

Evaluating Chlamydial and Gonococcal Positivity at a Health and Wellness Center in South Los Angeles

Ariana Zargarian¹; Vallerie Wagner², Craig Thompson², Claire C. Bristow^{3,4}; Jeffrey D. Klausner⁴

¹University of California Los Angeles, ²APLA Health and Wellness, Los Angeles, CA, ³Department of Epidemiology, Fielding School of Public Health, University of California Los Angeles, ⁴Department of Medicine, David Geffen School of Medicine, University of California Los Angeles

Background

- Chlamydia and gonorrhea respectively affect 0.5% and 0.1% of residents in Los Angeles County (LAC).¹
- Incidences of chlamydia and gonorrhea in LAC have increased by 10% and 47%, respectively, from 2009-2013.¹
- The prevalence of chlamydia is six times higher among African-Americans and twice as high among Latinos than among Caucasians.¹
- The prevalence of gonorrhea is five times higher among African-Americans than among Latinos or Caucasians.¹
- The prevalence of gonorrhea is four times higher among men who have sex with men (MSM) than among heterosexual males and females.¹

Objective

In April 2013, AIDS Project Los Angeles (APLA) began offering low-cost/free screening and treatment for sexually transmitted infections (STIs) in South LA. The new APLA Health & Wellness Center, located in Baldwin Hills, serves a community in which 95% of residents are African-American or Hispanic/Latino. The objective of this project was to evaluate the trends in chlamydial and gonococcal positivity from clients seen in this community-based health and wellness center.

Methods

- Nucleic acid amplification testing (Roche cobas® 4800 CT/NG Test) was used for *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoeae* (NG) detection.
- Positivity was grouped by anatomic site and compared with CT and NG prevalence rates in LAC in 2011.
- Information regarding gender, race/ethnicity, and age was collected.

Results

- Among those that utilized the various STI services at the health and wellness center, 78.6% were male. A majority of the clients were African-American, followed by Latino/Hispanic clients. The median age of those serviced by the clinic was 30 (Figure 1).
- Between July 2013-March 2014, 809 CT and 1008 NG tests were administered using specimens from different anatomic sites from 694 clients. The positivity rates of CT and NG were 5.7% (39/687) and 4.1% (28/691), respectively. Compared with reported prevalence rates in LAC in 2011, the screened population's CT and NG positivity rates were 11 and 41 times higher, respectively (Figure 2).
- Chlamydial tests were positive in 28 of 676 (4.1%) urine specimens, 11 of 107 (10.3%) rectal specimens, and 2 of 26 (7.7%) vaginal specimens (Figure 3A).
- Gonococcal tests were positive in 17 of 667 (2.5%) urine specimens, 6 of 208 (2.9%) pharyngeal specimens, 10 of 106 (9.4%) rectal specimens, and 0 of 27 vaginal specimens (Figure 3B).
- Negative urine specimens accompanied 9 of 11 positive rectal CT cases, 7 of 10 positive rectal NG cases and 4 of 6 positive pharyngeal NG cases.

The APLA Health and Wellness Center <http://www.aplahw.org/>



Figure 1: Demographics of Clients Screened at the APLA Health and Wellness Center, Los Angeles, California, July 2013-March 2014

Figure 1A: Age and Sex/Gender

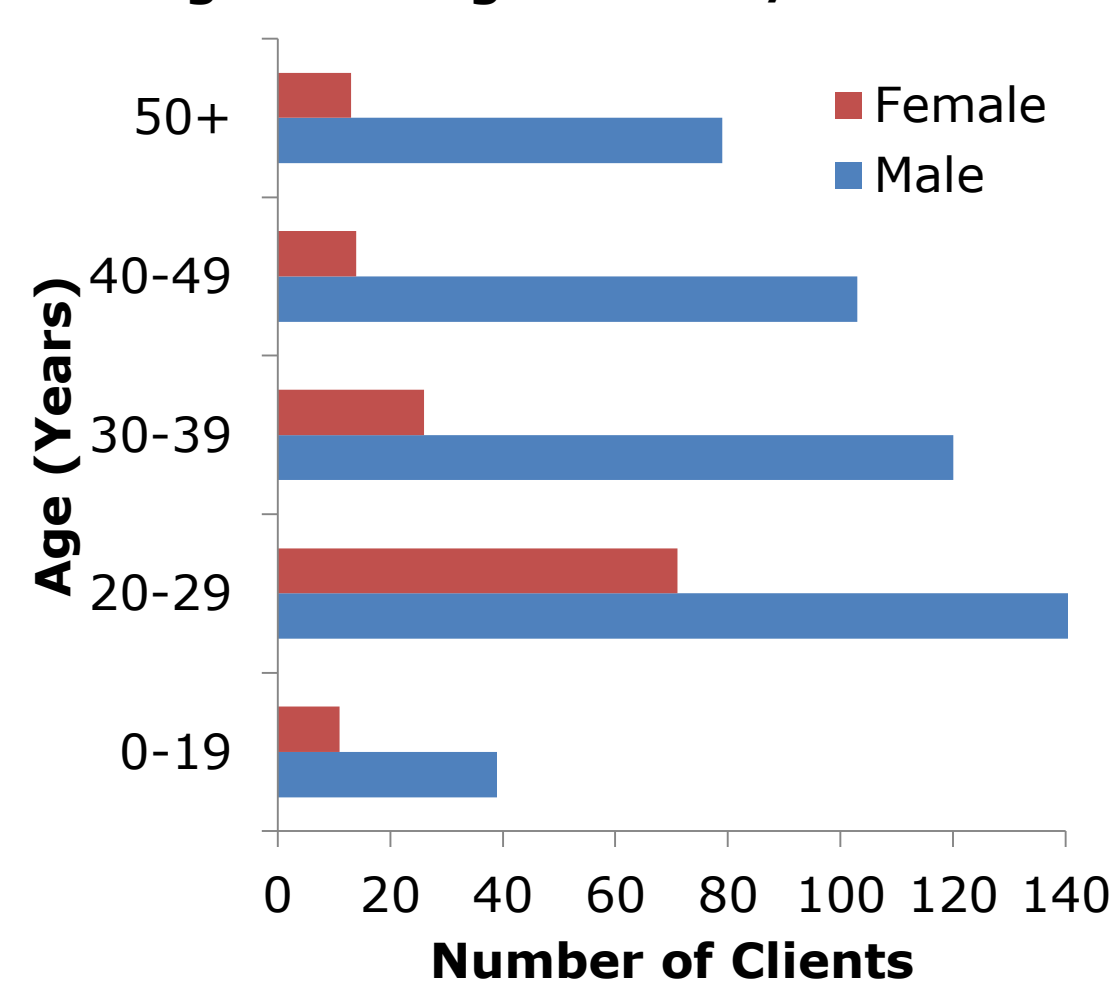


Figure 1A: Fifteen clients did not specify either age or sex/gender.

Figure 1B: Race/Ethnicity

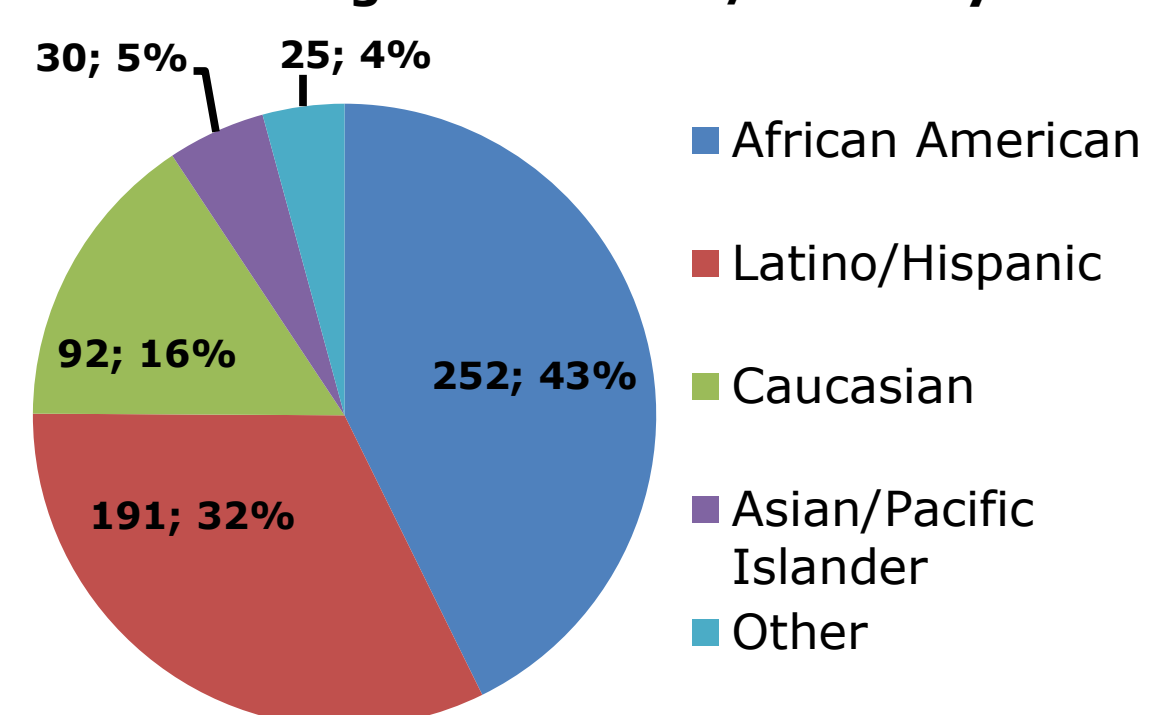


Figure 1B: One hundred thirty-four clients did not specify their race/ethnicity.

Figure 1: STI screening services for chlamydia, gonorrhea, genital herpes, *Trichomonas vaginalis*, Hepatitis B and C, syphilis, and HIV.

Figure 2: CT/NG Positivity from APLA and LAC

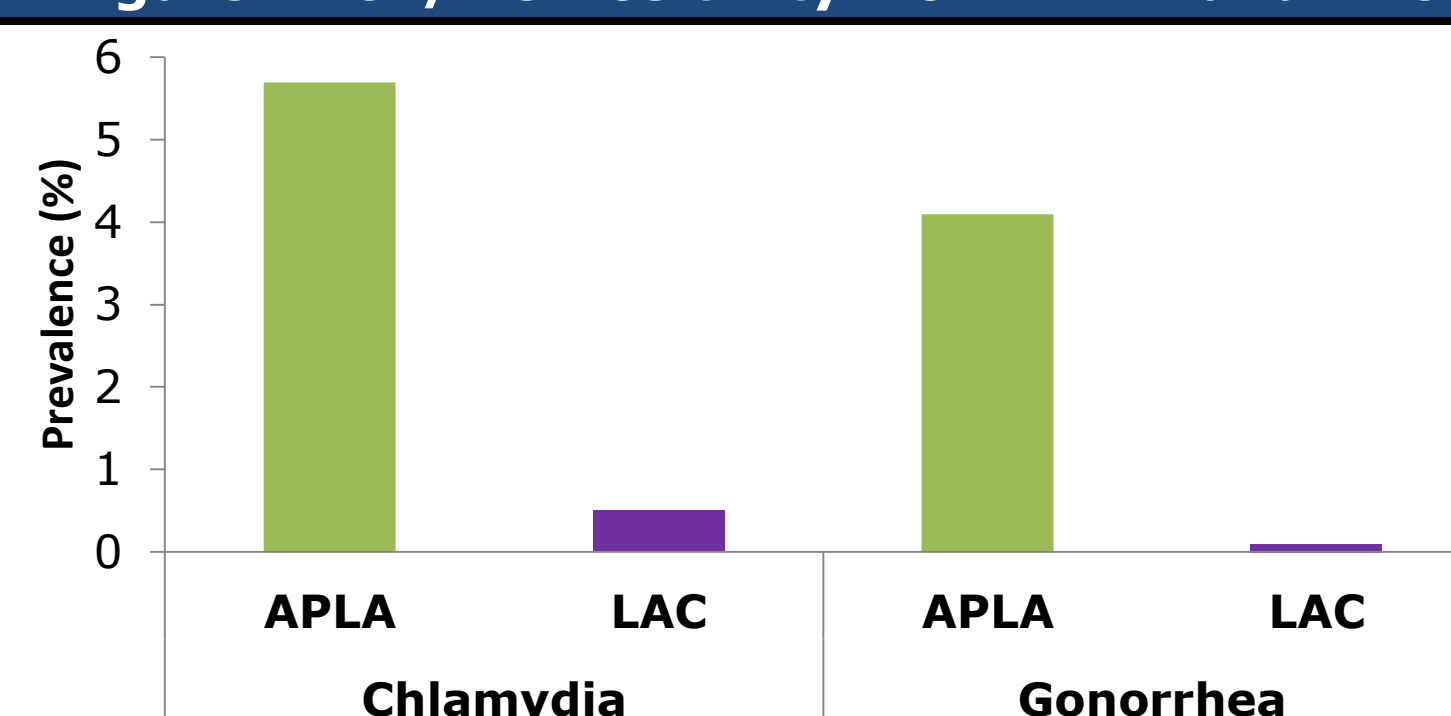


Figure 2: Prevalence of chlamydia and gonorrhea from clients screened at the APLA Health and Wellness Center between July 2013 and March 2014 next to the prevalences of chlamydia and gonorrhea reported by the County of Los Angeles Public Health Department for 2011.²

Figure 3: CT/NG Prevalence by Anatomic Site

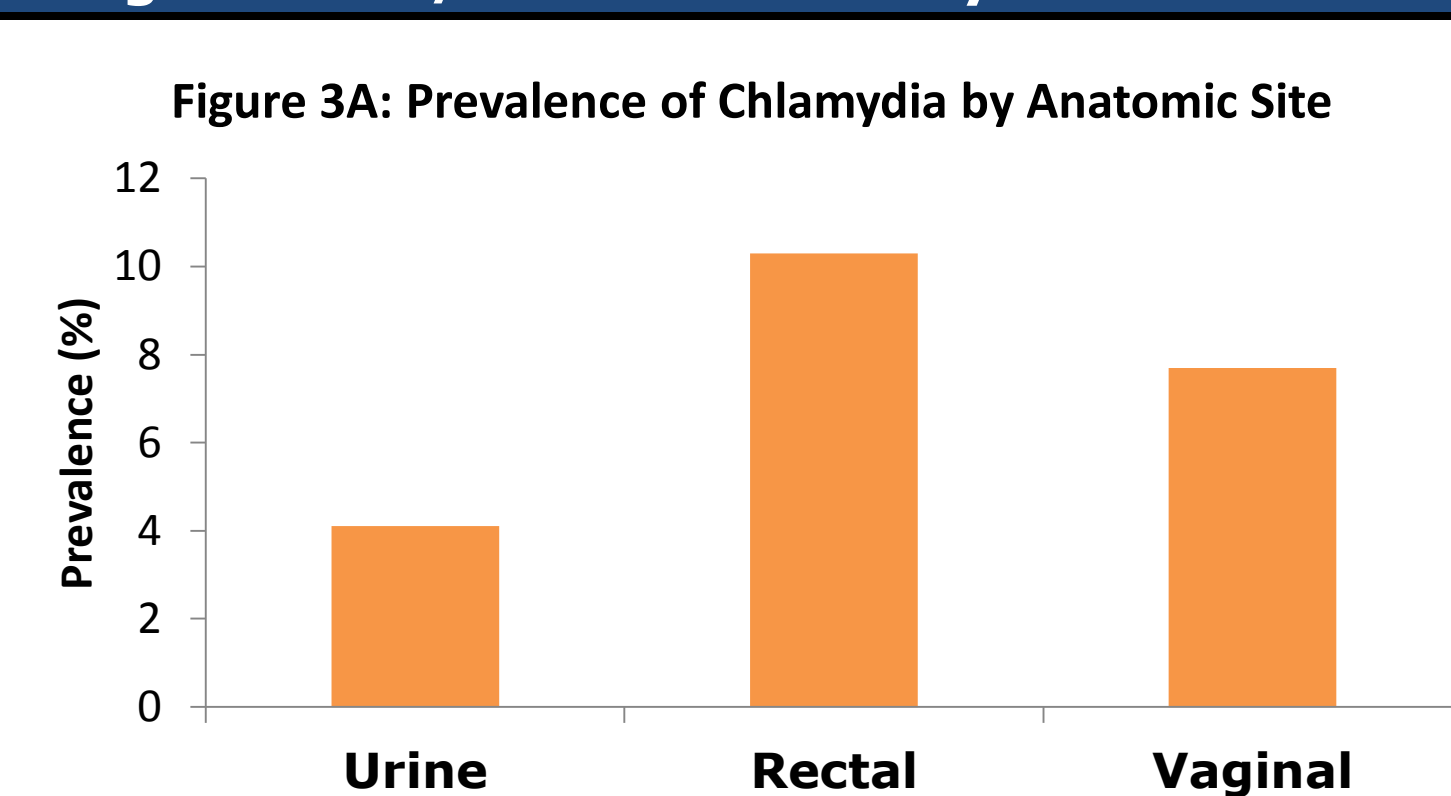


Figure 3A: Positivity of chlamydia grouped by anatomic site for clients screened at the APLA Health and Wellness Center between July 2013 and March 2014. Both men and women are represented in urine and rectal chlamydia prevalences.

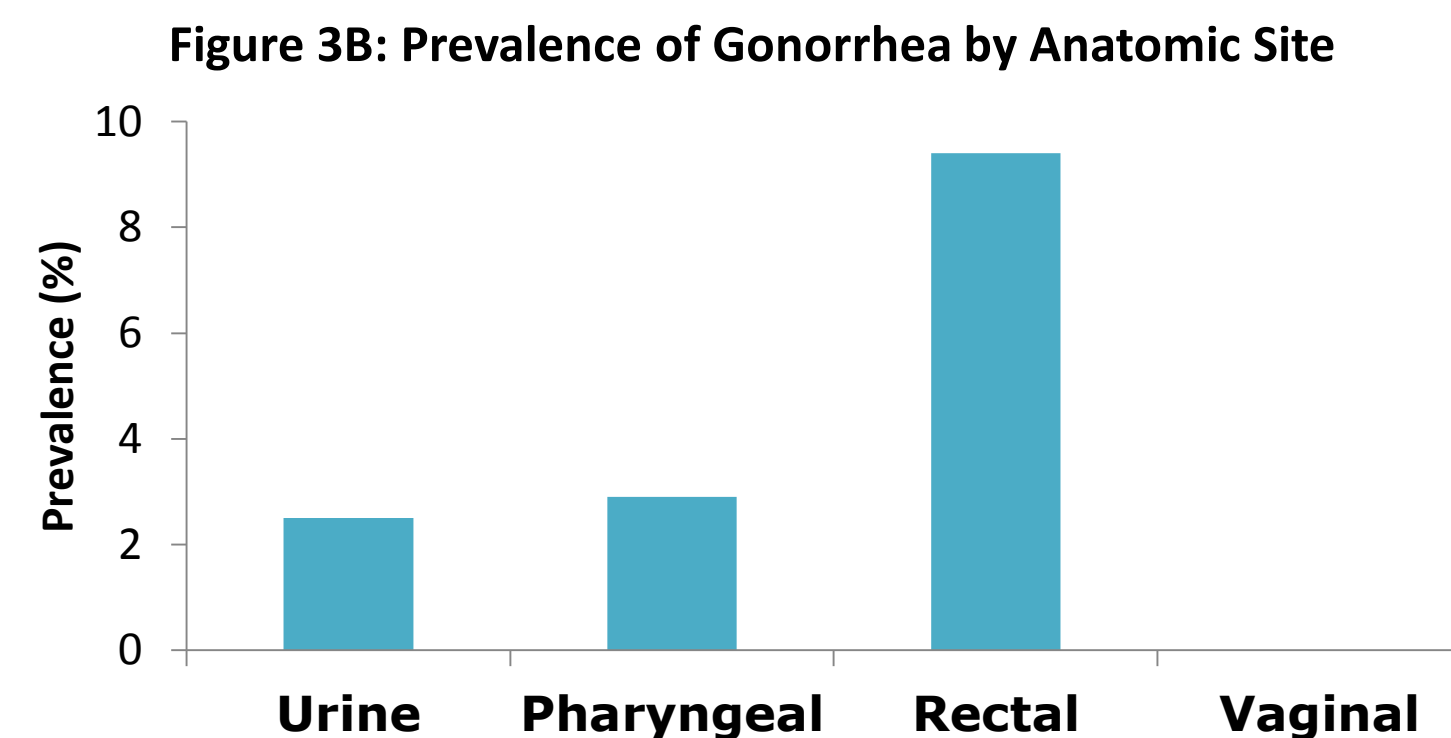


Figure 3B: Positivity of gonorrhea grouped by anatomic site for clients screened at the APLA Health and Wellness Center between July 2013 and March 2014. Both men and women are represented in urine, pharyngeal and rectal gonorrhea prevalences. The prevalence of vaginal gonorrhea was 0%.

The APLA Health and Wellness Center <http://www.aplahw.org/>



Conclusions

- The APLA Health and Wellness center identified 39 persons with CT infections and 28 persons with NG infections from 1817 CT and NG tests over nine months.
- A higher prevalence of positive CT/NG rectal cases compared to other anatomic sites highlights the need to continue rectal CT and NG screening in at-risk populations.
- 23.1% of CT-infected and 35.7% of NG-infected people would have remained undiagnosed based on urine specimens alone, highlighting the importance of screening at multiple anatomic sites.
- Community-based health and wellness centers can be important for identifying CT and NG infections in underserved areas.

References

¹County of Los Angeles Public Health Division of HIV and STD Programs: 2013 Sexually Transmitted Diseases Fact Sheet. <http://publichealth.lacounty.gov/dhsp/docs/STDEpiFactSheet%20March2015.pdf>

²County of Los Angeles Public Health Division of HIV and STD Programs: Sexually Transmitted Disease Morbidity Report 2011. <http://publichealth.lacounty.gov/std/docs/2011STDReport.pdf>

Acknowledgements

We are very thankful for the hard work and dedication of the staff and volunteers of the APLA Health and Wellness Center.