

# Review of: "Review: Human papillomavirus (HPV)"

Gert C. Scheper<sup>1</sup>

<sup>1</sup> Johnson & Johnson

**Potential competing interests:** No potential competing interests to declare.

First, unfortunately, the review is poorly written. There are too many places where it is not clear what the author means. The paper would greatly benefit from a thorough review and rewrite by a native English speaker.

Second, the rationale for writing this review is unclear. What is the main purpose of this overview? New insights into pathogenesis? Into prevention or treatment? Or 'simply' an overview of HPVs to increase awareness of the virus and the diseases that it can cause?

I strongly recommend that all references are carefully checked. For example, 'Hirth, 2019' does not describe that HPV 'needs to be combined with other risk factors such as pregnancy, immunosuppression, UV radiation exposure, smoking, and folate deficiency', but addresses 'disparities in HPV vaccination rates and HPV prevalence in the United States'. Another example is 'Graham, 2017', which does not describe 'cancer may also develop spontaneously as a result of episomal expressions E2, E4, and E5.'

Throughout the text: reduce the use of 'according to...'. Giving the name and year between brackets is sufficient.

Some statements are incorrect. For example, HPV types 1 and 2 can cause warts in contrast to what is mentioned in the text ('Warts are caused by HPV2, HPV27, and HPV57, but not by types 2, 1, or 63.'). In addition, 'genital warts' are not described in the section 'Types of infections caused by HPV' (which should better be called 'Types of diseases caused by HPV').

The apparent certainty with which lung cancer is coupled to HPV infection is unusual. A clear causative role has not been established yet.

Check text for consistency – for example, sometimes more than 100 HPV types are mentioned, but also more than 200 types. Similarly, 311,000, 300,000 and 275,000 annual deaths due to cervical cancer is mentioned. Why this repeat with different numbers?

The author mentions 3 available vaccines (Cervarix, Gardasil and Gardasil-9), but additional vaccines are approved in some countries: Ceolin, Walrinvax and Cervavax.