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SEX WORK

IS

REAL WORK

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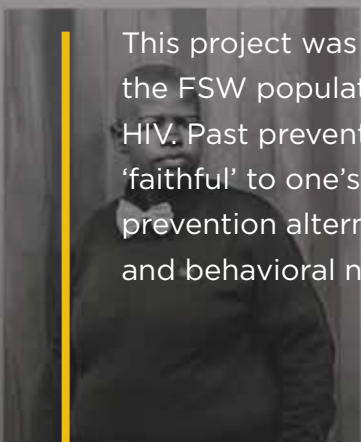
APPLYING HUMAN-CENTERED DESIGN & BEHAVIORAL ECONOMICS TO DEVELOP COMMUNICATION STRATEGIES TO DRIVE UPTAKE OF ORAL PrEP AMONG FEMALE SEX WORKERS IN KENYA

In 2016, the government of Kenya introduced Oral Pre-Exposure Prophylaxis (Oral PrEP), a method which uses antiretroviral drugs to protect HIV-negative people from getting infected. Following research and demonstration projects, which showed that the drug reduces the risk of HIV infection with up to 96 per cent, the drug was incorporated into the country's HIV prevention roadmap as the most recent strategic framework. The key goals of the project—the first of its kind to deliver PrEP widely across a health system while promoting a sustainable service delivery model—was to understand and develop new communication strategies targeting Female Sex Workers (and other target populations) across five regions in Kenya, to increase the uptake of Oral PrEP to prevent HIV.

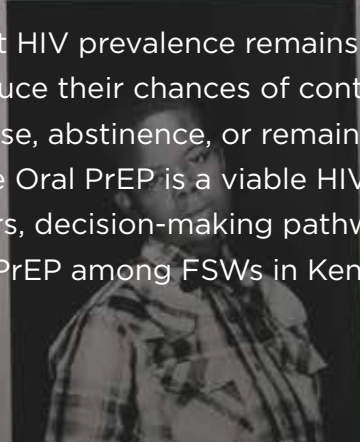
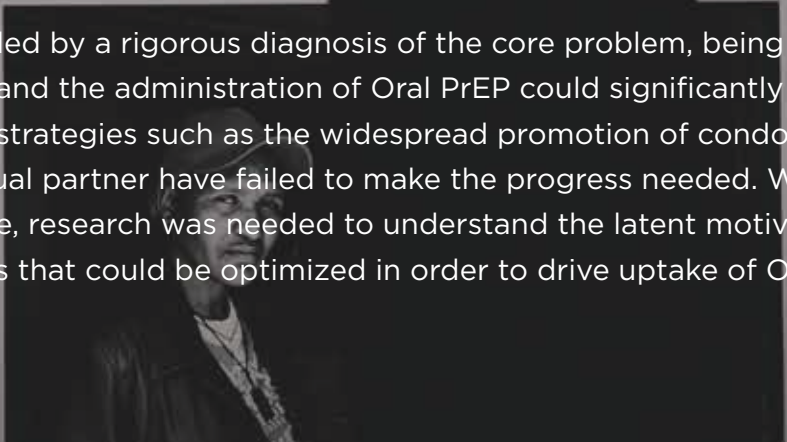
Oral Pre-exposure Prophylaxis (PrEP) is one way to help prevent HIV infection. Prophylaxis means disease prevention. In this approach, people who do not have HIV infection take one pill once a day to reduce the risk of becoming infected.



# THE PROBLEM



This project was guided by a rigorous diagnosis of the core problem, being that HIV prevalence remains high in the FSW population and the administration of Oral PrEP could significantly reduce their chances of contracting HIV. Past prevention strategies such as the widespread promotion of condom use, abstinence, or remaining 'faithful' to one's sexual partner have failed to make the progress needed. While Oral PrEP is a viable HIV prevention alternative, research was needed to understand the latent motivators, decision-making pathways, and behavioral norms that could be optimized in order to drive uptake of Oral PrEP among FSWs in Kenya.





Voluntary enrollment  
PrEP treatment

Consistently takes  
medication as  
prescribed and is  
continually monitored  
by health care provider

# HOW MIGHT WE DRIVE **UPTAKE** & **RETENTION** OF ORAL PrEP AMONG **FEMALE SEX WORKERS** IN **KENYA** ?

Includes anyone who  
formally or informally  
exchanges sex for  
money, resources, or  
status

Nairobi, Kisumu, Kisii,  
Mombasa and Thika

# OUR RATIONALE

Why Human-Centered Design and Behavioral Economics?

## HCD + BE

Human-Centered Design and Behavioral Economics have the ability to help us deeply understand at a deeper level, and think about not just individual adoption, but wider social norm change and sustainable long-term diffusion. In this project, we broke out of the analytical, risk-averse, linear conventions when it came to problem solving and explored a different approach that placed an emphasis on a more iterative, adaptive, and highly creative process, forcing ourselves and the users to learn by making and doing.

ThinkPlace's strength lies in the deep, personal understanding of users through a qualitative research approach. Our partner, The Busara Centre for Behavioral Economics; added to this value by validating and adding rich quantitative data to our segmentation of the population of female sex workers in Kenya. The primary aim of the segmentation was to understand the decision making characteristics of these identified segments and to generate thematic areas of interest for deep dives in design phases that followed.

# OUR SEGMENTATION APPROACH

Developing the **QUANTITATIVE INSTRUMENT** to collect useful information relevant for intervention design, including risk perceptions, clinic experience and locus of control

**COLLECTION AND PREPARATION** of quantitative data for descriptive analysis and quantitative segmentation

**SEGMENTATION OF DATA** using unsupervised machine learning followed by analysis of resulting clusters

**DECISION ON MOST USEFUL SEGMENTATION** solution based on quantitative and qualitative findings

1

2

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**INITIAL QUALITATIVE RESEARCH** to contextualize key populations and identify variables to collect in quantitative survey

Preparing the **SAMPLING FRAME** based on key populations of interest, availability of mobilizers, expert advice and project timelines

**COLLECTION OF KEY VARIABLES FOR SEGMENTATION** using dimension reduction techniques

**ROBUSTNESS AND USABILITY CHECKS OF IDENTIFIED SEGMENTS** for intervention design through quantitative and qualitative methods

**ATTITUDINAL SEGMENTATION** which considers risk perception, sexual behavior and social inclusion.

# QUALITATIVE RESEARCH METHODS

## Research Methodology

### **A day in the Brothel and at the Hotspots**

We spent full days and nights, with sex workers both inside brothels and with those operating from the street at designated “hotspot” zones speaking with them during free periods in between clients. This immersion allowed us to naturally observe what a typical day looks like for them, including the flow of clients in-and-out, their decision-making processes behind how clients are assigned, and how staff members communicate with each another. Observing internal politics in this way furthered our understanding of the various influences that impact the decision-making behavior of brothel and street sex workers. By embedding ourselves as researchers in their environment, sex workers were able to get more comfortable in expressing themselves genuinely about sensitive topics that mattered to them.

### **Peer interviewing**

In this method of research, we engaged active sex workers to conduct research in an environment that was familiar to them. We trained them on effective research methods and also on how to achieve the objectives of this research phase. This tool allowed us to get unique and in-depth insights, as well as rich and real data that genuinely represented the sex work landscape.

### **Activity themed interviews**

This method involved engaging participants in a themed activity that gave us uninterrupted opportunities for observation. One such activity was; challenging a group of 4 sex workers to create a model of an “ideal sex worker friendly health center” using Lego blocks. As they participated in this activity, our researchers were attentive to cues on what the ‘builders’ find to be barriers and enablers for themes such as accessibility and service delivery. In the past we have found that engaging participants in a mentally challenging and fun activity improves their likelihood of sharing genuine information.

After this first round of qualitative research, Busara classified FSWs into segments using a machine learning approach (an appropriate unsupervised learning clustering algorithm). The tool identified the key features that differentiated FSWs across segments given a user-inputted set of features observed. These features were the relevant data collected as part of a quantitative survey, as well as behavioral indicators uncovered by the qualitative research (risk aversion, subjective and objective perception of HIV risk, etc.)

This input was fundamental in the development of our 4 personas (key archetypal users that represented the needs, values, and behaviors of larger groups of FSWs).





# QUANTITATIVE RESEARCH METHODS

## Research Methodology

### Research Sample

Before conducting the survey, we carried out community entry in each location with the aim of:

- Establishing links with organizations/ mobilisers
- Identifying 'hotspots'
- Gaining contextual knowledge

After which, our client's mobilisers and peer educators assisted in carrying out recruitment by utilizing their links with FSWs to provide the field team with a steady stream of individuals who met the criterion. In addition to this, respondents referred friends who met the criterion to take part.

The final sample consisted of (equally split between the 5 locations):

296 Female Sex Workers (FSWs)

We conducted the interviews in venues that were familiar to respondents, such as local organizations or their place of work. This ensured they were in an environment that was both comfortable and convenient for them. The interviews lasted approximately 1 hour and were conducted one - on- one using a tablet device. The survey focused on several key areas and included a bean activity where respondents allocated beans to various categories as a visual representation of their decision making processes and perceptions of risk.

# Aiysha

## DESPERATE AND DISCONNECTED

Mean age 28 years old

- She does not consider herself a sex worker.
- She regularly has sex in order to meet her basic needs and the needs of her family.
- She is very difficult to identify because she is not connected to any formal network.

# Lulu

## THE SPONSORED STUDENT

Mean age 23 years old

- She does not consider herself a sex worker.
- She has a false sense of trust in her sponsor.
- It is important for her to be "on trend and part of the "in group".

# Halisi

## THE STREET SEX WORKER

Mean age 27 years old

- She has a feeling that HIV is inevitable.
- She has become desensitized to the gamble of not using a condom after years of taking the risk.
- Halisi interacts with peer educators and fellow sex workers on a consistent basis

# Anna

## THE BROTHEL SEX WORKER

Mean age 32 years old

- She is highly influenced by the acceptance and opinions of her brothel peers.
- She justifies risky behavior in the name of monetary reward.
- She does not respond to information and messaging from "out group" sources

# OUR PERSONAS



Throughout our research, we identified a hierarchy of barriers which had to be addressed in order to increase adoption of oral PrEP amongst female sex workers in Kenya. We proposed a barrier based approach, as we discovered that one cannot effectively change people's behavior with only rational mechanisms, such as incentives, but that it is necessary to induce changes in unconscious behavior. The challenge was to create "decision architectures" to positively take advantage of the unconscious forces of the human mind, in order to motivate more rational behavior. With the barrier prioritization approach we stated the need to design and implement nudges that could effectively surpass barriers towards PrEP uptake and adherence among the sex worker population.

The proposed approach is based on the realization that all individuals have cognitive limitations, that lead to the limitation of rationally processing large amounts of information, that emotions influence their decision making process, that they are subject to biases when handling probabilities and are often willing to sacrifice their own interest to satisfy different forms of social or cultural preference. People do not have the experience to always make the right decision in a complex modern world, but they enjoy having the right to choose.

# DESIGN-LED BEHAVIOR CHANGE

Our Model for Understanding Female Sex Workers Needs & Decision-Making for PrEP uptake



- 6 HIGHLY PROTECTED AGAINST HIV OR NO RISK AT ALL
- 5 ABILITY TO MAKE DECISIONS ABOUT YOUR BODY
- 4 VALUING YOUR SEXUAL HEALTH
- 3 FINANCIAL ACCESS
- 2 PRODUCT AWARENESS
- 1 CLINIC VISIT + TESTING

This approach was derived from breaking down barriers into groups that could help us to generate more targeted strategies that created more value, per contact with users. These categories were:

## 1. CLINIC VISIT AND TESTING

The assumptions that one has about their anticipated clinic experience vs their actual experience pose very real barriers to PrEP adoption. PrEP adoption is not possible without an in-person visit to a participating health facility, which means that it is critical that we understand how people anticipate and experience the clinics around them.

## 2. PRODUCT AWARENESS

Not knowing about PrEP is an obvious, but critical barrier to uptake. Understanding the pervasiveness of general “product unawareness” within the various user segments was critical in the process of designing strategy that responded to addressing these “awareness gaps.”

## 3. FINANCIAL ACCESS

A lack of finances and access to supportive economic resources could directly impact one’s ability to uptake PrEP. When assessing financial access as a barrier, we took into account the various costs that are indirectly associated with PrEP enrollment. Transport fare, for example, can deter someone from traveling to and from clinics in order to visit their doctor and obtain the drug. Additional indirect costs associated with uptake could include time spent during travel, time spent at the clinic, and productivity lost due to the potential side effects.

## **4. VALUING YOUR SEXUAL HEALTH**


This segment refers to one's perception of their own level of risk as a barrier to uptake. Simply, if someone does not think about and calculate their own potential for risk, then they are unlikely to consciously make behavioural changes in response to it. Valuing sexual health would include the process of conceptualising one's personal risk, and then subsequently prioritising it above external influences.

## **5. AUTHORITY TO MAKE DECISIONS ABOUT YOUR BODY**

One's ability to make decisions about sexual activity and sexual partners are often impacted by skewed power dynamics within the negotiation process. When it comes to PrEP uptake, we had to consider who does and does not have the authority to make proactive decisions about their bodies. Research around authority and decision-making included understanding spheres of influence and expectations amongst the various user segments in the context in which they live and socialize.

## **6. HIGHLY PROTECTED AGAINST HIV OR NO RISK AT ALL**

No risk of HIV infection is a direct barrier to PrEP adoption, as a person that is not at risk has no utility for protection. Sex workers that fell into this segment were not part of the strategy in terms of intervention and communication action plans.



Once we were aware of the main barriers to be addressed by each of our personas, we conducted a second round of deep dive qualitative research to answer the unresolved research questions. We also conducted shadowing peer educators - PEs (trained individuals conduct sessions with their peers to improve knowledge and attitudes that reduce the risk of acquiring HIV).

This second round of research helped us generate the five main insights of the project and prioritize our communication strategies by assessing risk and reachability.

# PRIORITIZATION BASED ON RISK

**Why did we prioritize by objective risk?** To ensure that our demand creation was targeting the segments of the population which are most at risk of HIV transmission, in order to amplify the program's impact

**Why did we prioritize by ability to reach?** By considering reachability in prioritization (in conjunction with objective risk) we were amplifying the program's impact by focusing on segments which gave us the best impact for the investment applied resources.





# KEY INSIGHTS

1

SHOW ME THAT YOU UNDERSTAND THAT SEX WORK IS MY PROFESSION, AND THAT I AM PROUD OF IT

2

GIVE ME INFORMATION THAT I CAN TAKE TO READ LATER

3

MOTHERHOOD IS A HIGHLY INFLUENTIAL EXPERIENCE SHARED BY THE MAJORITY OF FSW

4

REACH ME THROUGH MY NETWORKS

5

LOYALTY AND CAMARADERIE ARE CRITICAL COMPONENTS OF THE SEX WORK COMMUNITY

# COMMUNICATION INSIGHTS

## **Show me that you understand that sex work is my profession, and that I am proud of it**


FSWs discuss retirement from their profession, similar to the way other types of working professionals plan for their future post-employment. For FSWs who work full-time in brothels or out of hotspots, sex work is their profession, and they want this to not only be acknowledged, but also accepted. Strategies that are aimed at the career sex worker need to acknowledge the legitimacy of the profession before introducing PrEP.

## **Give me information that I can take to read later**

In general, it is challenging for FSWs to fully engage with PrEP material while they are actively working. The transmission of time consuming information is ineffective while FSWs are on-the-job, usually when they have idle time is in between clients. The digestion and full comprehension of information, however, is unlikely during this same window. Most FSW requested information that they can read on their own time, at their own convenience.

## **Motherhood is a highly influential experience shared by the majority of FSWs**

A large number of FSWs are mothers, often single-mothers, and are highly motivated by their children. FSWs that are mothers typically report that their primary behavioral driver is the need to earn and provide for their children's future.



*"We consider ourselves  
a political party"*

**Director, Sex Worker Organisation**

Throughout our research we identified several influencers that have very loud voices within the FSW communities. FSW are very particular with whom they confide in and who they trust as sources of information. When it comes to accessing sexual health information, most of the people that we spoke to speak with their Peer Educator at their hotspot.

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# COMMUNICATION INSIGHTS

## **Reach me through my networks**

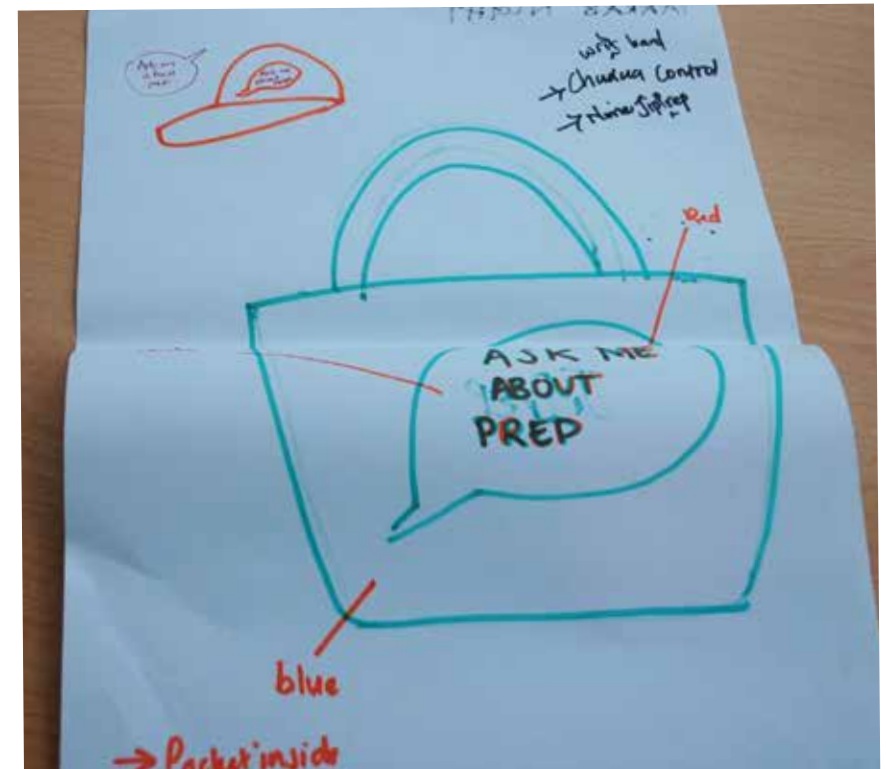
Most bar owners, particularly at bars frequented by FSW, are willing to support efforts of increasing PrEP awareness among their clientele. Some brothel owners were unwilling to hang posters in places where clients could see them, fearing that it would impact overall business. Many are, however, open to conversation around testing and PrEP. These individuals have one of the highest rates of contact with FSW, making them potentially effective messengers and reinforcers of PrEP messaging.


## **Loyalty and camaraderie are both critical components of the sex work community**

This is particularly evident in the peer-to-peer networks that exist at “hot-spots” throughout Nairobi and beyond. One Peer Educator told us that she has from 60 to 100 women who can call her at any time for support and information. She explained that “even if I am not in the city, I make sure to connect them with someone who can help.” Health facilities (53%) and Peer Educators (23%) are the most trusted sources of information regarding sexual health information for FSW.

# CO-DESIGNING WITH USERS

We ran several co-design sessions with FSWs who represented our key personas and subject matter experts. At the end of this process a range of concepts were generated, then prioritized and built. Together with Busara, we conducted user testing of the concepts including RCT style testing, phone sensing to track user's behaviors and iterated based on the outcomes.



A close-up photograph of a woman with dark, curly hair. She is looking slightly to her left with a thoughtful expression. She is wearing a vibrant, multi-colored patterned top with shades of blue, yellow, and orange. The background is softly blurred, showing what appears to be an outdoor setting with a white structure.

This strategy targets not only FSW who have an attitude to avoid contracting HIV (Lulu and Anna Personas) in order to achieve a high level of success or improve their current situation in life, but also FSW who have the ability to speak openly about their lifestyle with others.

## SOLUTION APPROACH

# MESSAGING

*"Prove to me (by design)  
that you understand me"*

1

Make me a more professional sex worker: Support me to do my job, by giving me the tools to do it better.

2

Don't be afraid to talk to me about my job: I see it as a profession and something to be proud of.

3

Every FSW is doing it, it's the new norm: If every FSW is doing it, then I want to as well.

4

I am a mother and also a sex worker: I need to provide for my family and that is what drives me to maintain my job as a sex worker.

# IMAGERY

## **Sex work is my job. Represent this in a real way.**

FSWs want to see more imagery, language, and depiction of sex workers that are successful in their work and their personal lives. There is a strong undertone of professionalism and the need to be legitimized among FSW. Being direct about PrEP as it relates to the empowered, professional sex work is critical in catching the attention of these women.

## **Be upfront, confident and direct**

### Exuding strength

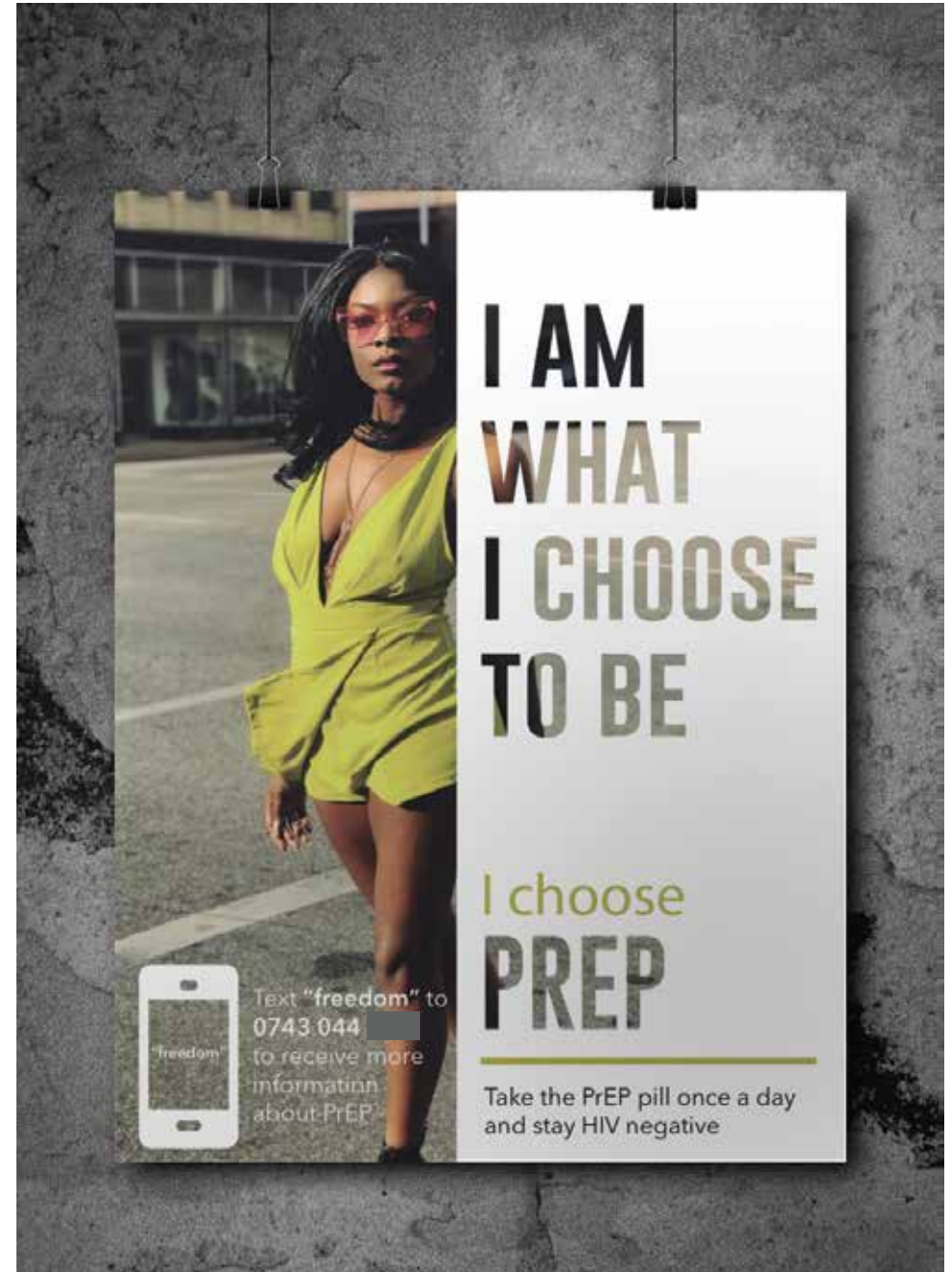
Strong women, facing ahead, direct to camera, not smiling but strong and daring

### Show scenes or places she is familiar with

Brothels, hotspots, accomodations, sex den

### Be bright, bold and boisterous

She wants to be noticed, so don't hold back





# IMAGERY

## My children keep me working hard

Be direct about the positive impact that PrEP can have on the life of a mother who is in sex work. Most FSW who are mothers explain their roles as sex workers in direct relation to their children, explaining that earning money for their family's education and health is the most important thing to them. PrEP should be introduced as a compliment to healthy sex work and fiercely loyal motherhood.

## Be aspirational and target feelings

### Emotional engagement

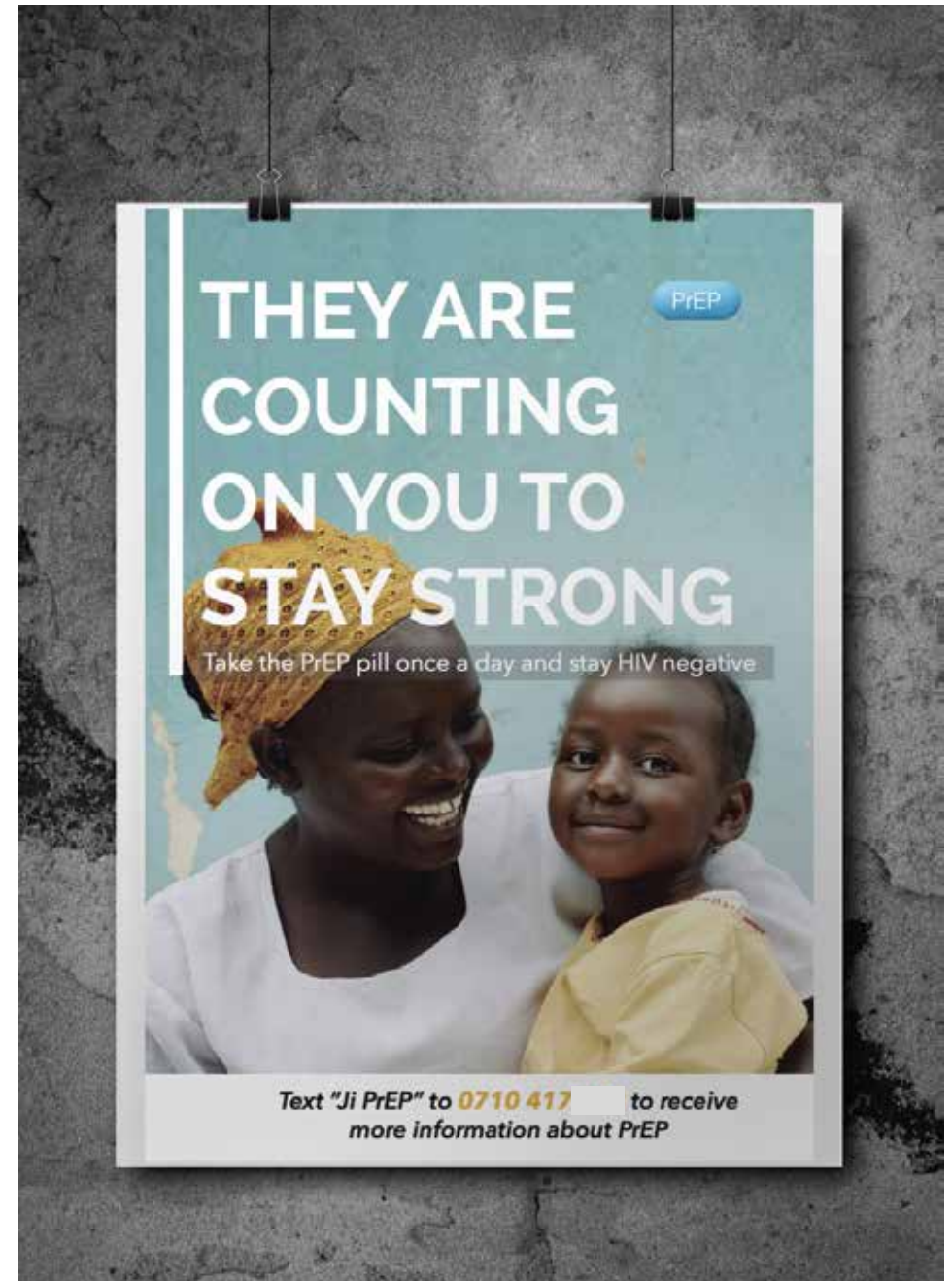
Motivating, empowering, laughing, showing the bond between sex workers and their children

### Shows scenes or places she visits often with her kids

Parks, home, etc.

### Make the right decisions for them

Speak directly to the strength that is required to mother while in sex work.



# CHANNELS

**THE FOLLOWING WERE THE PROVEN EFFECTIVE CHANNELS FOR STRATEGICALLY DISSEMINATING PREP INFORMATION TO CAREER SEX WORKERS.**

## **WHATSAPP**

Using Whatsapp as a message delivery channel is an effective way to connect with the career FSW.

The typical day of an FSW includes a great deal of idle time, as she waits for clients and travels to and from places of work. Most FSW have cellphones and access to Whatsapp, where they communicate with friends, Peer Educators, and family. FSW use Whatsapp to communicate the status of certain hotspots as well as to keep in touch with clients.

## **BROTHELS AND LODGINGS**

FSWs tend to work either within specific geographical areas (on the streets) or within lodgings such as sex dens and brothels. They spend a lot of their time in these areas and are prime for receiving information in their down time.

FSW tend to stick together, both geographically and figuratively. The nature of their work requires them to wait consistently, and often in groups with other FSW.

## **PUBLIC TRANSPORT**

FSW utilize public transport on a daily basis, oftentimes moving into the city for work from their homes outside of it. Unapologetic and direct communication within public transport demonstrates to FSW that the brand supports their movement and that is not afraid to let the public know. This ultimately increases trust in the brand, as well as familiarity among FSW and other members of the public.

# CHANNELS

**THE FOLLOWING WERE THE PROVEN EFFECTIVE CHANNELS FOR STRATEGICALLY DISSEMINATING PREP INFORMATION TO CAREER SEX WORKERS.**

## **IPC**

Peer educators are FSW who speak from experience, which means that they are often very successful in developing rapport with FSW while on outreach.

Knowing when to engage with an FSW, versus when to give her space, is something that PEs can do very effectively in-person.

## **INFLUENCERS**

FSWs look to male management and clients for advice and guidance.

Getting especially, pimps and managers of brothels on board is key to success for any intervention. We can use them as a channel for information but also as a gateway to make sure that channel interventions are uptaken by this segment.

# INTERVENTIONS CURRENTLY BEING PILOTED ACROSS KENYA

## **REIMAGINING THE PE'S NETWORK:**

Start with recruitment. The peer network is only as successful as the people who run it. Building a strong network starts from the very beginning, with recruiting PEs that are fit all eligibility criteria.

## **MAKE IPCS MORE EXPERIENCED AND TARGET THEIR MESSAGING:**

Supporting PEs in their work with a digital tool: PEs are not necessarily clinicians, and therefore cannot always answer technical and specific PrEP questions in the field. They need to be provided with reliable and consistent support so that they can answer questions in real-time.

Develop a “PrEP package”: Currently PEs find it challenging to relay details about PrEP in a quick and user-friendly manner, while convincing peers about why it may be a good idea for them. This kit included a conversation starter tote bag and smaller kits that will not only help PEs do their job better, but also FSWs.

## **“BRING THE CLINICS TO ME”:** IMPLEMENTING MOBILE CLINICS THAT VISIT BROTHELS:

FSWs are more likely to uptake if we remove the barrier of distance and time. Many FSW as stated previously, are generally either at work or home and do not have the time, money or inclination to travel to clinics within their area. During our tests, we found that HIV testing was shown to be promising amongst FSW when we brought the clinic to them but during qualitative questioning, that PrEP uptake would more likely happen in mobile clinics that visited brothels

# PrEP

A PILL A DAY TO KEEP HIV AWAY

## SEX WORK IS REAL WORK

Text [PrEP](#) to 0798542719 to receive more information about PrEP



## WHY PrEP?



My name is Mary. I am a mother of four strong boys. Making money to pay for school fees is most important to me. My children deserve a good education for their future, and sex work is what allows me to pay these fees.

As a sex worker, I am exposed to HIV on a day-to-day basis. This is an unavoidable part of the job. PrEP gives me the security that I need because it protects me from contracting HIV, even if I am exposed to it.

Because of PrEP, becoming infected with HIV is no longer something that I worry about.



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