

**The Relation Between Human Papillomavirus and Cervical Cancer**

Student's Name or Students' Names

Department Affiliation, University Affiliation

Course Number: Course Name

Instructor's Name

Assignment Due Date

## **The Relation Between Human Papillomavirus and Cervical Cancer**

### **Introduction**

The presence of human papillomavirus (HPV)-induced cervical cancers remains a concern among women and, more so, those living in under-developed health systems globally. The high mortality rate among patients is concerning because many diagnose it in its late stages. Studies regarding the link between HPV and cervical cancer can help determine better ways of enhancing the care provided to patients. HPV is a common sexually transmitted infection (STI) that can exist in more than 100 types. Thus, exploring the causative relationship between HPV and cervical cancer can improve how health providers address the needs of women at risk of this disease.

### **Findings**

Numerous studies link HPV to cervical cancer. Okunade (2020) illustrated that 99.7% of cervical cancer cases are a result of persistent genital high-risk HPV infection. In most cases, HPV infects the mucocutaneous epithelium and generates viral particles within matured epithelial cells. HPV types 16 and 18 are the most prevalent strains, accounting for more than 70% of cases globally (Okunade, 2020). Even then, Ojha et al. (2022) noted that the prevalence of various HPV types differs based on region, requiring an examination of common challenges and determining the best treatment options. The authors also noted that low education levels and low financial status play a critical role in determining the risk factors, given the increased cervical malignancy that leads to poor access to disease screening services and resistance against screening visits (Ojha et al., 2022). The execution of HPV immunization can improve the fight against the disease.

Emphasis on HPV screening is critical. Gilham et al. (2019) found that HPV screening is better than screening for abnormal cytology with a smear test. Examining these attributes is vital when recommending vaccination, with studies showing that HPV infection

increases with sexual contact, making those with multiple sexual partners more prone to the disease. Sexual contact at an early age (normally under 10-12 years) and experiencing immune suppression may lead to increased risks of infection and, consequently, high chances of contracting cervical cancer. However, not all HPV incidences progress to cervical cancer cases. Ojha et al. (2022) wrote that some HPV infections clear out. Therefore, the screening process needs to be intentional.

### **Discussion**

The relationship between cervical cancer and HPV underscores the significance of enhancing HPV vaccination and cervical cancer screening. Establishing these programs can prevent infection incidences and minimize the mortality associated with the disease. Using vaccines such as Cervarix, Gardasil, and Gardasil 9 can help with the prevention of the disease. The projections must reflect the different ways of improving the core care that patients deserve regardless of their background.

Again, examining the risk factors is vital to help more women deal with the prevention process. The risk factors start with hygiene, sexual activity, and usage of condoms (Ojha et al., 2022). Genetic factors, immune system responses, and viral factors affect the body's response to HPV. Using oral contraceptives, smoking, and experiencing immunodeficiency increases the likelihood of invasive cancer.

### **Recommendations**

Luckily, vaccines do exist. The discovery of prophylactic vaccines has been a welcome aspect. This is because these vaccines target various HPV types (Pal & Kundu, 2019). However, the increased fatalities show the poor penetration of vaccination processes globally. Lack of patient education and financial capabilities highlight the challenge. Working on ways of improving screening can lead to increased prevention of cancer cases globally.

Increasing patient education among people in poor communities can increase the number of people who are aware of their conditions. Low-status neighborhoods need such programs to minimize fatalities. Many receive their diagnoses when it is too late. Therefore, bridging this gap will minimize the mortality rate.

### **Conclusion**

HPV is a significant risk factor in the development of cervical cancer. There is a need for vaccination, patient education, and screening. These are initiatives and interventions that limit the severity of the disease. Health authorities need to champion concerted efforts to ensure equitable access to preventive measures. Improving patient education can minimize the incidences by advancing their knowledge of HPV and cervical cancer to improve control strategies.

## References

- Gilham, C., Sargent, A., Kitchener, H. C., & Peto, J. (2019). HPV testing compared with routine cytology in cervical screening: Long-term follow-up of ARTISTIC RCT. *Health Technology Assessment (Winchester, England)*, 23(28), 1–44. <https://doi.org/10.3310/hta23280>
- Ojha, P. S., Maste, M. M., Tubachi, S., & Patil, V. S. (2022). Human papillomavirus and cervical cancer: An insight highlighting pathogenesis and targeting strategies. *Virusdisease*, 33(2), 132–154. <https://doi.org/10.1007/s13337-022-00768-w>
- Okunade K. S. (2020). Human papillomavirus and cervical cancer. *Journal of Obstetrics and Gynaecology: The Journal of the Institute of Obstetrics and Gynaecology*, 40(5), 602–608. <https://doi.org/10.1080/01443615.2019.1634030>
- Pal, A., & Kundu, R. (2019). Human papillomavirus E6 and E7: The cervical cancer hallmarks and targets for therapy. *Frontiers in Microbiology*, 10, 3116. <https://doi.org/10.3389/fmicb.2019.03116>



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