TITLE: BIOBEHAVIORAL SURVEY AMONG KEY POPULATIONS IN [COUNTY X], KENYA, 2024

# BACKGROUND

A bio-behavioral survey among key populations was conducted in Kenya among female sex workers (FSW), men who have sex with men (MSM), people who inject drugs (PWID) and transgender persons (TG). This was a respondent-driven sampling survey, conducted from February to July 2024 in nine counties in Kenya – Nairobi, Mombasa, Kilifi, Kiambu, Machakos, Nakuru, Kisumu, Kajiado, and Kisii. The objective of the survey was to measure the impact of the HIV response and gaps among key populations in the nine counties (?) and was led by the Ministry of Health through the National AIDS and STI Control Program (NASCOP) and the National HIV Reference Laboratory (NHRL) with technical support from the U.S. Centers for Disease Control and Prevention. The Key Populations Consortium and the Department of Health in each county were key collaborators in this survey. The survey was funded jointly by U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) and Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) and was implemented by the University of California, San Francisco, Global Programs, Kenya.

Kindly add the following to the background (from Soloh):

* The role of Site Managers who were the Directors from Key Populations
* The Peers who were mainly KP Representatives
* The conversation on County context where the studies were done. Can be just a few lines

# OBJECTIVES

## Primary objectives

1. To estimate the proportion of HIV-infected key populations who have suppressed viral load by KP typology and county.
2. To estimate the prevalence of HIV by KP typology and county.
3. To estimate HIV incidence by KP typology and county.
4. To examine HIV service uptake (prevention, treatment) and serostatus knowledge among all KP by typology and county
5. To estimate the proportions of KP who know their HIV status, are on treatment and are virally suppressed (UNAIDS 95-95-95 targets) by KP typology and county

## Secondary objectives

1. To estimate the prevalence of STIs among all KP by typology, county, and HIV status
2. To identify risk factors associated with HIV infection for KP typology by county
3. To estimate the key population size for KP typology by county

# SURVEY METHODS

## Selection of nine counties

Survey was conducted in the selected nine counties based on high key population size estimates, existence of key populations programs, HIV prevalence among general population and funding availability.

## ENROLLMENT / SAMPLING METHOD

Potential participants were enrolled in the survey using respondent driven sampling (RDS). For each population typology, seeds were identified by the key population community stakeholders and survey investigators and met the eligibility criteria for the survey. Each seed was provided three coded coupons and instructed to give these coupons to persons in their social circle who are members of the same target population and reside in the same county. Peers receiving these coupons are potential survey participants and continue survey enrollments through coupons and peer enrollment till sample size is met.

## SURVEY SITES AND SAMPLE SIZE

Each county conducted the BBS in different populations shown the table below along with the sample size and the name of survey site [or survey site in shown in the map].

|  |  |  |
| --- | --- | --- |
| Typology | Survey site | Sample size |
| Female Sex Workers |  |  |
| Men who have sex with men |  |  |
| People who Inject Drugs |  |  |
| Transgender persons |  |  |

## ELIGIBILITY SCREENING

All potential participants had to be 18 years of age or older, reside in the survey area, able to communicate in Kiswahili or English and are in possession of a valid peer enrolment coupon. The typology specific eligibility criteria are:

* FSWs: biologically female; received money or gifts in exchange for sex at least once in the three months prior to interview.
* MSM: biologically male; report at least one anal or oral sex act with a biological male in the six months prior to the interview.
* PWID: men and women; report at least one drug injecting episode for non-medical purposes in the three months prior to interview.
* TG persons: people whose gender identity and expression at the time of the interview does not conform to the sex assigned to them at birth.

## INTERVIEWING

Potential participants who screened eligible for participating in the survey and consented for survey participation were offered an interview which included demographics, HIV-relevant behaviours, symptoms of HIV/STI, as well as on HIV/STI-related knowledge, attitude, practices, stigma, perceptions, and questions related to mental health or other health-related domains. Results from a few select topics are presented in this report.

## BIOMARKER TESTING PROCEDURES

All consenting participants were offered rapid HIV testing using the national algorithm for HIV diagnosis, and Syphilis testing at the survey site with immediate return of results and linkage to care and treatment. Treatment for syphilis was provided as a part of the survey.

Testing for Chlamydia Trachomatis, Neisseria Gonorrhea, Hepatitis C, Hepatitis B was done at NHRL and results were returned to the participants at their return visits to the survey sites with linkage to care and treatment.

## DATA ANALYSIS AND WEIGHTING

**Prevalence** was calculated using all consented individuals with a valid HIV test result in the denominator and individuals with an HIV-positive test results based on the national HIV diagnosis algorithm in the numerator.

**Viral load suppression** was calculated among all individuals who tested HIV positive in the survey. Viral suppression was defined in two ways: 1. <200 and 2. <1000 copies of HIV RNA per milliliter.

**Status of 95-95-95 targets**

**1st 95 - Awareness of HIV positive status:** Awareness is defined as people living with HIV who disclosed a prior HIV diagnosis and/or had suppressed viral load (<200 or 1000 copies / mL)

**2nd 95 – Aware of HIV positive status and on ART:** Being on ART is defined as those who disclosed current use of ART and/or had suppressed viral load (<200 or 1000 copies / mL).

**3rd 95 – Aware of HIV positive status and on ART and virally suppressed:** Viral suppression among people living with HIV who knew their HIV status and were on ART.

[additional definitions – hep b, hep c, syphilis, CT, NG]

Each survey site’s data was weighted using self-reported network size and Gile’s Sequential Sampling in RDS-Analyst – **is this accurate?**

## POPULATION SIZE ESTIMATES

# KEY RESULTS

## RESPONSE RATE, BY TYPOLOGY

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| TYPOLOGY | SCREENED | ELIGIBLE | CONSENTED FOR INTERVIEW | CONSENTED FOR BLOOD COLLECTED | Response rate [of those eligible, how many participated in an interview] |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

## HIV PREVALENCE, VIRAL LOAD SUPPRESSION AND POPULATION SIZE ESTIMATE, BY TYPOLOGY

Among (INSERT KEY POPULATION) aged (INSERT AGE CRITERIA) who (INSERT ANY OTHER ELIGIBILITY CRITERIA), (INSERT DESCRIPTION OF DATA (*e.g., HIV prevalence was similar across survey cities. Typology 1 has an estimated HIV prevalence of XX.X% and typology 2 had an estimated HIV prevalence of XX.X%*.)).

Population size estimates (PSE) for each typology, shown in the table below, were derived using (insert method(s)).[[1]](#footnote-2)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Typology | HIV Prevalence  % (95% CI) | Viral Load Suppression (<200 copies/ml) among all HIV-positive  n (95% CI) \* | Viral Load Suppression (<1000 copies/ml) among all HIV-positive  n (95% CI) \* | Consensus Population Size Estimate  n (95% CI) \* |
| FSW | XX.X (XX.X–XX.X) |  | XXXX (XXXX–XXXX) | XXXX (XXXX–XXXX) |
| MSM | XX.X (XX.X–XX.X) |  | XXXX (XXXX–XXXX) | XXXX (XXXX–XXXX) |
| PWID | XXXX (XXXX–XXXX) |  | XXXX (XXXX–XXXX) | XXXX (XXXX–XXXX) |
| TG | XXXX (XXXX–XXXX) |  | XXXX (XXXX–XXXX) | XXXX (XXXX–XXXX) |
| Notes:  \* CI: Confidence Interval (except for population size estimate: Credible Interval) | | | | |

## AGE DISTRIBUTION, BY TYPOLOGY

[for PWID, present distribution by age and sex]

[for TG – check data to see if disagg by sex would make sense]



# KEY RESULTS, BY TYPOLOGY

# [TYPOLOGY 1 RESULTS]

## HIV PREVALENCE, BY AGE

[graph]



## HIV VIRAL LOAD SUPPRESSION, BY AGE

[graph]



## PROGRESS TOWARDS UNAIDS 95-95-95 TARGETS

Cascade to be adjusted using VL<200.

[graph]

Unconditional 95-95-95



Conditional 95-95-95



## STI PREVALENCE

## SYPHILIS



## HEPATITIS B

Add hep c if results are available in time

[describe how many were tested, sampling approach etc]



## CHLAMYDIA TRACHOMATAS



## NISSERIA GONORRHOEA



## PREVENTION SERVICES

### LINKAGE TO SERVICES

Last 12 months, last 3 months

Define linkage as “either accessed services at a facility OR at peer”

### Time since last HIV test

### PrEP KNOWLEDGE, HISTORY OF PrEP USE, PrEP Use in the past 6 months

* Comment from Soloh - Under PrEP, is there a need for putting PrEP Access in the counties?-Can be discussed

### Condom use – access condoms for free in past 12 months; ease of access to condoms

### [PWID ONLY] Access to needle exchange (NSP), OAT

### Stigma and discrimination

#### Experienced stigma and/or discrimination in the past 6 months

#### Avoided healthcare because of stigma and/or discrimination in the past 12 months

### 

# [TYPOLOGY 2 RESULTS]

# [TYPOLOGY 3 RESULTS]

# [TYPOLOGY 4 RESULTS]

# CONCLUSIONS

[COUNTY-SPECIFIC UNIQUE IMPLEMENTATION EXPERIENCES]

1. [↑](#footnote-ref-2)