Website address:
https://www.gesundheitsindustrie-bw.de/en/article/press-release/hpv-vaccination-numerous-studies-provide-impressive-proof-effectiveness-against-cervical-cancer

HPV vaccination: Numerous studies provide impressive proof of effectiveness against cervical cancer

More and more data from various European countries prove: Vaccination against human papillomavirus not only prevents precancerous lesions, but also reliably protects against cervical cancer. On the occasion of the International HPV Awareness Day on March 4, Nobel laureate Harald zur Hausen hopes that many more parents will recognize this unique opportunity to protect their children from preventable cancers by vaccinating against HPV.

The first vaccine against human papillomavirus (HPV) was approved in Europe back in 2006. The vaccine was launched to protect women against cervical cancer. But many years had to pass before the efficacy of this first vaccine developed specifically against cancer could be proven by robust study results. That's because it takes up to two decades or more for cancer to develop from chronically HPV-infected cells.

But since 2020, scientists from an increasing number of European countries have reported dramatically reduced cervical cancer incidence among vaccinated women. Data are now available from Sweden, Denmark and the United Kingdom, for example. These studies also clearly show that in order for the vaccination to develop its full protective potential, it should be administered early - ideally before the start of the first sexual contacts. Women who were vaccinated before their 17th birthday (example Sweden) were up to 88 percent less likely to develop cervical cancer later than those who were not vaccinated.

"I am very pleased that more and more data are now showing the effectiveness of HPV vaccination, not only for precancerous lesions, but also for cervical cancer. I hope this good news will convince many more parents to have their children vaccinated against cancer-causing HPV," said Harald zur Hausen. The former chairman of the German Cancer Research Center (DKFZ) received the Nobel Prize in 2008 for his discovery that HPV can cause cervical cancer. "Globally, cervical cancer is still the fourth most common cancer in women. Particularly in poorer countries, the number of cases is still scandalously high. Vaccination can now make an important contribution to protecting women from cancer or even eliminating cervical cancer."

This plan is also being pursued by the World Health Organization (WHO) and the European Union (Europe's Beating Cancer Plan), which are calling on their member states to work toward eliminating cervical cancer. However, the examples from Sweden, Denmark and the United Kingdom explicitly show that the success of HPV vaccination programs depends not only on the effectiveness of the vaccine, but also on the proportion of the population vaccinated. Even after almost 16 years of educational work, far too few young people are fully vaccinated - and Germany is still miles away from the elimination targets of the WHO and the EU: less than half of 15-year-old girls (47 percent) in Germany are fully vaccinated against HPV, and among boys of the same age, the figure is only around five percent.

One of the reasons for the low vaccination rate of boys: many people are still unaware that HPV infections cause not only cervical cancer, but also various other types of cancer that can also affect men, such as oral and pharyngeal cancer or anal cancer. In total, about 1,700 male cancers per year in Germany are caused by HPV. Men are therefore not only carriers of the viruses, but also victims and thus benefit from the vaccination themselves. Therefore, the very well-tolerated HPV vaccination is recommended for girls and boys aged 9 to 14 years in Germany since 2018. The costs are reimbursed by the statutory health insurance. In addition to effective protection against cancer, the vaccination can also protect against the widespread genital warts. The vaccination can be caught up to the 18th birthday at the expense of the health insurers.

Publications:

Milena Falcaro, Alejandra Castañon, Busani Ndlela, Marta Checchi, Kate Soldan, Jamie Lopez-Bernal, Lucy Elliss-Brookes, Peter Sasieni:
The effects of the national HPV vaccination programme in England, UK, on cervical cancer and grade 3 cervical intraepithelial neoplasia incidence: a register-based observational study
The Lancet, 2021, DOI: 10.1016/S0140-6736(21)02178-4

Susanne K. Kjaer, Christian Dehlendorff, Federica Belmonte, Louise Baandrup:
Real-World Effectiveness of Human Papillomavirus Vaccination Against Cervical Cancer
JNCI J Natl Cancer Inst, 2021, DOI: 10.1093/jnci/djab080

Jiayao Lei, Alexander Ploner, K. Miriam Elfstrom, Jiangrong Wang, Adam Roth, Fang Fang, Karin Sundstrom, Joakim Dillner, and Par Sparen

HPV Vaccination and the Risk of Invasive Cervical Cancer
N Engl J Med 2020, DOI: 10.1056/NEJMoa1917338

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Further information

- German Cancer Research Center (DKFZ), Heidelberg