Human papillomavirus infection and vaccination

Human papillamoavirus (HPV) is an infection that can be sexually transmitted. A person can get HPV by having vaginal, anal, or oral sex with another person who has the virus. HPV infections are the most common sexually transmitted infections in the United States. About 14 million new genital HPV infections occur each year. HPV can cause health problems, including genital warts and cancers (cervical cancer, anal cancer, and cancers of the tongue or throat).

Luckily, there are vaccines that can prevent these health problems from happening. The Food and Drug Administration (FDA) has approved three vaccines to prevent HPV infection: Gardasil®, Gardasil® 9, and Cervarix®. These vaccines provide strong protection against new HPV infections.

All three vaccines prevent infections with HPV types 16 and 18, two high-risk HPVs that cause most cervical cancers and other HPV-associated cancers. Gardasil also prevents infection with HPV types 6 and 11, which cause 90 percent of genital warts. Gardasil 9 prevents infection with the same four HPV types plus five additional high-risk HPV types (31, 33, 45, 52, and 58). The Cervarix vaccine is approved only for girls. Both Gardasil vaccines are approved for girls and boys.

It is recommended that all boys and girls ages 11 to 12 be vaccinated. Catch-up vaccines are recommended for males through age 21 and for females through age 26, if they did not get vaccinated when they were younger. The HPV vaccines are given in three shots over a six-month period. It is important to get all three doses of the vaccine to be protected against HPV.

These vaccines are very important because they have the potential to reduce the incidence of cervical cancer by a significant percentage. They can also help to reduce health care costs in the long term.

Unfortunately, there are many barriers to non-vaccination. The most common barrier is when a health care provider does not recommend the vaccine to patients. Other barriers are poor knowledge about the infection and vaccine, cost, misconceptions about the vaccine, and the lack of time available to health care providers to talk about the vaccine during a visit. Just like there are factors that reduce or limit vaccination, there are factors that help to facilitate vaccine acceptance and use. When parents or patients believe there are benefits to the vaccine, they are more likely to receive it. Also when a health care provider spends time to discuss and recommend the vaccine, more patients are willing to get vaccinated and complete the vaccine series.

Ways to improve vaccination rates include education. Teaching people the facts about and the benefits of the vaccine has the potential to lead to more people getting vaccinated. It is also important for doctors, physician’s assistants, and nurse practitioners to talk about the vaccine at every visit.

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