

In women, is the incidence of cervical dysplasia and neoplasia decreased in those who receive the HPV vaccination compared to those who do not?

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Background:

Human papillomavirus (HPV) is a double-stranded DNA virus with carcinogenic properties directly linked with cervical abnormalities and cancer. It is the most common sexually transmitted disease in the United States. There are many different strains of HPV. The most virulent strains linked to the majority of cervical dysplasia include HPV 16, 18, 31, 33, 45, 52, and 58.²²

Purpose:

The purpose of this analysis is to evaluate the efficacy of the HPV vaccination in preventing cervical dysplasia and neoplasia in women compared to those who do not receive the vaccination.

Materials and Methods:

Research was conducted using the following: Pubmed, Google Scholar, and Ovid. Keywords searched were “HPV”, “women”, “vaccination”, and “cervical dysplasia”. Inclusion criteria included females who received the HPV vaccination. Exclusion criteria included no

reviews or meta-analysis and no paper over 10 years old. Twenty-six articles met the set parameters.

Results:

Most studies reported efficacy of the HPV vaccine for decreasing rates of cervical anomalies, dysplasia, and cancer. There was a decrease of HPV infection in those who received the HPV vaccination versus those who did not.

Conclusion:

The HPV vaccine decreases the incidence of cervical dysplasia/neoplasia and incidence of HPV infection. There is evidence that there can be sustained immunity to prevent the strains covered by the vaccination with just one dose. More research and studies performed over-time would be beneficial to examine the long-term outcomes of HPV and cervical neoplasia prevention in those vaccinated versus unvaccinated as the vaccination is still relatively new.

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