Prevention and control of HBV perinatal transmission in Armenia
Istanbul, March 15-17, 2006

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Republic of Armenia
Relevance of the Issue

- A global health care problem in the region
- High HepB morbidity: more than 350 million people suffer from chronic diseases resulting from HBV
- High mortality from cirrhosis and hepatocellular carcinoma, as well as from sequelae of chronic hepatitis B
- High morbidity registered in children
Urgency of the Issue in Armenia

- High HepB incidence – prior to 1999, the incidence rate fluctuated between 7.5 and 23.1/100,000.
- HbsAg carrier prevalence reached 1-2%
- High risk of HBV perinatal transmission
- High rates of chronic infection
- Low socio-economic status of the country
Endemicity of HepB in CEE and NIS
Changes in HepB morbidity (based on the number of cases) and HepB vaccination coverage in Armenia, 1990-2005
Rationale for the integration of HepB vaccination in the National Immunization Schedule in Armenia

- Regardless of low endemicity in Armenia, HepB vaccination will become an affordable, accessible and efficient tool for HepB prevention.
- An opportunity for the considerable reduction of childhood morbidity and mortality.
- Prevention of HBV perinatal transmission.
- High cost-efficiency of the vaccination.
- Potential reduction of the disease burden.
Goals of the integration of HepB vaccination in the National Immunization schedule

- Improvement of HepB-related health status of the Republic’s residents
  - Prevention of HBV perinatal transmission
  - Reduction in HepB incidence among children and adults
  - Reduction in HepB-associated mortality
  - Reduction of the disease burden
  - Reduction of the poverty level in the country
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<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Schedule</th>
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<tbody>
<tr>
<td>BCG -1</td>
<td>Within 24-48 hours after birth</td>
</tr>
<tr>
<td>HepB-1</td>
<td></td>
</tr>
<tr>
<td>HepB-2</td>
<td>1.5 months</td>
</tr>
<tr>
<td>DTP–1 OPV-1</td>
<td>3 months</td>
</tr>
<tr>
<td></td>
<td>4.5 months</td>
</tr>
<tr>
<td>DTP –3 OPV-3 HepB-3</td>
<td>6 months</td>
</tr>
<tr>
<td>MMR-1</td>
<td>12 months</td>
</tr>
<tr>
<td>DTP–4 OPV-4</td>
<td>18 months</td>
</tr>
<tr>
<td>OPV-5</td>
<td>20 months</td>
</tr>
<tr>
<td>DT-1 OPV-6 MMR-2</td>
<td>6 years</td>
</tr>
<tr>
<td>BCG-2</td>
<td>7 years</td>
</tr>
<tr>
<td>DT-2,3,4...</td>
<td>16 years and every 10 years afterwards</td>
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HepB vaccination coverage in the Republic of Armenia
HepB Incidence Rates after the introduction of HepB vaccine in the National Immunization Schedule

HepB cases Including among 0-14 y.o.

Coverage

0 20 40 60 80 100 120 140 160 180 200 220 240

1999 2000 2001 2002 2003 2004 2005
Achievements

- HepB incidence reduction among children
- High coverage with 3 doses of HepB vaccine
- Increased coverage rate for the birth dose administered within 24 hours after birth – a real opportunity to prevent HBV perinatal transmission
- The use of a monodose HepB vaccine has significantly reduced the number of lost opportunities (the vaccine is supplied by GAVI)
- The country uses AD-syringes
Achievements

- Trainings have been conducted for neonatologists, pediatricians, family doctors, epidemiologists
- Trainings have been conducted for the nursing personnel
- A number of TV programs have been prepared and aired for the general public
- The reduction in number of parents’ refusals to have their children vaccinated
Remaining Challenges

- Untimely administration of the birth dose (later than within 24 hours after birth) increases the risk of HBV perinatal transmission
- There are cases of unjustified refusal from HepB vaccination still observed in the population
- Unjustified contraindications to vaccination, especially as related to the birth dose administration, are still observed (especially among neonatologists)
Remaining Challenges

- There are regions with the vaccination coverage of <90%
Remaining Challenges

- Cases of lost opportunities for vaccination
- There are certain problems related to HepB vaccine shortages at health care facilities, which are due to population migration
- Indicators sensitivity – data reliability
Targets

- To maintain high immunization coverage, in particular, for HepB vaccine
- To achieve HepB vaccination coverage at >90% in all regions
- To ensure timely vaccination of neonates (within 24 hours after birth)
Targets

- To ensure adequate education for medical students, and continue staff training
- To improve management
- To conduct monitoring and provide accurate information
- To review contraindications
- To promote and improve the HepB vaccine utilization
- To increase the level of public awareness
Thank you for your attention!