



STD Self-Collection Expanded Screenings Contributed to Understanding of Prevalence of Chlamydia and Gonorrhea among Guam's Adolescent/Young Adult and Chuukese Populations

Bernadette Schumann, STD/HIV Program Supervisor, MPA¹; Annakutty Mathew, MD FACP²; Vince Aguon, BA¹; Josephine O'Mallan, BA¹ and Elizabeth Adriatico, BSN¹

¹Bureau of Communicable Disease Control, Guam Department of Public Health and Social Services, Mangilao, Guam; ²Medical Director, Guam Department of Public Health and Social Services



INTRODUCTION

The prevalence of chlamydial (CT) and gonococcal (NG) infections among targeted populations was unclear although high rates of chlamydial infections were consistently reported on Guam in general. To better understand prevalence among populations at risk, targeted screenings were done among adolescents and young adults of all ethnic groups (15 to 24 years of age) in addition to the Chuukese population (from the Federated States of Micronesia) of all age groups accessing services at the STD Clinic and other non-traditional venues on Guam.

OBJECTIVE

To understand the prevalence of chlamydia and gonorrhea among populations at risk, specifically adolescents/young adults and Chuukese accessing the STD Clinic and at non-traditional venues.

METHODS

From October 2009 through October 2013, the STD/HIV Program, in collaboration with community partners and the Centers for Disease Control and Prevention (CDC), implemented a screening program using Aptima Combo 2 assay (Gen-Probe) self-collected vaginal swabs and urine samples to test for chlamydia and gonorrhea. Patients who tested positive for chlamydia and/or gonorrhea were treated as recommended by CDC along with their sex partner(s). The chlamydia and gonorrhea prevalence was calculated from data obtained from STD client records.

RESULTS

- From October 2009 to October 2013, a total of 4,894 tests were collected (2,491 males, 2,392 females, and 11 transgender).
- The overall prevalence for chlamydia was 21.1% (19.5% males, 23.0% females) and gonorrhea was 2.7% (2.6% males, 2.8% females).
- Of the 4,894 tests administered 802 (16.4%) were Chuukese and 2,624 (53.6%) were adolescents and young adults (15 to 24 years of age).
- Among adolescents and young adults, a prevalence of 25.4% for chlamydia and 3.1% for gonorrhea were noted.
- Among Chuukese, a prevalence of 29.9% for chlamydia and 2.6% for gonorrhea were noted.

Figure 1: Rate of CT by Age Group and Sex, 2009-2013
N=4,894 (Males 2,491; Females 2,392)

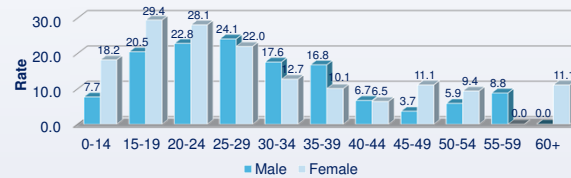


Figure 2: Rate of NG by Age Group and Sex, 2009-2013
N=4,894 (Males 2,491; Females 2,392)

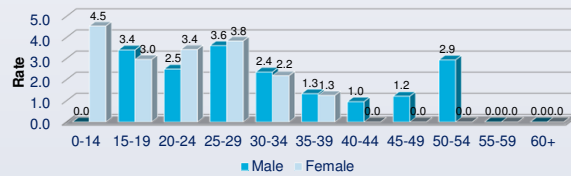
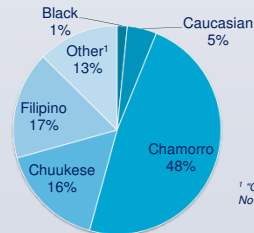


Figure 3: Percentage of Clients Screened by Race/Ethnicity, 2009-2013
N=4,894



¹ "Other" includes Multiple Races, Not Reported, etc.

Figure 4: Rate of CT by Race/Ethnicity, 2009-2013
N=4,894

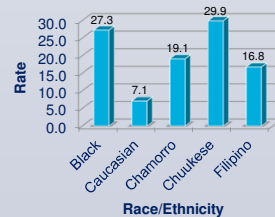
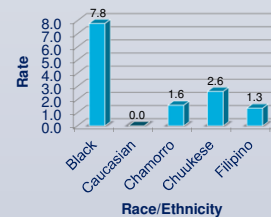


Figure 5: Rate of NG by Race/Ethnicity, 2009-2013
N=4,894



CONCLUSION

- Expanded screenings for chlamydia and gonorrhea provided solid epidemiological data. By conducting periodic analysis of the data (monthly, quarterly, and annually), the STD/HIV Program was able to better target program resources and implement strategies to reach populations most at risk.
- As a result of expanded screenings, the STD/HIV Program better understands the prevalence of chlamydia and gonorrhea among the adolescent/young adult and Chuukese populations on Guam.
- Self-collection of vaginal and urine samples for tests by clients, demonstrated that this testing method reduced missed opportunities by reaching populations who would not have accessed STD services.



ACKNOWLEDGEMENTS

Saina Ma'ase (Thank You) to the following for their assistance and support throughout this project:

- Guam Department of Public Health and Social Services (GDPHSS) STD/HIV Program
- WestCare Pacific Islands / GUAHAN Project
- Guam's Alternative Lifestyle Association (GALA)
- GDPHSS Central Public Health Laboratory
- University of Guam Student Health Services Office
- Guam Behavioral Health and Wellness Center
- Roxanne Barrow, MD, MPH – CDC, NCHHSTP, DSTDP
- John Papp, PhD – CDC, NCHHSTP, DSTDP
- Carol Farshy – CDC, NCHHSTP, DSTDP