

OUTCOMES SUMMARY

ELIMINATING THE VACCINE- PREVENTABLE CANCERS

BACKGROUND INFORMATION

HPV Vaccination is highlighted as one of the most prominent gaps in current cancer care and prevention in Europe. CEE countries lag in prevention and bear the burden of cervical cancer incidence and mortality. The vaccination rates vary even in Western Europe from less than 50% in France to more than 70% in Norway, Sweden, or Spain. Looking at the CEE region countries, PL and RS are missing National Immunization Program for HPV (to be introduced in 2021), VCR for girls in BG reaches less than 5%, in SK 15%, in HR 50%, CZ and SI get on 60%, only HU is getting close to the target with 80% VCR in girls.

Europe's Beating Cancer Plan will support EU countries efforts to extend routine vaccination against human papillomaviruses of girls and boys – to eliminate cervical cancer and other cancers caused by HPV. The objective is to vaccinate at least 90% of the EU target population of girls and to significantly increase the vaccination of boys by 2030.

SPEAKERS

- ▶ **Marina Davidashvili**, Lead International Advocacy and Partnerships, European Parliamentary Forum for Sexual & Reproductive Rights (EPF, EU-Brussels)
- ▶ **Prof. Mgr. Miloš Jeseňák, M.D., PhD., MBA, Dott.Ric., MHA.**, Department of Pediatrics, Jessenius Faculty of Medicine in Martin, Comenius University in Bratislava, University Teaching Hospital in Martin (Slovakia)
- ▶ **Peter Baker**, Consultant, European Cancer Organization's HPV Action Network (EU) – details about the UK gender-neutral vaccination campaign and ECO's current effort in HPV vaccination within EU (EU/UK)
- ▶ **Dr. Zoltán Novák**, Head of Gynecological Surgery Department of the National Institute of Oncology
- ▶ **Prof. Joakim Dillner**, Director of Research & Development, Medical Diagnostics at Karolinska Institutet (Sweden)
- ▶ **Sibilia Quilici**, Executive Director, Vaccines Europe, EFPIA (Brussels)
- ▶ **Assoc. Prof. PhDr. Kállayová Daniela, PhD., MPH**, Ministry of Health-Department of Public Health, Screening & Prevention (Slovakia)

MAPPING OF THE CURRENT SITUATION

Vaccines can prevent cancers. There is real world evidence that vaccination can achieve elimination of cervical cancer. The ability to eliminate a disease, especially a type of cancer, is unique. It is a great ambition and therefore needs everybody's cooperation to achieve this.

Cancers attributed to HPV infection pose a tremendous burden in EU with 98 000 new cancer cases annually across EU. Zooming into cervical cancer, every year, more than 61 000 women are diagnosed with cervical cancer and more than 25 800 die from the disease.

There is a significant discrepancy between eastern and western Europe in incidence and mortality of cervical cancers. The highest standardized incidence and mortality rates are highest in eastern Europe. Although it is proven that the HPV vaccine is almost 100% effective in preventing the persistent HPV infections that cause cervical cancer, there is a significant fragmentation of access to HPV vaccination in Europe, with significant gaps in vaccination coverage which is reflected in the incidence and mortality rates.

In Slovakia, there is low vaccination rate with late application of the first dose (after sexual debut), approximately 15% of 13-year-old target cohort get vaccinated. The major obstacles in improving the vaccination rate in Slovakia is the lack of knowledge of laic and scientific society about vaccination against HPV; misunderstanding of the true impact and severity of HPV infection; irrelevant doubts about safety of HPV vaccines; and only partial coverage of vaccine by health insurance companies. Approximately 270 women die each year in Slovakia from cervical cancer which is fully preventable by vaccination.

BEST PRACTICES

Sweden

In Sweden, the school-based HPV vaccination of girls was introduced in 2012, and currently has 83-88% population coverage. In 2019, the gender-neutral vaccination started and achieved similar population coverage. In practice, HPV vaccine is administered by a school nurse, which was concluded as the most effective way after a series of experiments run in Sweden. All needed information is distributed to parents prior to the vaccination by letters.

Cervical screening is performed in ages 23-70 and has 83% population coverage, and 92% coverage among 23–25-year-old girls. Each woman gets an invitation for an appointment, even if she does not attend, she gets another appointment next year.

In 2021, there was a parliamentary decision that cervical cancer should be eliminated by 2026. Setting clear, ambitious but at the same time realistic goals by governments is key to achieving elimination of cervical cancer. Eradication of HPV related diseases is predicted at 70% coverage of both sexes, and Sweden is on the pathway of elimination by 2026.

Real-life protection against cervical cancer is seen rapidly after HPV vaccination (N Engl J Med 2020; 383:1340-8). In Sweden the FASTER concept was introduced – combination of screening and vaccination resulting in faster elimination of cervical cancer.

Hungary

School-based vaccination program, 12-year-olds are offered HPV vaccination as part of the program. HPV vaccination started in 2014 for girls, it is optional and fully funded by the state upon parental decision. Administered by school pediatricians. From 2018/19 the 9 valent vaccine started to be used and in 2020 gender neutral vaccination was established.

The HPV vaccination success in Hungary can be attributed to a mix of factors. In the Hungarian population, pro-vaccination attitudes are generally predominant. From systemic point of view, vaccination is included in school-based programs, which is coupled with an intensive PR campaign aimed at both the parents and the children where online media are utilized to increase effectiveness. Importantly, there is also an intensive education of primary healthcare providers responsible for vaccination. Lastly, the cooperation of authorities, patient organizations, physician societies and industry makes for a strong partnership which has enabled the success of HPV vaccination program.

United Kingdom

UK girls vaccinated since 2008 with an 80+% uptake. HPV Action established in 2013 to achieve gender-neutral HPV vaccination in UK. HPV vaccinations for men who have sex with men began in 2018. Gender-neutral HPV vaccination for all 12/13-year-olds began in 2019. Overall, the HPV immunization program has successfully almost eliminated cervical cancer in women born since Sept 1, 1995.

RECOMMENDATIONS

To come close to achieving the elimination of cervical cancer, it is recommended that national policy-makers and health authorities align with the following recommendations:

- ▶ Prioritize routine immunization as an essential service across the life-course
- ▶ Improve access to routine immunization services through expanded delivery services
- ▶ Strengthen immunization data systems to enable development of suitable policies based on real world evidence
- ▶ Build trust and confidence in vaccination by providing citizens with reliable evidence-based information about HPV screening and vaccine and where to reach them
- ▶ Include free and gender-neutral HPV vaccination into routine state vaccination schedules
- ▶ Provide free mature population-based screening programs which are the only way to reach the entire population and achieve results in saving women lives
- ▶ Ensure equal access to the best quality treatments
- ▶ Set specific and ambitious KPIs when developing immunization strategies and national cancer control plans
- ▶ Ensure sufficient financing of immunization programs by investment of substantial resources and effective coordination at the national level
- ▶ Utilize EU funding opportunities: EU4Health initiative of European Commission: Actions to improve HPV vaccination: 3.8 EUR million direct grants to member states for HPV vaccination campaigns, 1,2 EUR million in grants for civil society/NGOs to support member states' vaccination campaigns.