results brief

Early Results Demonstrate the Feasibility and Acceptability of Community-based Antiretroviral Treatment Delivery to Female Sex Workers in Tanzania

Several studies from sub-Saharan Africa have shown improved HIV treatment outcomes, such as uptake of HIV services, retention in care, and increased dignity and quality of life, by using community health workers to deliver HIV services.[1–4] Project SOAR in collaboration with the National AIDS Control Program of the government of Tanzania, National Institute of Medical Research, and Jhpiego's Sauti Program, are conducting implementation science research to investigate the delivery of community-based antiretroviral treatment (ART) services to female sex workers (FSWs) in Tanzania. This brief summarizes key findings from a baseline survey administered to a cohort of FSWs enrolled in the study, qualitative interviews with FSWs conducted three months after the start of the community-based ART services, and routine monitoring data.

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In addition to ART service delivery, CBHTC Plus provides several other services, e.g., family planning and cervical cancer screening, to key populations.

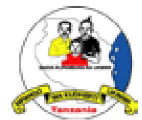
METHODS

The overall study uses a quasi-experimental design. The intervention arm comprises four districts where Sauti operates in the Njombe region and the comparison arm comprises three districts where Sauti operates in the Mbeya region. The community-based ART service delivery model was built upon an existing community-based HIV testing and counseling (HTC) service called CBHTC Plus (CBHTC+). CBHTC+ also provides other services to key populations: HTC, sexually transmitted infection (STI) screening and treatment, escorted referrals of HIV-positive clients to HIV treatment facilities, condom distribution, family planning counseling and methods, referrals for cases of violence, TB screening, and cervical cancer screening.

From July to September 2017, the research team recruited and enrolled more than 600 FSWs into

KEY MESSAGES

- FSWs' extremely low levels of condom use with paying clients and non-paying partners support the importance of following the World Health Organization's guidelines on treating all people living with HIV to reduce HIV transmission.
- There are gaps in linking FSWs with HIV testing, and for those who test positive to HIV care and treatment, highlighting the need to strengthen these linkages.
- Early results suggest that the community-based ART delivery model for female sex workers is feasible and acceptable, thereby paving the way to close critical HIV care and treatment gaps.



the study. Eligible FSWs were HIV positive, not currently on ART, aged 18 and above, sold sex for money or goods at least once in the past 6 months, and planned to reside in their respective region for the next 12 months. The recruitment was mainly carried out through Sauti mobile and home-based testing events.

FSWs in the intervention arm (Njombe Region) were screened to ensure they were in a clinically stable condition to receive community ART (excluding World Health Organization Clinical Stages 3 and 4), and one month supply of antiretroviral (ARV) drugs. At the first refill, each FSW would then receive two months' supply of drugs. Subsequently, from the third refill on, FSWs would receive three months' supply of ARVs. FSWs would have a choice of picking up ART refills at the CBHTC+ mobile tent or to have the refills delivered to their home. FSWs in the comparison arm (Mbeya Region) were referred to public ART facilities for standard ART services per national guidelines.

We collected data from the FSWs in both groups at baseline and will re-interview the cohort at 6 and 12 months and measure viral load as well.

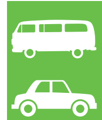
WHO ARE THE STUDY PARTICIPANTS?

617 FSWs (308 Njombe, 309 Mbeya)

Median age: 29 (Njombe), **32** (Mbeya)

Half have never married, 34% divorced, widowed, or separated

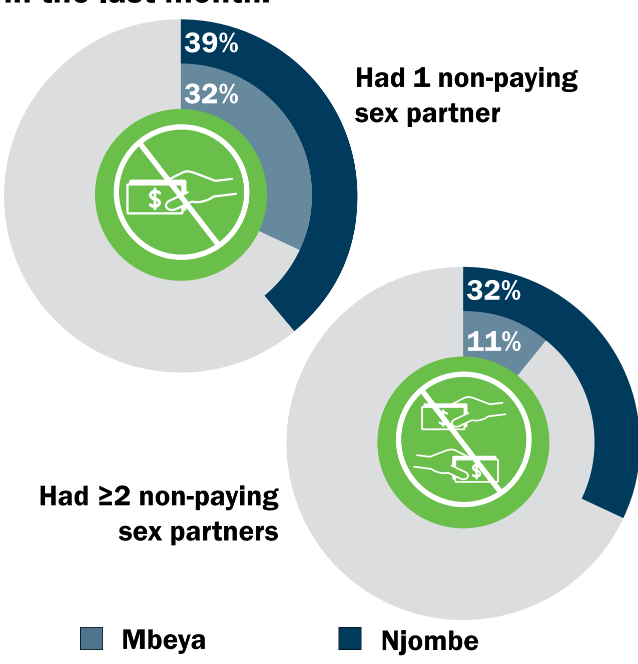
83% have at least **1 living child**



Traveled out of the region to sell sex in past 6 months: **35%** (Njombe), **10%** (Mbeya)

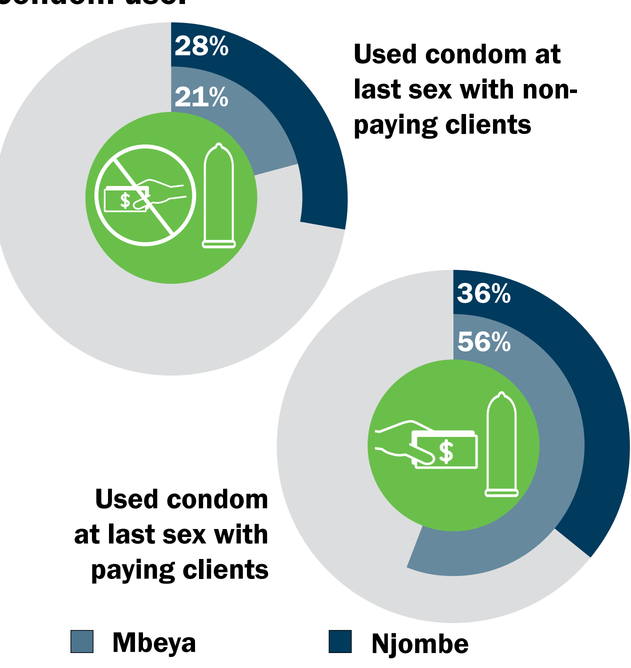
RESULTS

Many FSWs had a non-paying sex partner in the last month.



Between a third and two-fifths of study participants had a non-paying sexual partner in the past month. About three times as many FSWs in Njombe compared to Mbeya had two or more such partners in the same time period.

FSWs reported extremely low levels of condom use.



Fewer than one in three FSWs used a condom at last sex with either a paying or non-paying partner.

FSWs experience high levels of internalized stigma.

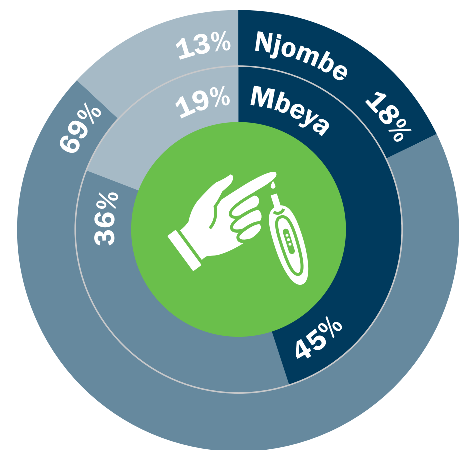
	Njombe %	Mbeya %
I hide my HIV status from others	76	65
Because I am HIV positive:		
I sometimes feel worthless	31	36
I am ashamed of myself	28	47
I feel guilty	59	37

There are important gaps in HIV service uptake.

HIV testing and diagnosis

Many FSWs learned about their HIV-positive status for the first time at study enrollment. FSWs in Mbeya were almost three times as likely to be diagnosed as HIV positive the day they were interviewed compared to FSWs in Njombe.

Time since HIV diagnosis**



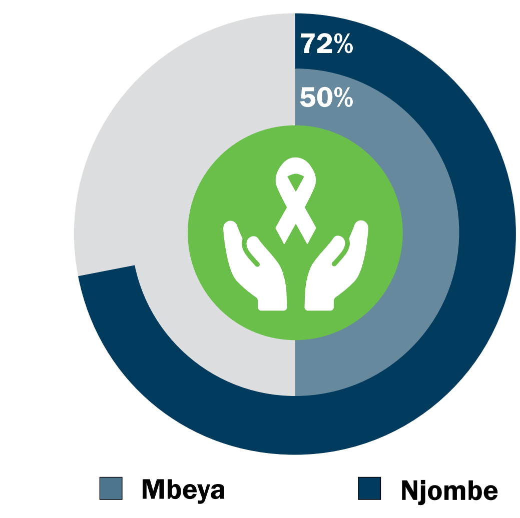
- **Newly diagnosed today (at time of survey)**
- **Diagnosed within past month**
- **Diagnosed more than a month ago**

**p ≤ 0.01

Linkage to HIV care

Among the sub-sample who had known their HIV status for more than a month before the study (n=97/617), many had not yet registered in HIV care, particularly those in Mbeya.

Registered in HIV care (n=97)*



*p ≤ 0.05

STI diagnosis and treatment

Most had not had an STI check-up in the past three months, with FSWs in Njombe half as likely to have had a check-up as those in Mbeya (20 vs. 40 percent; p<.001).

Early findings suggest that the Sauti community-based ART model is feasible and acceptable.

The routine monitoring data (four months after enrollment into the study) show that in Njombe, 98 percent of participants came back on time for the first refill, and 95 percent came back on time for the second refill. Those who missed scheduled appointments did so because they were traveling outside of the region.

Our three-month qualitative interviews with nine FSWs in the intervention arm show overwhelming support of this community-based ART model. All FSWs chose this program because it provided at-home delivery of ART and therefore afforded more

privacy as FSWs did not need to worry about being recognized at an ART clinic.

> *I was easily very interested* [in the program] *after hearing that clients are supplied with the drugs to their home. I feel very good* [about the program] *as I'm shy to do it in groups of people as they would know my status.*
>
> —FSW, Njombe DC

More importantly, all the FSWs were comfortable with the program staff as they felt the staff both respected them and had excellent bedside manners.

> *They speak to us politely and don't stigmatize us. If they need to run tests, they touch my body normally without feeling disgusted.... They even take their time to call us, asking about our health progress which is really sweet.*
>
> —FSW, Njombe TC

Furthermore, all FSWs commended the program staff for making the refill process easy as they consistently reached out to clients to remind them of their refill pickup dates and were very accommodating when scheduling their pickup dates.

> *To be honest, they are very good at following up, and when I run out of medication, they call me so I can fetch some more drugs.*
>
> —FSW, Makambako

CONCLUSIONS

- One-third of FSWs were diagnosed on the date of the survey through community outreach testing. This suggests that many are first-time testers who have either been recently infected or unaware of their positive status. Among those who had known their positive status for at least a month before the study, only 41 percent had registered in HIV care, demonstrating a gap in access to care and treatment and in achieving progress toward reaching UNAIDS's 90–90–90 targets.
- Nearly half of FSWs had a non-paying sex partner, and less than one-third used a condom at last sex with paying and non-paying clients. These risk behaviors can potentially result in high levels of HIV transmission to the general population. This further substantiates the importance of timely HIV diagnosis and treatment.
- Early findings support the feasibility and acceptability of Sauti's CBHTC+ model—important first steps in closing HIV care and treatment gaps among FSWs.

REFERENCES

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