*Session 3. Human papilloma virus, chronic infection & associated cancers.*

*10.00 – 10.30 PLENARY LECTURE Anda Kivite-Urtane (Riga Stradins University, Riga, Latvia) EPIDEMIOLOGY OF INFECTION WITH HIGH RISK HPVs, RISK FACTORS IN DIFFERENT POPULATION GROUPS (30 min)*

* *Word file;*
* *Times New Roman font, size 11;*
* *one line spacing;*
* *Length of the text (without title, authors’ names, affiliations) is limited to 500 words.*

***Abstracts of invited plenary lectures***

*Abstracts should contain the following components:*

* *Title (is not more than 150 characters with spaces);*
* *Authors (surname, given name), indicate the corresponding author;*
* *Affiliations for all authors;*
* *Background: describe the importance of the revised field of research;*
* *Aim(s): subject of the review;*
* *Topics overviewed: short description of the overviewed topics; own findings of the author in this context;*
* *Conclusions: resume of the progressed achieved so far and perspectives for the development.*
* *Acknowledgements, references to publications (max 5).*

**Title:** Epidemiology of infection with high risk HPVs, risk factors in different population groups

**Authors:** Kivite-Urtane Anda (corresponding author) (1), Zodzika Jana (1,2), Berza Natalija (1)

**Affiliations:** (1) Institute of Public Health, Riga Stradins University, Latvia; (2) Gynaecology Department, Riga East Clinical University Hospital, Riga, Latvia

**Background:** Human papillomavirus (HPV) is the most prevalent sexually transmitted infection worldwide. High-risk HPV (HR-HPV) is a major contributor to oropharyngeal and anogenital cancers, with cervical cancer being the most widely recognized HR-HPV-related malignancy. Understanding the risk and associated factors for HR-HPV infection in different populations facilitates the development and implementation of targeted, and therefore more effective, primary, secondary and tertiary prevention measures (in terms of the infection and assciated malignances) within each country and region.

**Aim:** To describe the epidemiological situation of HR-HPV infection in Latvia, Europe and globally, and to identify the factors associated with higher prevalence rates across different population strata.

**Topics overviewed:** The global prevalence of HR-HPV infection in the general population is estimated to average 12%, but in some developing countries, it can rise to as high as 35%. According to our recent cross-sectional study conducted in 2022, the prevalence of HR-HPV was observed to be as high as 67% among women aged 25–70 years referred to colposcopy clinics due to cervical cytological changes, compared to 11% among women visiting general practitioners. Interestingly, the prevalence of HR-HPV decreases with age but shows a second peak among women aged 60 and older.

Scientific studies indicate that HR-HPV prevalence is basically influenced by geographical, socioeconomic, cultural, and health-related factors. In Latvia, factors associated with a positive HR-HPV status included being single, divorced, or widowed (as opposed to being married or cohabiting), having three or more lifetime sexual partners in the general population, and being of Latvian ethnicity (as opposed to other ethnicities) in the colposcopy group.

**Conclusions:** In Latvia, the burden of HR-HPV infection is comparable to that observed in other European Union countries. HR-HPV positivity in Latvia is strongly associated with sexual and other health-related behaviors.

**References:**

1. Berza N., et al. Understanding the human papillomavirus prevalence and associated factors in the European country with a high incidence of cervical cancer. European Journal of Public Health, 2024; 1; 34 (4): 826-832; <https://doi.org/10.1093/eurpub/ckae075>
2. Bruni L., et al. ICO/IARC Information Centre on HPV and Cancer (HPV Information Centre). Human Papillomavirus and Related Diseases in the World. Summary Report 10 March 2023. [19.11.2024]
3. Kombe A.J., et al. Epidemiology and burden of human papillomavirus and related diseases, molecular pathogenesis, and vaccine evaluation. Frontiers in Public Health, 2021; 20:8:552028; <https://doi.org/10.3389/fpubh.2020.552028>
4. Okunade K. S. Human papillomavirus and cervical cancer. Journal of Obstetrics and Gynaecology, 2020; 40: 602–608; <https://doi.org/10.1080/01443615.2019.1634030>