HPV Vaccine Introduction in Thailand

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Outline

- Cervical cancer in Thailand
- Existing policies on cervical cancer prevention
- Pilot HPV vaccination project
- Scale up plan

Cervical Cancer in Thailand

Cancer incidence in Thai women

<table>
<thead>
<tr>
<th>Site</th>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>38.1</td>
</tr>
<tr>
<td>Cervix uteri</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14.4</td>
</tr>
<tr>
<td>Liver and bile duct</td>
<td></td>
<td></td>
<td></td>
<td>12.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colon and rectum</td>
<td></td>
<td></td>
<td>10.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trachea, bronchus and lung</td>
<td>6.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovary</td>
<td></td>
<td>5.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Hodgkin lymphoma</td>
<td>4.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corpus uteri</td>
<td></td>
<td>4.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leukemia</td>
<td>4.0</td>
<td></td>
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</tbody>
</table>

*Age-standardised incidence rate
Source: National Cancer Institute, Thailand, 2010-2012

Existing policies on cervical cancer prevention in Thailand

<table>
<thead>
<tr>
<th>Prevention</th>
<th>Primary prevention</th>
<th>Secondary prevention</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPV vaccine*</td>
<td></td>
<td></td>
<td>cryosurgery, laser surgery, loop electrosurgical excision and cold knife conization</td>
</tr>
<tr>
<td>Pap smear</td>
<td></td>
<td></td>
<td>Simple hysterectomy</td>
</tr>
<tr>
<td>Visual inspection with acetic acid (VIA)</td>
<td></td>
<td></td>
<td>Radical hysterectomy</td>
</tr>
<tr>
<td>HPV DNA*</td>
<td></td>
<td></td>
<td>Chemotherapy</td>
</tr>
</tbody>
</table>

* Not yet included in Thai Universal Coverage Scheme, but available in private health facilities

Severity of new cervical cancer cases in Thailand

Source: Thai cancer registry, 2011
Background: HPV vaccination policy

Thai Advisory Committee on Immunization Practices

- Pilot HPV vaccination in school girls in Ayutthaya
- Scale up nation-wide

Pilot HPV vaccination in Ayutthaya

Target: grade 5 female students
Schedule: 2 doses (0, 6 months)

Pilot HPV vaccination project

Objective

To assess
- HPV vaccine acceptability
- HPV Vaccine Coverage
- Adverse event following immunization
- Impact of HPV vaccination on cervical cancer screening program

Method

- Interviewed public health staffs in 114 immunization clinics, teachers in 93 primary schools and reviewed 1,736 parent consent forms to assess HPV acceptability
- Surveyed 1,736 school girls to assess HPV vaccine coverage

Method

- established the Adverse Event Following Immunization (AEFIs) surveillance for HPV vaccine to monitor any AEFIs related to HPV vaccination
- explored cervical screening records and interviewed public health officers to determine the impact of HPV program on the existing cervical screening program
Results

**HPV vaccine acceptability and vaccination coverage**

<table>
<thead>
<tr>
<th></th>
<th>Vaccine acceptability</th>
<th>Vaccine coverage</th>
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</thead>
<tbody>
<tr>
<td>Healthcare</td>
<td>97.4%</td>
<td>97.4%</td>
</tr>
<tr>
<td>Parent</td>
<td>91.2%</td>
<td>91.2%</td>
</tr>
<tr>
<td>Teacher</td>
<td>91.4%</td>
<td>91.4%</td>
</tr>
<tr>
<td>1st dose</td>
<td>87.6%</td>
<td>87.6%</td>
</tr>
<tr>
<td>2nd dose</td>
<td>76.9%</td>
<td>76.9%</td>
</tr>
</tbody>
</table>

**Adverse reaction within 7 days following HPV immunization**

- Vaccine acceptability
- Vaccine coverage

**Impact of HPV vaccination on cervical cancer screening program**

Proportion of public health officer by their opinion on number of cervical cancer screening after HPV introduction:

- Increase: 62.5%
- Decline: 29.2%
- Not change: 2.1%
- Uncertain: 6.3%

**Number of cervical cancer screening per year in health facilities surveyed**

- 2011: 6,670
- 2012: 4,784
- 2013: 4,779
- 2014: 3,895

**Summary**

- HPV vaccine acceptability among public health staffs, teachers and parents was 97.8%, 95.7% and 91.2%, respectively.
- HPV vaccine coverage was 87.4% for fully immunization.
- No severe AEFIs has been reported.
- No evidence that declining number of cervical screening was due to HPV program.
HPV scale up plan

- 2014: 1 pilot province
- 2017: 13 provinces
- 2018: 25 provinces
- 2019: 37 provinces
- 2020: country wide

Acknowledgements

- Public health staffs in Ayutthaya province
- Office of Disease Prevention and Control 1 Bangkok
- WHO Thailand office

THANK YOU

Wat Yai Chaimongkol, Ayutthaya