willing to purchase a self-test kit in the South African study said they would be willing to pay 100 to 150 ZAR (9 – 13 USD). The substantially higher willingness to pay in South Africa compared to Kenya could be explained in part by the differences in living standards between the countries.

In Kenya, mass media, healthcare providers and community health outreach workers were preferred methods of promotion. Television appeared to be the most effective method of communicating purchase locations, promoting confidence regarding ability to perform the test and belief in the test accuracy. Television also appeared more effective in aiding recall of key messages. As there are various languages utilized in southern and eastern Africa, it is important to identify which languages should be used to communicate messages. In Kenya, 61% of study participants stated that they would like to hear the radio advertisements in Kiswahili. Programmes and organisations dispensing the self-test kit in both countries will need to work with the government and the suppliers to streamline messaging about stigma and discrimination relating to HIV/AIDS generally, as well as of testing, and to help mitigate the public’s fear about testing positive. In both studies, members of the target audience mentioned healthcare providers and community health workers as trusted counsellors who
could provide information and answer questions. It will be important to equip these providers with the agreed messaging to ensure consistency of information.

**Co-creation through social markets**

In order to ensure HIV self-test kits are available and accessible to all segments of the market, PSI collaborated with the private, public and social sectors, as well as potential consumers during the studies. In Kenya, government bodies, regulatory authorities, manufacturers, packaging experts, key populations at higher risk of HIV infection, as well as the general population were consulted. Stakeholders were asked to provide insights on a number of issues, including the macro environment and its effect on uptake of HIV self-testing kits and the criteria sellers of HIV-self test kits must comply with to get government certification. These insights led to many of the recommendations found in the following section. In South Africa, PSI worked with a partner NGO and is working with and sharing its findings with stakeholders from the public and private sector. This initial research will be used to develop go-to-market strategies.

**Systematic Planning**

The studies underwent review from relevant human ethics board, and stringent processes were put in place covering all aspects of the studies from recruitment of participants, to data collection and interpretation. Research in Kenya used a mixed-method approach, which included a cross-sectional household survey and qualitative interviews (in-depth interviews and focus group discussions). In South Africa, an exploratory qualitative cross-sectional study using FGD was conducted. All data was collected in predominant languages of the study areas.

**Results and Learning**

The key learning from these formative studies is that there is strong interest and latent demand for HIV self-testing in both countries. There are also some programmatic and product learnings from the studies, including:

- HIV self-test kit users must be linked to additional HIV prevention and treatment services, whether through a hotline, as part of the instruction manual or both.
- Future HIV self-testing programs should address self-efficacy in coping with an HIV-positive test result, as it has significant impact on intention to use HIV oral self-test kits.
- Promotional messaging should build on identified benefits such as ease of use, convenience and privacy, as these were the most common incentives for using an HIV self-test kit.
- Healthcare providers and community outreach workers are the preferred and trusted sources for promoting self-testing.
- Package and labeling can greatly influence purchase and correct use of HIV self-test kits, such as ensuring accurate and reliable interpretation of the test results and helping to correct misconceptions regarding HIV.
- Being able to purchase the kit discreetly and confidence in test quality are key influencing factors; however, the best site for distribution may vary by context and audience segment.
• A strategy targeting providers, pharmacists, and other HIV self-test kit sellers needs to be developed before introducing the product to market to address barriers and motivators to selling.
• There is a wide range of willingness to pay suggesting a potential market for products that are both socially marketed and sold with cost recovery.

Pilots for the distribution of this product are currently underway in Kenya and new pilots in Malawi, Zimbabwe and Zambia are expected to launch in mid to late-2015. These pilots will answer critical questions about whether programs designed based on this formative work, can achieve behavioral objectives associated with testing uptake and treatment access.

References


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