

# HIV and commercial sex workers in Portugal: Are there missed opportunities to scaling up HIV testing and linkage to care?

Sónia Dias<sup>1</sup>, Luís Mendão<sup>2</sup>, Ana Gama<sup>2</sup>, Gabriela Cohen<sup>2</sup>, Sara Trindade<sup>2</sup> & Henrique Barros<sup>3</sup>

<sup>1</sup>Institute of Hygiene and Tropical Medicine, Universidade Nova de Lisboa; <sup>2</sup>GAT - Grupo Português de Activistas sobre o Tratamento de VIH/Sida Pedro Santos;

<sup>3</sup>Institute of Public Health, University of Porto

## INTRODUCTION

Commercial sex workers (CSW) have been considered one of the groups at greater risk for HIV infection and transmission<sup>1,2</sup>. Still, epidemiological and behavioral data among this group in Portugal remain scarce. Increasing knowledge would be valuable to design effective strategies for prevention and control of HIV infection. It has been recognized that awareness of serostatus and access to care may help to prevent and control the infection<sup>3</sup>. Indeed, HIV testing with effective linkage to care is considered one of the most important HIV prevention strategies<sup>4</sup>.

## OBJECTIVES

This study aims to examine HIV testing and associated factors among female CSW and describe the proportion of reported HIV infection.

## METHODS

In 2010-2011, the Project PREVIH - HIV/AIDS infection in MSM and CSW: Prevalence, determinants, prevention interventions and access to health was developed in order to address the lack of data about HIV among some vulnerable groups, namely CSW. This project was based on a participatory approach, in which NGOs and CSW communities actively participated in all its phases. In this project, a cross-sectional study was conducted with a snowball sample of 846 female CSW. Snowball sampling was developed through the users of outreach structures, NGOs, community-based organizations and social networks. Data was collected using a questionnaire with items on sociodemographics, sexual practices, preventive measures, HIV testing and self-reported serostatus. Questionnaires were applied by trained interviewers. Odds ratios with corresponding 95% confidence intervals were calculated through logistic regression analysis.

## RESULTS

Of the total sample, mean age was 35.9 ± 10.7 years (Table 1). Around 74% of participants had elementary education and 56.3% had Portuguese nationality; of those foreigners, 58.9% were from Brazil. Approximately 62% reported earning more than 1000€ per month.

Considering participants' sex work conditions, 71.9% referred that worked full time and 57.5% worked only in outdoor settings (streets or cars) (Table 2). Around a half reported 2-4 client partners in the last working day and 29.3% reported 5-10 clients.

Overall, 91% of participants reported having always used condom with clients in the previous month and 31.1% having always used condom with non-client partners in the previous year (Table 3). Approximately 42% of participants referred having been reached with HIV prevention programmes in the last year.

Of the total sample, 89.7% reported knowing that HIV testing in Portugal can be done confidentially and for free (Table 4). Overall, 90.5% of participants reported having been tested for HIV; among these, 72.7% were tested during the last year. HIV testing in the last year was more frequent among those reporting consistent condom use with clients (72.8% vs. sometimes: 60% and never: 33.3%, p=0.013).

Table 5 shows the results of the logistic regression analysis. Having been tested for HIV during the last year was more likely among participants who had been reached with prevention programmes in the same period and who knew that HIV testing in Portugal can be done confidentially and for free. HIV testing was less likely among those older and those who did sex work in indoor settings or both indoor and street/car settings, compared to those who only worked outdoor. No significant association was found between having been tested during the last year and educational level and nationality.

Of the participants ever tested, 10.4% reported not knowing their serostatus. Of those who knew, 7.4% reported being HIV positive. Among those seropositive, only 77.5% were currently in treatment.

## CONCLUSIONS

National efforts have been undertaken to generalize HIV testing. Nevertheless, the proportion of those having never been tested and that of those who do not know their serostatus reinforce that continuing efforts are needed. Integrative strategies comprising HIV prevention campaigns and test promotion among female CSW, particularly in indoor settings, would be valued. Heterogeneity within CSW and subgroups' specific needs should be accounted. Furthermore, involving female CSW directly in HIV prevention campaigns and interventions may contribute to empower them, thus encouraging them to adopt protective measures, to use health services and to uptake HIV testing. These strategies could contribute to improve HIV testing and reduce the undiagnosed proportion of HIV infection among this group.

Table 1. Sociodemographic characteristics of participants.

	Mean	SD	
Age (years)	35.9	10.7	
	n	%	
Educational level (n=836)	Elementary	619	74.1
	Secondary	185	22.1
	Higher education	32	3.8
Nationality (n=844)	Portuguese	475	56.3
	Non-national	369	43.7
Country of origin (n=365)	Brazil	215	58.9
	African	93	25.4
	Eastern European	39	10.7
	Other	18	5.0
	Self-reported income (n=811)	≤ 1000€	505
	> 1000€	306	37.7

Table 2. Sex work conditions.

	n	%	
Commercial sex work (n=702)	Occasionally	197	28.1
	Full time	505	71.9
Sex work settings (n=795)	Street/car	457	57.5
	Indoor	299	37.6
	Both	39	4.9
Number of client partners in the last working day (n=806)	None	25	3.1
	1	129	16.0
	2 – 4	396	49.1
	5 – 10	236	29.3
	≥ 11	20	2.5

Table 3. Condom use and contact with prevention programmes.

	n	%	
Frequency of condom use with client partners in the last month (n=826)	Always	752	91.0
	Sometimes	68	8.2
	Rarely/never	6	0.8
Frequency of condom use with non-client partners in the last year (n=653)	Always	203	31.1
	Sometimes	148	22.7
	Rarely/never	302	46.2
Having been reached with HIV prevention programmes in the last year (n=819)	Yes	341	41.6
	No	478	58.4

Table 4. HIV testing.

	n	%	
Knowing that HIV testing in Portugal is free and confidential (n=838)	Yes	752	89.7
	No	86	10.3
Having ever been tested for HIV (n=841)	Yes	761	90.5
	No	80	9.5
Having been tested for HIV in the last year (n=752)	Yes	547	72.7
	No	205	27.3

Table 5. Factors associated with HIV testing in the last year.

			P value	Adjusted OR (CI 95%)	
	mean	SD			
Age	35.5	10.1	0.010	0.98 (0.96-0.99)	
	n	%			
Educational level	Elementary	396	72.3	1	
	Secondary	118	72.0	0.642	1.16 (0.75-1.81)
	Higher	24	80.0		1.82 (0.71-4.71)
Nationality	Non-national	228	71.9	0.631	1
	Portuguese	319	73.5		1.16 (0.78-1.72)
Sex work setting	Street/car	313	76.5	0.011	1
	Indoor or both	203	67.9		0.58 (0.40-0.86)
Having been reached with HIV prevention programmes in the last year	No	285	68.3	0.002	1
	Yes	250	78.4		1.71 (1.20-2.45)
Knowing that HIV testing in Portugal is free and confidential	No	32	58.2	0.010	1
	Yes	513	74.1		1.91 (1.03-3.54)

## References

<sup>1</sup>UNAIDS (2009). UNAIDS Guidance Note on HIV and Sex Work. Geneva: UNAIDS; <sup>2</sup>National Coordination for HIV/AIDS Infection (2007). National Programme for the Prevention and Control of HIV/AIDS 2007–2010: A Commitment to the Future. Lisbon: National Coordination for HIV/AIDS Infection; <sup>3</sup>Heymer, K.J., & Wilson, D.P. (2011). Treatment for prevention of HIV transmission in a localized epidemic: The case for South Australia. *Sexual Health*, 8(3), 280-294; <sup>4</sup>CDC (2011). High-Impact HIV Prevention: CDC's Approach to Reducing HIV Infections in the United States. CDC: Atlanta.