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BACKGROUND

- Chlamydia trachomatis (CT) and Neisseria Gonorrhoeae (NG) are among the most common STIs worldwide
- In Peru, routine screening and testing for CT/NG is lacking as syndromic management for urogenital infections is used
- Prev. studies show moderate rates of CT/NG in non-urogenital site
- Pharyngeal and anal CT/NG infections may represent an
- unrecognized disease burden and limit effective STI control in Peru

METHODS

- A cross-sectional, clinic-based study with high-risk men who have sex with men (MSM) and transgender women (TW) in Lima, Peru
- We screened all MSM/TW for pharyngeal and anal CT/NG infection (CT/NG Aptima Combo2, GenProbe-Hologic, San Diego, CA) using self-collected anal swabs and staff collected pharyngeal swabs
- Participants with positive results received treatment based on Peruvian and US-CDC guidelines
- Prevalence ratios (PRs) calculated for associations between sociodemographics, sexual risk behaviors, and anal or oral infection



Picture 1. Posters with figures showing the participants the procedures of sample collections (left: Pharyngeal, assisted; right: Anal, self-collected) .

RESULTS

- We enrolled 306 MSM and 89 TW with a median age of 29.6 years (interquartile range (IQR) 23.7 – 38.4)
- Participants reported a median of 5 male sex partners in the past 3 months (IQR 2 - 10)
- Prevalence of anal or pharyngeal CT or NG infection was 28.3%
- Anal CT = 14.4% , Anal NG =8.9%
- Pharyngeal CT = 6.1%, Pharyngeal NG = 6.4%

High Prevalence of CT/NG Infection in Extragenital Sites Among MSM in Lima, Peru

- Among CT or NG infected participants:
 - 81% had one infection at one anatomical site,
 - 7% had the same infection at both sites,
 - 12% had multiple infections at multiple sites
- Anal NG infection was significantly associated with younger age (PR 0.96), being versatile during anal sex (PR 2.40), and using antibiotics in the prior 3 months was protective against infection (PR 0.61)
- Pharyngeal CT infection was significantly higher among TW (PR 2.00)

Fig 1. CT and/or NG infection by anatomic site among MSM/TW



Table 1. Prevalence of anal CT/NG infection and associated factors in MSM and TW in Lima, Peru.

	No (%)	Prevalence of anal GC or CT	Crude PR	CI	p-value
Overall		21%			
Age			0.96	0.94 - 0.99	0.001
18-25	136	26%			
26-30	75	19%			
31-35	60	30%			
36+	111	12%			
Unmet basic needs (months, last year)					
0	157	21%	Ref		
1 - 3	112	23%	1.10	0.70 - 1.74	0.668
4 - 12	113	19%	0.93	0.57 - 1.50	0.756
Sexual identity / Gender Identity	• • •		- (
Gay	211	23%	Ref		
Bisexual/Heterosexual	83	14%	0.64	0.36 - 1.34	0.126
Iransgender	83	23%	1.01	0.63 - 1.61	0.979
Say Bala far anal say					
Sex Role for and sex	ОЛ	1 70/	Pof		
Active	04	12%		070 211	0.214
Versatile	170	27%	2 30	1 23 - 1 32	0.214
Used an antihiotic 3 months	175	2170	2.30	1.25 - 4.52	0.010
No	222	24%	Ref		
Yes	159	16%	0.63	0.41 - 0.97	0.037
Used alcohol before last sex	100	2070	0.00	0.11 0.07	01007
No	259	21%	Ref		
Yes	122	20%	0.96	0.63 - 1.47	0.868
No. male sex parnters, 3 months					
0 - 2	114	22%	Ref		
	112	220/		.6179511	
3 - 5	112	۲۷/۵	1.01	1.647019	0.972
	65	22%		.5500335	
6 - 10	05	2270	0.98	1.753759	0.951
	90	19%		.4962506	
11+			0.86	1.495001	0.596
Had unprotected anal sex, 3 months	0.2	240/			
No	83	21%	Ret	0.67.4.74	0.754
Yes	285	22%	1.08	0.67 - 1.74	0.754
Sex worker	270	220/	Def		
NO	2/0		Ket	0 54 1 21	
Yes	112	1970	0.84	0.54 - 1.31	0.455

		No P	Prevalence of Oral GC or CT	Crude PR	CI	p-valu
	Overall	45/381	12%			
	Age 18-25	17/136	13%	0.97	(0.94 - 1.00)	0.092
	26-30 31-35	13/75 7/60	17% 12%			
	36+	8/110	7%			
	0 0	22/157	14%	Ref		
	1 - 3 4 - 12	9/112 14/112	8% 13%	0.57 0.89	(0.27 - 1.20) (0.48 - 1.67)	0.140
	Sexual identity / Gender Identity	22/210	10%	Ref		
	Bisexual/Heterosexual	6/83	7%	0.69	(0.29 - 1.64)	0.402
	Transgender Sex Role for anal sex	16/83	19%	1.84	(1.02 - 3.33)	0.044
	Active	6/84 14/119	7% 12%	Ref	(0.66 - 4.12)	0.286
	Versatile	25/178	14%	1.03	(0.84 - 4.62)	0.121
	Antibiotic Use, last 3 months No	22/221	10%	Ref		
	Yes	23/159	14%	1.45	(0.84 - 2.51)	0.182
	No	28/259	11%	Ref		
	Yes	17/121	14%	1.30	(0.74 - 2.28)	0.362
	No. male sex parnters, 3 months	12/114	110/	Pof		
	3 - 5	16/113	14%	1.24	(0.63 - 2.46)	0.536
	6 - 10 11+	5/64 11/90	8% 12%	0.69 1.07	(0.26 - 1.84) (0.50 - 2.28)	0.452 0.857
	Had upprotected anal sex 3 mont	the				
	No	11/88	13%	Ref		
		00/	1 7 0/	0.95	(0.50 - 1.79)	0.866
	Yes Sex worker	33/279	1270			
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