Impact of Residing or Injecting in Testing Center Catchments on HIV Testing in Churachandpur, India

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BACKGROUND

- India has made significant progress toward UNAIDS 95-95-95 targets, though there are still gaps in HIV testing, particularly for people who inject drugs (PWID)
- HIV testing in India is offered free-of-charge through government supported integrated care and testing centers (ICTCs)
- Starting in 2013, we established PWID-focused integrated care centers (ICC) that provide free HIV testing alongside other services

OBJECTIVE

- We evaluated whether proximity to the ICTCs or the ICCs was associated with recent HIV testing in Churachandpur, a northeastern Indian city

METHODS

- N=752 PWID in Churachandpur, India, recruited through respondent-driven sampling (RDS) from Nov 2022-Feb 2023
  - Inclusion criteria: ≥18 years and reported injection drug use in the past 2 years
  - Completed interviewer-administered surveys and provided HIV testing and injection-related behaviors and locations for their primary residence and up to 4 locations in which they injected drugs in the past year
- Catchment areas within a 30-minute walking radius from ICTCs (N=10) and the ICC (N=1) were calculated using spatial area network analysis
- Logistic regression was used to assess the association between being within an ICC or ICTC catchment area and testing for HIV in the past year or past 6 months, adjusted for age, daily injection, and undiagnosed HIV

Table 1. Characteristics of PWID who did not self-report living with HIV in Churachandpur, India (N=538)

	Unweighted n (%) / median (IQR)	RDS-II Weighted % / median (IQR)
Age (years)	27 (23, 35)	27 (24, 34)
Duration of Drug Use (years)	5 (2, 10)	4 (1, 8)
Injection Frequency, Past 6 Months		
Never/Less than Daily	89 (16.5)	16.2
Daily	449 (83.5)	83.8
Undiagnosed HIV	32 (5.9)	8.1
Tested for HIV		
Past 12 Months	222 (41.3)	38.5
Past 6 Months	142 (26.4)	23.7

Proximity to Community-Based HIV Testing Facilities Increased the Odds of HIV Testing among PWID Living without HIV

RESULTS

- Of 752 PWID enrolled, 538 (72%) did not self-report living with HIV
- ~40% completed HIV testing in the prior year, while ~26% did in the prior 6 months
- Being within a 30-minute walking catchment of an ICC increased the odds of testing 2-fold
- Being within a 30-minute walking catchment of an ICTC did not significantly increase the odds of testing

Table 2. RDS-II Weighted Associations Between ICTC Catchment Areas and HIV Testing in the Past 12 and 6 Months among PWID living without HIV in Churachandpur, India (n=538)

		Testing in Past 12 Months		Testing in Past 6 Months	
		Univariable	Multivariable	Univariable	Multivariable
	n (%)	OR (95% CI)	aOR* (95% CI)	OR (95% CI)	aOR* (95% CI)
Outside of 30-Minute Walking Catchment	157 (30.0)	ref	ref	ref	ref
In 30-Minute Walking Catchment	381 (70.0)	1.70 (0.97, 2.97)	1.65 (0.94, 2.87)	1.54 (0.82, 2.89)	1.51 (0.80, 2.84)

*adjusted for age, injection frequency, and undiagnosed HIV; ⁺p<0.05

Table 3. RDS-II Weighted Associations Between ICC Catchment Areas and HIV Testing in the Past 12 and 6 Months among PWID living without HIV in Churachandpur, India (n=538)

		Testing in Past 12 Months		Testing in Past 6 Months	
		Univariable	Multivariable	Univariable	Multivariable
	n (%)	OR (95% CI)	aOR* (95% CI)	OR (95% CI)	aOR* (95% CI)
Outside of 30-Minute Walking Catchment	171 (34.4)	ref	ref	ref	ref
In 30-Minute Walking Catchment	367 (65.6)	**2.07 (1.20, 3.57)⁺**	2.02 (1.17, 3.48)⁺	**2.00 (1.06, 3.77)⁺**	**1.97 (1.03, 3.76)⁺**

*adjusted for age, injection frequency, and undiagnosed HIV; ⁺p<0.05

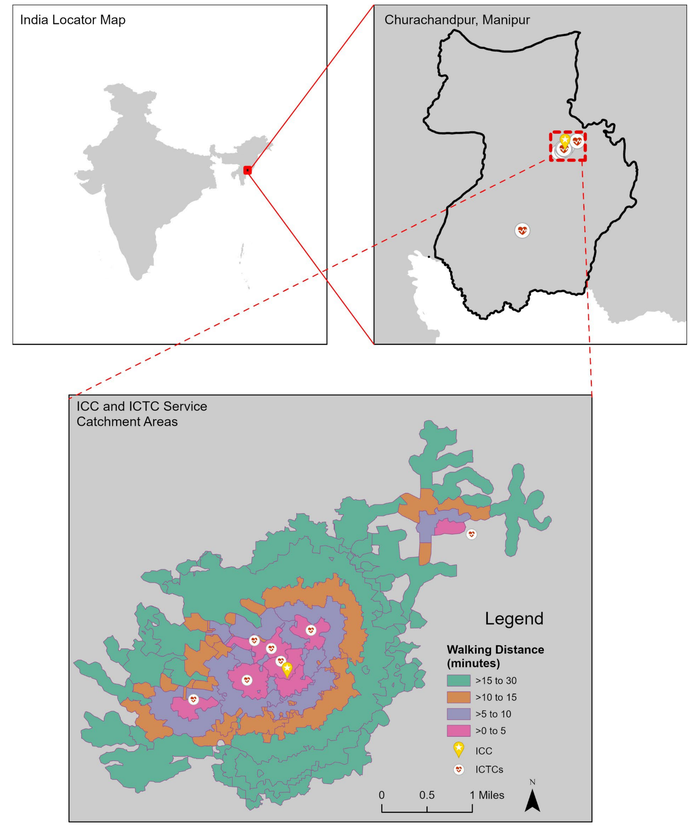


Figure 1. Service Catchment Area Map, Churachandpur, Manipur, India

CONCLUSIONS

- Proximity to a community-based testing location (ICC) appeared important for regular HIV testing among PWID Despite the presence of multiple government ICTCs, proximity to them did not significantly improve recent testing, potentially reflecting additional barriers
- Centers specifically oriented toward PWID populations may facilitate HIV testing and achieve the first 95 in the 95-95-95 elimination targets

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