

# 22nd

International Association  
for Adolescent Health  
(IAAH) European  
Regional Conference



**Joint Event:**

15th STATE OF THE  
ART Panhellenic  
Adolescent Health /  
Medicine Congress

*Youth Development Challenges in the post-COVID-19 era*

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## **Newer Perspectives on Prevention of HPV Related Diseases for Boys and Girls**

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HPV is the most frequent sexually transmitted viral infection worldwide, and the root cause of almost all cervical cancer cases (Burd, 2003). HPV is also an important causative factor for a series of other cancers, such as oropharyngeal, penile, and anal cancer, as well as other common benign diseases such as genital warts affecting both male and female population (Martel, 2020). In Greece, vaccination against human papillomavirus is indicated in both boys and girls since the publication of the National Immunization Program for Children and Adolescents for 2022, on 23-03-2022 (NIP, 2022). Special mention was given to the fact that The National Immunization committee highlighted the maximum protection that is achieved when vaccination is completed before the start of sexual activity (NIC, 2022).

According to the new indications of the National Immunization Program, the updated HPV vaccination schedules includes: (a) recommendation for universal vaccination of boys and girls, (b) the indicated vaccination interval for both sexes is the age of 9 to 11 years, (c) in case the vaccination for both sexes is not carried out at the recommended age, a catch-up vaccination can be done, (d) it is indicated that the HPV vaccine will be reimbursed fully to boys and girls aged 15-18 until 31.12.2023, and (e) the limitation in reimbursement after 31.12.2023 does not concern the groups of increased risk (NIC, 2022).

During the presentation, benefits of vaccination at an early age of 9-11 years old children thus before the start of their sexual life, were extensively discussed. Firstly, it is well accepted that boys and girls at a young age have a better antibody response/immune readiness (Pollard, 2021). Also, there is a positive economic impact on national health systems budgets due to the dose reduction from 3 to 2 doses regimen (NIC, 2022). In addition, studies have shown that at this age, compliance is better achieved, leading to higher vaccination coverage and to a successful implementation strategy (Oyo-Ita, 2016)

Moreover, it was presented the Global Burden of HPV-Related Cancers and Diseases in Males and Females. Approximately, 690,000 cases of HPV-related cancer are diagnosed in males and females around the world and HPV is estimated to cause up to 4.5% of all new cancer cases worldwide (Bruni, 2019).

HPV infections and HPV-related diseases commonly recur in males and data show that incidence rates are way higher in male population (Pamnani, 2018; Giuliano, 2019; Thomas, 2017; Singh 2018; Goldstone 2014). Furthermore, literature data for HPV infection and disease recurrence rates in males and epidemiological data for the incidence of HPV-associated OPSCC in males and cervical cancer in females in the United States, were

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presented (Van Dyne 2018). What is more, there are no routine screening recommendations for HPV-related cancers & diseases especially for males, except for cervical cancer in women (CDC, HPV Screening; McGinley, 2011). More in details, precancers HPV related lesions contribute to a substantial disease burden in both males and females, globally (Thome, 2018). The incidence of HPV-attributed oropharyngeal cancer is higher in males than in females and the incidence is increasing in many countries (Senkomago 2019; Morais, 2019). An analysis presented showed that most oropharyngeal cancer cases through 2029 in the US are projected to occur among white males (Morais, 2019). Additionally, the incidence of anal squamous cell carcinoma is increasing in males in numerous high-income countries (Deshmukh, 2020; Kang, 2018). Emphasis was given to the low rate of seroconversion in males following HPV infection, regardless of anatomic site of infection (Pierce Campbell, 2016). In reference to literature (Giuliano, 2015), only 7.7% of males developed detectable serum HPV antibodies within 36 months following genital, anal, or oral infection with HPV 6, 11, 16, or 18; approximately 4- to 10-fold lower than that observed among women following cervical infection. . The Australia HPV epidemiological situation was mentioned by presentation of the prevalence of 4-valent vaccine HPV types in males, pre- and post-vaccination. In fact, significant declines in prevalence of 4vHPV vaccine types were seen in males during postvaccination era; most significantly in males  $\leq 21$  years of age and the

prevalence of vaccine HPV types was lower in 2016–2017 compared to 2014–15, but not statistically significantly. Also, for Australia 10 Years. Furthermore, prevalence of genital warts significantly declined by 90% in Australian males and females 15–20 years of age 10 years after introduction of a female-only national 4vHPV vaccination program. Finally, regarding males generally, HPV infection can progress to external genital lesions in a short amount of time.

The HPV vaccine was first introduced into the Greek National Immunization Program for Children & Adolescents (EPE) in 2008. The 9vHPV vaccine was marketed in 2017 in Greece and vaccination with 9vHPV vaccine initiated at the same year according to the National Immunization Program. More than 1.7 million doses of HPV vaccines have been administered in Greece by the end of 2020 (IQVIA Hellas, Retail market sales audit, Greece 2007-January 2021).

The good safety profile of the HPV vaccines and their high effectiveness is also confirmed by the World Health Organization (WHO), whose reports recommend the continuation and strengthening of vaccination programs.

The main factor affecting compliance with HPV vaccination is the doctor's recommendation. The role of the physician in increasing the vaccination coverage rate for HPV is important. The recommendation must be strong, clear & personalized. Pediatricians must deal hesitancy with respect, understanding, participation and discussion and final use educational tools and reminder systems.

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Closing slides insisted on WHO Global Strategy to accelerate the elimination of cervical cancer as a public health problem. The WHO vision to eliminate cervical cancer worldwide in next 100 years relies on three main pillars to be achieved until 2030: 90% of girls must be fully vaccinated by the age of 15 years old, 70% of women must be screened with a high precision test at 35-45 years of age and 90% of women identified with cervical disease must receive treatment and care.



## Youth Development Challenges in the post-COVID-19 era

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