Epidemiology poster session 1: STI trends: HPV

P1-S1.51 PREVALENCE OF ANOGENITAL WARTS AMONG STD CLINIC PATIENTS-STD SURVEILLANCE NETWORK, USA, JANUARY 2010–SEPTEMBER 2010

doi:10.1136/sextrans-2011-050108.51

[1]E Llata, [2]R Pugsley, [3]I Tabidze, [4]L Asbel, [5]K Bernstein, [6]R Kerani, [7]J Schwebke, [8]L Longfellow, [9]C Mettenbrink, [10]S Guerry, [11]J Zenilman, [12]E Klingler, [1]H Weinstock. *[1]CDC, Atlanta, USA; [2]Virginia Department of Health, Richmond, USA; [3]Chicago Department of Public Health, Chicago, USA; [4]PDPH, Division of Disease Control, USA; [5]San Francisco Department of Public Health San Francisco, USA; [6]Public Health - Seattle & King Co, Seattle, USA; [7]University of Alabama, Birmingham, Birmingham, USA; [8]Louisiana Office of Public Health, Metairie, USA; [9]Colorado Department of Health, Colorado, USA; [10]LA County Dept of Public Health, Los Angeles, USA; [11]Johns Hopkins School of Medicine, Baltimore, USA; [12]NYC department of Health and mental hygiene, New York City, New York, USA*

Background STD clinics routinely provide diagnostic and treatment services for anogenital warts. With the availability and increasing use of a highly effective quadrivalent vaccine against the HPV types associated with 90% of anogenital warts, the impact on patients presenting with anogenital warts to STD clinics may be significant. To be positioned to estimate the population-level impact of HPV vaccine on STD clinics, we conducted a baseline cross sectional analysis of patients with anogenital wart-related visits.

Methods We reviewed STD clinic data collected on patients seen by a clinician from 1 January 2010 to 30 September 2010 in 11 sites (38 clinics) participating in the STD Surveillance Network (SSuN)—Seattle, WA (1 clinic); San Francisco, CA (1); Los Angeles, CA (12); Denver, CO (1); Chicago, IL (5); New Orleans, LA (1); Birmingham, AL (1); Richmond, VA (3); Baltimore, MD (2); Philadelphia, PA (2); New York City, NY (9). SSuN uses a collaboratively developed protocol to collect demographic, risk behaviour, and clinical data on all patients with anogenital warts at participating STD clinics. The unit of analysis was unique patients; patients were considered to have anogenital warts if warts were identified at any visit.

Results Among SSuN sites, 3–13% (median 4%) of STD clinic patients had anogenital wart-related visits, with 5063 patients presenting for 6989 visits. Among patients with anogenital warts, 20% of the patients had multiple anogenital warts-related visits (range 2–26 visits). Overall, the median prevalence rate was 2% (range 1–5%) for women and 6% (range 4–22%) for men. By age and sex, median prevalence rates were highest among women aged 20–24 at 3% (range 1–7%) and among men aged 25–29 at 8% (range 5–25%). Among men who have sex with men (MSM), the median prevalence was 7% (range 4–18%) and among men who have sex with women only (MSW) it was 6% (range 3–23%). Of patients with anogenital warts, 40% were African American, 32% were white, 21% were Hispanic compared to all clinic patients who were 58% African American, 18% white, and 18% Hispanic. 59% received treatment and most treatment (97%) was provider applied.

Conclusions The prevalence of anogenital warts among women is low in STD clinics. It may thus be difficult to monitor the impact of the HPV vaccine in women in these settings. However, the higher prevalence in MSM and MSW suggest that these clinics may provide settings in which to monitor anogenital warts in men.

P1-S1.52 INCIDENCE OF ANAL HPV AND HPV-RELATED SEQUELAE IN HIV-INFECTED AND UNINFECTED US ADOLESCENTS

doi:10.1136/sextrans-2011-050108.52

[1]T Mullins, [2]C Wilson, [3]B Rudy, [1]H Sucharew, [1]J Kahn. *[1]Cincinnati Children's Hospital Medical Center, Cincinnati, USA; [2]University of Alabama, Birmingham, USA; [3]University School of Medicine, New York, USA*

Background Immunodeficiency related to HIV infection may place HIV-infected youth at increased risk of human papillomavirus (HPV) infection and anal dysplasia. Our objective was to determine incidence of anal HPV infection and related sequelae, and factors associated with these outcomes, among adolescents who are HIV-infected or -uninfected but at-risk.

Methods We analysed data from the Reaching for Excellence in Adolescent Care and Health Project. Adolescents age 12–18 years who were behaviourally HIV-infected (n=319) or -uninfected but at risk (n=177) were recruited at 15 US sites from 1996 to 1999. Incidence rates for anal HPV, high risk anal HPV, anogenital warts, and anal dysplasia were calculated using Poisson modelling. Factors associated with these outcomes were explored using Cox proportional hazards modelling.

Results Mean age at entry was 16.8 years, and mean follow-up time for detection of anal HPV infection was 22.4 months (SD 10.8). Most participants (76%) were female, and 70% were black non-Hispanic. HIV-infected women (vs -uninfected women) had higher incidence of anal HPV (30 vs 14 per 100 person-years; p=0.002), high risk anal HPV (12 vs 5.3 per 100 person-years; p=0.04), and anogenital warts (6.7 vs 1.6 per 100 person-years; p=0.002) but not anal dysplasia. Although incidence rates of these outcomes were consistently higher among HIV-infected vs -uninfected men, they did not achieve statistical significance. Factors associated with incident anal HPV, high risk anal HPV, anogenital warts, and anal dysplasia in women are shown in the Abstract P1-S1.52 table 1 below. No factors were associated with any outcome in men.

Abstract P1-S1.52 Table 1 Factors associated with incident anal HPV and HPV-related sequelae among women

	HIV-uninfected		HIV-infected	
Outcome	**Predictor**	**HR (95% CI)**	**Predictor**	**HR (95% CI)**
Anal HPV	Cervical HPV infection	2.45 (1.01 to 5.92)	None	
High risk anal HPV	None		Smoker	3.46 (1.21 to 9.89)
			Late (vs early) CDC disease stage	2.80 (1.18 to 6.67)
Anogenital warts	None		Cervical HPV infection	4.28 (1.29 to 14.19)
			HIV viral load	1.55 (1.12 to 2.17)
Anal dysplasia	None		Late (vs early) CDC disease stage	7.02 (2.18 to 22.59)
			Ever had high risk anal HPV infection	3.72 (1.52 to 9.12)

Conclusions HIV-infected women, when compared to HIV-uninfected women, had higher rates of HPV and related sequelae. Because HIV-infected youth are at increased risk of HPV and related disease, enhanced HPV prevention efforts, such as vaccination, are warranted for this group.

P1-S1.53 ASSESSING HPV GENOTYPE PREVALENCE IN AUSTRALIAN WOMEN BY INDIGENOUS ETHNICITY PRE-VACCINATION

doi:10.1136/sextrans-2011-050108.53

[1,2,3]S M Garland, [1,4,5]J M L Brotherton, [3]M I Stevens, [1,2,3]S N I Tabrizi, [6]J Condon, P McIntyre, [7]D Smith. on behalf of the WHINURS Women, HPV, Indigenous Nonindigenous, Urban, Rural Study Group. *[1]Department of Microbiology and Infectious Diseases, The Royal Women's Hospital, Melbourne, Australia; [2]Department of Obstetrics and Gynaecology, University of Melbourne, Australia; [3]Murdoch Children's Research Institute, Victoria; [4]Victorian Cytology Service; [5]NCIRS, University of Sydney; [6]Menzies Centre, Darwin; [7]Pathwest, Perth, Western Australia*

Background A government funded HPV vaccination program was implemented across Australia from April 2007. The aim of this study was to ascertain whether HPV genotype prevalence, prior to