



Prophylactic HPV Vaccination For Gay And Bi-Sexual Population – A Step In The Right Direction For Inclusivity

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ABSTRACT

HPV (Human Papilloma Virus) related cervical cancer is the second most common malignancy causing the highest number of cancer related deaths. Achieving 90% vaccination coverage, 70% screening coverage and 90% treatment coverage by 2030 (90-70-90) is a goal as set by WHO (World Health Organization) for every nation. Populations with high incidence of HIV are very susceptible to persistent HPV infections. Since spread is through skin-to-skin and skin-to-mucosa contact, homosexual and bisexual men are also a part of the susceptible population. Integration of HPV vaccination for gay and bisexual men with cervical cancer elimination programme is prudent, particularly in areas with high prevalence of HIV, not only on social grounds, but also for economic and logistic ones.

KEY WORDS:

Human Papilloma Virus (HPV), Cervical cancer, HPV vaccine, 90-70-90 goal, Gay and bisexual men

1. INTRODUCTION

Cervical cancer, almost exclusively caused by HPV, is the second most prevalent cancer among women globally and the leading cause of cancer-related mortality among Indian women^[1,2]. Cervical cancer is predominantly squamous cell cancer and affects women in their third to fifth decades^[3]. Unlike other malignancies, squamous carcinoma of cervix is attributed almost universally to HPV infection. Most common sub-types of HPV causing cervical malignancy are types 16 and 18^[2]. Vaccines targeting these cancer inducing strains have been developed and are increasingly being used globally for prophylaxis^[4].

2. WHO CERVICAL CANCER ERADICATION INITIATIVE

In 2020, the World Health Organization (WHO) adopted the Global Strategy for cervical cancer elimination, to address the public health problem of cervical cancer. This plan requires achievement of three key pillars:

- a. 90% HPV vaccination coverage among girls under 15 years old,
- b. Cervical cancer screenings for women at least twice in their lives (with a 70% screening rate at ages 35 and 45) and
- c. Ensuring 90% treatment coverage for both pre-cancerous and cancerous conditions.

Elimination is currently set as incidence of below four per 100000 women. Eradication of cervical cancer is targeted by 2120. To this end, each country needs to meet these three pillars (90–70–90 targets) by 2030 [5].

3. HIV/AIDS AND HPV CO-INFECTION

In 2012, there were approximately 2.5 million gay individuals in India, with about 7% of them being HIV positive. By 2016, India had the third-largest population of people living with HIV/AIDS worldwide. According to the National AIDS Control Organization, around 250,000 people were living with HIV/AIDS in India in 2021 [6].

Individuals with untreated HIV/AIDS are more susceptible to persistent HPV infections, putting them at a higher risk of developing cervical cancer. Thus, preventing HPV is crucial for people living with HIV [7]. Three studies conducted in South Africa indicate that cervical cancer could be eradicated even in regions with high HIV prevalence, as models show that regular cervical screenings every three years can significantly decrease the incidence of cervical cancer in women with HIV [1,8].

In regions with high HIV rates, homosexual and bisexual men can harbor HPV and transmit it, leading to various cancers, including cervical, anal, vaginal, vulvar, and oropharyngeal cancers. The likelihood of HPV seroconversion may be higher following exposure at nonkeratinized sites (commonly seen in gay and bisexual men) than at keratinized sites (typically seen in men who have sex with women). HPV is primarily spread through skin-to-skin or skin-to-mucosa contact [9].

4. CONCLUSION

In conclusion, integrating the nationwide cervical cancer elimination program with HPV vaccination for gay and bisexual men in high HIV areas sounds unsurprising. In addition to social benefits, it also saves cost. We suggest that health care policy makers take a look at initiating awareness campaigns and conduct further scientific studies to identify and vaccinate this high-risk group early.

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