

ASTDA Small project Assistance: Final Report

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Project Name: Prevalence of Condyloma Acuminata in Sexual and Gender Diverse Populations: A Retrospective Cohort Study

Project Goals:

Sexual and gender minority (SGM) include, but are not limited to, individuals who identify as lesbian, gay, bisexual, or transgender/gender diverse (TGD), as well as individuals whose sexual orientation, gender identity or expression, or reproductive development are characterized by nonbinary constructs of sexual orientation, gender, and/or sex. SGM patients have unique risk factors that may predispose them to developing certain dermatological conditions, including sexual transmitted infections (STIs).

HPV is the most common sexually transmitted infection worldwide, with 9-13% of the global population being infected, and poses significant morbidity and mortality in the United States. There is a strong link between HPV and condyloma acuminata (CA), which is a significant risk factor for anal cancer in HIV infected people. The prevalence of anogenital condyloma is approximately 1% of sexually active population and an increasing incidence of 500,000 new cases reported every year.

There is a disproportionate prevalence of HPV infection and condyloma acuminata (CA) among populations engaging in receptive anal sex behaviors such as Men who have Sex with Men (MSM) and those living with HIV. CA prevalence is of particular importance among transgender patients undergoing genital gender affirmation surgery.

The human papillomavirus quadrivalent and 9-valent vaccines (Gardasil and Gardasil-9) target HPV genotypes that cause anogenital warts of CA. HPV vaccination, a preventative measure recommended in these high-risk groups, has been available in the United States since 2016 and is considered the most effective method of preventing HPV infection and CA. The estimated prevalence rate of HPV anogenital infection in the United States adult population is 10 to 20 percent among unvaccinated individuals and rates have shown to be trending downward in countries where HPV vaccination has been implemented. Among sexual and gender minority populations, however, the epidemiology of CA and HPV vaccination remains understudied.

The goal of this retrospective study is to determine the prevalence of CA as well as HPV vaccination among sexual and gender minority patients as it compares to cisgender, heterosexual counterparts in a community health center in Boston, MA that specializes in the care of the LGBTQ population. The results of this study will contribute to the understanding of the needs of at-risk populations and help guide potential interventions for prevention of HPV/condyloma.

This project was awarded \$5000 by the ASTDA to fund travel to the International Societies for Investigative Dermatology (ISID) Meeting being held in Toyko, Japan from May 11th -13th, 2023, during which we will present our findings. This is an abstract driven, peer reviewed scientific meeting held every 5 years, hosted on a rotating basis by investigative dermatology societies from Asia and Australasia, from Europe, Middle East and Africa and from North, Central and South America.

Project Achievements: As a result of the generous small project assistance funding provided by the ASTDA, we were able to present research findings via a poster presentation in a well-regarded international academic conference. During the International Societies for Investigative Dermatology (ISID) Meeting being held in Toyko, Japan, we presented a poster titled “Prevalence of Condyloma Acuminata in Sexual and Gender Diverse Populations: A Retrospective Cohort Study.” As part of ongoing project research efforts, we are currently drafting two academic manuscripts—the first detailing the relationship between HPV vaccination rates and CA prevalence among gender diverse populations, and the second elucidating these rates among sexual diverse populations. In summary, the ASTDA small grants assistance program enabled our findings to be presented at an international conference and continues to support our research cohort as we develop two scientific manuscripts.