EPF
European Parliamentary Forum
for Sexual & Reproductive Rights

RAISING PARLIAMENTARY AWARENESS OF HPV VACCINATION TO PREVENT CERVICAL CANCER IN EUROPE

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1. INTRODUCTION

The United Nations Sustainable Development Goals (SDGs) recognise the centrality to global development of women's empowerment, gender equality and equal rights to health and education is recognized in the United Nations Sustainable Development Goals (SDGs). In addition to including the achievement of gender equality as a stand-alone goal, SDGoal 5 also addresses gender equality across health, education, social and economic domains. Although ambitious, the 2030 global goals are achievable if women and girls are recognised as powerful agents of change for their own health and well-being.[1]

Cervical cancer is a significant health problem in Europe. Estimates from 2012 indicate that every year 58,373 women are diagnosed with cervical cancer and 24,404 die from the disease.[2] The burden of cervical cancer varies considerably across Europe. In the Eastern Europe and Central Asia (EECA) region, the numbers of cases and deaths are up to 10 times higher than in Western Europe. Every year, there are more than 38,000 new cases and 18,000 deaths from cervical cancer in the region.[3]

Research shows that human papillomavirus (HPV) vaccines are safe and effective, and transmission of the most common and dangerous types of HPV is declining in countries with high coverage rates. Studies conducted in Australia, Belgium, Germany, Sweden, the United Kingdom, the United States and New Zealand demonstrate rapid reductions of up to 90% in the number of HPV infections and genital warts in teenage girls and young women.[4] Recent research on HPV vaccination and cervical cancer screening in 53 countries in the World Health Organization (WHO) European Region states that the two primary (HPV vaccination) and secondary strategies (screening, early diagnosis) will lead to the reduction of the incidence of and mortality from cervical cancer. It could also contribute to reducing social inequalities between Central and Eastern European countries.[5]

According to the new European Centre for Disease Prevention and Control (ECDC) HPV vaccine guidance for open public consultation, all European Union/European Economic Area (EU/EEA) countries had introduced HPV vaccination in their national immunisation programmes by 2018. It further states that 50% of countries had introduced it within the three years after the European Commission granted the first HPV vaccines in 2006-2007. Over the last five years the remaining EU/EEA countries have progressively introduced the vaccine.[6]

Despite positive progress, the success of HPV immunisation programmes has varied. Concerns about HPV vaccine safety as well as financial difficulties have led to low uptake in some countries. Even in countries where cervical cancer programmes are available, inadequate knowledge about the importance of these programmes leads to women not using them.[7]

2. WORLD HEALTH ORGANIZATION (WHO) GUIDANCE AND RECOMMENDATIONS

The WHO is working with 194 Member States across six regions, from more than 150 offices. It partners with countries, the United Nations system, international organisations, civil society, foundations, academia and research institutions. The primary role of the WHO is to direct and coordinate international health within the United Nations system. The main areas of work are health systems; health through the life-course; non-communicable and communicable disease; preparedness, surveillance and response; and corporate services.

In 1999, the Director General of the WHO established the Strategic Advisory Group Experts (SAGE) on Immunization, to provide guidance on the WHO's work. SAGE is the principal advisory group to the WHO for vaccines and immunisation, advising the organisation on overall global policies and strategies, ranging from vaccines and technology, research and development, to delivery of immunisation and its linkages with other health interventions.

Since 2009, the WHO has recommended the inclusion of HPV vaccination in national immunisation programmes in countries where cervical cancer is a public health priority and where cost-effective and sustainable implementation of the vaccine is feasible.

The introduction of HPV vaccination does not mean that funding for developing or maintaining effective screening programmes for cervical cancer should be undermined. The vaccine does not protect against all high-risk types of HPV and cannot be used for treatment of cervical cancer or HPV infection. The introduction of vaccination does not replace the need for cervical cancer screening, and should, therefore, be part of a coordinated and comprehensive approach to cervical cancer control.[8]

Prevention of cervical cancer is best achieved through:

- **the immunisation of girls, primarily through vaccination of girls aged 9–14 years prior to exposure to and acquisition of HPV infection;**
- **secondary prevention through screening and treatment of adult women for precancerous lesions; and**
- **tertiary and palliative care for women affected by cervical cancer. The WHO further recommends that HPV vaccination should not be deferred in countries where other relevant interventions are not available.**

3. UN JOINT GLOBAL PROGRAMME ON CERVICAL CANCER PREVENTION AND CONTROL

Worldwide, 266,000 women died of cervical cancer in 2012 — equivalent to one women dying every two minutes. Around 90% of these deaths were in low- and middle-income countries. While the number of women dying as a result of childbirth has nearly halved, the number of annual deaths from cervical cancer has increased by almost 40% and is expected to rise further.[9]

To build on existing programmes and enhance progress, seven agencies under the United Nations Task Force on Non-Communicable Diseases (NCDs) have established a new five-year Joint Global Programme on Cervical Cancer Prevention and Control. The Joint Programme will provide global leadership as well as technical assistance to support governments and their partners to build and sustain high-quality national comprehensive cervical cancer control programmes that enable women to access services equitably.

The Joint Programme will build on the world's collective endeavours to ensure that in a generation, death from cervical cancer will no longer be a public health issue. It will do this by undertaking joint efforts to take new technologies to scale, reducing the costs of vaccines, and using innovative approaches to ensure that women are accessing services.[10]

At the country level the Joint Programme will focus on three priorities:

- **HPV immunisation for girls;**

- **making screening and treatment for cervical precancer available to all women; and**

- **making diagnosis and treatment of invasive cervical cancer, including palliative care, available to all women.**

There are great inequalities between women living in high-income countries and those living in low- and middle-income countries when it comes to the availability of and access to these services. The Joint Programme will ensure that countries provide a national cervical cancer control plan and develop systems for monitoring and evaluating the national comprehensive cervical cancer control programme.

The Joint Programme will learn from and build on the existing work of those working on cervical cancer, ensuring activities are harmonised and aligned. This will be done at the global level by:

- **encouraging other countries and development partners to develop their own national comprehensive cervical cancer control programme;**

- **stimulating South–South collaboration and contributing to the collective effort of partners, including public–private collaboration;**

- **building on the work done to increase access to HIV testing and treatment, to ensure that women benefit from effective prevention services and will no longer succumb to cervical cancer; and**

- **working with partners to develop innovative technologies for screening and pricing policies to stimulate increased coverage of HPV vaccination and testing.**

To achieve this, the Joint Programme will provide technical assistance to countries by assisting governments, mobilising resources to implement their national cervical cancer control plan, and joining and collaborating with domestic and international partners towards a common goal.

4. THE EUROPEAN UNION

The European Council is empowered to establish recommendations to promote the implementation of health policies, improve vaccination levels, actively increase the education of the population in favour of vaccination, train health care professionals, and elaborate reports on the epidemiological situation as well as on the degree of implementation of the vaccination programmes and their coverage levels. These activities are already being developed with the cooperation of the ECDC.[11]

The European Commission has coordinated continued exchange of information as well as activities promoting the improvement of public health, which are being channelled through the Directorate-General for Health and Food Safety.[12] The European Commission assists EU countries in coordinating their policies and programmes, but it is up to the Member States to make the final decisions needed to adopt vaccination programmes at country and regional level.

In April 2018, the Commission proposed a Council Recommendation to strengthen EU cooperation on vaccine-preventable diseases.[13] The initiative aims to tackle vaccine hesitancy, improve coordination on vaccine procurement, support research and innovation, and strengthen EU cooperation on vaccine-preventable diseases. National vaccination efforts are also supported through joint action on vaccination set out in the third Health Programme (2014–2020).[14] The Health Programme is implemented by the Consumers, Health, Agriculture and Food Executive Agency (CHAFEA). CHAFEA is assisted by national experts in Member States and participating countries, called National Focal Points (NFPs), appointed by their national health ministers. The joint action was launched in 2018, coordinated by the French Health and Medical Research Institute (Inserm), with support from the French Ministry of Health.[15] The joint action will address vaccine hesitancy and increase vaccination coverage in the EU. Strengthening cooperation between National Immunisation Technical Advisory Groups (NITAGs) is also part of its work.[16]

5. WHO/EUROPE

The WHO Regional Office for Europe (WHO/Europe) is one of the WHO's six regional offices around the world. WHO/Europe covers a vast geographical region from the Atlantic to the Pacific oceans, compromising 53 countries. WHO/Europe staff are public health, scientific and technical experts. This section will address WHO/Europe's work and activities on vaccine and immunisation in regard to the HPV vaccine and cervical cancer.[17]

5.1 European Technical Advisory Group of Experts on Immunization

The European Technical Advisory Group of Experts on Immunisation (ETAGE) is a body of six to eight immunization experts appointed by the WHO Regional Director for Europe. The group's task is to provide independent review and expert technical input to the WHO/Europe Vaccine-preventable Diseases and Immunization Programme (VPI), with the goal of facilitating and accelerating achievements in relation to the eradication, elimination and control of vaccine-preventable diseases in the WHO European Region.[18]

Vaccine hesitancy is undermining individual and community protection from vaccine-preventable diseases, even though the European Region has relatively high vaccination coverage rates. At the request of ETAGE, the Vaccine-preventable Disease and Immunization Programme of WHO/Europe has developed tools to help countries address hesitancy more effectively. The response was the 2013 Guide to Tailor Immunization Programmes (TIP), an evidence- and theory-based behavioural insight framework.

5.2 National Immunization Technical Advisory Groups

NITAGs are multidisciplinary groups of national experts responsible for providing independent, evidence-informed advice to policymakers and programme managers on policy issues related to immunisation and vaccines.[19] NITAGs provide scientific recommendations to their respective ministries of health to enable them to make evidence-based immunisation-related policy and programme decisions. WHO/Europe works to increase Member States' capacities for informed and rational decision-making in immunization by:

- **advocating for the establishment or strengthening of these national advisory bodies;**
- **building capacity of national experts; and**
- **introducing best practices identified in the countries that have long-established NITAGs.**

The WHO Regional Office also facilitates collaboration between members of these national advisory committees and ETAGE through joint meetings and dissemination of ETAGE meeting reports and recommendations.

5.3 Support and guidance

WHO/Europe supports Member States through the entire process of decision-making, introduction and management of new and underutilised vaccines and post-introduction monitoring. It facilitates the sharing of knowledge and good practice through meetings and workshops held across the European Region, and offers guidance and technical support to countries in collecting evidence and making informed decisions about whether, when and how to introduce new antigens.[20]

6. UNITED NATIONS POPULATION FUND (UNFPA)

Prevention of cervical cancer is central to UNFPA's mandate to ensure universal access to reproductive health as defined by the International Conference on Population and Development. UNFPA is supporting several countries as they develop and strengthen their cervical cancer prevention programmes.

Awareness-raising is a key component of any prevention programme aiming to ensure that individuals can make informed decisions about their health. UNFPA emphasises the need for national strategies to be part of a comprehensive approach that includes HPV vaccination for young girls, screening and treatment for women diagnosed with precancerous lesions, and treatment and palliative care for women with invasive cervical cancer.[21]

The UNFPA EECA office works together with the International Cervical Cancer Prevention Association (ICCPA), ministries of health and other organisations throughout the region to provide assistance for the establishment of cervical cancer prevention programmes. The EECA region faces challenges in the development of health services because of common characteristics such as the economic crisis that followed the break-up of the Soviet Union. This led to drastic cuts in health budgets in all countries, and a reduced ability to plan and coordinate activities at health system level. This is of particular relevance to cancer prevention, since these programmes require the effective interaction of multiple health services. The health sector in many EECA countries has improved over the past decade, with increases in both clinical and administrative capacities. However, most countries in the EECA region still have unresolved gaps, resulting in each country having a unique mixture of service capacities and gaps.[22]

European guidelines for cervical screening specify that it should be delivered through organised programmes. Existing cervical screening in the EECA region is mostly opportunistic, rather than organized. Opportunistic screening means that people are screened at their own request. There is no system in place to recruit people, monitor attendance or follow-up and ensure that all service components are of high quality. This leads to sub-optimal cancer reduction, increases harm and health inequalities, and wastes health care resources.[23]

7. CASE STUDIES

Case Study Moldova

According to WHO estimates, HPV caused cervical cancer in more than 470 women and was responsible for 210 deaths in the Republic of Moldova in 2012 alone. Cervical cancer is the third most prevalent of all cancers among women in the country. The Republic of Moldova is among the top five countries in the WHO European Region with the highest cervical cancer mortality rates. WHO/Europe supported the decision-making process in Moldova by organising a national stakeholders' meeting on the HPV disease and vaccines on 29–30 September 2016 in Chisinau.

In November 2017, vaccination against HPV was added to the country's routine immunisation schedule. The Ministry of Health's decision to introduce the vaccine followed the recommendation of Moldova's NITAG. The introduction of HPV vaccine along with the implementation of other preventive interventions will help significantly reduce morbidity and mortality due to cervical cancer and other HPV-related conditions.[24]

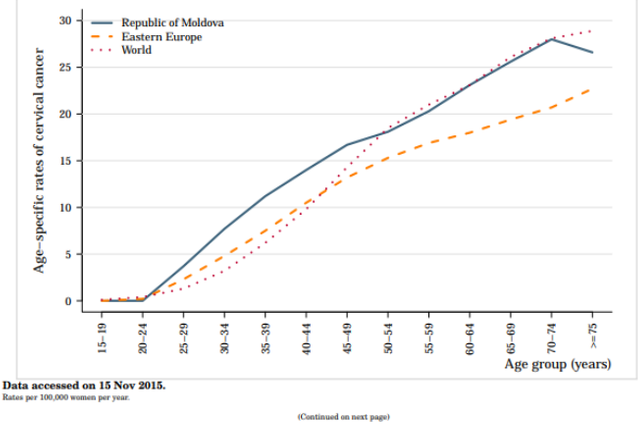

Figure X. Age-specific rates of cervical cancer mortality in Moldova

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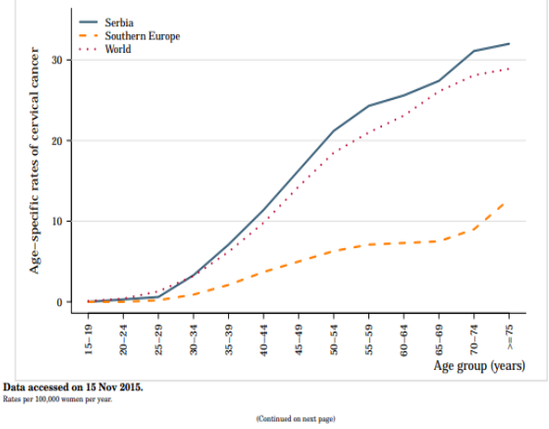

Figure X. Age-specific rates of cervical cancer mortality in Serbia

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Case Study Serbia

Recent estimates suggest that cervical cancer caused by HPV places a significant burden on public health in Serbia. According to the Institute of Public Health of Serbia, about 1,250 women are diagnosed and 470 die from cervical cancer each year. By invitation of the Parliamentary Committee for Health and Family, the WHO Representative in Serbia, Dr Zsofia Pusztai, participated in the public debate to help raise awareness on the importance of preventing cervical cancer and other HPV diseases through immunization.[25]

On 14 December 2016, the State Secretary in the Ministry of Health, Berislav Vekic, announced that Serbia would begin offering HPV immunisation to 12-year-old boys and girls across the country by 2017. The State Secretary stressed the government's commitment to drastically reduce morbidity and mortality from HPV-related diseases, including cervical cancer. In addition to vaccination, screening programmes will ensure both primary and secondary prevention.

Case Study Ukraine

Ukraine has the lowest coverage of immunisation against all of the vaccine-preventable antigens and the highest number of un- and under-vaccinated children in the WHO European Region. Despite the efforts of the Ministry of Health and partner agencies to improve performance on immunisation, the public's trust in vaccination is low. During European Immunization Week (EIW), the non-governmental organisation (NGO) Parents for Vaccination initiated an innovative project to build public trust in immunisation, called Change Agents, with support from the WHO and Rotary International.

A meeting with parents was conducted under the leadership of Dr Yevgeny Komarovskiy — a well-known paediatrician in Eastern Europe who became a public figure through extensive use of social and mass media. The meeting reached thousands of parents through extensive media coverage, in addition to the hundreds who attended. The press conference covered key immunisation issues and was well attended. Throughout the week, immunisation was a leading topic in mass and social media.[26]

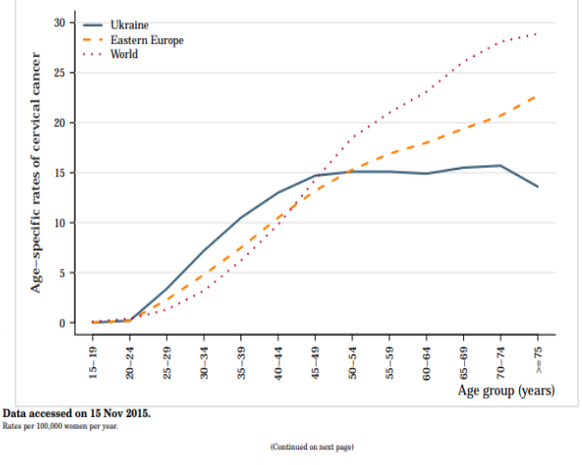

Figure X. Age-specific rates of cervical cancer mortality in Ukraine

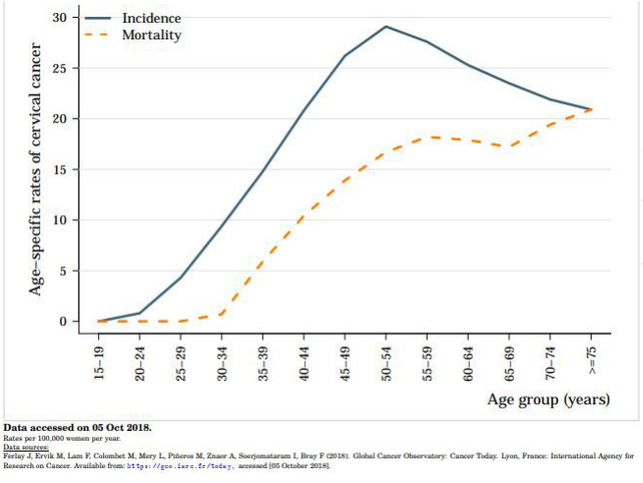

Figure X. Age-specific rates of cervical cancer mortality in Georgia

Case Study Georgia

Since 2017, Georgia has received support from the Gavi Alliance to vaccinate 9-year-old girls born in 2008 and 2009 free of charge until 2019, as a pilot project. The vaccine will be delivered to Tbilisi, Kutaisi and the two autonomous republics of Ajara and Abkhazia. If the pilot proves successful, the HPV vaccine will be gradually introduced into the country's vaccination programme. The support from the GAVI Alliance is intended to be one-time catalytic funding over a specified grant period.[27]

Countries that receive such funding are expected to mobilise domestic and/or external financing to cover the cost of sustaining the initial investment in immunisation system-strengthening activities once the grant period ends. The WHO provides support to countries that are in the process of transitioning out of Gavi support, such as through a comprehensive multi-year plan (cMYP).[28]

Case Study Romania

Romania has the highest incidence of cervical cancer and the highest associated mortality in the WHO European Region. Cervical cancer is the fourth leading cause of female cancer deaths in Romania, and the leading cause of cancer deaths in women aged 15–44 years. The country introduced a screening programme in 2012, and uses Pap smear tests with a five-year screening interval. Although women aged 25–64 are targeted, no more than 10% of the target population benefit from screening, as coverage remains low. Proper follow-up for women testing positive is not fully part of the programme, and no quality assurance process is in place for screening, diagnosis and treatment of screened women.[29] The Romanian Ministry of Health decided to roll out a school-based immunisation campaign in 2008, which provided HPV vaccines for girls aged 10–11 years. Coverage statistics revealed that only 2.57% of girls were vaccinated. The following year, an informal campaign was launched, followed by a second vaccination programme targeting girls aged 12–14 years. Adult women who had previously not been vaccinated were offered the opportunity to be vaccinated free of charge through a catch-up programme. Nevertheless, initiation remained low, and the school-based programme did not continue.[30]

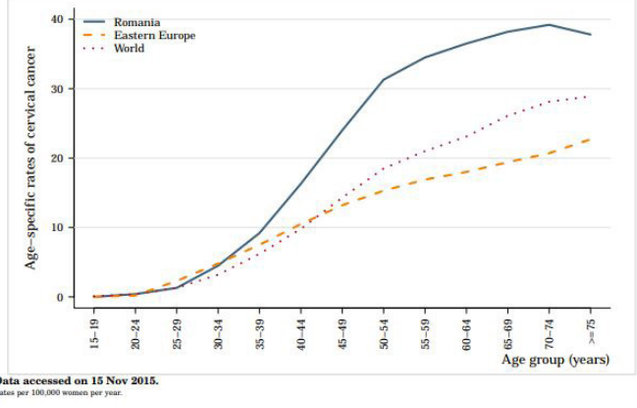

Figure X. Age-specific rates of cervical cancer mortality in Romania

Case Study Denmark

In Denmark, stories about the suspected side effects of HPV vaccines spread throughout media and online in 2014 led to many parents of girls around the age of 12 postponing vaccination. To build confidence in the vaccine and remind people about the risk of contracting cervical cancer, the Danish Health Authority, the Danish Cancer Society and the Danish Medical Association launched the campaign 'Stop HPV, Stop Cervical Cancer' in 2016. Articles about how to prevent cervical cancer were pitched to newspapers and lifestyle magazines throughout the country, and a Facebook page was created to help answer parents' questions and share stories.[31]

In October 2016, WHO/Europe initiated an informal peer sharing group to facilitate discussion and learning among HPV immunisation programmes in similar contexts in the European Region. Participants included representatives of national immunisation programmes in Austria, Denmark, France, Ireland, the Netherlands, Sweden and the United Kingdom; representatives of the Danish Cancer Society, the ECDC, GACVS and WHO/Europe; and press and media experts.[32]

7. WHAT HAS BEEN ACCOMPLISHED, AND WHAT REMAINS TO BE DONE?

Since the licensure of HPV vaccines in 2006, a great deal has been accomplished. HPV vaccines and cervical cancer programmes have entered the global agenda, creating national and international partnerships in combating the disease. In the WHO European Region, 33 countries have introduced HPV vaccine into routine immunisation programmes, and a significant number have also introduced catch-up programmes for young women. Some countries have also introduced the vaccine for boys.

Clear impact on reducing the spread of HPV

HPV vaccination has been shown to have a clear impact on reducing the spread of HPV. The immediate signs are reductions in the number of women with cervical lesions and a dramatic drop in the number of men and women suffering from genital warts. Studies from Australia and Denmark, which were among the first countries to introduce HPV vaccines, showed reductions of 80% in the number of high-grade cervical abnormalities, which are likely to lead to cancer if left untreated.[33] The HPV vaccination coverage rates in Europe vary from 30% to 80% with school-based programmes. Another study also finds that the greater the vaccination coverage, the more effectively the programme will prevent cervical cancer and other HPV-related diseases.[34]

Although many countries have introduced HPV vaccine into routine immunisation programmes, current vaccine uptake is lower than expected. Many countries have implemented national vaccination programmes and catch-up programmes, but it does not mean that they are easily available. There is a high cost in countries where the vaccine is covered by the recipient, and many countries do not provide effective cervical screening and HPV vaccination programmes. Cervical screening and cancer treatment is free of charge in most EECA countries, but very few cover the cost of following up a positive screening test or the treatment of precancerous lesions. There is no point in offering cervical screening for free, unless the treatment of precancerous disease is also free.[35] In the case of the EU, the European Council provides recommendations, but it is up to the Member States to make the final decision to adopt vaccination programmes at country and regional level. All Member States currently use vaccination to prevent severe and lethal conditions, but information collected from the ECDC shows that vaccination calendars, target populations and coverage levels vary among them.[36]

Misconceptions about vaccination

Although results on HPV vaccine safety have been provided by large trials and post-marketing studies, parents' and girls' anxiety regarding serious adverse events (AEs) and fear of unknown side effects are barriers to vaccination. Research shows that in Europe lower rates of vaccine intentions are associated with misconceptions about vaccination and fear of AEs. Ever since the HPV vaccines were introduced into national immunisation programmes, public opinion has been influenced by rumours of AEs. Sudden deaths have been connected to HPV vaccination but later disproved to have any causal relationship with the use of the vaccine. Good management of such events by public health authorities can prevent any negative impact on HPV vaccination programmes. However, this is not always the case. When public health authorities have had little evidence on the real cause of the AE, it has proven to have a serious impact on the vaccination programme.[37]

Verifying the absence of any association between the vaccine and deaths occurring after vaccination is of utmost importance. Although no deaths from the introduction of the two vaccines have been attributed to HPV vaccination, poorly investigated cases have left room for speculation.[38] In all countries, well-organised and active anti-vaccination campaigns are seen as the biggest threat to HPV vaccination programmes. It is important to identify whether and where vaccine hesitancy exists, to

monitor public confidence and to develop an understanding of the causes of vaccine hesitancy. The Guide to Tailor Immunization Programmes (TIP), developed by the WHO/Europe Vaccine-preventable Disease and Immunization Programme, could be useful for addressing this.

Increased knowledge

Increased research on the HPV vaccine has provided new evidence and filled knowledge gaps, but this new knowledge needs to be made more widely available to the general public so that they can gain a good understanding of the benefits of cervical screening and HPV vaccination and will be motivated to use these services.[39] Since the recommended age for vaccinating girls is 9–14 years, parental acceptance is necessary. Multiple studies in Europe have identified health care providers as the most important source of information on protection from vaccine-preventable diseases. Health organisations such as the ECDC and the WHO have published several guidelines to provide useful advice, based on scientific evidence that can be used by all health care personnel.[40]

Health care workers need to provide parents with information and reassurance about the safety and effectiveness of the vaccines.[41] As seen in Denmark, the introduction of the campaign 'Stop HPV, Stop Cervical Cancer', where parents received information from health professionals, led to twice as many girls starting the HPV vaccination programme.[42]

Knowledge and understanding of the benefits of cervical screening and HPV vaccination must also be provided to vulnerable groups, such as immigrant women and parents of young girls. Immigrant women tend to be less adherent because of challenges related to poor proficiency in the new language, literacy, perceived discrimination, and cultural sensitivity among health personnel.[43]

Raising public awareness

In recent years, many campaigns and events regarding HPV vaccination and cervical cancer have taken place around Europe. Public awareness campaigns are useful tools for influencing individuals to obtain vaccination against diseases, as they can rapidly communicate messages about vaccine effectiveness and the high prevalence of HPV to large numbers of people.[44] A growing number of people use the Internet to obtain health information, including information about vaccines. Scientific information needs to be written in appropriate, accessible language to provide the best information to all citizens.[45] Many countries already use social media platforms such as Facebook and Twitter to provide information about HPV vaccines to parents, and to encourage young women to take cervical tests.

Many women living with cervical cancer have also increased public awareness by sharing their stories. In 2014, a documentary called 'Someone You Love: The HPV Epidemic' shows how cervical cancer affects ordinary families and highlights the value of the HPV vaccine.[46] Communication is most likely to effectively reach young women and parents through channels that they identify with and trust. In Scotland, a multimedia campaign that included the Internet, TV and cinema was developed and implemented to raise awareness, understanding and acceptance of HPV immunisation among girls and their parents, and health care and education professionals.[47] A common strapline for all materials — 'Together we can beat cervical cancer' — and a brand image based on a schoolgirl talking to her friends were designed.

Global commitments

Although it is well known that prevention is key to avoid ill health, only a small fraction of health care budgets, political attention and stakeholder engagement have been dedicated to prevention. However, recent years have seen increased attention to prevention and the understanding of the importance of strong primary care, guided by the United Nations

2030 Agenda for Sustainable Development and its goal to reduce by one third premature mortality from non-communicable diseases through prevention and treatment. Investment in population health is not only valuable in itself, but also for economic growth and social inclusion.[48]

The dramatic fall in vaccine uptake and the re-emergence of preventable diseases in recent years have also shown that more information and focus on this topic are needed. In 2010, the estimated total global cost of cervical cancer was around US$2.7 billion per year. This is expected to increase to $4.7 billion by 2030, unless something is done now.[49] Global commitments, the establishment of the United Nations Joint Global Programme on Cervical Cancer Prevention and Control, as well as increased attention from civil society show that there is great will to put an end to the burden of cervical cancer.

Quite recently, global Heads of State were meeting on 26 and 27 September 2018 at the United Nations General Assembly in New York to discuss strategies to end tuberculosis (TB), as well as plans to put a stop to leading non-communicable diseases such as cancer. The Director-General of the WHO, Tedros Adhanom Ghebreyesus, said that governments must stand up for health and that presidents and prime ministers must become the champions of their people's health: "the UN is giving political leaders a unique chance to put the wellbeing of their citizens first. They should remember that promoting health pays dividends on many other fronts, too, from economic development to security."[50]

In short:

• Increase information to the general public of the benefits of HPV vaccination and cervical cancer screening through public awareness campaigns and different communication channels.

• Health care providers need to always provide accurate and up-to-date information and encourage patients to use these services.

• Providers must communicate effectively with HPV vaccine-hesitant parents. Tackling public misinformation about vaccines is important to increase vaccine uptake.

• Tailored information and service delivery may be necessary to increase cancer screening among immigrants.[51]

• Inform political leaders about the benefits of cervical screening and HPV vaccination, and encourage them to prioritise implementation of cervical cancer prevention programmes.[52]

• Mobilise resources for strengthening health systems and purchasing HPV vaccines, both nationally and internationally, and find innovative ways to finance HPV vaccination programmes.[53]

• Vaccination and screening programmes are potentially cost-effective and reduce the incidence and mortality rates of cervical cancer.

• Screening will remain fundamental for the prevention of cervical cancer, despite increased HPV vaccination. [54]

ENDNOTES

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