Lessons learned from a rapid assessment to address low Hepatitis B Birth Dose vaccine uptake in Vietnam

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1. My profile
2. Health care system in Vietnam
3. Hepatitis B-Birth Dose (HepB-BD) in Vietnam
4. A rapid qualitative assessment of factors associated with low Hepatitis B-BD uptake
1. WHO AM I?

- Dentist, HMU, 1996
- Master of Public Health, HMU, 1999
- PhD on Public Health, University of Copenhagen, 2012
- Assoc. Prof. 2018
- Head of Occupational Health department
- Head of Human Resources and Administration
- Head of Vaccination center
- Institute for Preventive Medicine and Public Health, Hanoi Medical University
2. HEALTH CARE SYSTEM IN VIETNAM
Health System and PHC System in VN

GOVERNMENT
(Ministries, sectors)

Central Level
(MOH, hospitals, centers, depts, universities)

PROVINCE
(63 provinces)

Provincial Level
(Hospitals, centers, colleges, schools)

DISTRICT
(697 districts)

District Level
(Hospitals, health centers/depts)

COMMUNE
(11,122 communes)

Commune Level
(Commune health stations)

VILLAGES
(126,927 villages)

Village Health
(Village health workers/collaborators)
Comprehensive Health Care

- Medical Care By Health Sector
  - Examination, Treatment
  - Prevention, Rehab, Drugs, Health Edu, etc
- Non-Medical Care By Other Sectors
  - Food, Transport, Construction, Industry, etc

Primary Care
Secondary Care
Tertiary Care
10 Essential Contents of PHC in Vietnam

1. HEALTH EDUCATION

2. Expanded program on immunization

3. Nutrition & Food safety

4. Clean water & environment hygiene

5. Health care of mothers & children, include family planning

6. Treatment of common diseases & injuries

7. Prevention & control of local outbreaks

8. Essential drugs

9. Strengthening grassroots health network

10. Health management
3. HEPB-BD VACCINE IN VIETNAM
Viet Nam HepB Birth Dose Coverage, 2003-2016

HepB BD Coverage (%)

Year | Coverage |
--- | --- |
2003 | 54.4 |
2004 | 55.2 |
2005 | 62.2 |
2006 | 63.2 |
2007 | 28.1 |
2008 | 25.5 |
2009 | 40.3 |
2010 | 21.4 |
2011 | 55 |
2012 | 75.6 |
2013 | 56 |
2014 | 55 |
2015 | 69.8 |
2016 | 69 |

AEFIs

Stock out

<3 days

<24 hrs
Viet Nam AEFIs

- 3 infant deaths in 2013 were determined after a lengthy investigation to be due to program errors and not the vaccine (the wrong substance was injected).
- Resulting drop in HepB-BD coverage from 76% to 56%
- Estimated impact: 90,000 chronic infections and 17,000 excess deaths
- Behavioral health research in 2017-18 showing evidence of persisting reluctance among HCWs and families to receive HepB-BD
3. A RAPID ASSESSMENT ON HEPB-BD AT BIRTH DOSE
OBJECTIVES

1. Assess access and demand factors associated with low HepB-BD uptake in Vietnam

2. Identify policy and intervention recommendations to improve HepB-BD coverage
### DATA COLLECTION METHODS: LOCATION

<table>
<thead>
<tr>
<th>Province Name</th>
<th>2016 HepB-BD Coverage</th>
<th>District Name</th>
<th>2016 HepB-BD Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hai Phong</td>
<td>42.7%</td>
<td>An Lao</td>
<td>30.2%</td>
</tr>
<tr>
<td>Gia Lai</td>
<td>46.9%</td>
<td>Chur Pu</td>
<td>24.2%</td>
</tr>
<tr>
<td>Son La</td>
<td>35%</td>
<td>Bac Yen</td>
<td>13%</td>
</tr>
</tbody>
</table>

1. Low performing provinces selected for inclusion
2. Lowest performing district in each low performing province selected for inclusion
DATA COLLECTION METHODS: PARTICIPANTS

<table>
<thead>
<tr>
<th>Participant Category</th>
<th>Participant Type</th>
<th>Type of Interview*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative</td>
<td>• Director of Prevention Medical Center (PMC)</td>
<td>IDI</td>
</tr>
<tr>
<td></td>
<td>• Director of Provincial Hospital</td>
<td>IDI</td>
</tr>
<tr>
<td></td>
<td>• Director of District Hospital</td>
<td>IDI</td>
</tr>
<tr>
<td></td>
<td>• Head of Community Health Center (CHC)</td>
<td>IDI</td>
</tr>
<tr>
<td></td>
<td>• OB-GYN Lead- Provincial, District Hospital</td>
<td>IDI</td>
</tr>
<tr>
<td></td>
<td>• Head of Communicable Disease Control- PMC</td>
<td>IDI</td>
</tr>
<tr>
<td>Healthcare workers</td>
<td>• Doctors &amp; Nurses- Provincial, District, CHC</td>
<td>FGD</td>
</tr>
<tr>
<td>Caregivers</td>
<td>• Mothers</td>
<td>FGD</td>
</tr>
<tr>
<td></td>
<td>• Fathers</td>
<td>FGD</td>
</tr>
<tr>
<td></td>
<td>• Grandparents</td>
<td>FGD</td>
</tr>
<tr>
<td>Key Community Influencers</td>
<td>• Traditional birth attendants</td>
<td>IDI</td>
</tr>
<tr>
<td></td>
<td>• Village health workers</td>
<td>IDI</td>
</tr>
</tbody>
</table>

*IDI= in-depth interview; *FGD= Focus Group Discussions
Qualitative Results: Factors Associated with Low Uptake of HepB-BD among Caregivers

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Hai Phong</th>
<th>Son La</th>
<th>Gia Lai</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fear of serious AEFIs</td>
<td>*********</td>
<td></td>
<td>***</td>
</tr>
<tr>
<td>Low knowledge about HepB burden and need for Hep-BD</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Belief that newborns are too small to get vaccinated</td>
<td>***</td>
<td>*****</td>
<td>****</td>
</tr>
<tr>
<td>High prevalence of home births in mountainous areas</td>
<td>*********</td>
<td></td>
<td>*********</td>
</tr>
<tr>
<td>Influence of anti-vaccine groups</td>
<td>+</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Qualitative Results: Factors Associated with Low Uptake of HebB-BD among Healthcare Providers

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Hai Phong</th>
<th>Son La</th>
<th>Gia Lai</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concerns about causing serious AEFIs among newborns</td>
<td>++++</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>Need to follow strict guidelines that restrict administration of HepB-BD</td>
<td>+</td>
<td>+</td>
<td>++++</td>
</tr>
<tr>
<td>Low prioritization of HepB-BD</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Medical doctors without OB-GYN background uncomfortable with HepB-BD administration</td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Vaccine supply issues: lack of vaccine, improper storage, lack of electricity</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>
Proposed solutions to improve HepB-BD coverage

- Recommendations to Improve HepB-BD
  - Revise national guidelines on administration of HepB BD to remove strict exclusion criteria and limitations on who can administer HepB-BD
  - Consider mobile clinics to provide HepB-BD to hard to reach populations
  - Increase awareness of the burden of HepB and the benefits of HepB-BD vaccine, particularly during prenatal counseling at CHCs
  - Provide training on administration of HepB-BD to HCW
  - Facilitate better linkages between health facilities and communities
  - Improve media communications on vaccinations.
Conclusions

• HepB-BD coverage has remained low in Vietnam since a series of AEFIs in 2013

• Among both caregivers and healthcare providers, fear of AEFIs, low awareness of the importance of HepB-BD, and high home births were primary barriers to HepB-BD uptake

• Recommendations to improve HepB-BD include revising national guidelines on HepB-BD administration, provision of mobile BD clinics, increasing population awareness of HepB burden and importance of HepB-BD, and improving media communication about vaccines
• Thank you very much for your attention!

• Q&A
EXTRA SLIDES
Hepatitis B birth dose should be given after immediate newborn care (that is, drying baby, checking for breathing, skin-to-skin contact with mother, cord-cutting, initiation of breastfeeding, eye care) and only when the baby is stable (that is, baby scores 6 or higher on the Apgar test (if test is done) and is able to breastfeed soon after birth.)
Health Level Organization by Professions

- Research, guidance, high tech, key areas.
- Technical assistance for lower levels

- Ensure every health need of people
- Implement PHC and use effective common techniques
WHO’s Blocks of Health System

- HRH
- Financing
- Drug, Equipment, Information
- Governance & Management

Inputs

Coverage
Access
Utilization

Process

Health service delivery

Quality
Equity
Efficiency

Outputs

Socioeconomic Development

Health Status

Social Equity