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Letter to the Editor

# Reflections on the role of the vaccine against human papillomavirus (HPV) in Sexually Transmitted Diseases (STDs)

*Dear Editor,*

Sexually Transmitted Diseases (STDs) cause serious damage; among other, gynecological and anal cancers, in that HPV is the carcinogen in 90% of cases. The prevention of these diseases is based on people's education, but their treatment and vaccination occupy an increasingly greater space. In this context, are particularly important (www.aids.gov.br and www.dst.uff.br):

1. Hygiene, particularly peri-intercourse hygiene;
2. Responsibility with respect to one's partners, for instance, the correct use of condoms and care with extramarital sex;
3. A correct and early treatment of STDs and the partner's protection during this period;
4. General preventive care, such as a regular gynecological review;
5. Access to diagnosis, treatment and information about STDs, and
6. Vaccination, currently available for some STDs, such as HPV.

Concerning HPV vaccination, ANVISA currently recommends the tetravalent vaccine for men and women aged 9–26 years; and the bivalent vaccine for women over 9 years old (www.anvisa.gov.br). On the other hand, some studies discuss the benefits of expanding the indication for other age groups, and also for people already infected with HPV. There is even a project of law moving through Brazilian Congress (PLS 238/11) mandating the vaccination for women between 9 and 40 years. The extent of this benefit for a larger number of Brazilian people also depends on public awareness, costs, side effects and benefits of the vaccine.

The awareness of the population depends on informative campaigns to clarify about STDs, especially the benefits of HPV vaccination, vaccine indications and location of vaccination posts. The vaccine costs will decrease with the development of a national technology aiming to a large-scale vaccine production. The vaccine has minor side effects, compared to its benefits, and these side effects should decrease with vaccine improvement.[1–6]

Some facts emphasize the benefits of the vaccine, leading to reflections on the possibility of expanding its indications for other age groups and for people already infected with HPV, such as:

1. HPV vaccines cover part of viral types. In an individual, the infection can occur by types different from those that constitute the viral vaccine, in which case the vaccinated individual would be protected, if a new infection caused by any of HPV types targeted by the vaccine occurs.[7] In addition, some studies suggest that the vaccine can improve immunity against viral types not present in the vaccine, influencing the treatment and the resistance against disease.[8–11]
2. STDs are entry points for other STDs or for different viral types of the same STD. When the body's immunity is improved with the vaccine and when infections by those HPV types present in the vaccine are prevented, we are improving the protection of the body from being infected by new STDs, or by other viral types.[9]
3. There is a better chance that a STD-infected individual do not follow those preventive care measures above mentioned, therefore being at greater risk of recontamination. In this case, the vaccine protects against diseases caused by those HPV types that make up the vaccine, notwithstanding this behavior.

In conclusion, we believe that demonstrating the advantages of expanding the indication of ANVISA towards vaccinating people of other age groups and also those who have had HPV disease, together with an appropriate investment in research, production and distribution of the vaccine by the Ministry of Health, cancer mortality, absence from work, poor quality of life and the cost of Health will be diminished.[12–14]

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