



Current Status of HPV Vaccination in South Asia

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Disclosures

- No financial relationships or conflict of interest to disclose

HPV vaccination as part of National immunization programs

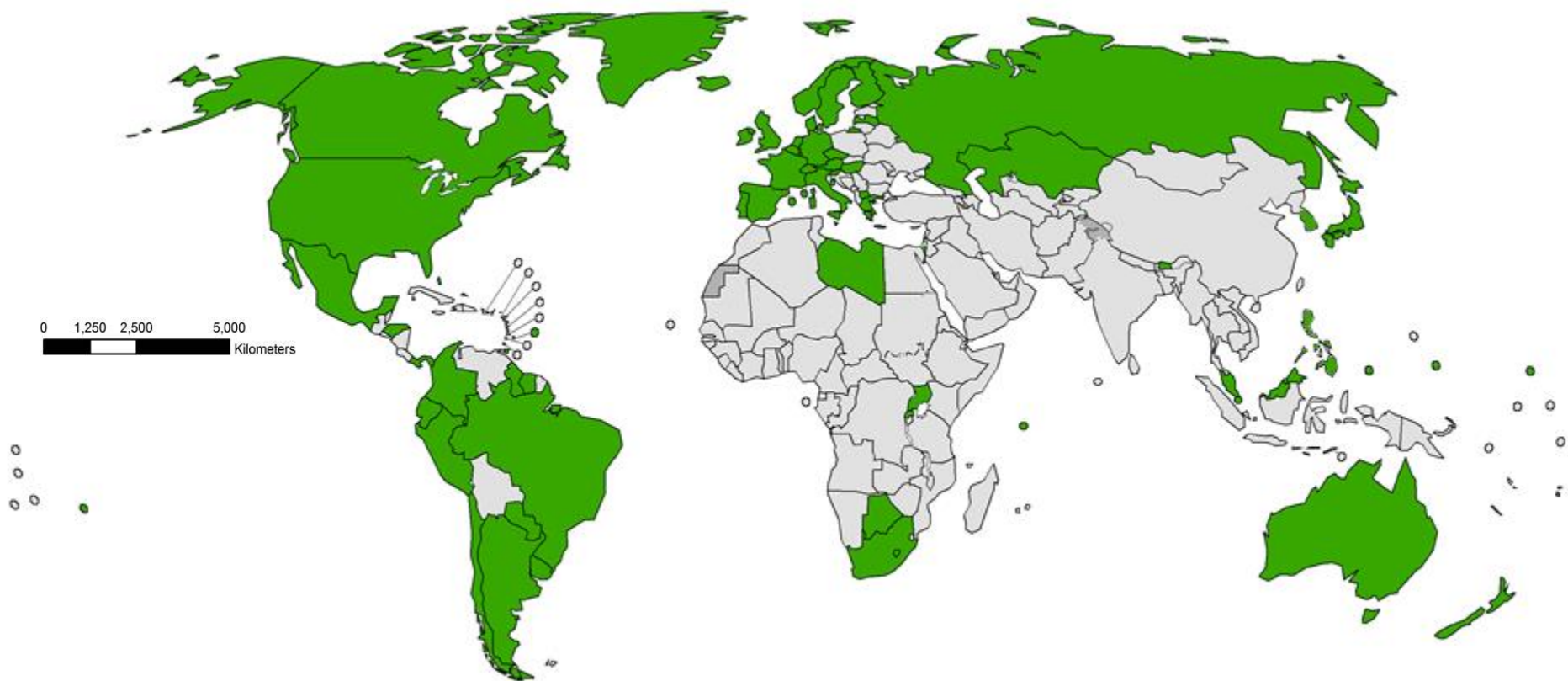
- HPV vaccination as part of National Immunization Programs (NIP) or pilot demonstration programs in **83 countries**
- Australia, UK, USA and Canada were the among the first countries to implement HPV vaccination
- In Europe, the countries implementing HPV vaccination as part of NIP increased from 3 in 2007 to 29 in 2015
- **Bhutan, Panama and Rwanda** were among the first LMICs to implement HPV vaccination in NIP

Markowitz et al., Vaccine. 2012;30 Suppl 5:F139-48
Sankaranarayanan. Int J Gynaecol Obstet. 2015;131 Suppl 1:S33-5
Herrero et al., Lancet Oncol. 2015;16(5):e206-16
Sankaranarayanan et al., Womens Health. 2015;11(2):201-12
Hansen et al., Vaccines (Basel) 2015; 3: 408-19

HPV vaccination in South Asia

- National programs with national coverage: Bhutan, Malaysia
- Pilot programs: Bangladesh, Nepal
- National scale up: Thailand (2017)
- Selected status: India (Delhi, Punjab, Uttar Pradesh)
- Proposed: Sri Lanka (2017)

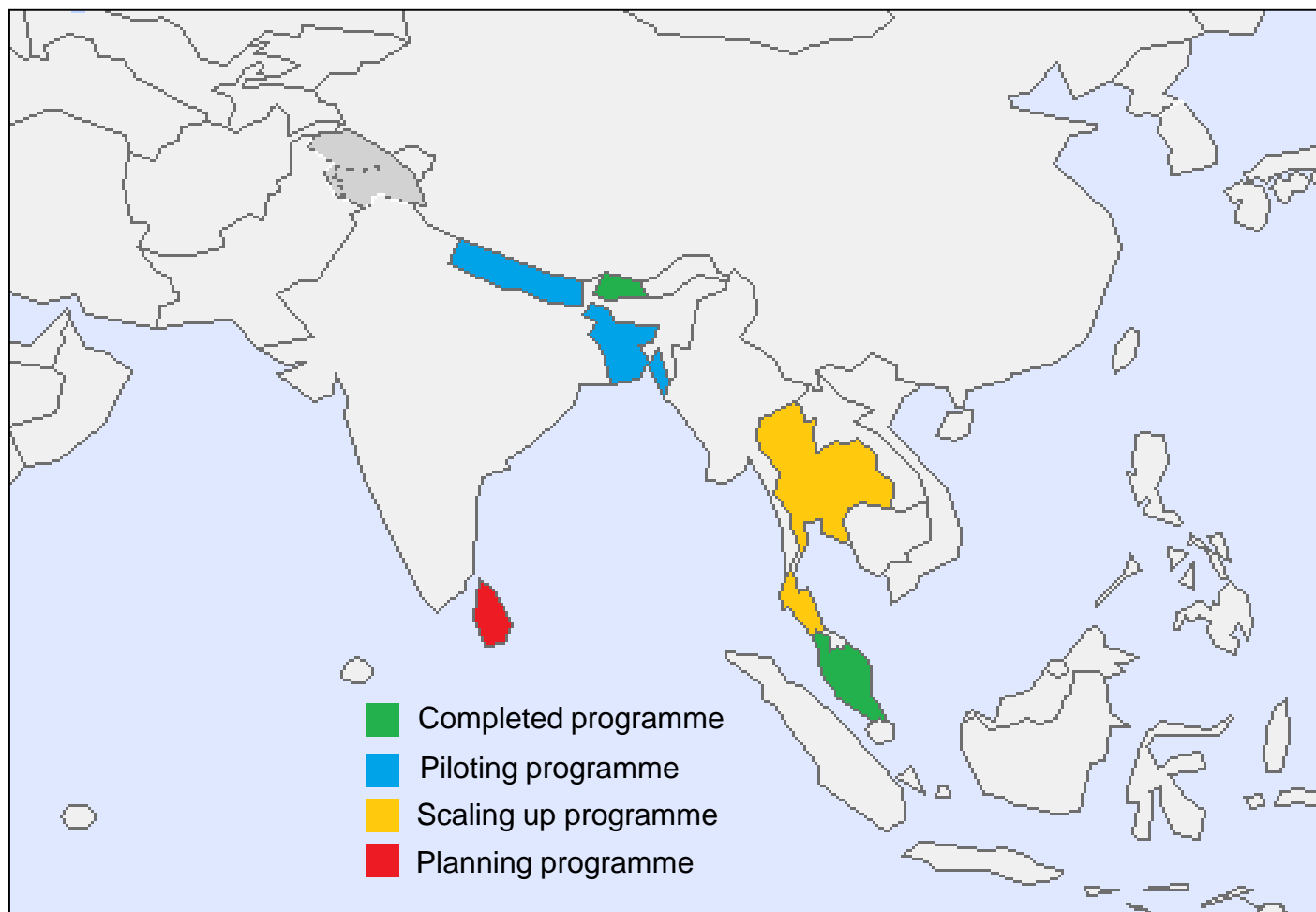
Countries with HPV vaccine in the national immunization programme



* Includes partial introduction

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HPV vaccination in South Asia



HPV vaccination in South Asia

- Bhutan vaccinating for 6 years now with excellent safety and acceptability profile
- Pilot HPV vaccination programme completed in Thailand and national scale up in phased manner during 2017-2019
- Pilot vaccination programmes on going in Bangladesh and Nepal as a prelude to national scale up
- States of Delhi and Punjab in India commenced HPV vaccination in November 2016
- Uttar Pradesh in India commenced HPV vaccination in February 2017

Bhutan: pilot program followed by national scale-up

- Pilot phase (Oct 2009-Apr 2010)
 - ACCF/GAP program donation of 9,600 doses
 - School-based (22), 3,167 girls aged 11-13 years targeted
 - 94% 3rd dose coverage
- National scale-up (May-Nov 2010)
 - GAP donation of 184,000 doses
 - Schools, 47,888 girls 12-18 year old eligible
 - 96% 3rd dose coverage
- National program (2011)
 - Health clinics based delivery, 12 year old (2012,2013) (3rd dose coverage 69%)
 - School based delivery (2014), 90% 3rd dose coverage
- The Bhutan HPV vaccine program is a model for other developing countries that aspire to implement national HPV vaccination programs

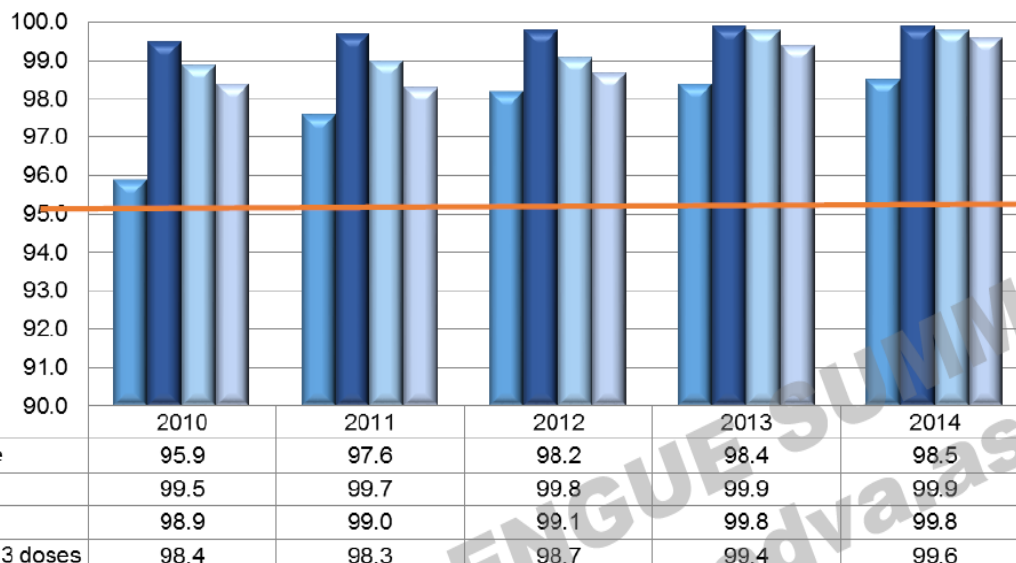
Dorji *et al.*, *Vaccine*. 2015;33(31):3726-30

HPV vaccination programme in Malaysia

- Policy and funding approval during 2006-2009
- Introduced in mid-2010 after 6 months preparation phase
- Primarily school-based delivery
 - community health centres for missed girls or out-of-school girls
- Extensive communications preparation: electronic media, radio, newspapers, posters, pamphlets
- Eligible population: 236,000 (13 year old girls)
- > 95% coverage of 2nd dose
- Strong monitoring system
- HPV vaccination well accepted by communities and parents

Malaysia HPV vaccination performance 2010 - 2014

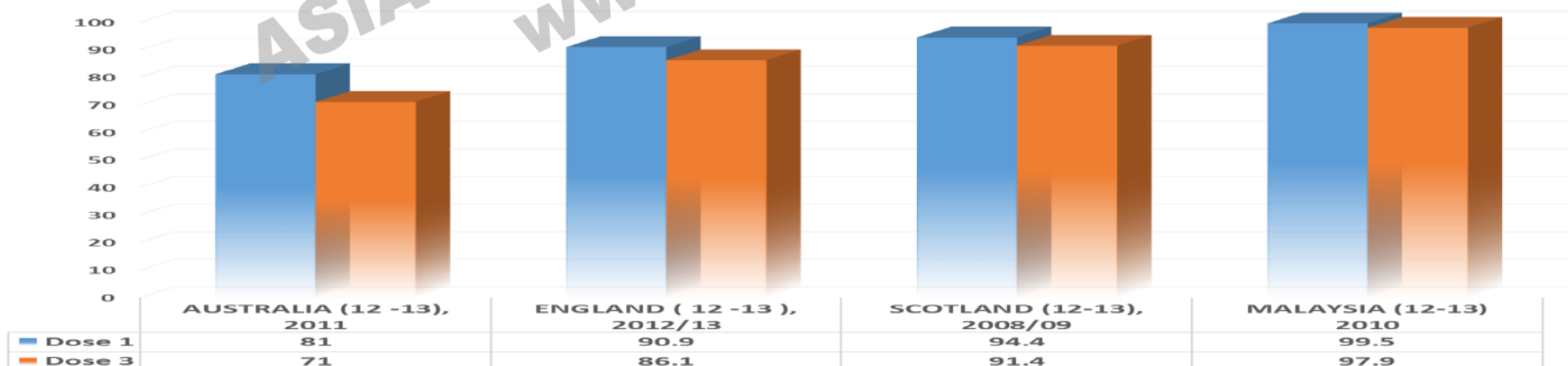
Program
target: 3
doses
completion
at 95%



AEFI REPORTED TO PHARMACEUTICAL BUREAU BETWEEN 2010 AND 2014

YEAR	2010	2011	2012	2013
Total doses of vaccine delivered	687,735	678,897	693,905	727,518
Number AEFI report recieved	403 0.06%	3023 0.45 %	1757 0.25 %	960 0.13%

NATIONAL HPV SCHOOL BASED HPV VACCINATION PERFORMANCE FOR 12 - 13 YEARS OLD GIRLS : AUSTRALIA, ENGLAND, SCOTLAND AND MALAYSIA SCORE CARD



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Courtesy slide from : Saidatul Norbaya Buang and Rohani Jahis for Asia Dengue Summit

HPV vaccine safe, says health ministry of Malaysia

FMT | January 24, 2015

WHO released 2014 report after scientific review and investigation of all side effects.

PUTRAJAYA: The Ministry of Health today clarified that the human papilloma virus (HPV) vaccine is safe and has no side effects as reported in Colombia.

Health Ministry Disease Control director, Dr Chong Chee Kheong said the World Health Organisation (WHO) in a report released last year stated that the HPV vaccine was safe.



“This conclusion was reached based on a scientific review and investigation of all side effects reported by other countries since the HPV vaccine was registered in 2006,” he said in a statement here yesterday.

Dr Chong said the National Adverse Drug Reactions Monitoring Centre, the Health Ministry’s National Pharmaceutical Control Bureau would continue to monitor the side effects after HPV immunisation among adolescents in Malaysia, as well as monitor the unusual events related to the vaccine overseas.

He also urged parents to take advantage of this National HPV Vaccination Programme and consent to have their daughters immunised to protect them from HPV16 and HPV18 infection and prevention of cervical cancer.

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HPV vaccination introduction in Thailand

- Completed a pilot project of vaccinating 12,500 girls aged 11 year in Ayutthaya province with 91% second dose coverage and with excellent safety and acceptability profile
- National Vaccine Institute's subcommittee on immunity promotion has resolved to recommend the HPV vaccine for use in a national-level immunity promotion
- Food and Drug Administration - in its capacity as secretary to the national drug-list development sub-panel - to consider incorporating the HPV vaccine on the national drug list
- National Health Security Office (NHSO) is drafting a budget plan for 2017 the next fiscal year to vaccinate 9 year old girls as part of National Immunization program

HPV vaccination in Thailand

Thai Advising Committee on Immunization Practices



HPV pilot vaccination in school girls in Ayutthaya province
(2014-2016)



Beginning national scale up in a phased manner 2017-2019



National coverage 2020

HPV vaccination scale up plan in Thailand

2014 Ayutthaya province pilot introduction

2017 13 provinces

2018 28 provinces

2019 37 provinces

2020 National coverage

HPV vaccination in India

- Punjab state and New Delhi Capital Territory have introduced HPV vaccination in 2016
- Coverage for the first dose in two districts in Punjab (initial introduction districts) exceeded 97% with excellent safety and acceptability profile
- Uttar Pradesh in February 2017



Press Release / Announcement

PUNJAB TO SIGN MoU WITH UNICEF TO PROCURE 40,000 DOSES OF HPV VACCINE

- FREE VACCINATION TO GIRL STUDENTS STUDYING IN CLASS 6 OF GOVERNMENT TO BE ADMINISTERED IN FIRST PHASE FROM NOVEMBER
- CM FOR LAUNCHING STATE WIDE AWARENESS CAMPAIGN TO EDUCATE MASSES ABOUT THE PREVENTIVE CARE OF CERVICAL CANCER

Chandigarh, October 26:

In a bid to stamp out the menace of cervical cancer in the state, the Punjab government would soon sign a Memorandum of Understanding (MoU) with the UNICEF to procure 40,000 doses of vaccine against Human Papilloma Virus (HPV) in a phased manner. With this decision, Punjab would be the first state in the country to launch this free vaccination program to eradicate the curse of cervical cancer.

A decision to this effect was taken by the Punjab Chief Minister Mr. Parkash Singh Badal during a high level meeting with the senior officers of the Health & Family Welfare Department here at Chief Minister's Residence on late evening on Monday.

The Chief Minister gave nod to the Health & Family Welfare Department for entering into a MoU with UNICEF for the procurement of the requisite doses of HPV vaccine and assured regular flow of funds to implement this mega vaccination program project in the right earnest. Mr. Badal emphasized the need to create awareness amongst the general public especially in rural areas about the preventive measures and cure of cervical cancer through launching a mass media campaign.

Taking part in the deliberations, Principal Secretary Health & Family Welfare Mrs. Vini Mahajan apprised the Chief Minister that a technical expert group under the Chairmanship of Health & Family Welfare Advisor to the Punjab government Dr. KK Talwar recommended that approximately 10,000 schools girls of class VI studying in government schools would be covered under first phase in districts of Mansa and Bathinda as the primary target group of girls ranges between 9-13 years. Nearly 20,000 doses in the first phase would be given to the girls but subsequently, entire two lac girls all over the state of class 6 in government and private schools and even drop outs would be covered in the next phase. Under the first phase, vaccination would begin in November and all the Community Health Centres, Sub Divisional and District Hospitals administered the doses to the girls. She told that the Departments of Planning and Finance have already given their concurrence to carry out this mass vaccination program to eradicate the curse of cervix cancer.

Mrs. Mahajan informed the Chief Minister that cervical cancer is the second most common cancer of women in India. Globally, every year estimated 2.5 lac women die of cancer. India was the fourth largest contributor to these deaths with estimated 67,000 deaths per year. It is the second most prevalent cancer (after breast cancer) in Punjab. Although the trends of incidence of cancer in Punjab are similar to national level, but unfortunately districts of Mansa and Bathinda have higher incidence of cervical cancer as compared to rest of the districts of Punjab. Cervical cancer was more prevalent in rural areas than the urban ones. She clarified that since this imported vaccination was already available in open market and most of the affluent families were administering the requisite doses to their daughters as preventive measure. Showing grave concern to curb the cervical cancer in Punjab, the state government has now decided to administer doses of this vaccination to the targeted group of girls at free of cost.

HPV vaccination in Nepal

- Proceeding national scale up, Nepal has introduced HPV vaccination targeting grade 6 girls in two districts
- Targeting 6500 girls in Kaski district and 8250 girls in Chitwan district using bivalent vaccine
- Second dose coverage exceeds 90% with excellent safety and acceptability profile

HPV vaccination in Bangladesh

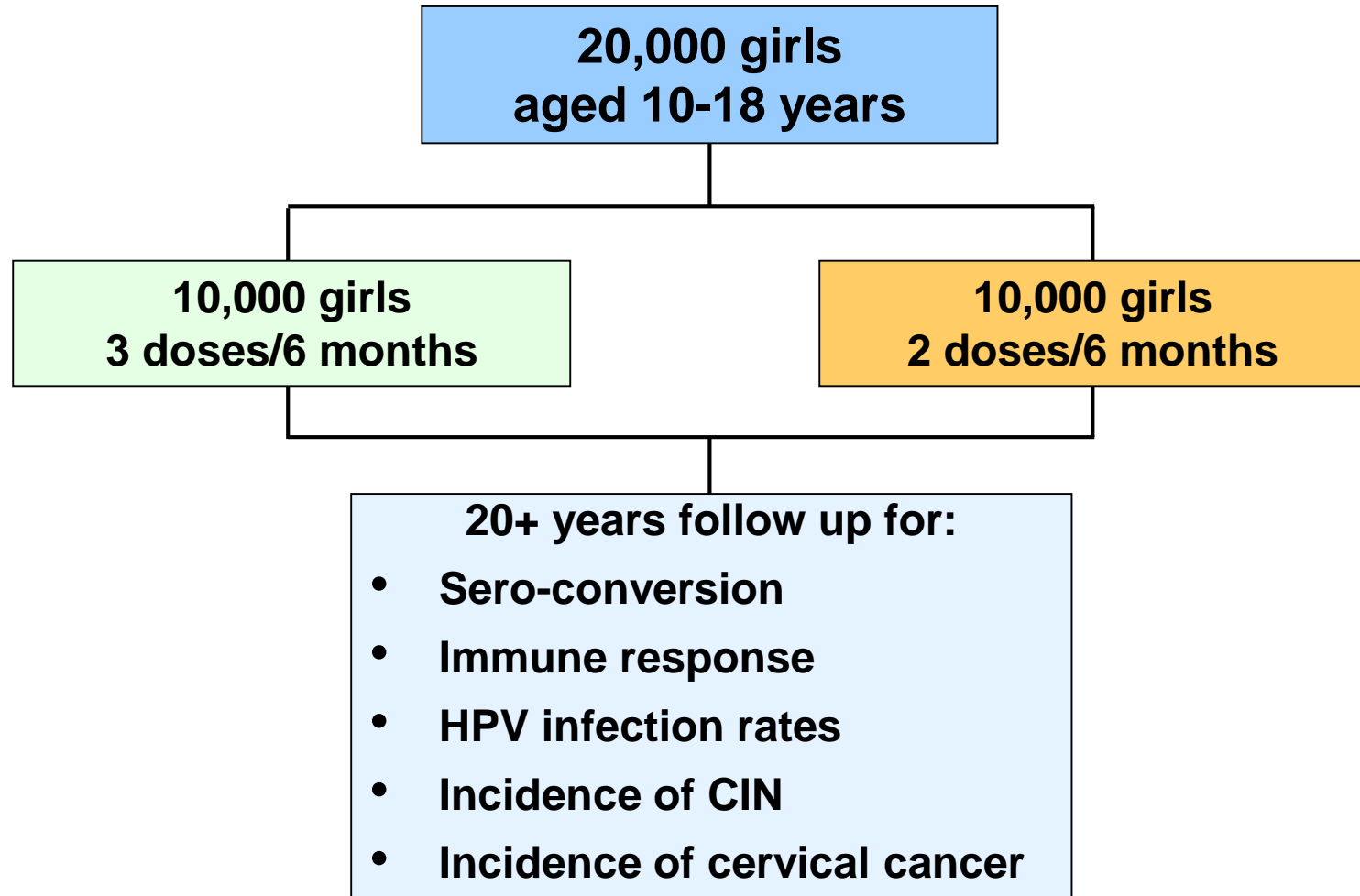
- Gavi supported pilot introduction in Gazipur district targeting 10 years old girls in 2016
- A post-introduction evaluation found that >94% 2nd dose coverage among target girls with excellent safety and acceptability profile
- Vaccine delivery strategy was a mix of EPI fixed sites, outreach and school vaccination sessions
- There is a need to increase the space at EPI store to accommodate the vaccines and ensure adequate human resources for national scale up

HPV vaccination introduction in Sri Lanka

- An expert group of the MOH, Sri Lanka met thrice and has recommended the introduction of HPV vaccination with two doses targeting girls in grade 7 in the schools along with school medical inspection and Td vaccination
- The estimated annual cost of HPV vaccination in Sri Lanka is around 130 million SLR
- Population prevalence of HR HPV infection is around 1.2%
- HPV 16 and 18 account for 80% of cervical cancers in Sri Lanka
- 2521 girls have to be vaccinated to prevent 1 cervical cancer

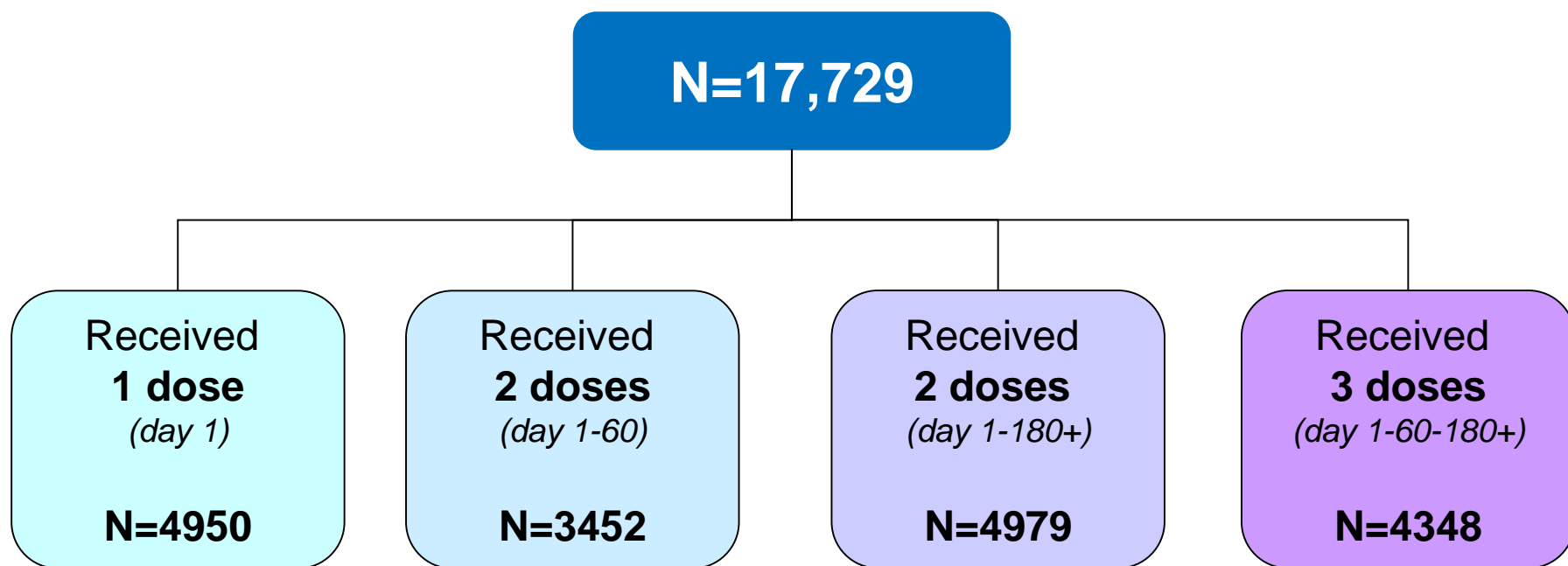
http://www.epid.gov.lk/web/images/pdf/HPV/hpv_vaccination_expert_comitee_and_rec.pdf

Randomised Trial of 2 versus 3 doses of HPV vaccination in India



Randomised Trial of 2 versus 3 doses of HPV vaccination in India

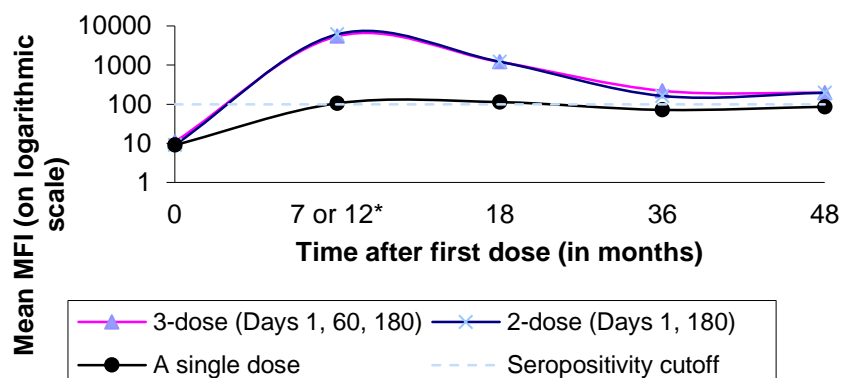
Situation of the different vaccination regimens
All study sites (N=17,729) (as of May 2015)



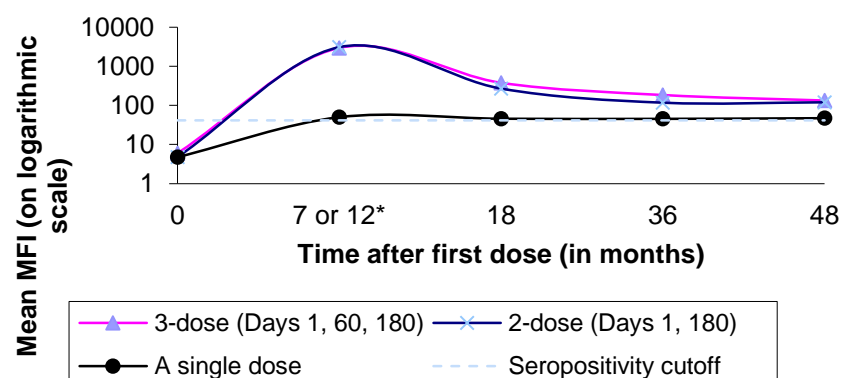
Randomised Trial of 2 versus 3 doses of HPV vaccination in India

Mean MFI values for HPV 16, 18, 6 and 11 L1 antibodies at different time points among girls who completed vaccination per protocol (vaccination at day 1, 60 and 180 (3-dose group) or day 1 and 180 (2-dose group)), and those who did not have their complete vaccine schedules (vaccination at day 1 and 60 or a single dose)

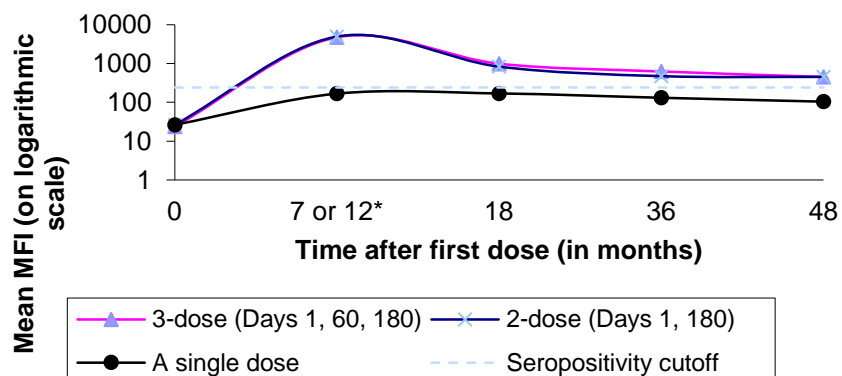
HPV 16 L1 antibodies



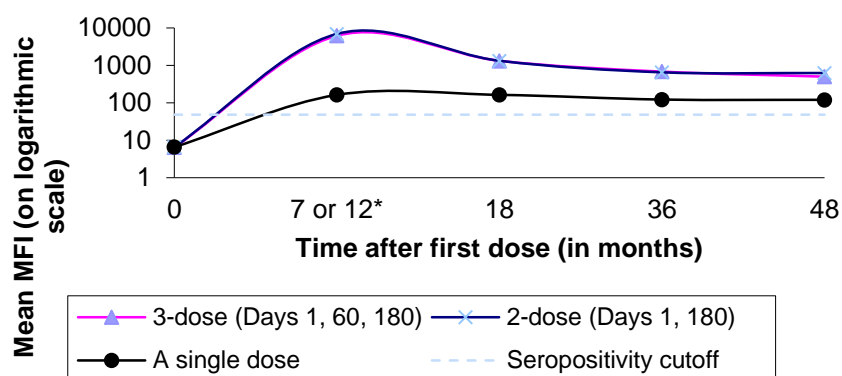
HPV 18 L1 antibodies



HPV 6 L1 antibodies



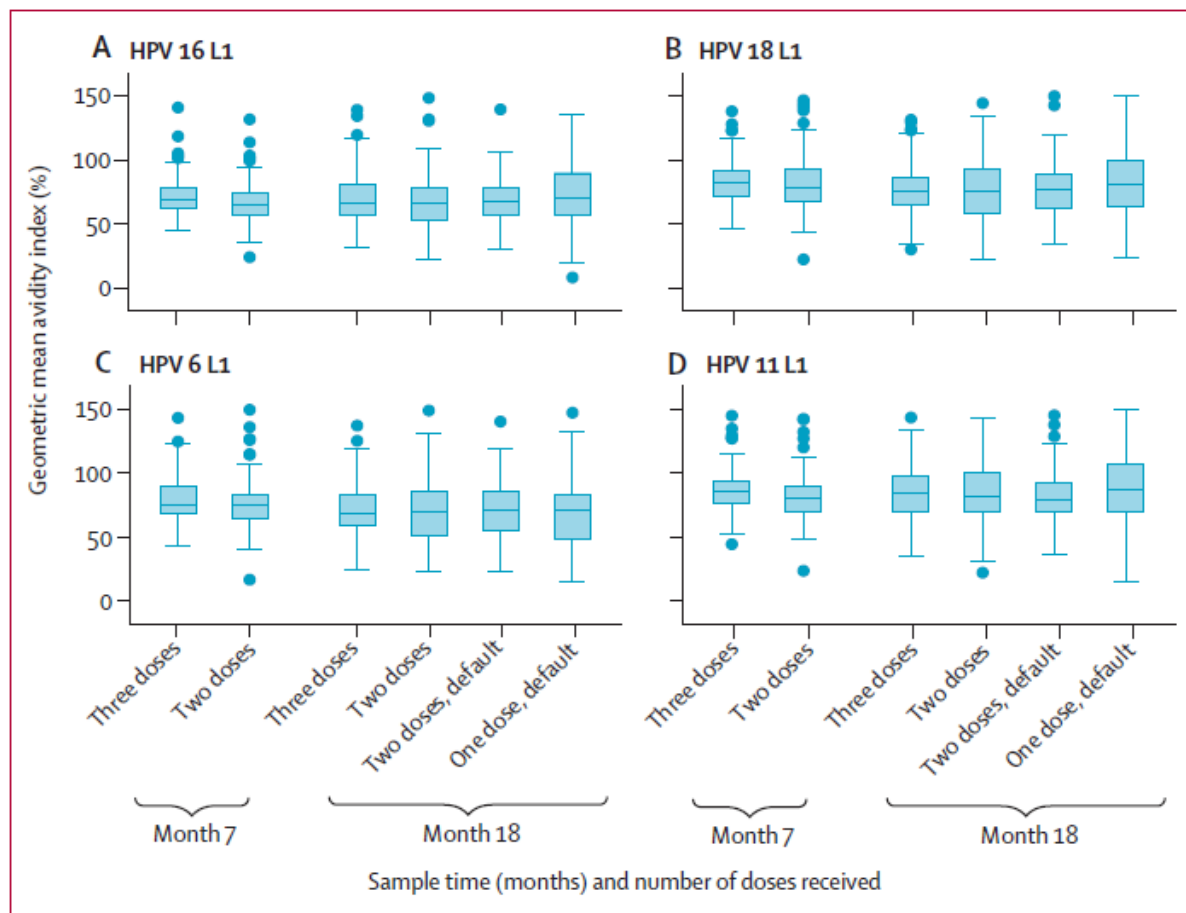
HPV 11 L1 antibodies



Randomised Trial of 2 versus 3 doses of HPV vaccination in India

Geometric mean MFI avidity index of HPV 16, 18, 6 and 11 L1 antibodies

at 18 months after the first dose among girls who received vaccination per protocol, and those who did not have their complete vaccine schedules



Evaluation of less than 3 doses of HPV Vaccination in India:
Frequency of persistent HPV 16 and 18 infection in 2398
vaccinated women by dose regime and 1058 unvaccinated women

- 3-Dose: 0/477
- 2-Dose (day 1-180): 0/512
- 2-Dose (day 1-60) : 3/665 (0.5%)
- 1-Dose: 0/759
- All vaccinated girls: 3/2413 (0.1%)
- UNVACCINATED WOMEN: 9/1058 (0.9%)



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OCTOBER 1-4, 2020



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