Population Size Estimation study for Key Populations in Egypt 2014

Special thanks and appreciation to all NGOs who participated in the study and those are (in alphabetical order):

Al Shehab Institution for Comprehensive development

Caritas Egypt

Freedom

Friends of HIV

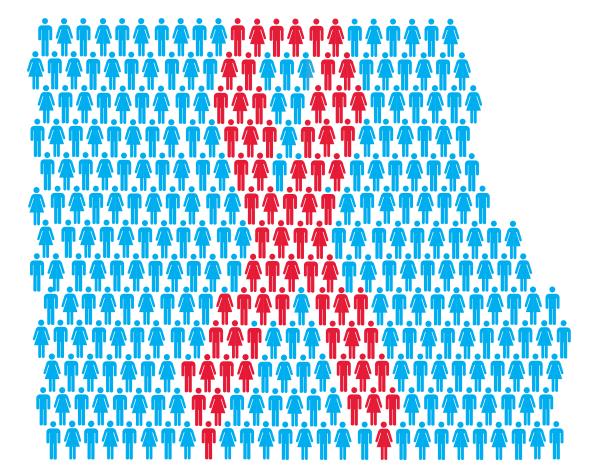
Friends of Minya

National Association for Family and Society Development (Hemaya Project)

Roayah Association for integrated development

Youth Association for Population and Development-YAPD

Special Thanks and appreciation to PEMA consultancy who provided technical expertise for the planning, implementation and analysis for this study.













What is Population size estimation?

Population size estimation is a process and a fundamental technique for gathering the information necessary to plan interventions and prevention programs for key populations (KPs)

Purpose of the study

To plan outreach and prevention activities

coverage of interventions



To determine whether service sites are located in places which are convenient to KAP beneficiaries

Used as the denominator for measuring cover-



age of interventions To assist in setting realistic targets for the



To estimate the necessary budget/staffing needed for interventions

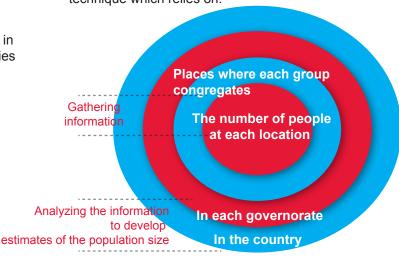


One of the inputs needed to model the HIV epidemic

The primary groups of interest are: People who inject Female sex drugs (PWID) workers (FSW) with men (MSM)

Methodology:

The population size estimation was conducted using the mapping technique which relies on:

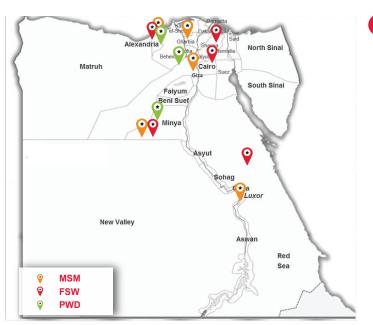


Types and levels of mapping:

| Geographic | Level 1 – make a list of physical locations |
|------------|---|
| Mapping | Level 2 – visit locations to collect informatio |
| Virtual | Level 1 – make a list of virtual Web/app site |
| Mapping | Level 2 – "visit" sites to collect information |

Governorates Selection:

The technical working group selected 5 governorates for the study implementation. These governorates were selected to represent different regions in Egypt. Also priority was given to governorates with functioning Non-governmental Organization (NGOs) in the field of HIV. Following are the selected organization:



Note: Sinai region was excluded (for security region) and New Valley

Study field- team:

The study field team consisted of a supervisor and data collectors teams. Each team consisted of two data collectors, and the total number of teams varied from 2 to 10 teams. The duration of the field work varied from one week to five weeks depending on the governorate size and type of KPs.

| Levels of mapping | Мар | aphical ping | Virtual mapping | | | |
|----------------------|----------|-----------------|--------------------|----------|--|--|
| | Level 1 | Level 2 | Level 1 | Level 2 | | |
| MSM | / | / | / | / | | |
| FSW | V | ✓ | | | | |
| PWID | V | | | | | |
| | | | | | | |

Operational Definition

| Population | Geographical Mapping | Virtual mapping |
|------------|---|---|
| мѕм | Males present at known MSM venues who were identifiable as MSM to outreach workers, based on appearance and behavior | Individuals online on MSM-specific Internet hookup sites, whose profile indicated they were male, age 18 or older, and seeking a male partner in the respective governorate |
| FSW | Females present at known FSW venues who were identifiable as FSW to outreach workers, based on appearance and behavior | |

Analysis Strategy:

| Men who have sex with men (MSM) | | | Female sex workers (FSW) | | | | | People who inject drugs (PWID) | | | | |
|---|---------------------------------|---------------------------------|---|---------------------------------|------------------------|----------------------------|------------------------|--------------------------------|--------------------------|--|---|---|
| Cairo | Alexandria | Menia | El-Ghabia | Luxor | Cairo | Alexandria | Menia | El-Sharkia | Hurgada | Cairo | Alexandria | Menia |
| Geographical + Virtual Count | Geographical + Virtual Count | Geographical + Virtual Count | Geographical + Virtual Count | Geographical + Virtual Count | Geographical Count | Geographical Count | Geographical Count | Geographical Count | Geographical Count | Estimates from first level of geographical mapping | Estimates from first level of geographical mapping | Estimates from first level of geographical mapping |
| Adjustments | Adjustments | Adjustments | Adjustments | Adjustments • | Adjustments | Adjustments | Adjustments | Adjustments | Adjustments | Adjustments • | Adjustments | Adjustments |
| Cairo Size Estimate | Alexandia Size Estimate | Menia Size Estimate | El-Gharbia Size Estimate | Luxor Size Estimate | Cairo Size Estimate | Alexandia Size Estimate | Menia Size Estimate | El-Sharkia Size Estimate | Hurgada Size Estimate | Cairo Size Estimate | Alexandia Size Estimate | Menia Size Estimate |
| Extrapolate by region to remaining governorates | | | Extrapolate by region to remaining governorates | | | | | | | | | |
| National Size Estimate | | | National Size Estimate | | | | | | | | | |

Results:

| Key Population | Best Es | stimate % | Lower Bound No % | | Upper bound No % | | |
|-----------------------------------|---------|--------------|---------------------|-------|---------------------|-------|--|
| Men who have sex with men (MSM)* | 64,318 | 0.62% | 15,946 | 0.15% | 90,914 | 0.87% | |
| Female sex workers (FSW)** 🍦 | 22,986 | 0.24% | 6,460 | 0.07% | 26,792 | 0.28% | |
| People who inject drugs (PWID)*** | | | | | | | |
| Cairo | 22701 | 0.47% | 21555 | 0.45% | 44424 | 0.92% | |
| Alexandria | 6969 | 0.51% | 6376 | 0.46% | 7396 | 0.54% | |
| Menia | 1005 | 0.07% | 1005 | 0.06% | 1116 | 0.08% | |

^{*} These estimates are based on projections on male population census in urban areas in Egypt in 2014 age (18 – 59) years

Limitations:

- 1. Certain segments of the MSM and FSW populations are not represented in the estimates. These include:
 - MSM and FSW in rural areas for represented regions.
- MSM and FSW in governorates excluded from the study for security reasons (Sinai) or for budget limitations (e.g. New Valley). It is important to note that the governorates excluded from the estimates represent a small portion—2% and 4%—of the total male and female household population, respectively.
- FSW who sell sex exclusively out of private residences or by phone or Internet.
- MSM who do not meet partners either at MSM-identified venues or MSM-specific Internet sites; for example, those who meet partners exclusively through their social circles.
- 2. PWID estimates were based only on level one geographical mapping as the technical committee and the steering committee decided it would jeopardize the research team's safety.
- 3. Regarding the PWID estimates, individuals who inject exclusively in private settings (such as at residences) or in closed settings (e.g., prisons, jails, drug treatment centers) are most likely not reflected in the estimates. In addition women who inject drugs (WWIDs) were not included in these estimates.
- 4. Data to approximate turnover among KPs were not available to expand the national figure beyond the individuals "currently" engaged in the respective risk behaviors (captured by the study)
- 5. The security situation continues to compromise field work in the HIV field. However, this problem was addressed in data analysis by applying the appropriate adjustments based on field workers feedback and previous program data when available.

Recommendations

- 1. Strengthen local NGO's ability to manage the safety risks of accessing KPs at the street level and other private settings. NGOs can learn from adapting international best practices.
- 2. Improve understanding of FSW and MSM who use private residences, Internet or phone. This can be achieved by qualitative research and/or rapid assessment.
- 3. Improve NGOs' programmatic data so that they can be used to develop multiplier size estimates in conjunction with future surveillance studies.

^{**} These estimates are based on projections on female population census in urban areas in Egypt in 2014 age (15 - 49) years

^{***} These estimates are based on projections on male population census in urban areas in Cairo, Alexandria and Menia in 2014 age (18 - 59) years