



Defense Health Agency (DHA) Clinical Communities Speaker Series

Feb 2021 CCSS: Emerging Priorities in Women's Health

S03: Human papillomavirus: Opportunity to eradicate gynecologic dysplasia and cancer

Resource List – February 2021

The Centers for Disease Control and Prevention (CDC) provide useful information regarding [HPV Vaccination and Cancer Prevention](#) (2020). HPV is a very common virus that can lead to cancer and nearly 80 million people are currently infected with the virus. The CDC provides guidelines on which populations should be vaccinated, depending on their age group. Up to this point there have been three versions of the HPV vaccine that have been approved for use by the Food and Drug Administration (FDA). Only one version is currently being distributed. The vaccination has been extremely effective in reduction of HPV infection, fewer teens contracting genital warts, and it has reduced the cases of precancers of the cervix in young women.

In 2006 the U.S. FDA approved the vaccine Gardasil, to prevent diseases caused by human papillomavirus (HPV), such as cancer and genital warts. In 2018 [FDA approves expanded use of Gardasil 9 to include individuals 27 through 45 years old](#). Recent improvements with the HPV vaccine have been made and the recommended age range for administration has expanded. In 2014, Gardasil 9 was approved and it protects against a total of five types of HPV.

The article [Disparities in HPV vaccination rates and HPV prevalence in the United States: a review of the literature](#) provides useful information regarding the history of the HPV vaccination plan. As recent as 2016 60% of all 13-17 year old adolescents in the U.S. had received one dose of the HPV vaccines and only 37% had received three doses, despite its potential to greatly reduce the burden of HPV-related disease among young adolescents. Most states in the U.S. do not require HPV vaccination for school enrollment which has created a unique barrier to this vaccine. Health providers have also not been communicating to patients about the benefits of this vaccination series. Due to the evolution and development of this vaccine, in which it was initially deemed most beneficial to females, to being deemed beneficial to both males and females of a greater age range, adherence to the vaccination recommendations has been lackluster. Other barriers to early wide dissemination were cost to patients and providers, lack of parents' awareness, and missed opportunities to vaccinate.

The National Institutes of Health published [Human papillomavirus as a driver of head and neck cancers](#) (Sabatini & Chiocca, 2020), which reviews current understanding of HPV in head and neck cancers. Oropharyngeal cancers caused by HPV have distinct epidemiological, clinical and molecular characteristics. This review also details HPV infection in head and neck cancers within different racial/ethnic subpopulations as well as gender differences. This article concludes with information regarding disease managements with considerations for "diagnostic biomarkers" and targeted therapies.



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References

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- Hirth, J. (2019). Disparities in HPV vaccination rates and HPV prevalence in the United States: a review of the literature. *Human Vaccines & Immunotherapeutics*, 15(1), 146-166. <http://doi.org/10.1080/21645515.2018.1512453>
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