

Women's Health: HPV and the importance of a national vaccination program

Bonjours tout le monde. I am Dr Vivien Brown, from Canada and I am honored to be here today, addressing you. Thank you Madame Chairman for the opportunity. As we discuss the social determinants of health, I think one of the significant issues for women, worldwide, is access to preventative care, access to vaccines. In Canada, there is a national program for HPV vaccine and I would like to suggest 5 reasons why this is important for every country.

Reason #1. HPV is a global burden

Cervical cancer is the 4th leading cause of death in all females, and the 2nd most common cause of death in women 15-44 years of age (1). There are 3.4 million cases of cervical cancer globally, with 528,000 new cases annually (2, 3). Of these, 266,000 women die from cervical cancer each year (4).

Cancer of the cervix has been linked to the human papillomavirus, otherwise known as HPV. HPV is a sexually-transmitted infection, with rates far surpassing that of HIV, chlamydia, HSV-2, and Hepatitis B (5). 75-80% of sexually active adults will have encountered the HPV virus at some point in their lives. Although many clear the virus, persistent infection in a proportion of individuals can lead to the development of cancer. In addition to cervical cancer, this ubiquitous virus can also cause cancers of the vulvar, vagina, oral, and anal regions, as well as genital warts.

There is an uneven burden of cervical cancer across the world with mortality rates 10 times higher in Africa than in North America (6). While the prevalence varies by region, the cancer-causing strains that vaccines protect against are responsible for at least 87% of cervical cancers worldwide, with little regional variation (7). Consequently, the HPV vaccine would be effective in any part of the world.

Reason #2. Current screening methods are not sufficient

While current screening methods are satisfactory at capturing the majority of early cancers, they have their limitations in test sensitivity (8). Despite the implementation of effective screening programs there are 1,300 new cases of cervical cancer annually and 443 resulting deaths in Canada alone (9).

Reason #3. HPV vaccination programs have an impact worldwide

HPV vaccination programs have been implemented in various school-based and clinic-based settings (10). Countries with the highest vaccine uptake rates have seen the most reduction in HPV-related disease, particularly in the younger vaccinated age cohorts. A review of 10 years of data across 9 countries has shown maximal reductions of 90% for HPV infection, 90% for genital warts, 45% for low-grade cervical abnormalities, and 85% for high-grade cervical abnormalities (11).

Regrettably, uptake rates have been far from optimal to-date.

Uptake rates may vary depending on delivery method, from 82% in Australia's school-based programs to 56% in US's clinic-based programs (12, 13). Vaccine rates can also differ within a country with rates as high as 88% in some regions of Canada and as low as 39% in other areas (14). This highlights the need for consistent and effective implementation of programs both across and within borders. For immunization is truly a TEAM SPORT. We need everyone, doctors and nurses, public health officials and teachers, pharmacists and politicians to all work together, advocating, educating and promoting vaccination.

Reason #4. The HPV vaccine offers protection to women across all ages

Major health agencies including the WHO, FDA, EMA, PHAC, FIGO, have publically endorsed HPV vaccination (15, 16). Despite the burden of HPV across all ages, most countries still only vaccinate school-aged girls. Canada and Australia, which are the few exceptions, have licenced the HPV vaccine for females up to 45 years of age. Moreover, the National Advisory Committee on Immunization (NACI) in Canada has further recommended the use of HPV vaccines with no upper age limit and for women with a history of HPV-related abnormalities or abnormal pap tests (17, 18). Despite this, Canada only reports a vaccine uptake rate of 8% in women 17-45 years of age (19).

Reason #5. It is not too late for those with HPV-related disease

Women with a history HPV-related disease are considered high-risk for recurrence (20). Vaccination in this group of women reduces the risk for re-infection from either the same or a different strain of HPV (21, 22). Studies have also shown that not vaccinating post-treatment is a risk factor for recurrence in women with cervical cancer, whereas vaccination post-treatment is associated with a 6-fold reduction in risk (23, 24).

Conclusion

The full public health potential of HPV vaccination is not yet realized and HPV-related disease remains a significant source of morbidity and mortality (11). Agencies such as the GAVI Alliance and the Pan American Health Organization (PAHO) Revolving Fund have had successes in expanding vaccination to unreached regions of the world. Still, there is much to be done.

We, the FMWC, are now working with others to promote a National Week in our Parliament to recognize the need for HPV vaccine. Our role is to advocate! Our role is to educate! Our role is to promote the vaccine: decreasing the mortality from the now vaccine-preventable cancer. For immunization is truly a TEAM SPORT. We need everyone, doctors and nurses, public health officials and teachers, pharmacists and politicians to all work together and be part of the TEAM.

I urge you to consider the important issue of HPV in women across the world. Delaying the implementation of effective national HPV vaccine programs will only result in further missed opportunities to prevent HPV infections responsible for millions of HPV-related cancers and deaths.

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ACRONYMS:

WHO – World Health Organization
FDA – Food and Drug Administration
EMA – European Medicines Agency
PHAC – Public Health Agency of Canada
FIGO – International Federation of Gynecology and Obstetrics

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