



COALITION to STRENGTHEN  
the HPV IMMUNIZATION  
COMMUNITY



# Opportunities for integrating HPV vaccination program with adolescent health services

Presented by:

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CHIC SPC Symposium

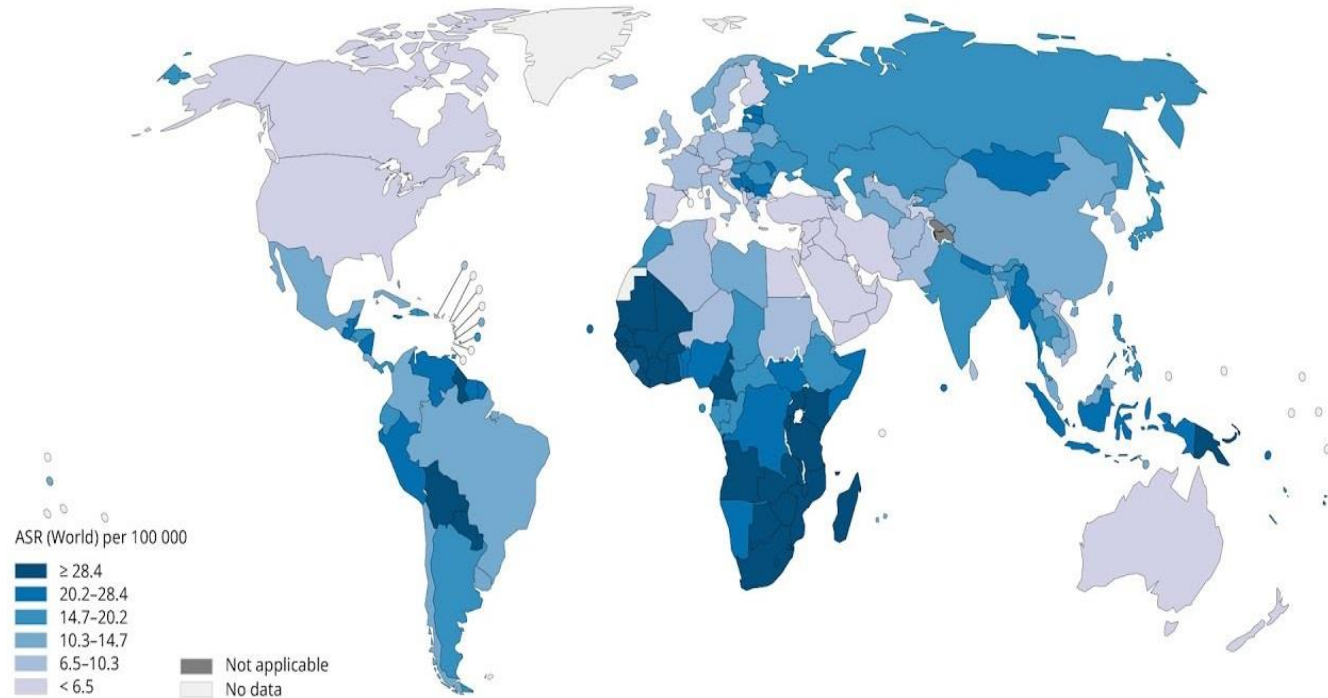
HPV Vaccination Programs: From Pre-introduction Planning to Restoration and Sustainability

24 – 25 Sept 2022 – Addis Ababa, Ethiopia

- **Background**
- Integration of HPV vaccination with other health services
- Cervical cancer & HPV vaccination in Cameroon
- Mapping of interventions for HPV vaccination integration in Cameroon
- Way forward

With about 604,000 new cases and an age standardized rate of 13.3/100,000 in 2020<sup>1</sup>, cervical cancer ranks as the fourth most common cancer among women worldwide and remains a global public health problem.

The burden of cervical cancer is unequally borne across the globe, with about 90% of the estimated 342,000 deaths related to the disease in 2020 occurring in low- and middle-income countries (LMICs)<sup>1</sup>. The high mortality rate recorded in LMICs is further accentuated by the limited access to preventative, screening and treatment services for cervical cancer in these settings.

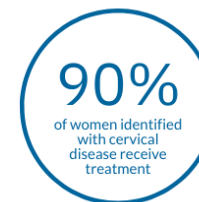
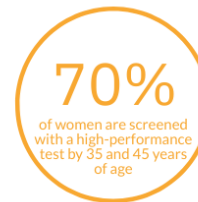


**Figure 1:** Global distribution of the burden of cervical cancer (figure from IARC 2020 based on Globocan 2018 data).

<sup>1</sup> <https://www.who.int/news-room/fact-sheets/detail/cervical-cancer>

# The high mortality rate from cervical cancer globally and in low-and-middle-income countries particularly, could be reduced by effective interventions at different stages of life.

- Eliminating cervical cancer requires that an incidence rate lower than 4/100,000 women is achieved and sustained, a goal which rests on three key pillars:



In LMICs where access to screening and treatment services for cervical cancer is poor, achieving and sustaining high HPV vaccination coverage is critical and central to curbing the burden of cervical cancer and other HPV-associated cancers. However, only about 1% of women targeted by HPV vaccination programs are from LMICs, with only just 2.7% of females aged 10-20 years in LMICs receiving the full course of the vaccine as compared to 33.6% in high income settings<sup>2</sup>.

- The particularly low coverage in LMICs is driven by several factors, amongst which the difficulties related to implementing a multi-dose vaccination program and targeting adolescents, a particularly challenging age group to reach with preventative health services<sup>3</sup>.

<sup>2</sup> Bruni L, Diaz M, Barrionuevo-Rosas L, Herrero R, Bray F, Bosch FX, et al. Global estimates of human papillomavirus vaccination coverage by region and income level: a pooled analysis. *The Lancet Global Health*. 2016 Jul;4(7):e453-63

<sup>3</sup> Nordin JD, Solberg LI, Parker ED. Adolescent primary care visit patterns. *Ann Fam Med*. 2010 Nov-Dec;8(6):511-6. doi: 10.1370/afm.1188.

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# Integrating HPV vaccination into adolescent/health services could increase access to the vaccine and raise vaccination coverage.

The integration of vaccination with other services precedes the HPV vaccine, with the use of infant immunization platforms to provide hearing screening, HIV services, vitamin A supplements, deworming etc<sup>4</sup>. The importance of utilizing available opportunities to promote adolescent health is well established and explains the exploration of integrating HPV vaccination with services relevant for adolescent health across several LMICs.



Bhutan linked HPV vaccination with the deworming program



Rwanda delivered the HPV vaccine together with a booster dose of Measles/Rubella



Tanzania used a school-based approach combining health education, de-worming, nutrition, vision screening with HPV vaccination



Uganda combined HPV vaccination with Child Health days and deworming



Panama integrated HPV vaccination into the routine school health program for adolescents



Kenya integrated HPV vaccination in Covid-19 vaccination outreaches.

By June 2017, about 46 LMICs had conducted demonstration projects to assess the most suitable strategies for the nationwide introduction of the HPV vaccine, with 42 delivering the vaccine via schools as a primary strategy or combined with health facility and/or outreach vaccination<sup>5</sup>

<sup>4</sup>Wallace AS, Ryman TK, Dietz V. Experiences integrating delivery of maternal and child health services with childhood immunization programs: systematic review update. *J Infect Dis* 2012;205(Suppl 1):S6–S19. <https://doi.org/10.1093/infdis/jir778>.

<sup>5</sup>Gallagher KE, Howard N, Kabakama S, Mounier-Jack S, Griffiths UK, Feletto M, et al. Lessons learnt from HPV vaccination in 45 low- and middle-income countries. *PLoS ONE* 2017; 12(6): e0177773. <https://doi.org/10.1371/journal.pone.0177773>

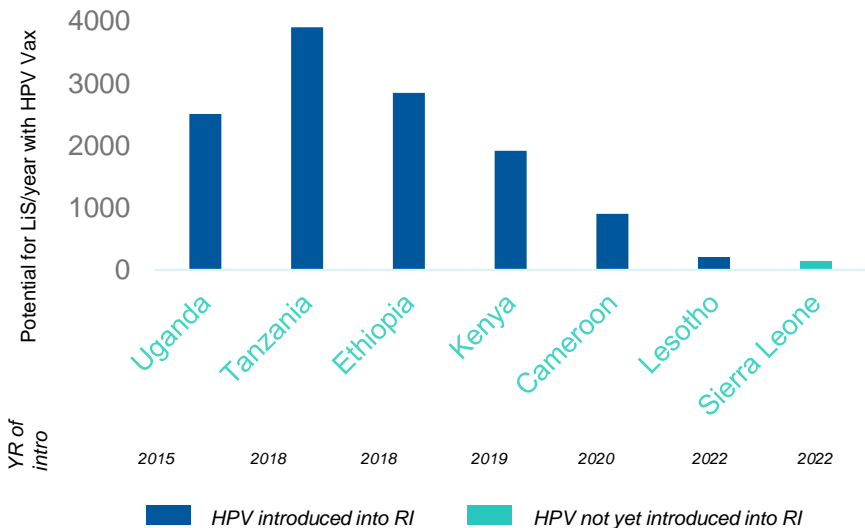
# Since 2017, CHAI has supported 7+ countries<sup>1</sup> to accelerate introduction and sustainably reach target HPV coverage

Focus of today's presentation

CHAI is currently supporting 7 countries with HPV introductions to avert nearly ~13,000 deaths/year ...

In 3 countries, we are exploring strengthening adolescent linkages to increase HPV coverage and sustainability

Potential for annual LiS in CHAI focal countries after HPV vaccine introduction



- Mapping adolescent and youth services, cancer program, and other initiatives, policies, and strategies
- Evaluating strategies for linking HPV w/ other programs for scale
- Updating national policies or strategies to include identified best practices from integration with other programs

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# In Cameroon, cervical cancer is the second most frequent cancer among women (2,770 new cases and 1,787 related deaths annually), motivating the introduction of the HPV vaccine to girls aged 9 years in October 2020.

- As of June 2021, coverage remained poor at **21,4% for HPV1** and **2,8% for HPV2**, almost a year after the introduction.
- To identify uptake barriers CHAI supported the EPI to conduct a post-introduction assessment across 101 randomly selected health district in all 10 regions of Cameroon in June/July 2021. The assessment consisted of desk reviews (review of data from DHIS-2, meeting reports and annual workplans on various immunization indicators) and Key Informant interviews (377 participants from the health and education sector, and the community) to assess various aspects of the HPV vaccine introduction.

## Key findings

### Planning & coordination

Limited engagement of key stakeholders (religious leaders, education authorities, health care workers caused considerable hesitancy and poor buy-in.

### Human resources

Insufficient health care worker (HCW) knowledge on HPV resulting in several missed opportunities to vaccinate.

### Service delivery

Low use of the school-based delivery with only 35% of sampled facilities conducting school outreaches and 8.7% of school administrators confirming HPV vaccination in their schools.

### Communication and social mobilization

Limited advocacy, communication, and social mobilization (ACSM). Only 24% of sampled facilities received communication materials and 100% stated communication as a major challenge.

## Recommendations

### Map and Engage

Map out all stakeholders needed to be involved in the processes and implementation at all levels, vigorously engage them and **explore avenues for linkage/integration with HPV vaccination.**

### Reignite and Reinvigorate

Reignite and reinvigorate HPV technical working groups at regional, district and HF level. Develop/revise TORs for multiple stakeholder engagement and accountability mechanisms to make sure meetings are held and activities are implemented

### Communicate Process & Monitor

Ensure plans from regional level are communicated to the lowest level. Also ensure that there are pathways for communication from lower levels to higher levels to address all concerns.

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## In addition to implementing other recommendations from the assessment, CHAI explored opportunities for HPV integration with other health services in Cameroon to boost coverage.



In line with the “Map and Engage” recommendation from the post introduction assessment, CHAI supported the EPI, in Q3 of 2022, to map and prioritize adolescent services for potential integration with HPV vaccination to boost coverage. Specifically, the aim was to:

- 1 Identify stakeholders involved in adolescent health and youth services, cancer prevention activities or initiatives, policies and strategies
- 2 Identify policies and strategies targeting adolescent health, youth services or cancer prevention activities
- 3 Prioritize potential interventions for integration with HPV vaccination

To achieve these objectives, a four-prong approach was utilized:



### **A** Desk reviews

Identification of stakeholders through review of country level interventions targeting adolescents and cervical cancer.



### **B** Stakeholder interviews

Key informant interviews with program managers meeting the inclusion criteria. Purposeful sampling method with a consecutive data collection. Target of 20 key informant interviews set



### **C** Data collection

using a Pre-tested and validated questionnaire via online, in-person or phone interview.



### **D** Analysis

Qualitative analysis using thematic coding focused on target population, delivery model, time frame, human resource capacity, funding availability and willingness for HPV vaccine integration

## Identified interventions were prioritized based on feasibility and potential impact of integrating HPV vaccination with the concerned intervention

Category	Criteria
Feasibility	<b>HR</b> – Whether there is adequate HR to support HPV integration and the ability to recruit extra HR for the integration if necessary.
	<b>Timeline</b> – Time left prior to the end of the project.
	<b>Funding</b> – Financial resources available for execution of project activities:
	<b>Will</b> – willingness of stakeholder to integrate HPV vaccination and the ability to support this integration in one or more ways.

Category	Criteria
Impact	<b>Target population</b> – Population group directly concerned by the intervention.
	<b>Service delivery model</b> – Interventions which offered the opportunity to directly vaccinate girls were deemed to be more impactful.
	<b>Frequency</b> – How often the intervention is implemented and therefore provides access for service delivery. Frequently running programs were scored highest and vice versa
	<b>Project duration</b> – Projects with longer durations will provide longer access for HPV vaccination integration and vice versa. Longer projects were scored higher and vice-versa

A total of 21 health and non health projects/interventions targeting adolescents were identified and 8 prioritized including the **school health** and **deworming program**. CHAI supported to develop theory of change frameworks with key objectives and success enablers mapped out for implementing these integration interventions

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CHAI is currently working in close collaboration with the EPI to test the most promising integration approach identified - leveraging the school health program.

- The pilot, scheduled for implementation in Q4 of 2022, will assess the acceptability and feasibility of delivering the HPV vaccine in a one dose schedule and gender-neutral manner via school outreaches, and explore optimizing the delivery of HPV vaccination in facilities through systematic screening.
- Through the pilot, CHAI will equally outline operational details, procedures and key stakeholders to engage for the successful delivery of the HPV vaccine via the aforementioned approaches. This is particularly important given that a clear description of processes involved is usually the missing piece from integration and demonstration efforts.<sup>6</sup>
- Results and learnings from the pilot will provide invaluable insight needed to inform the revision and update of HPV vaccination strategies in Cameroon, to ensure sustainably high coverage of HPV vaccination.

<sup>6</sup>Morgan C, Giattas MR, Holroyd T, Pfitzer A, Engel D, Sidibe A. Integration of other services with human papillomavirus vaccination; lessons from earlier in the life course highlight the need for new policy and implementation evidence. *Vaccine* 2022; 40: A94–A99

