



HPV Vaccine Introduction: Communications & Intersectoral Collaboration

Lessons Learned from Georgia and Uzbekistan

THE CHALLENGE

In Mongolia, the Human Papillomavirus (HPV) vaccine is currently available on a voluntary basis, but the government seeks to include it within the national immunisation programme. The country is still reeling from a challenging 2012 pilot introduction of the vaccine in three regions which was significantly affected by misinformation and hesitancy from both the community and healthcare providers. As the Ministry of Health (MoH) prepares for a national introduction of the HPV vaccine, the country would like to design and implement strategies to mitigate and overcome these barriers to achieving high coverage to prevent cervical cancer.

THE LEARNING OPPORTUNITY

The Linked Immunisation Action Network (Linked) facilitated a study tour for Mongolia to learn from the experiences of two of its network peer countries – Georgia and Uzbekistan – that had introduced the HPV vaccine in 2019. Georgia's experience was shared by the country's EPI manager and the director from the Adjara region. Uzbekistan's experience was shared by a representative from the WHO country office.

Mongolia's key learning questions for Georgia and Uzbekistan were:

- What are the common factors that support or impede the successful implementation of HPV vaccination?
- How does country-specific and sub-national context influence NVI?
- What are strategies to improve health provider confidence and engagement when introducing HPV vaccine?
- How can you boost community engagement?
- How do you ensure strong intersectoral collaboration?
- What are good practices for sustaining vaccine coverage?

SUMMARY OF KEY TAKEAWAYS

- HPV vaccine introduction requires thorough planning, strong coordination, and clear communication with stakeholders within and external to the health sector. Preparatory activities for introducing the HPV vaccine are also more intense than those for other vaccine introductions.
- Formative research of target populations, caregivers, teachers, and healthcare providers can identify their level of awareness and perceptions of the HPV vaccine that could then be the foundation for a communications strategy to support high vaccine uptake.

- Communications strategies should recognize that the HPV vaccine is unique and consider a multi-stakeholder approach to counter the potential intensity of anti-vaccination movements, rumors, and misinformation.
- Because parents and caregivers have a high degree of trust in their primary healthcare providers, preparatory Introduction activities should ensure that they have the knowledge, confidence, and interpersonal skills to recommend the vaccine and address any concerns or misinformation.
- Similarly, because schools are often vaccination sites for the HPV vaccine, the health sector should coordinate and collaborate with the education sector from the outset and recognize the potential role of teachers to engage with students and caregivers to discuss the vaccine.

INTRODUCTION

While the safety and efficacy of HPV vaccines has been established for more than a decade, countries continue to encounter vaccine hesitancy resulting from misinformation, much of which originates on social media. While Georgia and Uzbekistan both introduced the HPV vaccine in 2019, their experiences were very different. A summary of the HPV vaccine introduction data and strategies for both countries can be found in Table 1. Like Mongolia, Georgia also experienced vaccine hesitancy and low vaccine uptake during its HPV pilot introduction. Unfortunately, their experience with nationwide introduction continues to face persistent coverage challenges, but Georgia has many lessons learned to share in the hopes that Mongolia may avoid similar challenges. In contrast, Uzbekistan’s introduction is largely viewed as a success with 98% of 9-year-old girls receiving a first dose in the first year, offering good practices and lessons learned for Mongolia and other countries planning HPV introduction.



1. Research conducted prior to introduction showed low knowledge about the vaccine among key populations.

To effectively lay the groundwork for introduction, both Georgia and Uzbekistan conducted formative research to better understand the population’s awareness and perceptions of the HPV vaccine. The findings were similar in both countries: low knowledge among parents and caregivers on the HPV vaccine, concerns about vaccine safety and adverse effects, misinformation on infertility risks, and misunderstandings about the age of the vaccine recipients and reasons for vaccination.

Both countries recognized the strength of existing connections between primary healthcare providers and their target populations. However, providers often lacked the skills to effectively respond to caregivers’ concerns or misinformation, and they too had low confidence in the

vaccines. Doctors feared the reactions from parents if there were adverse reactions or side effects from the vaccine.

2. The HPV vaccine is unique, and the communication strategy for its introduction should reflect the potential misinformation and hesitancy confronting healthcare providers and caregivers.

When Uzbekistan had to delay its national HPV vaccine introduction due to a global vaccine supply shortage, the country used the opportunity to learn from the HPV vaccine introduction experience of a peer country. From a study tour to Moldova, the team from the Uzbekistan Expanded Program on Immunisation (EPI) learned how to communicate about vaccines, collaborate with multiple stakeholder groups, and engage the media. They also held roundtable discussions with the Ministry of Public Education, international



partners, local parents' organizations, journalists, academic institutions, and prominent medical professionals. The insights and learnings gained from these efforts were then translated into an effective vaccine communications plan, which included a crisis communications plan.

Uzbekistan developed strong HPV vaccine awareness campaigns for which they applied different communication tools and approaches. Training sessions were organized for television, radio, and print journalists before the start of the vaccine rollout. These sessions provided the media with the relevant information journalists needed on the HPV vaccine and a list of people who could provide more information. MoH specialists answered questions about HPV in Facebook live streams, and on TV and radio programs. On a doctors' group's social media page, they drafted a detailed post with answers to their most frequently asked questions about HPV vaccination. Experts were also featured in popular online women's magazines and in live streams with blogger-moms. Despite this preparation and outreach, Uzbekistan still had to combat an anti-vaccination movement, but its impact was far less significant than its peers in the region.

Traditionally, Georgia had a strong national immunisation programme with no serious hesitancy issues related to vaccines in the routine immunisation schedule, so they lacked the experience and capacity to prepare for and manage the intensive vaccine misinformation and disinformation challenges they encountered with the HPV vaccine. The country worked with healthcare providers of various specialties, professional associations, and the media to develop and disseminate communication materials for different target groups, but in contrast to Uzbekistan's experience coalescing stakeholders to speak with one voice about HPV vaccination, information campaigns and media engagement lacked intensity and consistent messaging. The National Center for Disease Control (NCDC) of Georgia worked with prominent gynecologists, healthcare providers, and local authorities to promote HPV vaccination, but the activities were not always aligned with

the country's communication strategy. Local CSO interest and participation in advocacy and communication was also low. In reflecting on their experience, Georgia also felt they could have done better to address and manage rumors on social media, actively engage journalists, and communicate directly with parents.

3. A successful HPV vaccine introduction will ensure that healthcare providers and teachers have sufficient knowledge and confidence to recommend the vaccine.

Georgia was particularly challenged by the perceived lack of interest among healthcare providers to better understand and promote HPV vaccination. Efforts by primary healthcare immunisation providers, pediatricians, and gynecologists to increase HPV vaccine uptake were also extremely limited. The country later recognized the need to engage these providers in the preparatory stages and to provide additional training on the HPV vaccine. Furthermore, the trainings that

did take place were separate for doctors, nurses, and gynecologists, and their recommendation was to bring groups together for a multidisciplinary training. Because Uzbekistan had implemented school-based vaccination for routine vaccines prior to the HPV vaccine introduction, teachers' knowledge and attitudes toward immunisation generally, and for the HPV vaccine specifically, were more positive. Without this previous sensitization, teachers in Georgia's school system did not yet have the capacity to discuss immunisation and vaccines with caregivers. Although local public health authorities worked with schools to increase their awareness, their confidence in communicating with children and caregivers was limited. Georgia later reflected on the need for additional collaboration with the education sector to further build the capacity of teachers supporting school-based vaccination.

Also, of note is the fact that Uzbekistan law does not require parental consent for vaccination - only notification. Both Georgia and Mongolia require a completed parental consent form for vaccination. These regulatory differences may also have contributed to Uzbekistan's higher rate of vaccine uptake.

4. Subnational performance variations could be leveraged as a learning opportunity.

While HPV vaccine performance across Georgia struggled, the exemplary performance in the Adjara region provided lessons for the rest of the country. Better performance in this region was the result of several factors: highly active and engaged local health authorities and healthcare providers, strong support for immunisation programming, high levels of trust between the

HPV vaccine introduction is a complex task that requires collaboration between many actors within and outside the health sector. Some actors may not immediately understand their role. Allocate enough time to gain their support. Find out which actors can influence and contribute to the planning and implementation of activities at different levels. Actively engage with them to define their roles and responsibilities at each stage and maintain clear communication. This will make the implementation process efficient and easy and increase ownership of the process. - Renat Latypov, WHO Uzbekistan

population and healthcare providers, and strong collaboration between local public health authorities and schools in promoting vaccination.

The Adjara public health authorities coordinated with local media, radio, and TV channels to feature information about the HPV vaccine. They held meetings and capacity building sessions with healthcare providers, including family doctors, pediatricians, and gynecologists. There were also meetings with parents and grandparents at the schools to discuss the HPV vaccine. Public health professionals worked with teachers in-person to build their capacity to discuss the vaccine with eligible children.



CONCLUSION

HPV vaccine introduction is a complex process that involves collaboration among many stakeholders within and outside the health sector. Vaccine introduction can be strengthened with thorough planning, strong coordination, and clear communication with these stakeholders at each stage. Both Georgia and Uzbekistan noted that preparations for introducing the HPV vaccine are more intense than those for other vaccine introductions. The contrasting introduction experiences in Georgia and Uzbekistan highlight the need to devote sufficient time and effort to the development of a thoughtful and inclusive communications strategy, engagement of stakeholders, and capacity building among healthcare providers and teachers. Countries should not underestimate the potential intensity of misinformation and hesitancy around the HPV vaccine, or the need to build the capacity of healthcare providers and teachers to effectively discuss the vaccine and respond to the concerns of caregivers and children.

Table 1: Key takeaways on HPV vaccination data and strategies

Data/strategies	Georgia	Uzbekistan
Epidemiology of cervical cancer (per 100 000 women), 2020^{1,2}		
Incidence	15.7	11.3
Mortality	9.8	6.5
Prioritization	5th most frequent cancer among women; 2nd most frequent cancer among women between 15 and 44 years of age. Annually, 327 women are diagnosed with cervical cancer and about 200 women die from the disease.	2nd most frequent cancer among women. In 2020, about 1900 women were diagnosed with cervical cancer and 1103 women died from the disease.
Introduction strategies		
Introduction phases and dates	Demonstration pilot project + Nationwide introduction	Nationwide introduction

¹ Georgia: Human Papillomavirus and Related Diseases, Summary Report 2022 (hpvcentre.net)

² Uzbekistan: Human Papillomavirus and Related Diseases, Summary Report 2022 (hpvcentre.net)

Age-group	<ul style="list-style-type: none"> • Demo project for 3 regions (2018–2019): 9–10-year-old girls • Nationwide introduction after post-introduction evaluation and change in age to girls aged 10–12 (since 2019) 	<ul style="list-style-type: none"> • Nationwide introduction (2019): 9-year-old girls • Extension to girls aged 12–14 (since 2021)
Preparation	<ul style="list-style-type: none"> • Formative research • Trainings of PHC personnel • Post-Introduction Evaluation (PIE) 	<ul style="list-style-type: none"> • Study tour to Moldova to learn about communication strategy • Formative research, WHO supported • Trainings of PHC personnel, doctor specialists, teachers, journalists
Communication	<ul style="list-style-type: none"> • Communication strategy and crisis communication plan (developed, not fully implemented) • Communication campaigns through media • Engagement of doctors 	<ul style="list-style-type: none"> • Communication strategy and crises communication plan (developed and well implemented in practice) • Social media monitoring • Webpage for community interaction • Engagement of parents, teachers, community groups, healthcare providers, journalists • Large scale continuous information campaigns: media, social media, meetings and conferences, talk shows, celebrity involvement
Service delivery	<ul style="list-style-type: none"> • Private for-profit clinics 	<ul style="list-style-type: none"> • Public clinics • School-vaccination services • Outreach campaigns
Sustainability	<ul style="list-style-type: none"> • Nationwide introduction • Financing from the state budget 	<ul style="list-style-type: none"> • Nationwide introduction • Financing from the state budget • Strong intersectoral partnership • Capacity to advocate for NVI
Coverage data		
Demonstration project, 2018–2019	<ul style="list-style-type: none"> • High difference among pilot regions (from 87% in Adjara to 10–19% in Tbilisi) 	<ul style="list-style-type: none"> • N/A
Nationwide introduction, 2019–2021	<ul style="list-style-type: none"> • Decline in coverage from 12–30% due to COVID-19 pandemic • High difference among regions (from 48% in Adjara to 10–19% in Tbilisi) 	<ul style="list-style-type: none"> • Coverage of different age groups in 2019–2021 varies between 97–99%

If you are interested in a peer-to-peer learning exchange with another country to discuss new vaccine introduction, please reach out to the Linked Immunisation Action Network at community@linkedimmunisation.org.