

The Relationship Between Sociodemographic Background, Sexual Behaviour, and HIV on Self-reported Anogenital Warts Among Young Men Who Have Sex With Men

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Background

- Although rare, human papillomavirus (HPV) is an almost universal STD in men infected with HIV, and is associated with the development of anal squamous cell carcinoma (ASCC).
- ASCC is highest in sexually active adults aged 18-28 years old, and has a higher incidence rate among men who have sex with men (MSM) than the general population (U.S estimates range from 12.5 to 36.5 per 100,000 versus 0.8 per 100,000).
- A history of anal warts increases the risk of ASCC by ten times, and approximately 50% of patients with ASCC have a history of anal warts.
- Early identification of anal warts could help to flag individuals for more careful monitoring, and seems promising in reducing ASCC rates.
- Risk factors for HPV pathogenesis are currently uncharacterized in Canada, however from studies conducted outside of Canada, high-risk sexual practices, other STDs, and the practice of receptive anal intercourse are implicated in HPV transmission.
- Determining the impact of high-risk sexual behaviours in HPV infection is of particular importance given the increasing numbers of younger MSM who may be practicing high-risk sex behaviours with coincident increases in HIV infection.

Objective

To determine the self-reported prevalence of anogenital warts in a cohort of men who have sex with men, and to identify the relationship between sociodemographic background, sexual behaviour, and HIV status on anogenital infection.

Methods

- The Vanguard Project, which commenced in 1995, is a prospective cohort study of HIV rates and risk factors among young gay and bisexual men in the Greater Vancouver area. Men aged 15 to 30 years, who had not previously tested HIV positive, were enrolled in this study.
- Eligible participants completed baseline questionnaires and at least one follow-up questionnaire between 05/95 and 09/01. All data is based on self-reporting, which provides a preliminary way of gauging the prevalence of anogenital warts, and identifying characteristics and risk factors of men with HPV.
- Chi-Square analysis was performed on data from the two most recent questionnaires.

Results

- Of 168 participants only 27 reported ever having received an anal Pap smear.
- Although research suggests that HPV rates are higher in HIV positive men than HIV negative men, no significant differences were found in our cohort between these two groups in testing for or reporting anal warts.
- The characteristics of men reporting anogenital warts are summarized in Table 1. In general, MSM reporting anal warts were more likely to report STDs, high risk sexual behaviour, and drug use, although these drugs may in fact be markers for higher sexual activity.

Table 1: Characteristics of sample reporting anogenital warts

Characteristics	Reporting anogenital warts	Not reporting anogenital warts	P value
Caucasian	83%	73%	0.04
Gonorrhea	26.5%	10.6%	0.001
Herpes	14.7%	3.5%	0.001
20 or more male sexual partners in lifetime	82.5%	67.2%	0.003
Protected or unprotected casual anal insertive intercourse with a known HIV infected partner	61.2%	45.8%	0.005
Nitrate inhalants	43%	31%	0.026
Ecstasy	43.7%	31.4%	0.02
Ketamine	27.7%	13.1%	0.001
Gamma-hydroxybutyrate	22.6%	14.5%	0.049

Conclusions

- To reduce HPV rates in Canada, it is necessary to understand the sociodemographic and behavioural factors that are associated with this infection.
- Our data indicates that prevention efforts designed for young MSM should incorporate issues relating to substance use, and encourage treatment of other STDs.