

## **Vaccine against HPV in boys in the National Immunizations Program/2017**

The Ministry of Health, through the National Immunizations Program (NIP), expanded, in 2014, the National Vaccine Calendar with the introduction of the quadrivalent vaccine against the Human Papillomavirus (HPV) in the Public Health System (SUS). The vaccination, in conjunction with current cervical cancer follow-up initiatives will allow for the prevention of this disease in the coming decades. Today, the disease represents the fourth main cause of death by neoplasms among women in Brazil, with an estimate of 15,000 cases and 5,000 deaths per year<sup>(1)</sup>.

Initially, the vaccine was offered gradually to girls aged 9 to 13 years and to women aged 14 to 26 years living with HIV/AIDS. This age range for the young girls' vaccination aims at protecting them before they begin their sex life, and as such, before having contact with the virus.

Starting in January of 2017, the Ministry of Health will provide the vaccine against HPV for the male population between 12 and 13 years of age. The age range will be gradually expanded until 2020, when boys aged 9 to 13 years will be included. Men between 14 and 26 years who are living with AIDS will also be included in the initiative of the vaccination against HPV, in addition to girls aged 14 years who haven't been vaccinated yet.

The vaccination schedule for the teenagers will be in two doses, with a six-month interval between each one. For people living with HIV, the vaccination schedule is three in doses (interval of 0,2 and 6 months), and it is necessary to present a medical prescription.

It is important to highlight that the vaccine against HPV has proven to be extremely safe, and the adverse postvaccination events, when they are present, are mild and self-limited.

The decision to expand the vaccination to the male sex is in accordance with the recommendations provided by the Brazilian Societies of Pediatrics, Immunology, Obstetrics, Gynecology, Sexually Transmitted Diseases and by the Advisory Committee on Immunization Practices (USA)<sup>(2)</sup>. The strategy aims at protecting against cancer of the penis, throat, and anus, which are diseases that are directly related to HPV, in addition to protecting against anogenital warts.

HPV is the most common sexually transmitted disease. It is so prevalent that around 70 to 80% of sexually active men and women will be infected at some moment in their lifetime. There is a 50 to 80% chance of transmission of HPV after sexual intercourse without protection (use of a masculine or feminine preservative) with someone infected with HPV. It is estimated that in 3 to 10% of cases, especially among people with a compromised immune system (for example, because they are HIV-positive), the virus persists and can lead to serious health problems, especially for men that have sex with men (MSM). This is the group of men with the highest risk of HPV infection and its consequences, especially the MSM that are HIV positive<sup>(3,4)</sup>.

A systematic review of the prevalence of genital HPV DNA in men examined data from men aged 18 years or older in Europe and North America. The prevalence of HPV was high in all of the

regions, but it varied from 1 to 84% among low-risk men, and between 2 and 93% among high-risk men (those with an infection, for example, caused by a sexually transmitted disease, HIV-positive men, and partners of women with an HPV infection or abnormal cytology). More than 90% of anal cancer cases are attributed to HPV infection and are very common in MSM, and are almost universally present in those infected by HIV<sup>(5)</sup>.

HPV infection can also compromise the oral cavity, in the sub-clinical presentation or by being associated with benign or malignant oral neoplasms. The cancers of the throat and mouth are the sixth most prevalent type of cancer worldwide, with 400,000 cases per year and 230,000 deaths. The cases are two to three times more frequent in men than in women<sup>(6)</sup>.

Benign oral lesions associated with HPV occur in 0.5% of the population in general, but in up to 5% of the individuals living with HIV and up to 23% of those undergoing antiretroviral therapy<sup>(7)</sup>.

It is noteworthy that the extension of the vaccine for boys will strengthen the health initiatives for the male population, and will affirm the shared responsibility of the Brazilian Health Ministry with respect to reproductive health questions between the genders. The broadening of access of the vaccine against HPV for both sexes will allow for the prevention of the sickness in the coming decades, impacting the epidemiological profile of the infections attributed to HPV.

Accordingly, the inclusion of boys in the vaccination against HPV will be an important tool for preventing cancer of the penis, anus, and throat and against genital warts. Furthermore, because they are responsible for transmitting the virus to their partners, upon receiving the vaccine, they are collaborating to reduce the incidence of cervical and vulva cancer, among others, in women.

As such, we are certain that the editorial **Why Should We Vaccinate Boys and Men against HPV?**, published in *STD – Brazilian Journal of Sexually Transmitted Diseases*, volume 28, number 2, from 2016, written by the authors Nelson Vespa and Mauro Passos, will be of great relevance and will influence researchers, health professionals, public health managers and the population, as it enables free access to scientific periodicals concerning the everyday need for expanding initiatives to protect people against preventable infectious diseases.

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