

HPV vaccination wise investment in preventing cervical cancer and other cancers and diseases, says expert

by Eric Michael Santos

In many ways, his fight against the human papillomavirus (HPV) is personal.

“When I was in grade 6, my mother was diagnosed with stage 3 cervical cancer,” narrates Dr. Efren Domingo.

His mother’s cancer was eventually controlled with treatment, but the young Domingo’s curiosity about cervical cancer was so piqued that the boy did some research and found out that the disease was caused by HPV. His interest in cervical cancer and HPV continued until Domingo became a specialist in women’s cancers and one of the principal investigators in research that led to the development of the HPV vaccine.

“The virus is resilient and treacherous,” says Dr. Domingo, secretary general of the Asia Oceania Research Organization in Genital Infections and Neoplasia (AOGIN) and concurrent AOGIN Philippines' president.

After 32 years of remission, his mother’s cervical cancer recurred. The virus had bided its time, waiting for the chance when advancing age would inevitably weaken its host’s immune system. At age 82, Dr. Domingo’s mother succumbed to cervical cancer.

Important differences between two HPV vaccines

Over 100 types of HPV have been identified, about 40 of which infect the anal and genital areas with approximately 15 to 20 types proven to cause cancer. HPV has been implicated in cancer of the cervix, vulva, vagina, anus, penis, oropharynx (tongue and tonsils), low-grade dysplasia (abnormal changes in cells lining the cervix), genital warts, and recurrent respiratory papillomatosis (wart-like growths in the larynx of children and young adults).

One hundred percent (100%) of cervical cancer cases worldwide (with almost 500,000 new cases and 270,000 deaths each year); 40% of vulvar and vaginal cases; 90% of anal cancer cases; 40% of penile cancer cases; 12% of oropharynx cancer cases; and 3% of mouth cancer cases can be attributed to cancer-causing HPV types.

“Our generation is lucky to be born in an era when a vaccine that prevents cervical cancer and other HPV-related cancers and diseases is available,” says Dr. Domingo, who is also the past president of the Society of Gynecologic Oncologists of the Philippines.

There are currently two available HPV vaccines. The bivalent vaccine helps protect against two HPV types, 16 and 18, while the quadrivalent vaccine helps

protect against four HPV types, 6, 11, 16 and 18. HPV 16 and 18 cause 70% of cervical cancer cases⁶ while HPV 6 and 11 cause 90% of genital warts cases.

“The bivalent vaccine protects against cervical cancer whereas the quadrivalent vaccine protects against cervical cancer, plus genital warts (which is one of the most prevalent sexually-transmitted infections in the world), vaginal cancer, and vulvar cancer,” Dr. Domingo notes.

Dr. Domingo points out another important difference. “Clinical studies of the quadrivalent vaccine have endpoints for cervical, vulvar, vaginal, perianal, anal, and penile cancers. Clinical studies of the bivalent vaccine only have endpoints for cervical cancer. Endpoints are important because they prove that a vaccine is efficacious in preventing disease or, in the case of the quadrivalent vaccine, several diseases.”

"Only the quadrivalent vaccine was able to demonstrate efficacy against World Health Organization (WHO)-recommended endpoint for assessing vaccine efficacy. It is also the only US FDA-approved HPV vaccine for cervical cancer, genital warts, and other HPV-related diseases," Dr. Domingo adds.

Vaccination at young age is best

The HPV vaccine is a prophylactic vaccine which stimulates the body's immune system to produce neutralizing antibodies that kill HPV in the skin cells of a man or woman's genital area, explains Dr. Domingo. “That's why it's best to get vaccinated at a young age when the immune system is at its strongest and therefore will mount a robust antibody response to the vaccine.”

Early vaccination is also ideal because sexual debut is unlikely at this age. “As early as age 9 for both girls and boys,” Dr. Domingo stresses. “Catch-up vaccination is for any woman who was vaccinated after she has had sex, regardless of age.”

What about women who are already sexually active? “They may still benefit from vaccination because even if a woman has been exposed to HPV, it's unlikely that she has been exposed to all virus types covered by the HPV vaccine. So the vaccine could still help protect against HPV types the woman hasn't been exposed to,” Dr. Domingo explains.

According to Dr. Domingo, both HPV vaccines have excellent safety and tolerability profiles. Minor adverse reactions, such as pain, redness and swelling, are limited to the injection site. No major adverse events have been reported. The vaccination schedule for both vaccines involves three doses administered intramuscularly within 6 months. For the bivalent vaccine, the schedule is day 1, month 1 and month 6. For the quadrivalent vaccine, the schedule is day 1, month 2 and month 6.

Wise investment

Dr. Domingo favors the more comprehensive protection provided by the quadrivalent vaccine which, he says, prevents more HPV diseases at a proportionately affordable cost. "Over the last 2 years, I have administered 15 doses of the bivalent vaccine and about 300 doses of the quadrivalent vaccine."

Dr. Domingo believes that investing in a proven cost-effective cervical cancer vaccine is a prudent and easy choice. "The cost of the vaccine is a fraction of the cost of cancer treatment."

HPV diseases can now be prevented through vaccination. Ask your doctor about the vaccine that can protect you from not just one, but four HPV-related diseases (cervical cancer, genital warts, vaginal cancer, and vulvar cancer). For more information, log on to www.hpv.com.ph.

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Photo Caption:



Dr. Efren Domingo, secretary general of the Asia Oceania Research Organization in Genital Infections and Neoplasia (AOGIN), emphasizes that it is best to get vaccinated at a young age when the immune system is at its strongest and therefore will mount a robust antibody response to the HPV vaccine.