

# Coming Out to Health Care Providers in Puerto Rico: Opportunities for Prevention, Linkage and Engagement in Care

Miranda de León, S<sup>1</sup>; Pérez-Ríos, N<sup>2</sup>; Sánchez-Díaz, CT<sup>3</sup>; Valencia-Torres, IM<sup>3</sup>; Quiñones-Ávila, V<sup>4</sup>; Rolón-Colón, Y<sup>1</sup>; Colón-López, V<sup>3, 4</sup>

<sup>1</sup>AIDS Surveillance Program, Epidemiology Office, Puerto Rico Department of Health; <sup>2</sup>Research Design and Biostatistics Core, Puerto Rico Clinical and Translational Research Consortium, UPR Medical Sciences Campus; <sup>3</sup>Cancer Control and Population Sciences Program, UPR Comprehensive Cancer Center, San Juan, PR; <sup>4</sup>Department of Health Services Administration, UPR-MSC Graduate School of Public Health



### Introduction

- Puerto Rico (PR) has the eighth highest incidence of HIV<sup>1</sup> and the third highest mortality rate<sup>2</sup> when compared to the United States mainland.
- 20,196 people were living with HIV/AIDS in PR by September 2015 and 25% (n=11,656) of all cases were Men who have Sex with Men (MSM)<sup>3</sup>.
- In 2013, the percentage of infection amongst MSMs surpassed those observed among any other population at risk in men, becoming the principal mode of transmission for newly diagnosed cases for this year in PR<sup>4</sup>.
- There are limited studies regarding the subject and in PR, disclosure of same sex attraction to Health Care Providers (HCP) is still poorly understood.
- Understanding disclosure to HCP can help target future prevention efforts for this group, raise awareness and improve MSM overall health outcomes in PR.

# Study Objective

To examine the relation between sociodemographic, behavioral, and health-related characteristics with MSM disclosure of same-sex attraction to a HCP.

# National HIV Behavioral Surveillance System (NHBS)

- CDC funded cyclical surveillance system conducted in 20 jurisdictions including Puerto Rico<sup>5</sup>.
- NHBS comprises 3 different populations at high risk for HIV: MSM, People who Inject Drugs (PWID), and Heterosexuals at increased risk for infection (HET).
- Venue-based, time-space sampling is used for MSM recruitment.
- Participants complete an anonymous standardized questionnaire that collects information on HIV-related risk behaviors, HIV testing, and access and use of HIV prevention services. HIV testing is also offered to all participants.
- For this analysis, data from the 2011 PR-NHBS participants who reported having at least 1 male sex partner in the past year (n=302) was used.

### Statistical Analyses

- Univariate analysis was performed to describe the study sample.
- Chi square, Fisher's exact test or independent t-tests where used for bivariate analysis.
- Collinearity test for potential confounders (only with significant co-variates)
  was employed.
- Logistic regression analysis was used to examine the relation between sociodemographic, behavioral, and health related characteristics with samesex disclosure. Log likelihood test for goodness of fit was used.
- Odds ratios (OR) and 95% confidence intervals (95% CI) were calculated using logistic regression models.

# Results Figure 1. Disclosure of Same-Sex attraction to Healthcare Provider The pr

Disclosed (53%) Undisclosed (47%)

Not disclosed same-sex Disclosed same-sex

Table 1. Characteristics of NHBS 2011 MSM.

	Not disclosed same-sex attraction to health care provider (n=141; 46.7%)		Disclose	Disclosed same-sex	
			attraction to health		
Characteristics			care	care provider	
			(n=161; 53.3%)		p-value
	No.	(%)	No.	(%)	
Age	110.	(70)	110.	(70)	
Mean age ± Std. Deviation	29.4±9.5		32.5±11.5		0.015 <sup>b</sup>
Education					
High school or less	41	29.1	38	23.6	
Some college or more	100	70.9	123	76.4	0.28
Health Insurance					
No	30	21.3	36	22.4	
Yes	111	78.7	125	77.6	0.82
Employment					
Employed full/part time	96	68.57	124	78.48	
Students	22	15.71	14	8.86	0.11
Unemployed	22	15.71	20	12.66	<b>U.L.</b>
Annual Household Income		131,71		12.00	
0-19,999	132	94.9	150	93.7	0.65
≥20,000	7	5.1	10	6.3	J.05
Sexual Orientation	,	3.1	10	0.5	
Homosexual	124	87.9	139	86.3	
Bisexual	17	12.1	22	13.7	0.68
Age at MSM Sexual Debut	1,	12.1	22	13.7	
Mean age ± Std. Deviation	16.6±5.2		15.9±5.2		0.33
Venue Type	10.025.2		13.323.2		0.33
Bars/Clubs or Sex Venues	110	94.8	128	96.2	
Other Venues <sup>a</sup>	6	5.2	5	3.8	0.59
Female partners in the last 12 months	O	J. Z	3	3.0	
No	44	93.6	64	95.5	
Yes	3	6.4	3	4.5	0.29
More than 5 male partners in the last 12 months	J	0.4	3	7.5	
No	111	78.7	124	77.0	
Yes	30	21.3	37	23.0	0.69
Unprotected anal sex in last 12 months	30	21.5	37	23.0	
No	57	40.4	61	37. 9	
Yes	84	59.6	100	62.1	0.61
Aware of partner serostatus	J	JJ.0	100	<b>∪∠.</b> ⊥	
No	84	59.6	77	48.1	
Yes	57	40.4	83	51.9	$0.047^{b}$
Visited healthcare provider in last 12 months	<b>.</b>			J 1.J	
Yes	97	68.8	127	78.9	0.046 <sup>b</sup>
No	44	31.2	34	21.1	J.J 10
Tested for HIV in last 12 months	• •	J 1. L	<b>.</b>	<b></b>	
No	85	61.15	70	43.48	
Yes	54	38.85	91	56.52	0.002 <sup>b</sup>
HIV prevalence	<b>J</b> 1	<b>33.33</b>	<b>-</b>	J J . J L	
No	131	92.9	147	91.3	
Yes	10	7.1	147	8.7	0.61
		<b>, . ⊥</b>	<b>-</b> ·	<b>.</b> ,	

<sup>a</sup>Other venues includes gym, restaurants, parks and beaches, street locations, social organizations, and other places where MSM congregate. <sup>b</sup>Significant p-value.

Results

Table 2. Multivariable analysis for disclosing same-sex orientation

Characteristics	Adjusted OR (95%CI)	p for Wald
Age	1.03 (1.00-1.05)	0.0203
Awareness of partner serostatus	1.65 (1.04-2.64)	0.0341
Not visited Health Care Provider in the last 12 months.	0.66 (0.38-1.14)	0.1369
Not tested for HIV in last 12 months	0.49 (0.30-0.80)	0.0046

Adjusted by age, awareness of partner serostatus and visited HCP provider in last 12 months variables.

- Multivariate analysis showed that as age increases MSMs were 3.0% (OR: 1.03, 95%CI: 1.00-1.05) more likely to disclose to a HCP.
- Likewise, MSM's aware of their partner's serostatus were 66.0% more likely to disclose to a HCP (OR: 1.65, 95% CI: 1.04-2.64).
- A marginal association between disclosure and visiting a HCP in the last 12 months was observed (OR: 1.65, CI95%: 0.97-2.81).

# Conclusions

- Puerto Rican MSMs had a low prevalence of disclosure of same-sex attraction to HCPs, which might impact HIV screening, treatment, adherence, and engagement in care.
- Age and awareness of partner's serostatus played an important role on the disclosure to a HCP.
- Development of multilevel efforts are needed in order to promote disclosure of sexual orientation within the primary healthcare setting among the MSM population in Puerto Rico.
- The 2020 National HIV/AIDS strategy intends for high-risk patients to regularly test for other STDs and initiate usage of Pre-Exposure Prophylaxis (PrEP). Disclosure to HCP could facilitate conversations regarding these topics.

### References

- 1. Programa Vigilancia de VIH/SIDA del Departamento de Salud de Puerto Rico. 2013. Informe Semestral de la Vigilancia del VIH en Puerto Rico. Retrieved from http://www.salud.gov.pr/Estadisticas-Registros-yPublicaciones/Estadisticas%20VIH/Boletín%20Semestral%20de%20la%20Vigilancia%20del%20VIH/Boletín%20Semestral%20-%20Junio%202013.pdf
- 2. Centers for Disease Control and Prevention. (2013) Diagnosed HIV infection among adults and adolescents in metropolitan statistical areas—United States and Puerto Rico, 2011. HIV Surveillance Supplemental Report, 18(8). Retrieved, from http://www.cdc.gov/hiv/library/reports/surveillance
- 3. Programa Vigilancia de VIH/SIDA del Departamento de Salud de Puerto Rico. 2015. Puerto Rico HIVAIDS Surveillance Summary September 2015. Retrieved from http://www.salud.gov.pr/Estadisticas-Registros-y-Publicaciones/Pages/VIH.aspx?RootFolder=%2FEstadisticas%2D Registros%2Dy%2DPublicaciones%2FEstadisticas%20VIH%2FEstad%C3%ADsticas%20Generales%2FSeptiembre%202015&FolderCTID =0x0120006EB27B705572AB4F8B2BED4B6DA66DEC&View=%7B1786F2C9%2DF76B%2D4649%2DAEA3%2D012C53809510%7D
- 4. Programa Vigilancia de VIH/SIDA del Departamento de Salud de Puerto Rico. 2015. La Epidemia del VIH en Puerto Rico: 2002 -2013. Retrieved from http://www.salud.gov.pr/Estadisticas-Registros-y-Publicaciones/Estadisticas%20VIH/Presentaciones/Epidemia%20del%20VIH%20en%20Puerto%20Rico,%202002%20-%202013.pdf
- 5. Wejnert, C., Le, B., Rose, C. E., Oster, A. M., Smith, A. J., Zhu, J., & Paz-Bailey, G. 2013. HIV infection and awareness among men who have sex with men-20 cities, United States, 2008 and 2011. *PloS One*, 8(10), e76878. doi:10.1371/journal.pone.0076878 [doi]

# Acknowledgements

This project was fully supported by **5U1BPS003245**. The content is solely the responsibility of the authors and does not necessarily represent the official views of the Centers for Disease and Control. Sponsors of this study had no part in the design, data collection, analysis, or interpretation of the findings of this study and did not take part in the writing of or decision to publish this poster.