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Reaching adolescent girls with the HPV vaccine

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HPV vaccines

- HPV vaccines were first introduced in 2006 on a three-dose schedule.
- In 2014, the WHO reduced the schedule from three doses to two doses, following an evidence review by SAGE.
- In June 2022, WHO SAGE endorsed the optimization of HPV vaccine schedules, noting that a single dose offers solid protection against cervical cancer.

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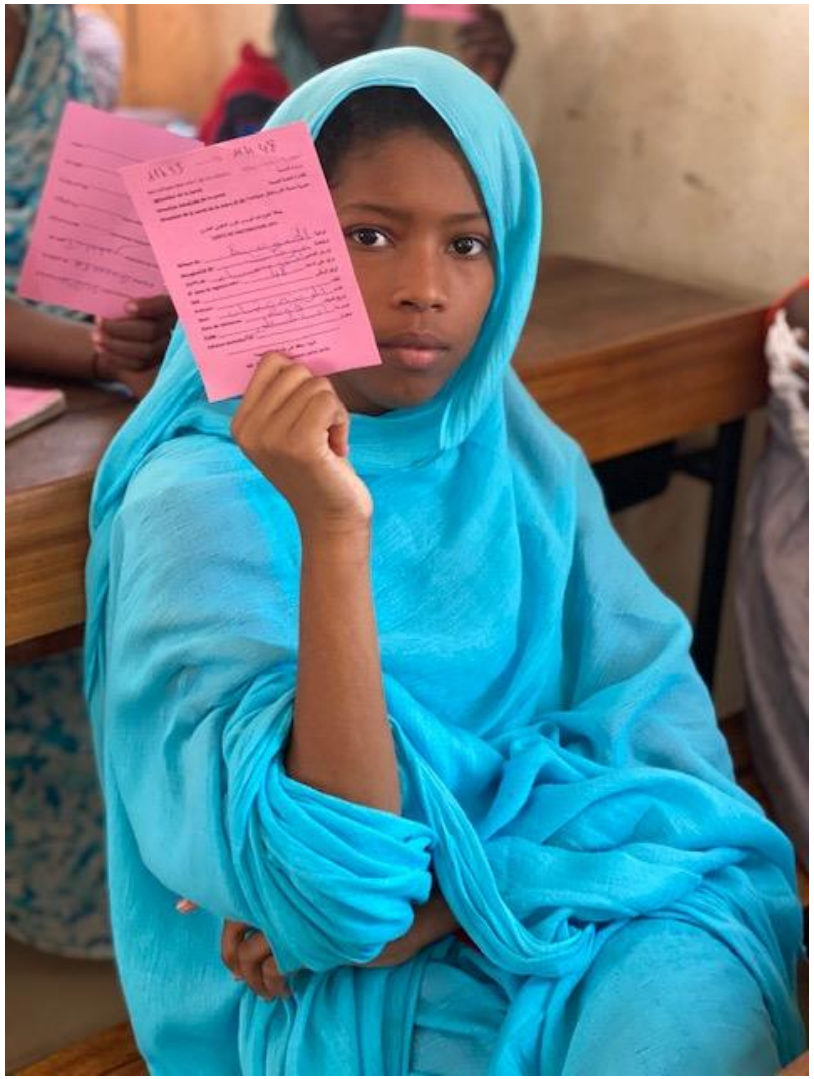
Why was implementation research needed for HPV vaccination programs?

Adolescent girls are not normally targeted by routine immunization programs outside of mass single-dose or catch-up campaigns targeting multiple age cohorts.

- New age group : 9- to 14-year-old girls
- New vaccine; multi-dose regimen
- Cultural and social concerns around vaccinating girls
- Competing health priorities:
  - Existing program and other new vaccines



HPV demonstration projects – Gavi funding

- From 2012 to 2016, Gavi provided support for countries to conduct small-scale demonstration projects for the introduction of the HPV vaccine.

- During the two-year demonstration projects, Gavi provided each country with:

    - Sufficient HPV vaccine supply to vaccinate a target population of up to 15,000 adolescent girls and cash support for operational costs (excluding vaccine).

    - The cash support totaled either US$4.80 per girl or $50,000 in the first year, whichever was greater, and either US$ 2.40 per girl or $25,000 during the second year

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HPV demonstration projects - Objectives

- Not an experiment on the safety or efficacy of the vaccine itself.
- Demonstrate the most effective ways to deliver the vaccine.
- Enable countries to assess the coverage, feasibility, acceptability, and cost of their vaccination strategy before continuing to national scale-up
- Generate critical data and experience for evidence-based decision-making, strengthening essential health system capabilities, and creating a supportive social and political climate.

What are the components of HPV vaccine demonstration projects?

Part 1. Vaccine Implementation

Part 2. Operational Research

What did we learn and how did those lessons inform practice?

Lessons learned and recommendations for decision-makers on several themes:

- Planning and preparation
- Communication and social mobilization
- Vaccine delivery
- Program costs
- Sustainability
- Integration with other adolescent health services

Lessons learned – Planning and preparations

- Close collaboration and timely planning across health and education sectors (and finance for national programs) critical for implementation and sustainability.

- Allow at least 9 months for planning process.

- Coordinating transportation of HPV vaccines with routine vaccines reduced logistical challenges and costs.

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Lessons learned – Communication and Social Mobilization

- Key messages: HPV vaccine prevents cervical cancer, is safe, will not harm future fertility and is endorsed by government and WHO.
- Most effective influencers: health workers, teachers, community leaders.
- Community sensitization and mobilization activities conducted at least 1 month prior to vaccination were most effective.
- Vaccine safety concerns and rumors were associated with non vaccination.
- Opt-in consent (where not standard practice) increased rumors.
- Urban and private school parents often require more information and messaging than others.

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Lessons learned – Vaccine Delivery

- Delivery of the vaccine in schools is the most effective strategy to reach most 9- to 14-year-old girls but were resource intensive.
- Grade-based delivery strategy easier to implement. Age-based strategy easier to explain but could cause greater disruption in school.
- Engaging community health workers increased acceptance and helped identify girls who missed doses or were out of school.
- Estimating target population posed challenges.
- Microplanning included establishing reliable registers validated during first-dose delivery.
- Delivery of all doses within 1 school year minimized dropouts and facilitated tracking to complete all doses.

Experience gained from demonstration projects

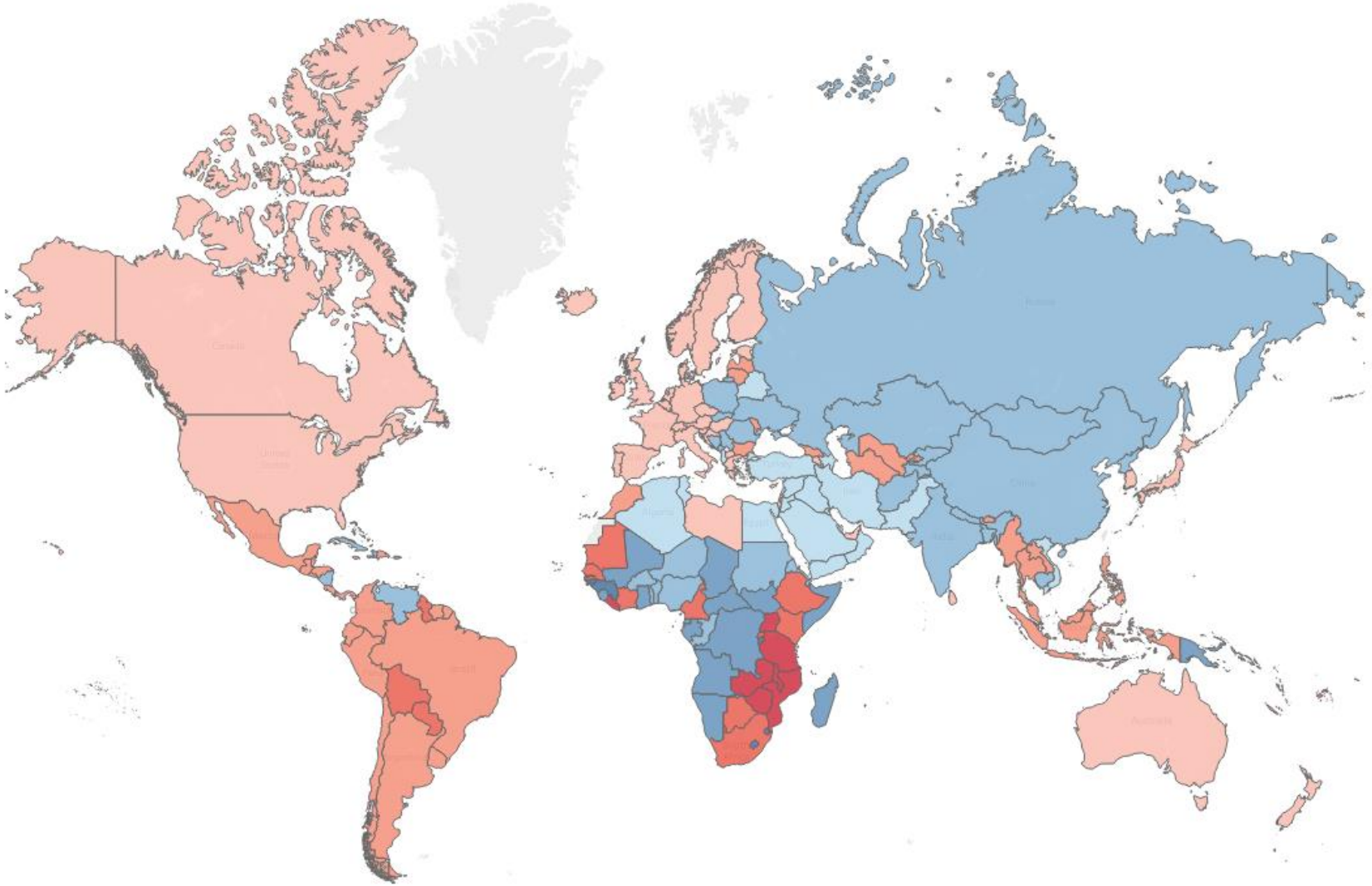
Factors associated with **high coverage**:

- Strategies using schools and collaboration with education sector at national and local levels.
- Inclusion of approaches to also reach out-of-school girls.
- Comprehensive social mobilisation, including use of ‘credible influencers’.
- Use of vaccination registers and cards.

Factors associated with **low coverage:**

- Health-facility-only delivery strategies.
- Ineffective coordination and planning with schools.
- Rumors that caused schools to refuse vaccinators.
- Other factors: delay in receipt of social mobilisation and school-delivery funds, not providing a second opportunity for girls who missed the first dose.

Global HPV vaccine introductions by burden of disease



KEY

Mortality rate (ASR)*

National introduction		No introduction
	<5	
	5 - 14.9	
	15 - 29.9	
	≥30	

*rates per 100,000 women per year; estimated 2020 cervical cancer mortality rates from IARC Globocan data

As of March 2022, 149 countries have national programs in place

PATH. *Global HPV Vaccine Introduction Overview*. Seattle: PATH; 2022, Available at https://path.azureedge.net/media/documents/Global_Vaccine_Intro_Overview_Slides_Final_PATHwebsite_MAR_2022_qT92Wwh.pdf.

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Questions remaining

- How to reach out-of-school girls?
- How to optimize vaccination delivery strategies in schools and in the community?
- How to better enumerate target population and improve coverage data estimation?
- How to reduce program costs?
- How to successfully integrate HPV vaccination with other adolescent health services or school health programs?


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