Monitoring HIV prevention services for key populations in El Salvador

Sorto JS¹, Velasco PE¹ Rodriguez AE², Nuche-Berenguer B², Alonso M², Nieto Al¹

¹Ministry of Health of El Salvador ²Pan American Health Organization.

Background

In El Salvador, most new HIV infections occur among key populations (KP); including men who have sex with men (MSM), and transgender women (TGW). Reducing new HIV infections involves achieving high coverage and quality of people-centered HIV services. To monitor HIV prevention services, the Pan American Health Organization (PAHO) proposes the HIV prevention cascade¹ that follows-up each KP across HIV prevention services. Based on KP population size and HIV prevalence estimates (*Pillar 1*), the cascade measures: i) number of KP with a negative HIV test (*Pillar 2*); ii) number of HIV-negative KP linked to prevention services (*Pillar 3*); and number of KP followed-up on HIV prevention services (*Pillar 4*). The impact is measured in terms of the number of KP who remain HIV-free (Pillar 5). El Salvador is using the HIV prevention cascade to guide decision making.

Methods

We analyzed data of people receiving an HIV test that were categorized as MSM or TGW (using standardized questionnaire). Each pillar of the cascade was determined as follows:

- Pillar 1 (estimates): for the estimated number of KP free of HIV, we subtracted to the total KP size (54.140 MSM and 1835 TGW) the estimated KP with HIV (5685 MSM and 297 TGW). We disaggregated the HIV positives between diagnosed (registered as diagnosed HIV+) and undiagnosed (total KP HIV estimates minus already diagnosed with HIV).
- Pillar 2 (number with HIV test): from data collection form for persons tested for HIV.
- **Pillar 3 (linkage):** offer of preventive service additional to the HIV test. We used the assessment of HIV risk carried out to every person who received an HIV test.
- Pillar 4 (follow-up): received a second HIV test over the 12 months following the initial HIV test.
- Pillar 5 (impact): result of the follow-up HIV test.

Pillars 3-5 were disaggregated by HIV infection risk (assessed through behavioral questions about number of sex partners and consistent condom use).

Results

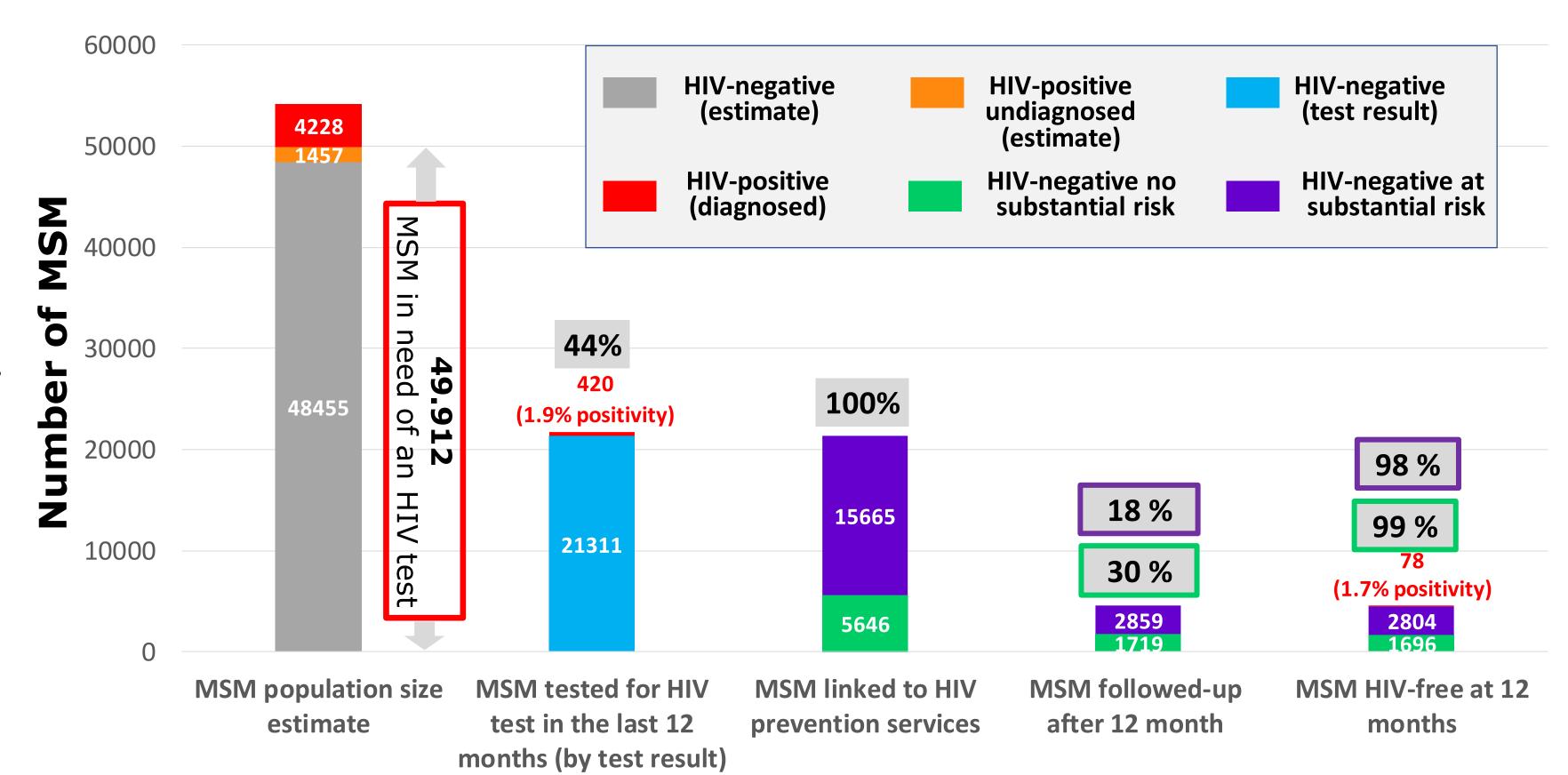
In 2022, an estimated 49.912 MSM (48,455 HIV-negative and 1457 undiagnosed HIV-positive) and 1631 TGW (1,538 HIVnegative and 93 undiagnosed) were in need of an HIV test. The HIV testing coverage was 44% among MSM and 64% among TGW with positivity rates of 1.9% and 2.4% among MSM and TGW, respectively. Of the 21,311 MSM and 1012 TGW with an HIV negative result, 15,665 MSM (74%) and 678 (67%) of TGW were identified at substantial risk of HIV. Among the HIV-negative MSM and TGW followed-up in care (i.e., with a second HIV test within 12 months after the initial test) there were 78 and 1 new HIV infections, respectively. The positivity rates of the follow-up HIV test were 1.9% (55 cases) among MSM at substantial risk and 1.3% (23 cases) among those at non-substantial risk. The only positive case among followed-up TGW happened in a TGW that was not identified at substantial risk for HIV. Comparing these data from those from 2021 (**Table 1**), we observed an increased coverage of HIV testing among TGW. The HIV positivity testing rates were lower in both MSM and TGW. We also observed a higher proportion of MSM and TGW at substantial risk.

Conclusions

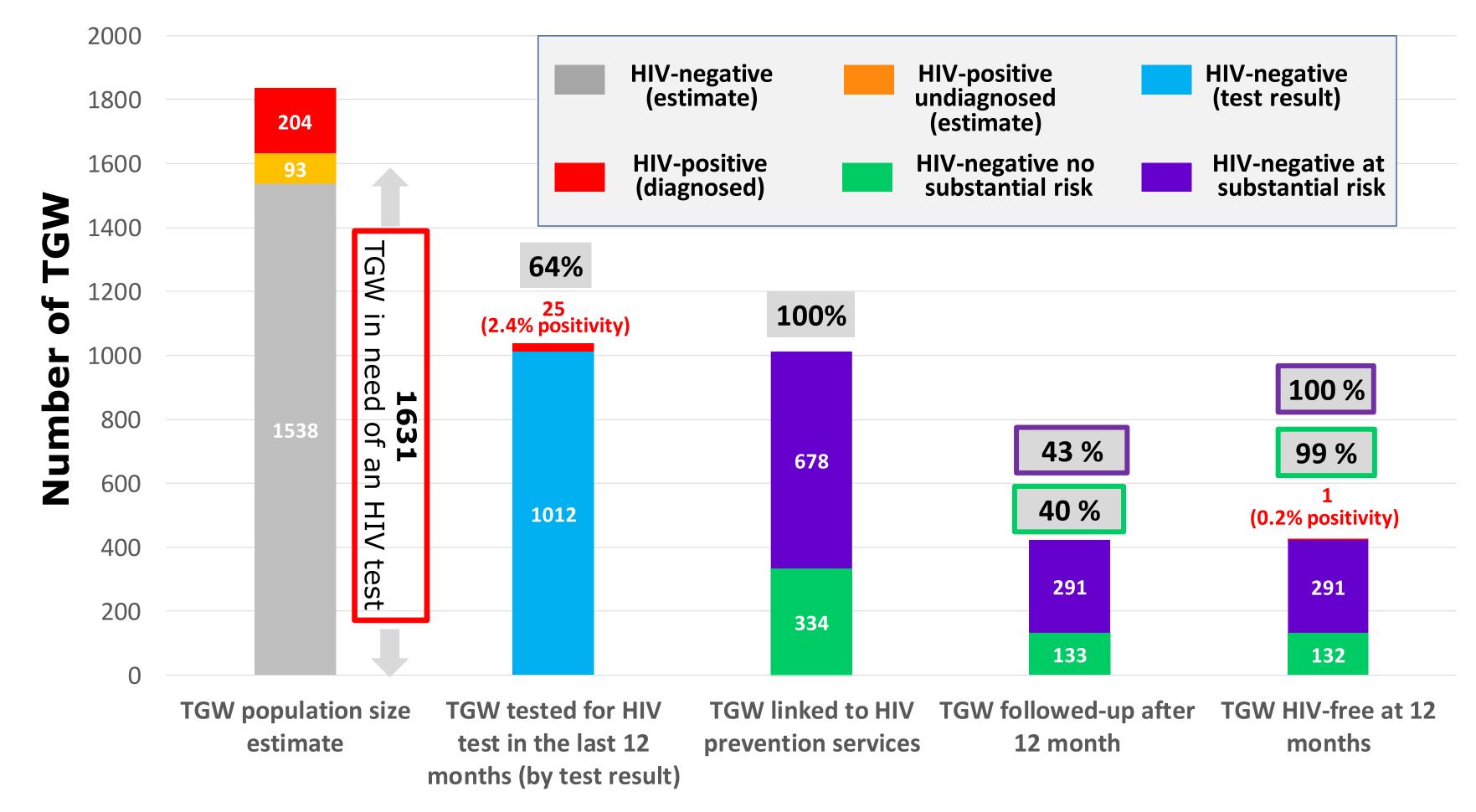
El Salvador maintains its efforts to reach KP with HIV testing among MSM similar in 2022 to 2021, and increased coverage among TGW. However, follow-up of people in HIV prevention is

HIV prevention cascades for MSM and TGW in El Salvador, 2022

Men who Have Sex with Men (MSM)



Transgender Women (TGW)



Source: HIV Epidemiological Monitoring, Evaluation and Surveillance System of El Salvador (SUMEVE), 2023.

Note: percentages in the grey boxes are calculated over the previous pillar. Percentages on the grey boxes outlined in purple (substantial risk) and in green (non-substantial risk) are calculated over the correspondent portion (purple or green) of the previous pillar.

Table 1. Comparison HIV prevention cascade indicators (2021 vs 2022)

	MSM		TGW	
	2021	2022	2021	2022
HIV testing coverage	44%	44%	52%	64%
HIV positivity rates	2.4%	1.9%	3.8%	2.4%
HIV-negative at substantial risk	54%	74%	56%	67%
HIV positivity rate at follow-up (subs. risk)	2.4%	1.9%	1.0%	0.0%
HIV positivity rate at follow-up (non subs. risk)	1.0%	1.3%	1.2%	0.8%

Source: HIV Epidemiological Monitoring, Evaluation and Surveillance System of El Salvador (SUMEVE), 2023.

still limited which decreases the opportunity to reduce HIV infections through comprehensive services. The implementation of PrEP, HIV self-testing and monitoring of HIV prevention continuum will help El Salvador address prevention needs. The assessment of substantial risk needs to be reviewed with more appropriate variables and more frequent assessment, as HIV cases were detected among those categorized as lower risk. The HIV prevention cascades will help El Salvador to guide decision-making towards increasing the coverage and quality of its HIV prevention services.