

Human papilloma virus vaccination provides long-term protection

September 25 2014

Every year, 11.2 of every 100 000 women in Germany develop cervical cancer. Persistent infection with a high-risk human papillomavirus (HPV) type is a necessary prerequisite for the development of dysplasia and neoplasia of the cervix. HPV vaccination has been a subject of heated debate since it was incorporated into the vaccination recommendations of the German Standing Committee on Vaccination (STIKO) in 2007. This edition of *Deutsches Ärzteblatt International* reveals that Yvonne Deleré of Berlin's Robert Koch Institute et al. have produced a systematic review that shows no decrease in protection over a period of five years following vaccination against HPV types 16 and 18.

Vaccines authorized for the German market are targeted against HPV types 16 and 18 because these are two of the most common high-risk types in Germany. Vaccination provides protection before infection with these HPV types, thus preventing HPV infection, without which [cervical cancer](#) does not develop. As sexual contact is the main route of transmission of HPV, vaccination is most effective when performed in girls and young women aged between 12 and 17 who are not yet sexually active. The review, which focuses on studies investigating the efficacy of vaccination in short- and long-term follow-up, is therefore restricted to HPV-naïve girls and women. According to the authors' calculations, in long-term follow-up vaccination is 94% effective in preventing randomly detected infection, 95% effective in preventing persistent infections, and 86% effective in preventing grade 2 or above cervical intraepithelial neoplasia (CIN 2+). However, smaller study and participant numbers mean that the quality of the evidence on long-term

protection is lower than that on short-term protection.

In order to improve the quality of evidence on long-term protection, the authors call for continuation of randomized controlled trials to ascertain the duration of HPV vaccine protection and further observational studies assessing the efficacy of vaccination.

More information: Deleré Y, Wichmann O, Klug SJ, van der Sande M, Terhardt M, Zepp F, Harder T: "The efficacy and duration of vaccine protection against human papillomavirus—a systematic review and meta-analysis." *Dtsch Arztebl Int* 2014; 111: 584–91.

Provided by Deutsches Aerzteblatt International

Citation: Human papilloma virus vaccination provides long-term protection (2014, September 25) retrieved 15 July 2023 from <https://medicalxpress.com/news/2014-09-human-papilloma-virus-vaccination-long-term.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.