

Nepal: Mapping/Size Estimation of MARP

Experience from Nepal

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Basics for the estimation of population size of hidden and stigmatized population sub-groups

- Agreed upon definition of the population sub-group should be in place
- Targeted population sub-groups should be socially identifiable

Methods available for estimating population size

1. Census and enumeration
2. Population surveys
3. Multiplier method
4. Nomination method
5. Capture-Recapture method

Methods borrow from each other and are not really mutually exclusive

Census method used in Nepal

- **Census method:**
 - Visit every location where targeted population sub-group are found
 - If possible, count everybody in those locations

OR

- **Get information on number of targeted population available in the identified locations through key informants**

Mapping

the First Step of Population Size Estimation Using the Census Method

- The size estimation studies were conducted using step-by-step approach:
 - each step was implemented successfully to establish a valid estimation of the size of the study population.
- Combination of various methods was used for this purpose
 - interaction with key informants,
 - observation and
 - tracking target population gathering locations/sites

Mapping (cotd..)

Various stages of mapping and size estimation:

1. Building coordination with local NGOs and other stakeholders
2. Hiring of local motivators/facilitators
3. Site observation and research walks
4. Geographical mapping of target population gathering/living locations and concentration sites
5. Counting target population seen/interacted with at different locations
6. Triangulating the counting of target population provided by different key informants
7. Sharing the final counts to local NGOs and other stakeholders before finalizing the estimated size of the target population

Nepal experience on census method

- **If possible, mixed approach for size estimation is better**
 - Because it allows triangulation of the estimates from different methods
 - If independent results are in a similar range it increases confidence in the estimate
- **Estimate size in range (min. – max.)**
 - to reflect level of uncertainty inherent in the size estimation

Nepal experience on census method (contd..)

- **Prioritize methods that use already existing data**
- **Multiplier methods suits most**
 - in areas with good service data
 - appropriate questions added to BSS/IBBS surveys
- **Size estimation process should be centrally managed**
 - by the government body leading the strategic information mechanism in the country
- **Size estimation should be done regularly**

Size Estimation of MSM in Kathmandu (in 2004)

Three different methods used

1. **Census method:**
 - Sites/locations listed, every site visited and MSM counted and/ or **information on number of MSM obtained from key informants**
2. **Capture – Recapture Method**
3. **Multiplier Method**

Definition of MSM:

“ having anal or oral sex with male at least once in the last 12 months”

Findings from 2004 size estimation study

- 52 different cruising sites were identified
- Information on the size of MSM was collected from key-informants in these 52 cruising sites & 82 non-public places.
- Cruising sites - open ground, park, jungle, temples and public toilets, discos, restaurants, night clubs and shopping centers.

Estimated MSM Size in Kathmndu

1. Census method: 6000-8000
2. Capture/re-capture : 500-700
 - cards distributed in 5 sites
 - after one week different color cards distributed in the same sites

Notes:

- **The census method cover visible population only.**
- **C/RC method not practical in Nepalese context as most of the MSM do not appear in the cruising sites**

Estimated MSM Size in Kathmndu

3. Multiplier Method

- MSM exposed to BDS services in the past 12 months (MSM/IBBS, 2004)
= 36%
- MSM reached by BDS program in the same period
= 7,200
- Est. # of MSM
= $(7,200 / 36) \times 100$
= 20,000

Note:

This method captures greater extent of hidden population as well

Size Estimation of MSM in Kathmandu, 2004

Method I

Census Method

- **Estimated Size = 6,000 – 8,000**

Method II

Capture-Recapture Method

- **Estimated Size = 500-700**

Method III

Multiplier Method

- **Estimated Size = 20,000**

Size Estimation used by NCASC in 2005:

Minimum= average of Method I = 7,000 (1.2% of adult male)

Maximum= Size estimated by Method III= 20,000 (3.5% of adult male)

Slightly more than 1-3%, but accepted as Kathmandu is a capital city

Challenge for mapping and size estimation of MARP

- No robust method applicable to such population available
- Stigma associated with HIV among the hidden population
- Easy to manipulate information collected
- Time and resource consuming
- HIV politics related to resource mobilization

Thank You



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