The introduction of human papillomavirus (HPV) vaccine has the potential to save the lives of millions of women and girls worldwide. Based on a review conducted by the London School of Hygiene & Tropical Medicine and PATH, this brief highlights findings, key lessons and recommendations relevant to the theme of HPV vaccine communications.

Findings and key lessons

FORMATIVE RESEARCH AND MESSAGES
Only seven countries in the review indicated that they had conducted formative research to inform communications activities. They found that knowledge of cervical cancer, HPV and HPV vaccination was low in communities, including among teachers and health workers.

When developing messaging, most projects/programmes framed vaccination as preventing cancer rather than preventing a sexually transmitted infection. This was because audiences related better to cervical cancer prevention. Furthermore, health decision-makers were concerned that associating HPV vaccination with sexually transmitted infections might increase stigma and decrease parental acceptance. Secondary messages focused on vaccine safety and efficacy, where and how it would be delivered, whether consent was necessary, and countering misinformation or specific rumours.

Several countries reported rumours. The range of rumours was limited and the content was consistent: fear that HPV vaccination might reduce fertility or cause adverse events. Strategies to address rumours included tailoring of messages to counter specific fears, vaccine endorsements by high-level officials, and dissemination of letters detailing World Health Organization or government endorsement of the vaccine’s safety.

**Key lesson:** Most countries used the following messages to encourage parental and community acceptance: HPV vaccine prevents cervical cancer, is safe, will not harm future fertility, and is endorsed by the government and the World Health Organization.

MATERIALS AND TACTICS
Countries employed multiple communication channels to deliver messages. Interactive methods included individual or group meetings at schools and health facilities with teachers and health workers. Noninteractive methods included leaflets, posters, community announcements, radio, television and social media.

Communication was reported to be most effective when delivered by ‘credible influencers’, such as health workers, teachers and community or religious leaders. Most parents reported that they first learned about the vaccine from meetings and other communication with health workers or teachers. They also reported a preference for interactive information sources.

**Key lesson:** Face-to-face interaction was the most effective way of mobilising parents and communities, especially with groups that were likely to refuse vaccination or that were exposed to antivaccination rumours.

**Key lesson:** The most effective influencers were health workers, teachers and community leaders.
SOCIAL MOBILISATION TIMING AND SEQUENCING
Most countries that reported data began mobilisation activities at least a month before vaccination; the success was greatest when activities were coordinated with health, education and community leaders. Implementation activities included health worker and teacher training, and meetings with parents or students. These activities were conducted by nurses, school leaders or teachers. A few demonstration projects used house-to-house visits, which were well received. While the timing of social mobilisation activities did not seem to affect coverage, projects/programmes reporting delays in social mobilisation indicated that implementation was difficult.

Key lesson: Community sensitisation and mobilisation activities that were conducted at least one month prior to vaccination were most effective.

ACCEPTABILITY
Among eight countries that conducted postvaccination acceptability surveys of parents or caregivers, the most common reasons parents agreed to vaccination were because vaccines are good for health and they protect their children from cancer and infection/diseases.

Information related to acceptance and refusal of HPV vaccine was obtained from 37 delivery experiences in 28 countries. Twenty-six delivery experiences had a documented acceptance rate or numerical value associated with acceptance. Those most likely to refuse vaccination were parents (in seven projects/programmes), private schools (in eight projects/programmes) and religious or antivaccine groups (in seven projects/programmes). In four projects/programmes, the opinion of health workers not involved with vaccination also influenced parental refusal, highlighting the importance of health provider education. Some projects/programmes noted that, with persistent sensitisation through community influencers, vaccine acceptability increased in communities that were initially reluctant to accept the vaccine.

Eleven countries provided data from surveys on why HPV vaccination was not started or completed. The three most common reasons cited by parents for not starting vaccination were fear of adverse effects, lack of awareness of the project/programme, and absenteeism during school vaccination days. Once started, the main reasons for noncompletion were logistical.

Key lesson: Logistical challenges, such as lack of awareness of vaccination days and school absenteeism, were common reasons for nonvaccination and incomplete vaccination.

Key lesson: Vaccine safety concerns, rumours and attending a private school were associated with nonvaccination.
CONSENT

Seventy-one out of 92 delivery experiences had data on the parental consent method for HPV vaccine. Consent policies were largely aligned with country-specific national policy. Opt-in consent (where parents must agree to vaccination) was used in almost half of delivery experiences, while 27% used opt-out consent (where vaccination proceeds unless parents indicate otherwise). Fifteen percent used a mixture of opt-in and opt-out at the request of private schools and 10% of delivery experiences switched from opt-in to opt-out.

Thirteen countries reported that using an opt-in policy, when opt-out policies were used for other vaccinations, led to suspicions that HPV vaccine was more risky than routine vaccines. Seven other countries changed to an opt-out strategy after one year of implementation. Experiences showed that a lengthy or complex consent process resulted in some girls missing the opportunity to be vaccinated.

Key lesson: Opt-in consent, where not used for routine vaccines, increased rumours that the vaccine was experimental and unsafe. An opt-out approach appeared acceptable where implemented.

Key lesson: Lengthy consent procedures decreased consent/uptake, as parents found it logistically difficult.

Recommendations

Based on country experience, decision-makers conducting communications for future HPV vaccine programmes should:

1. **Develop a communication plan to inform social mobilisation activities.** This should include strategies to prevent and manage rumours, measures to adequately mobilise private schools, training to sensitise health workers not involved in HPV vaccination, and a plan for delivering messages to out-of-school and hard-to-reach girls.

2. **Engage early with community groups, including schools and churches.** In-person meetings are the most effective method for increasing acceptance and confidence in vaccination.

3. **Focus messages on cervical cancer prevention, vaccine safety and efficacy, government endorsement, and when and where to get vaccinated.** Train teachers, community leaders and health workers to deliver messages, and adequately respond to questions and concerns from parents and the community.

4. **Tackle emerging rumours as soon as possible.** To do so, use respected institutions and high-level officials.

5. **Begin social mobilisation at least one month before vaccination.** In addition, ensure adequate and timely funding and preparation time to develop social mobilisation materials.

6. **Ensure consistency with existing consent policy.** Where possible, use opt-out processes and determine whether the consent process should be modified in private schools.