

Appendix B.

Information provided during the recorded Skype call: pros and cons of HPV vaccination for men

The below script contains the information that the physician provided during the recorded Skype call. The information encompasses pros and cons of the HPV vaccination for men. Both versions, needed for the two visits, had identical greetings before and after the information. The original script was in Dutch, below you will find an English translation of the script.

Version A

Pros:

1. The first reason to vaccinate boys is that homosexual boys are presently not protected. The current system focuses on heterosexual intimacy, where men are protected because women are vaccinated. However, when an infected man has sex with another man, the virus can still spread. Homosexual men therefore do not benefit if only women are vaccinated. This is one reason why people may feel that boys should also be vaccinated.
2. A second argument for the vaccination of boys is that men are currently dependent on the vaccination of girls. A man can contract the virus from a girl who has not been vaccinated. As a result, men have no personal control. Some people think it would be fair if men could also protect themselves by being able to opt for a vaccination themselves. Some men also like the idea that they themselves cannot pass on the virus to others.

Cons:

1. The first disadvantage is that we can better prevent the virus from spreading if 90% of all girls are vaccinated than if 65% of both boys and girls are vaccinated. If 90% of the girls are vaccinated, there are lower chances that the virus will continue to spread. Because with sexual contact, the

chance is higher that one of the people involved has been vaccinated. If only 65% of both sexes are vaccinated, it will be more common that one of the people involved in sexual contact is not vaccinated. This means the virus will keep on spreading more easily. For this reason, it would be more effective to vaccinate 90% of girls compared to 65% of boys and girls. It should be kept in mind that this applies to the current system that focuses on heterosexual contact.

2. In addition, 800 boys should be vaccinated compared to 200 girls to prevent the development of one tumor in one person. This is because men and women can both get cancer from the HPV virus, but women are more likely to develop cancer after infection. For the prevention of one tumor, it is therefore more effective to vaccinate girls, because it means that fewer vaccinations are needed in total. Thus, this would not only be the most effective, but also the most cost-effective approach to keep the HPV from spreading.

Version B

Pros:

1. A first argument for vaccinating boys is that the HPV virus is not only harmful to women, but also to men. As you have read, men can also develop different types of cancer from infection with the virus. Often this is oral pharyngeal cancer. This variant is up to 5 times more common in men than in women. In addition, the incidence of anal cancer due to HPV is currently increasing, in both men and women. For these reasons it is important that men are also well protected.
2. A second advantage is that it is more cost-effective to vaccinate boys as well as girls. I will explain why. At the moment, 65% of girls are vaccinated. If in addition 40% of boys are vaccinated, the risk of cancer decreases and the costs of cancer care decrease. Only if at least 80-90% of girls were vaccinated would the additional vaccination of boys no longer be cost-effective. Practice shows that such high vaccination rates for girls are not feasible. For the time being, it is therefore more cost-effective to vaccinate 40% of the boys and 65% of the girls. So this cost-effectiveness can also be a reason to vaccinate boys.

Cons:

1. A first argument for not vaccinating boys is that it is still unknown what the long-term effects of the new vaccine for boys are. For women, the long-term effects over a period of 10 years are known, but not for men. This uncertainty leads to questioning the desirability of vaccinating boys.
2. In addition, it has not yet been proven that the vaccine is effective against oral pharyngeal cancer, whereas that type of cancer is relatively common in men. The reason is that pharyngeal cancer cannot be recognized at an early stage. This means that it is not known whether the vaccination is effective against this type of cancer. This uncertainty can be a reason not to vaccinate boys.