Correlates of never testing for HIV among Men who have sex with men In Nepal

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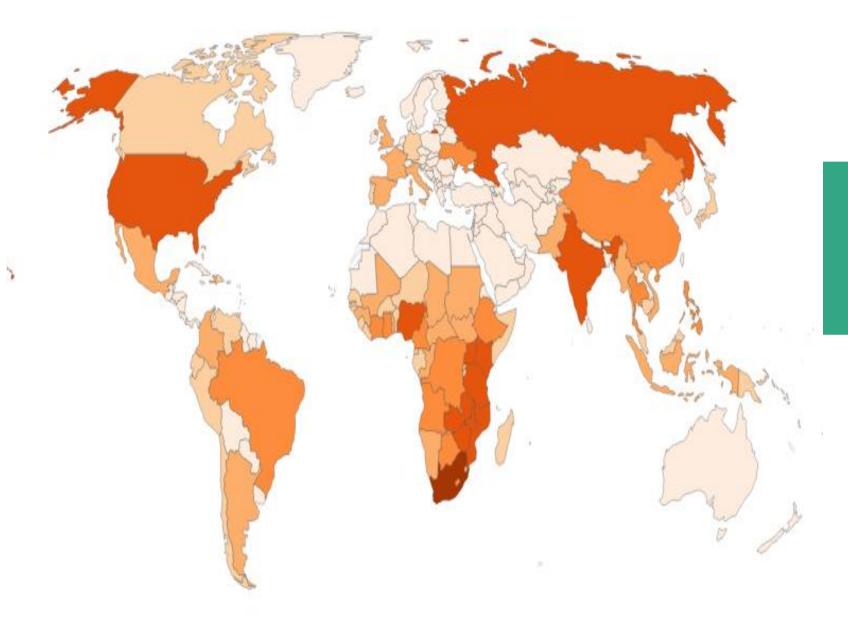


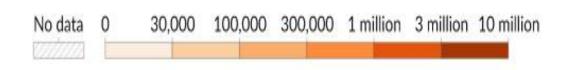




Number of people living with HIV, 2021

The estimated number of current cases of HIV/AIDS.





Data source: IHME, Global Burden of Disease (2024)

OurWorldinData.org/hiv-a

Background: HIV as a Global Health Concern

1. High disease burden

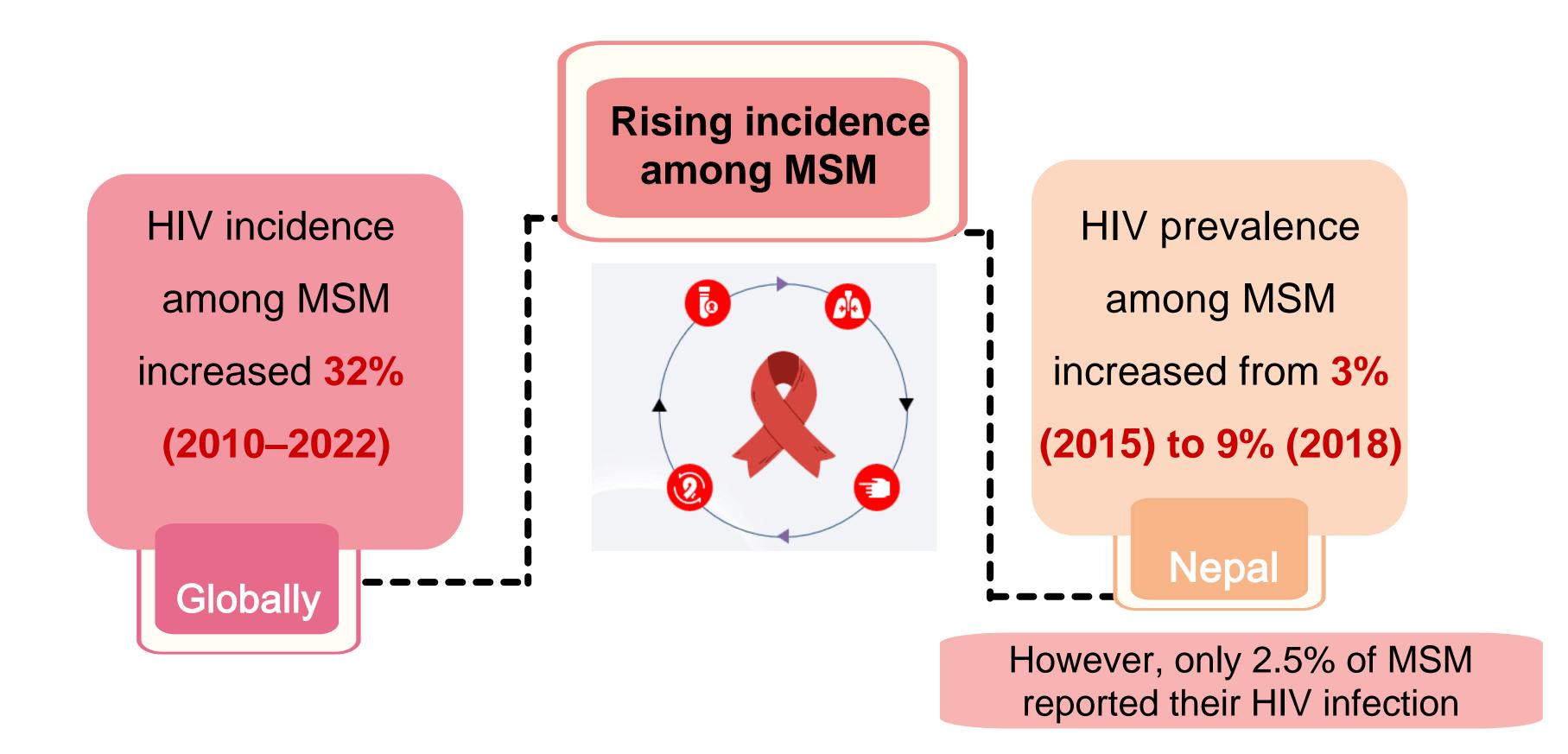
39.9 million people living with HIV.

2. Disproportionate Impact

MSM face a 28 times higher risk of acquiring HIV

Global disparity

LMICs remain at a higher risk



Nepal's Response & Challenges



- Committed to UNAIDS
 - 95-95-95 target by 2030 (National HIV Strategic Plan 2021–2026
- Expanding HIV testing accessibility

 263 HIV testing sites & multiple testing options
 - (facility-based, community-based, self-testing).
- ³ Challenges

HIV testing among MSM remains stagnant.





Limited research on factors linked to never testing among MSM in Nepal, with most studies focusing on infection risk over testing behavior.

Objective

To measure and determine factors associated with never testing for HIV and to suggest tailored public health interventions to improve HIV testing uptake among the MSM community in Nepal.



Study design

Cross-sectional bio-behavioral survey

Sampling Method

Population-based respondentdriven sampling (RDS)

Study Period

October 1 – December 30, 2022

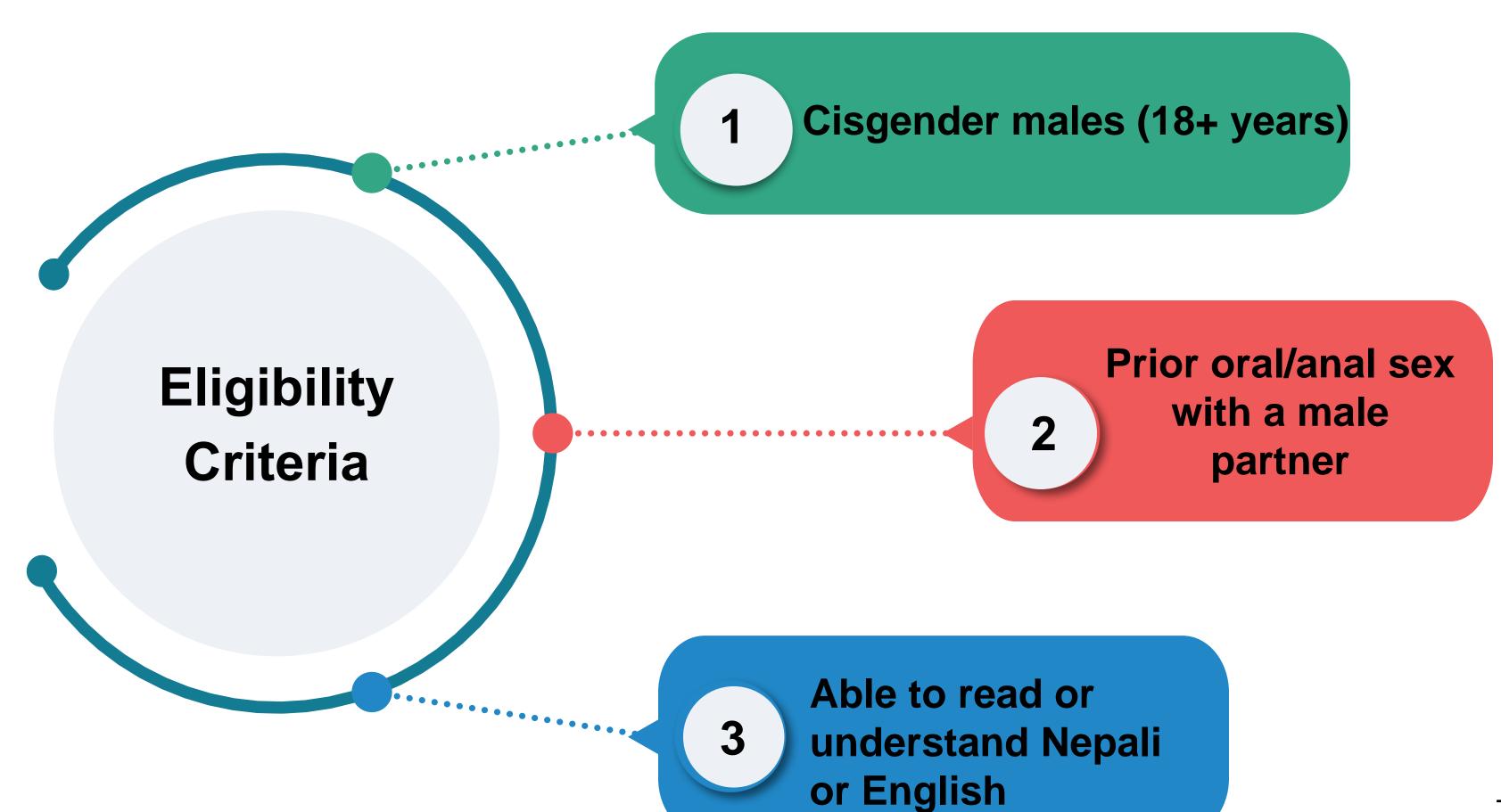
Collaboration

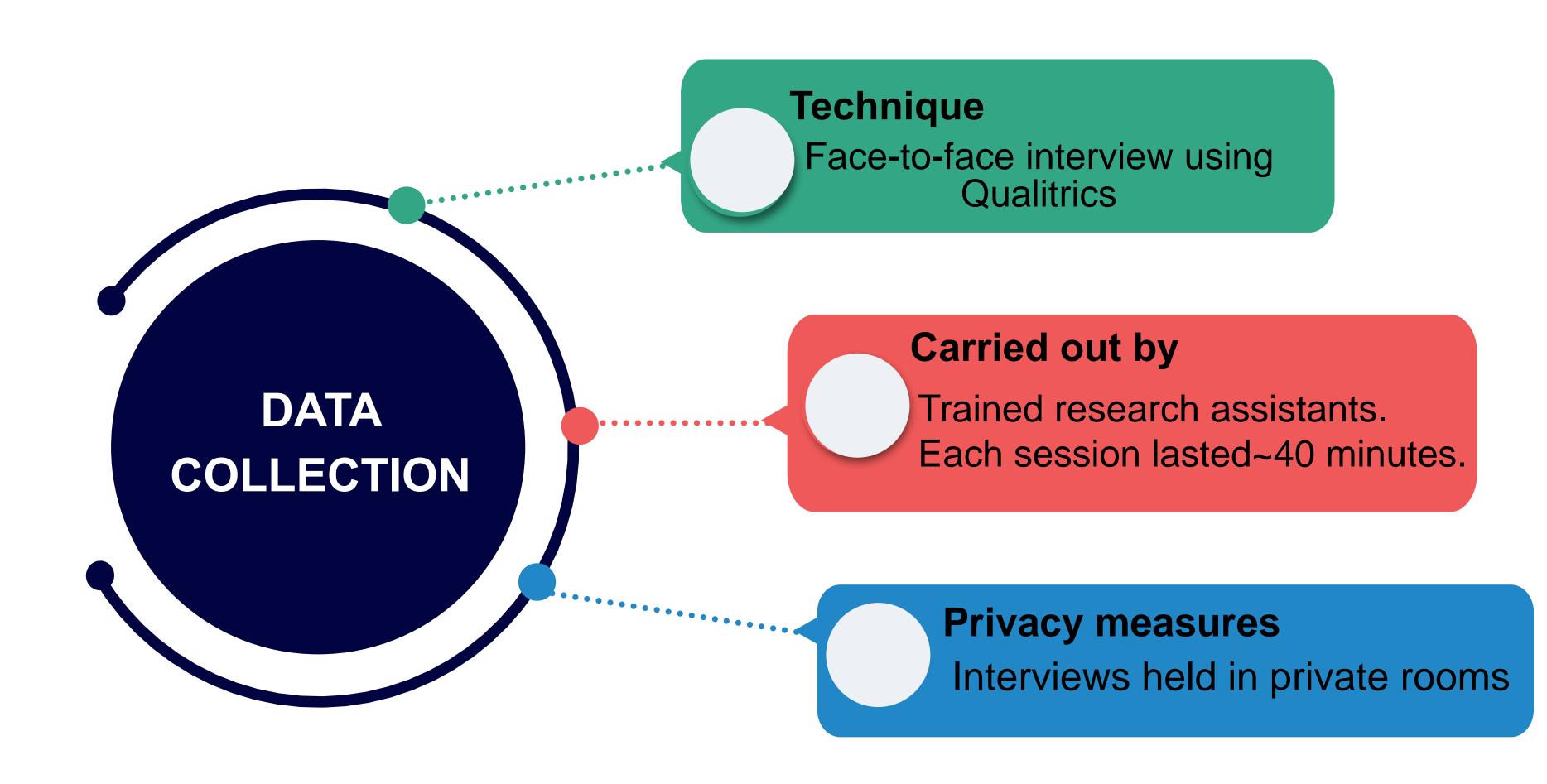
Conducted with Blue Diamond Society (BDS)

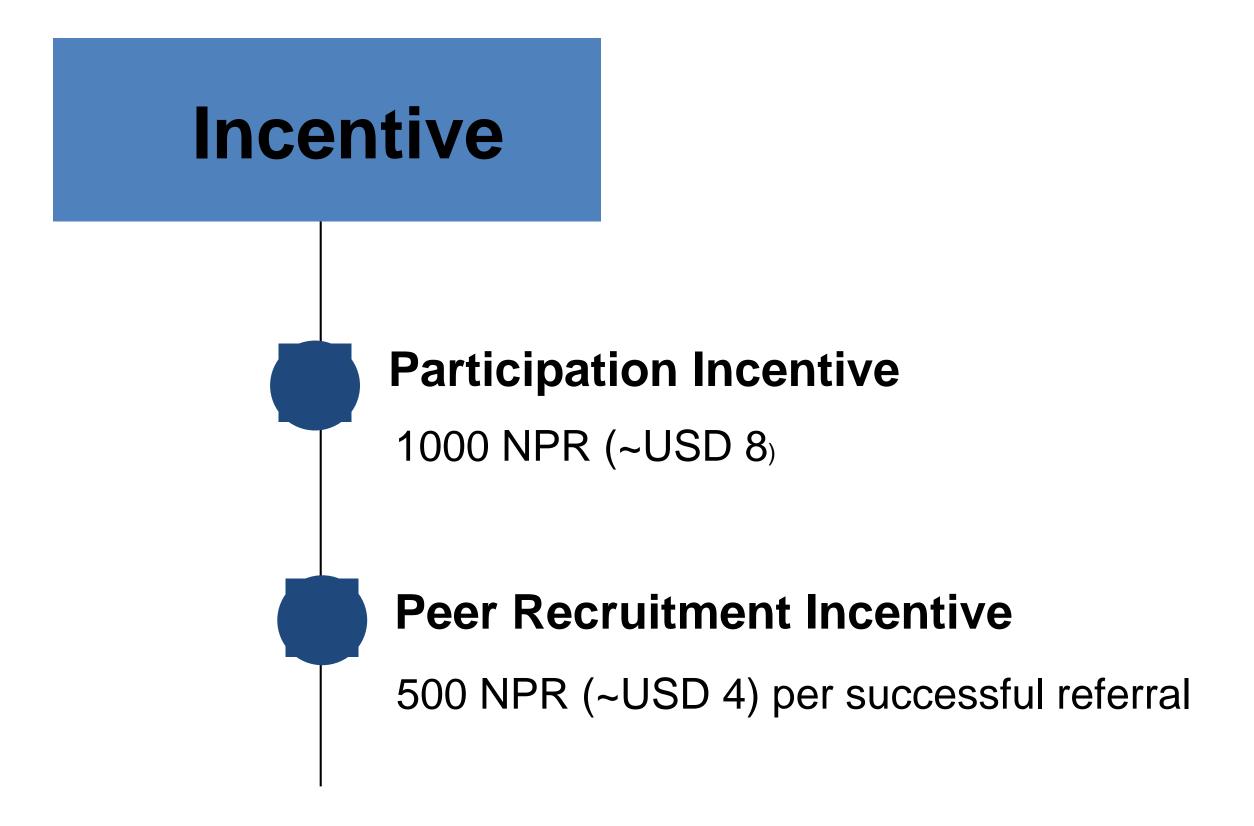
Study Location

Kathmandu Valley (Kathmandu, Bhaktapur,

Lalitpur)







Purpose

Compensation for transportation & potential work loss

Study procedure to recruit MSM in Kathmandu Valley, Nepal

Study team interface with City

- Review the estimated number of MSM in the city and determine the number of seeds needed.
- · Invite the seeds to the study site

Seed Recruitment

- · Register, take consent and assign ID
- · Interview and blood drew
- Provide 5 coupons and incentive
- · Provide appointments in next week

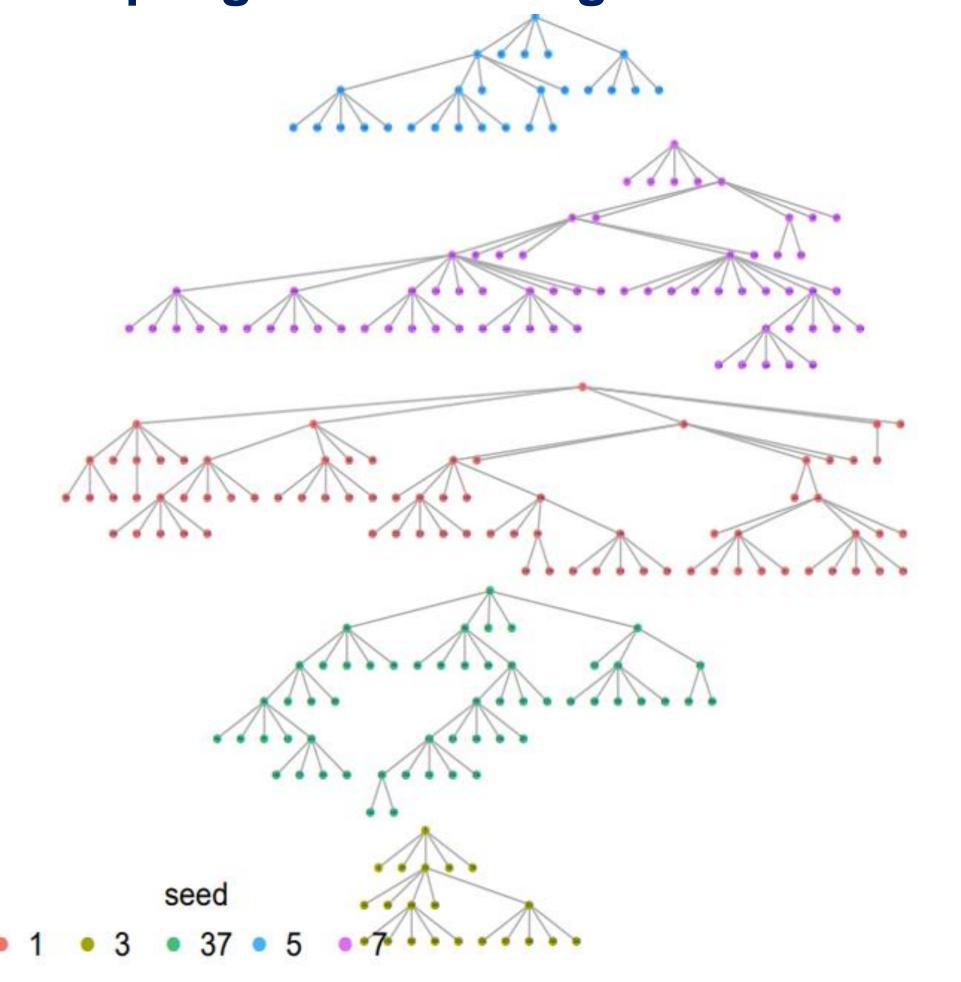
Participant Recruitment (First Visit)

- Assess eligibilty, check coupon validaity, register and take consent
- Interview, blood draw and returns results
- Provide 5 coupons and incentive
- Provide appointments in next one week

Participant
Recruitment
(Second Visit)

- Assess eligibility and check coupon validity
- Provide viral load result if positive; refer to Cruise Aids for counseling and testing
- Provide incentives for successful peer requirement and transportation

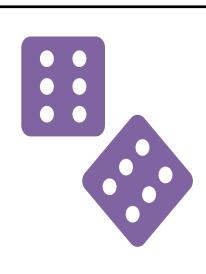
Respondent-driven Sampling Network Diagram of The Seeds & Waves



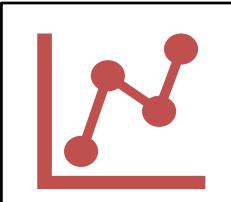
Statistical Analysis



- The statistical software Stata.SE Corp version 17.0 was used for data analysis.
- Descriptive statistics were applied.



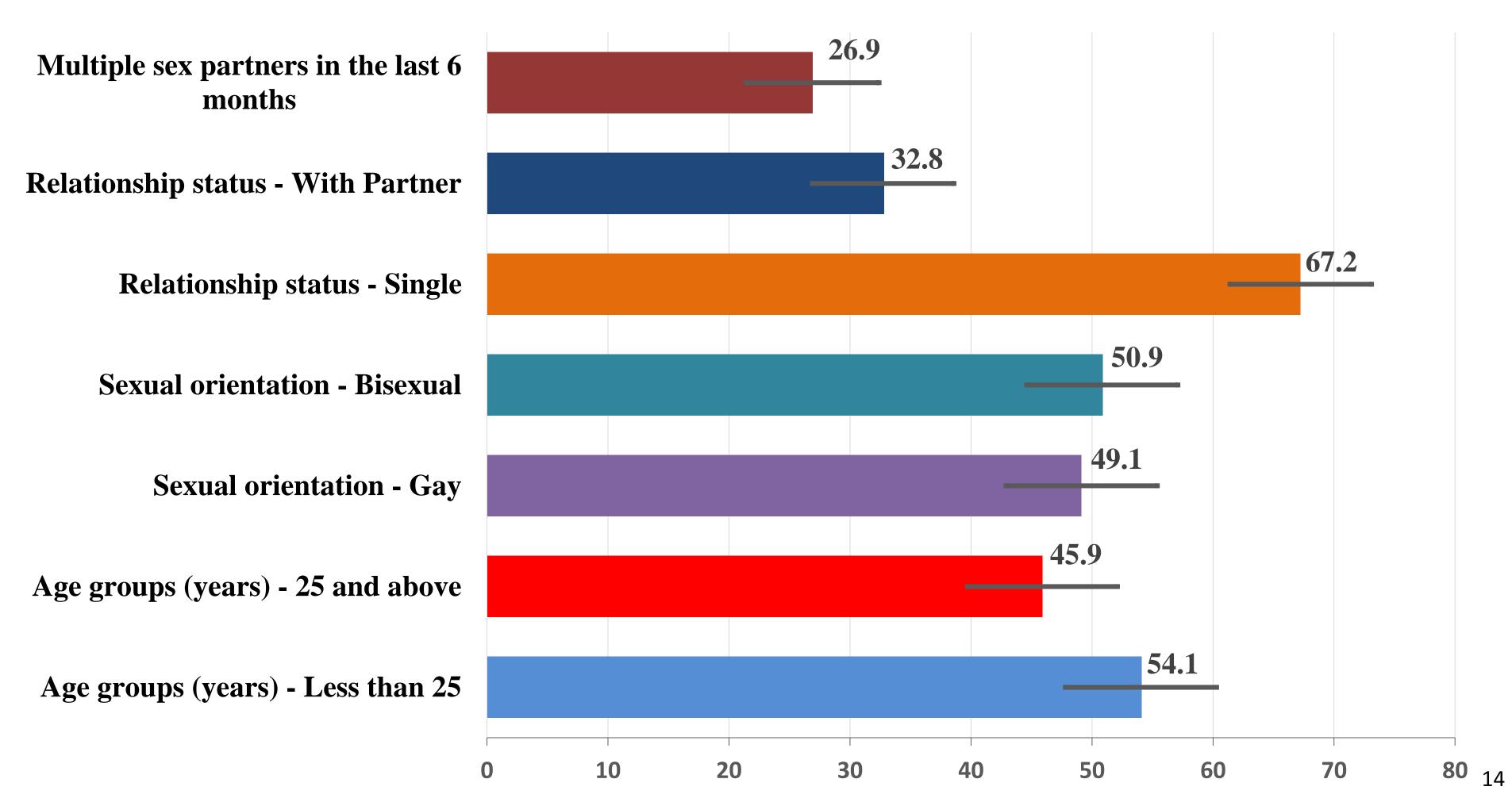
- RDS Analysis Tool 7.1 (RDSAT; Cornell, NY) was used to create weights and account for differences in participants' social network sizes.
- The RDSII estimator was applied to minimize biases in chain referral sampling.
- Weights were based on the transition matrix for the dependent variable (never tested for HIV).



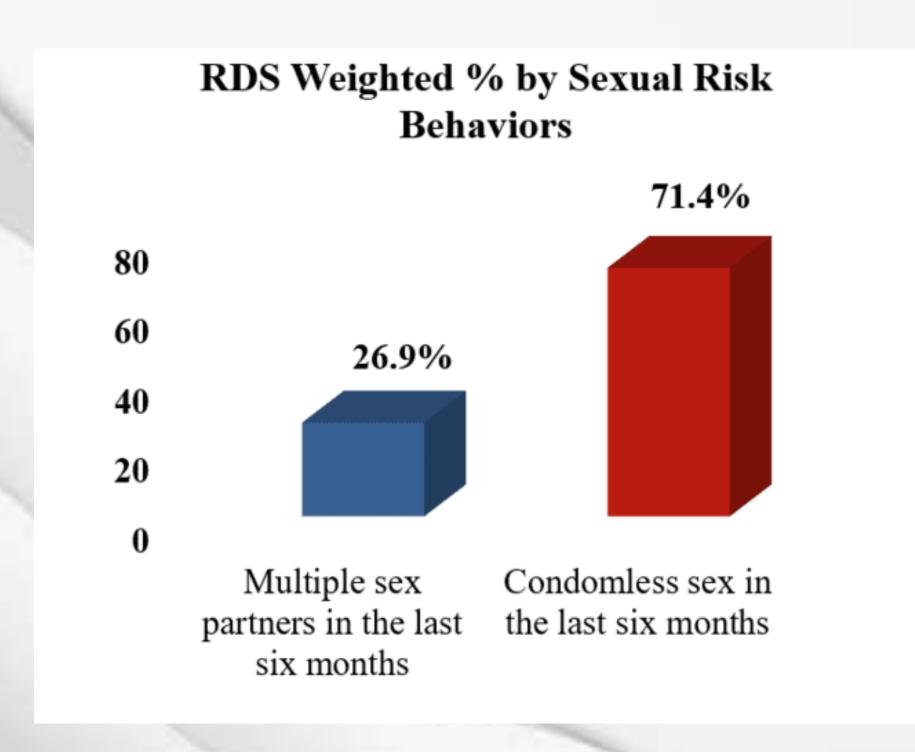
- Used bivariate and multivariate logistic regression to estimate associations.
- Applied RDS weighting in both models.
- Considered p-value < 0.05 as statistically significant.

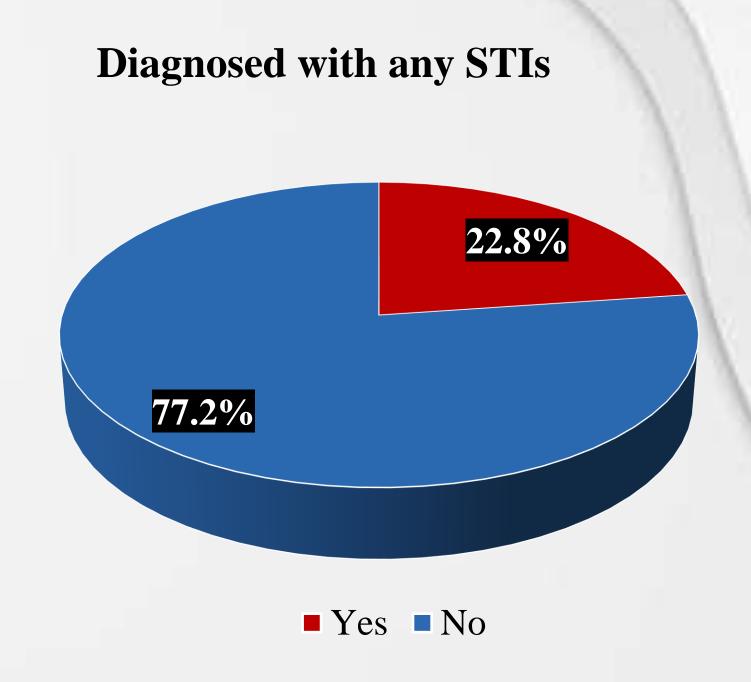


RDS Weighted % by Socio-demographic Characteristics

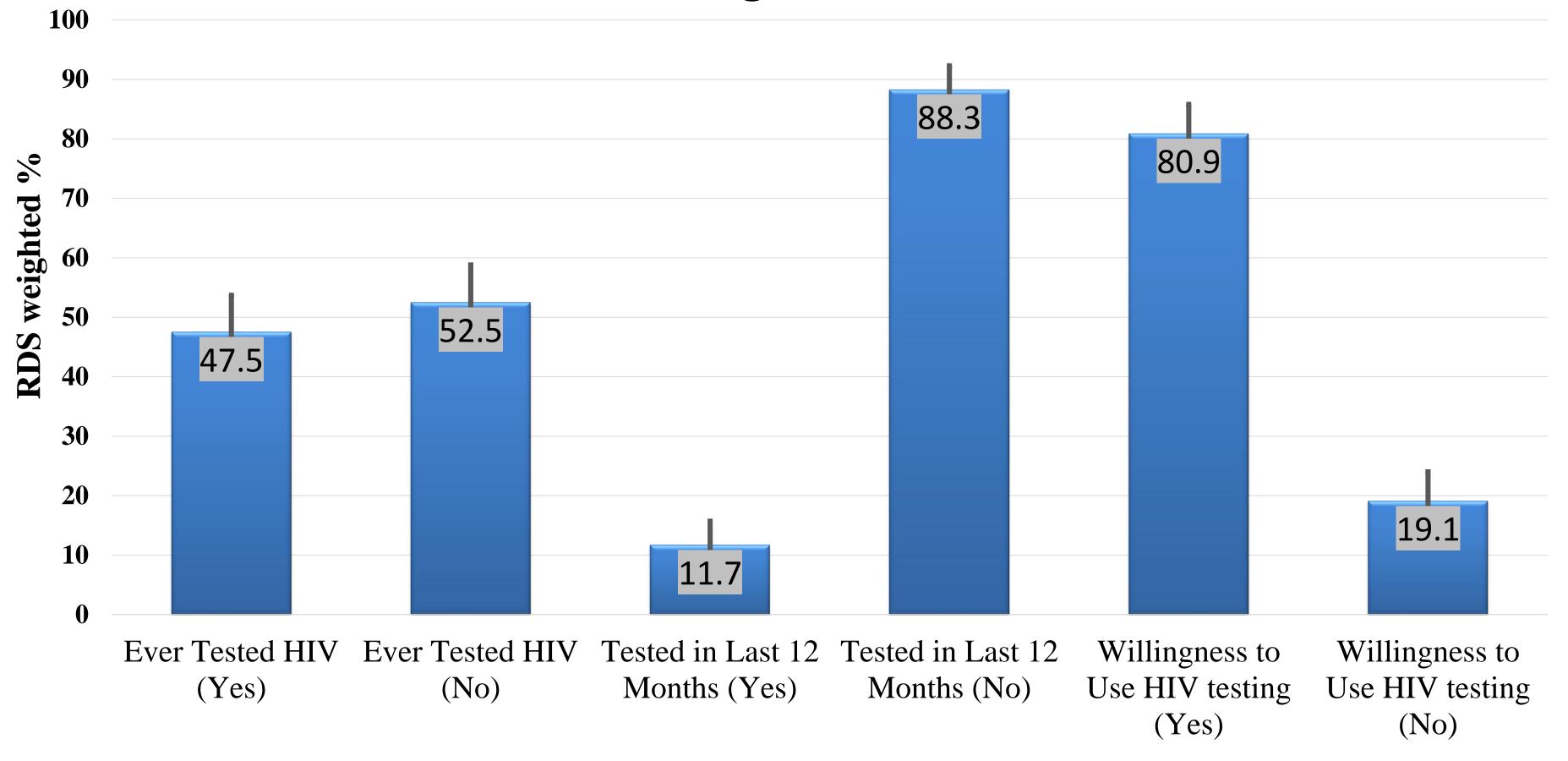


HIV-related and High-risk sexual behaviors





HIV testing and behavior



Factors associated with never testing HIV among MSM in Nepal

Characteristics	Crude weighted OR (95% CI)	Adjusted weighted OR (95% CI)
Ever engaged in transactional sex		
Yes	1 [Reference]	1 [Reference]
No	2.1 (0.9-4.4)	4.5 (1.2-17.3)
Daily internet access		
Yes	1 [Reference]	1 [Reference]
No	2.9 (1.3-6.5)	5.4 (1.4-21.3)
Heard of HIV self-testing		
Yes	1 [Reference]	1 [Reference]
No	8.2 (4.5-14.8)	6.7 (2.8-16.0)
Diagnosed with any STIs		
Yes	1 [Reference]	1 [Reference]
No	5.7 (2.6-12.3)	8.4 (2.8-25.2)
Know of someone taking PrEP		
Yes	1 [Reference]	1 [Reference]
No	52.8 (14.4-193.7)	44.9 (10.5-191.6) 17

LIMITATION

01 SELECTION BIAS

Monetary incentives in RDS

02

LIMITED GENERALIZABILITY 03

SMALL SAMPLE SIZE

A modest sample size

The study was conducted only in the Kathmandu Valley

Key Takeaways



HIV Testing Gap

Many MSM remain untested despite free services.



Risky Behaviors

Multiple partners and condomless sex increase HIV risk.



Stigma & Testing Preference

NGO-based testing is preferred over traditional healthcare.



Awareness Challenge

Many MSM are unfamiliar with HIV self-testing.



Opportunity for Accessibility

High willingness to use selftesting.



Expanding Reach

Couples testing, counseling, and online platforms



Hi!

I am Sandhya Niroula, an early-career researcher and undergraduate public health student at the Central Department of Public Health, IOM. My research interests lie at the intersection of digital health, sexual and reproductive health rights (SRHR), and non-communicable diseases. I'm always open to research collaborations—feel free to connect through:



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