Recommendation of HPV vaccination to boys in Francean unhappy coincidence with the WHO call to pause the implementation of this vaccination in boys

Fadia Dib, François Vie Le Sage, Robert Cohen, Odile Launay

► To cite this version:

Fadia Dib, François Vie Le Sage, Robert Cohen, Odile Launay. Recommendation of HPV vaccination to boys in Francean unhappy coincidence with the WHO call to pause the implementation of this vaccination in boys. *Vaccine*, 2020, 38 (23), pp.3919-3921. 10.1016/j.vaccine.2020.04.017 . hal-03126962

HAL Id: hal-03126962

<https://hal.sorbonne-universite.fr/hal-03126962>

Submitted on 1 Feb 2021

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

TITLE PAGE

Recommendation of HPV vaccination to boys in France - an unhappy coincidence with the WHO call to pause the implementation of this vaccination in boys

Fadia Dib^{1,2}, François Vie le Sage^{3,4}, Robert Cohen^{5,6}, Odile Launay^{1,2,7}

¹ INSERM CIC 1417, F-CRIN, I REIVAC ; Assistance Publique- Hôpitaux de Paris, Hôpital Cochin, Paris, France

² INSERM, Sorbonne Université, Institut Pierre Louis d'Épidémiologie et de Santé Publique, Paris, France

³ GPIP, Groupe de Pathologie Infectieuse Pédiatrique, Paris, France.

⁴ AFPA, Association Française de Pédiatrie Ambulatoire, Saint-Germain-en-Laye, France

⁵ Association Clinique et thérapeutique Infantile du Val de Marne, Saint-Maur des Fossés, France.

⁶ Department of neonatology, CHI Creteil, Creteil, France.

⁷ Université de Paris, Faculté de médecine Paris Descartes; Paris, France

Corresponding author:

Pr. Odile Launay
CIC Cochin Pasteur (CIC 1417)
27 rue du Faubourg St Jacques
75679 Paris cedex 14
e-mail: odile.launay@aphp.fr
Tel: +33 1 46 67 63 00; Fax: +33 1 46 67 63 10

Short title: Extension of HPV vaccination to boys in France

Keywords: HPV vaccine, boys, recommendations, World Health Organization, vaccine hesitancy, misinformation

Word count text=1465 words

References=12

MANUSCRIPT

While France was one of the first three countries in the world to introduce Human Papillomavirus (HPV) vaccination for girls in 2006 (1), it has been lagging behind when it comes to the introduction of HPV vaccine for boys from the general population. Indeed, several countries have expanded HPV vaccination to boys (2). A number of arguments could justify gender-neutral HPV vaccination, and in 2016, a push from patients' associations in particular led to the French recommendation of HPV vaccination in men who have sex with men, as they have an increased risk of exposure to and infection with HPV.

On December 16th 2019, the French National Authority for Health (HAS) finally issued a recommendation for all boys aged 11 to 14 years to receive HPV vaccine, with possible catch-up until the age of 19 years (3). It has been a long road to reach this milestone. A citizen consultation on vaccination held in 2016 in France pushed among other things for adoption of universal HPV vaccination of boys and girls. At the beginning of 2019, the French Minister of Health declared that she was personally in favour of extending HPV vaccination to boys and that she had referred the matter to the HAS the previous year. In March 2019, a press release was put out by a collective of Academies, Colleges, Societies and Medical Unions, leading medical personalities and patients' associations calling for action to synergistically expand HPV vaccination to boys and strengthen cervical cancer screening (4). In October 2019, the HAS issued a favourable opinion on the widespread vaccination of boys and called for accompanying measures such as strengthening the

recommendation of HPV vaccination by healthcare professionals and facilitating access to HPV vaccination through full reimbursement by the national health insurance system. This opinion was accompanied by an online public consultation of a draft recommendation for the vaccination of boys at the ages mentioned above. Multiple considerations were taken into account in the HAS recommendation, including the burden of HPV-related diseases in men, the favourable opinion of the general practitioners who felt that vaccinating boys would help increase the uptake of vaccination in girls -which remains low in France (23.7% for two-dose HPV vaccination among 16-year-olds, in 2018)- and ethical considerations (according to the principle of equity in preventing diseases in both sexes). While this recommendation represents a major step forward to promote gender-neutral HPV vaccination in France, future challenges are foreseen. Now is the time to prepare to meet these challenges, if the implementation of this recommendation is to be successful.

First, we need to be ready to correct misinformation (5) and strive to do this in a timely manner. Anti-vaccination movements started even before the HAS recommendation was issued. The benefit of vaccinating boys was put into question shortly (6) after the World Health Organization (WHO) Strategic Advisory Group (SAGE) on immunization stated that “All countries should temporarily pause implementation of boy, older age group (>15 years) and multi-age cohort (MAC) HPV vaccination strategies until vaccine supply allows equitable access to HPV vaccine by all countries. This will significantly relieve supply constraints in the short term and enable allocation of doses to high-burden countries that are currently planning to introduce or sustain HPV vaccination” (7). The WHO call, which was made on the grounds of equity and solidarity in the face of global HPV vaccine

shortages, soon became an instrument to feed the anti-vax movement with claims that “If this vaccination is really useful for boys, as some have repeatedly said, how can we explain this WHO appeal which could appear to discriminate against boys?”. This unfortunate use of the WHO call must be addressed at the national and global levels and future instrumentalization must be prevented. Equally disturbing are the claims stated in an online petition that “We must protect our little girls but also soon our little boys from these mass vaccination campaigns with Gardasil [...] If even the government closes its eyes and blindly supports Gardasil, what can we do?”. Historically, based on cost-effectiveness considerations, selective vaccination programs for girls have first been implemented. This selectivity possibly conveyed the message that HPV vaccine was not effective or unimportant in boys. From an ethical point of view, it leaves us torn regarding the sex to prioritize over the other.

Second, notwithstanding the reassuring safety data accumulated over the years and across countries, safety issues of HPV vaccination have been raised repeatedly in France and other parts of the world, fuelling anti-vax movements. People’s concerns regarding HPV vaccine safety issues must be heard and addressed. Confidence towards HPV vaccination must be restored. After all, let us not forget that in France “one in three people disagree that vaccines are safe” (8).

Third, we need to take into account the particular context of HPV vaccination of adolescent girls in France. The reasons for the low uptake of HPV vaccine in French girls remain unclear, are probably multifactorial and the subject of current research. However, vaccine

hesitancy, which is recognized by the WHO as one of the 10 threats to global health (9), is certainly one of the contributing factors. In France, growing vaccine hesitancy combined with low uptake of certain vaccines have led the Ministry of Health to recommend extension of mandatory vaccination for children as of January 1, 2018 from three to eleven vaccinations (10). There is no apparent reason to expect that HPV vaccine hesitancy would be limited to the case of girls. Lessons can be learned from the detailed examination of the failed attempts to increase HPV vaccine uptake in girls in France. It is now widely recognized that school-based vaccination programs have been successful in achieving high HPV vaccine uptake (11) and should be (re)considered when expanding HPV vaccination to boys. However, it appears a daunting task in France where a school-based vaccination program against hepatitis B was discontinued as a result of the controversy over the alleged causal link between hepatitis B vaccination and the development of multiple sclerosis, in the 1990s (12). A lack of dedicated human resources within French school health services may be an additional barrier for the successful deployment of a school-based HPV vaccination program in France. Alternatively, in some countries such as Spain and Portugal, high levels of HPV vaccination coverage are reached without school programs. Otherwise, interventions on text messaging (reminder/recall) to parents have been tested and shown promising results. Such an approach represents a scalable and sustainable strategy that warrants wider consideration in France.

Finally, there needs to be a well-developed mass communication strategy in place to support the introduction of HPV vaccine in boys. Such campaigns would represent a golden opportunity to address low HPV vaccine uptake in girls, perhaps by repositioning it as an

effective tool to prevent the infection by the most common sexually transmitted infection which unfortunately can cause genital and extra-genital cancers in both sexes. Education and communication campaigns should explain the sexual transmission nature of HPV and promote the equal responsibility that boys and girls should share in the prevention of these diseases, including through vaccination. They should convey the message that due to the mode of HPV transmission, boys owe it to the girls they sexually interact with to be vaccinated, particularly in areas where the rate of unvaccinated girls is high.

The long-awaited recommendation statement for universal HPV vaccination has been received with enthusiasm by a large part of the French medical community. However, we need to acknowledge the challenges ahead of us in implementing this recommendation so as to overcome them. In particular, the issue of HPV vaccine shortages leading to the WHO recommendation to prioritize girls versus boys, which fuelled anti-vaccination movements, should not hinder progress towards achieving universal HPV vaccination in France. The temporary WHO recommendation to pause vaccination programs in boys in all countries could be legitimately justified by equity and solidarity considerations, but careful application on a case-by-case basis according to the specific context of the countries seems also warranted. As often is the case, one size does not fit all. In France, strictly following these recommendations risks conveying false messages that HPV vaccine is not beneficial for boys and by extension for girls, further impacting their low vaccination uptake. International stakeholders should constructively engage in dialogue with vaccine manufacturers in order to address and minimise the impact of this HPV vaccine supply shortage on both girl and boy vaccination. In the future, a possible solution to both global

shortages and perhaps low coverage would be to reduce the number of doses required. The results of studies looking at the effectiveness of single-dose schemes are eagerly awaited. If efficacious, the single-dose vaccination might represent a more affordable and sustainable strategy for better and equitable coverage to prevent diseases in both women and men in all settings.

REFERENCES

1. WHO | World Health Organization [Internet]. [cited 2019 Dec 13]. Available from: https://www.who.int/immunization/monitoring_surveillance/en/
2. European Centre for Disease Prevention and Control. Public consultation on draft guidance for introduction of HPV vaccines in EU countries: focus on 9-valent HPV vaccine and vaccination of boys and people living with HIV. [Internet]. 2019 [cited 2019 Dec 13]. Available from: http://publications.europa.eu/publication/manifestation_identifier/PUB_TQ0319241ENN
3. La HAS recommande de vacciner aussi les garçons contre les papillomavirus [Internet]. Haute Autorité de Santé. [cited 2019 Dec 16]. Available from: https://www.has-sante.fr/jcms/p_3135747/fr/la-has-recommande-de-vacciner-aussi-les-garcons-contre-les-papillomavirus
4. Communiqué-HPV-2019.03.21.pdf [Internet]. [cited 2019 Dec 13]. Available from: <https://afpa.org/content/uploads/2019/03/Communiqu%C3%A9-HPV-2019.03.21.pdf>
5. Larson HJ. The biggest pandemic risk? Viral misinformation. *Nature*. 2018;562(7727):309.
6. Cholet CCHD. CTIAP* Centre Hospitalier de Cholet: L'OMS appelle les États à suspendre la vaccination anti-HPV (GARDASIL®, GARDASIL 9®, etc.) chez les garçons [Internet]. CTIAP* Centre Hospitalier de Cholet. 2019 [cited 2019 Dec 13]. Available from: <http://ctiapchcholet.blogspot.com/2019/12/loms-appelle-les-etats-suspendre-la.html>
7. WHO | Weekly Epidemiological Record, 22 November 2019, vol. 94, 47 (pp. 541–560) [Internet]. WHO. [cited 2020 Feb 19]. Available from: <https://clicktime.symantec.com/3XmFNw9o67en2LX1Fpyzi4M6H2?u=http%3A%2F%2Fwww.who.int%2Fwer%2F2019%2Fwer9447%2Fen%2F>
8. Wellcome Global Monitor 2018 | Wellcome [Internet]. [cited 2019 Aug 14]. Available from: <https://wellcome.ac.uk/reports/wellcome-global-monitor/2018>

9. Ten threats to global health in 2019 [Internet]. [cited 2019 Dec 13]. Available from: <https://www.who.int/emergencies/ten-threats-to-global-health-in-2019>
10. Cohen R, Martinot A, Gaudelus J, Subtil D, Stahl J-P, Pujol P, et al. Infant mandatory vaccinations: Confirmation of a positive impact. *Med Mal Infect*. 2020 Feb;50(1):74–7.
11. Walling EB, Benzoni N, Dornfeld J, Bhandari R, Sisk BA, Garbutt J, et al. Interventions to Improve HPV Vaccine Uptake: A Systematic Review. *Pediatrics*. 2016;138(1).
12. Nau J-Y. [Hepatitis B: a controversy for the French]. *Rev Med Suisse*. 2008 Feb 13;4(144):440.

Author's contributions

FD and OL have participated in the redaction of the manuscript and the revision process. FV and RC have participated in the revision process. All authors have approved the final manuscript.

Acknowledgment

A sincere thank you to Pr Philippe Mayaud for his diligent editing and reviewing of this manuscript for English language.

Funding

The authors received no specific funding for this work.

Conflict of interest

FD declares that MSD has covered registration fees, transport and accommodation costs for attendance to a conference and a research grant (Merck Investigator Studies Program HPV Grant 2018). FV and RC have participated to scientific board for GSK and MSD and were

201 investigators for GSK and MSD studies. OL served as principal investigator for vaccine
202 clinical trials (MSD, GSK bio, Sanofi Pasteur, Janssen, Pfizer) and participated to advisory
203 boards (Sanofi Pasteur, MSD, GSK bio, Janssen, Pfizer).