Hepatitis vaccination programs in Hungary

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Factors determining the immunization strategy against hepatitis B in Hungary (1980-1990)

• Incidence of HBV infections

  Incidence of acute hepatitis B: 300-400 cases/100 000 inhabitants/year
  The most affected age cohorts: 15-24 years
  Prevalence of HBV carriers: around 1%

• The characteristics of HBV transmission

  Dominants mode of transmission: sexual
  Most vulnerable groups: health care worker
                        new-borns of HBsAg positive mothers

• Cost of vaccination
The national hepatitis immunization program has three components

1. Immunising individuals in risk groups
2. Active and passive immunization of new-borns of HBsAg positive mothers
3. Vaccination of adolescents
Immunising individuals in risk groups

1984: Vaccination of health care workers with the highest risk and haemodialysis patients

1993: Voluntary vaccination of health care workers in all jobs at risk

1996: Voluntary vaccination of students enrolled in the first year of health education

Occupation-related mandatory vaccination
Mandatory vaccinations in health education institutions

1999: Decree No. 61/1999 (XII. 1) by the Ministry Of Health
on protecting the health of workers exposed to biological agents

The employer must ensure that workers at risk are vaccinated as a condition of employment
Immunising individuals in risk groups who have not previously received HB vaccination

HB vaccination is available for free of charge for

- Contacts of HBV cases
  - Sexual partners of acute or chronic HBV cases
  - Exposed ppl to HBV living in the household of HBV cases
- Patients on dialysis
- Haemophiliac patients
- Onco-haematological patients
- Intravenous drug users
Immunising individuals in risk groups who have not previously received HB vaccination II.

HBV vaccine is recommended for risk groups

- unsafe sexual practice (promiscuous people, sex workers, people re-infected with STDs, MSM)
- chronic HCV carriers
- travellers to HBV highly endemic countries, with long term residing
New-born HBV Prevention Program

NPHMOS: epidemiological investigation, education, HBsAg screening: vaccination of exposed non-immune persons, hepatological care of HBV carriers

Maternity wards: HBIG + HBV I. vaccination
General practitioner: HBV II. –III. vaccination control at 15 months

Screening around 16th week of pregnancy, Prenatal care: Obstetrician/Gynecologist, health visitor
Vaccination of adolescents

1999: School-based vaccination (campaign)
   14 years (8th grade) - 3 doses

From 2003: 2 doses

In 2009: 13 years (7th grade) and 14 years (8th grade)

From 2010: 13 years (7th grade)

Vaccination coverage: over 99%

*Persons aged 13 to 33 years were vaccinated against HBV infection with a few exceptions!*
Conclusion

The hepatitis vaccination strategy and its implementation in Hungary have been successful

- The incidence of hepatitis B infections has decreased significantly
  - 1995: 2.2 cases/100,000 inhabitant
  - 2018: 0.4 cases/100,000 inhabitant

- The biggest incidence drop was in the 15-29 age group, health care workers and infants
Future plan

- Maintaining the high vaccination coverage
- Improving HB surveillance
- Performing sero-epidemiological surveys to measure prevalence data in both the general population and at-risk populations
THANK YOU FOR YOUR ATTENTION!