Viral Hepatitis Prevention Board

Burden and Prevention of Viral Hepatitis in Bulgaria

Sofia, Bulgaria
March 24-25, 2011
The Viral Hepatitis Prevention Board

19 years of support to the control and prevention of viral hepatitis in Europe.
Content

• Viral Hepatitis Prevention Board (VHPB)
  – Mission statement
  – Structure
  – Activities

• Bulgaria Meeting: Burden and prevention of viral hepatitis in Bulgaria
Mission Statement

The objective of VHPB is to contribute to the control and prevention of viral hepatitides:
- by drawing the attention to this important public health problem
- by issuing prevention guidance and catalyse the development of recommendations, and
- by encouraging actions to improve control and prevention.

VHPB target audiences are, in the first instance, health care professionals, policymakers, and opinion leaders in Europe.

VHPB advisory board is composed of independent experts in the field of viral hepatitis.
History

- VHPB was established in 1992. First actions related to hepatitis B as an occupational risk.
- World Health Assembly (1992): Integration of hepatitis B vaccine into national vaccination programmes.
- In 1993, VHPB started a second major initiative and focused on hepatitis B as a community health risk.
- The geographical focus was initially Western Europe, its actions were extended to include all 53 countries in the WHO/EURO, contact are being made with other WHO regions.
VHPB Support

• VHPB is supported by unrestricted grants from
  – the vaccine industry:
    • GlaxoSmithKline Biologicals,
    • Sanofi Pasteur MSD, Sanofi Pasteur, Merck Vaccines
  – several universities in Europe
  – The VHPB has also received support from the GAVI, the Children's Vaccine Program at PATH, Unicef, ECDC and CDC for specific activities
• The structure of the VHPB includes
  – Executive secretariat,
  – Advisory board, and
  – Honorary members.
VHPB Structure

• The VHPB **Executive Secretariat** is part of the Centre for the Evaluation, Vaxinfectio, of the University of Antwerp
• strict operational and scientific independence is essential
  – VHPB advisers and invited experts get only travel and subsistence reimbursed
  – according to the University Rules
  – no honorary or other forms of remuneration
• Executive Secretariat members:
  – Emmy Engelen
  – Greet Hendrickx
  – Alex Vorsters
  – Pierre Van Damme
• WHO has designated Vaccine & Infectious Disease institute (Vaxinfectio) as Collaborating Centre for the prevention and control of infectious diseases
VHPB Structure

• Members
  – WHO/EURO, WHO/HQ, ECDC, CDC, MOH, University experts
• Network of experts
### Composition of the board

#### VHPB Advisors

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<tr>
<th>WHO</th>
<th>Academic/University</th>
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<tr>
<td>Nedret Emiroğlu</td>
<td>Selim Badur, Istanbul, Turkey</td>
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<td>WHO Regional Office for Europe</td>
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<td>Steven Wiersma</td>
<td>Paolo Bonanni, Florence, Italy</td>
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<td>WHO Headquarters</td>
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<td>ECDC</td>
<td>Angela Dominguez, Barcelona, Spain</td>
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<td>Marita Van de Laar</td>
<td>Wolfgang Jilg, Regensburg, Germany</td>
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<td>ECDC, Sweden</td>
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<td>CDC</td>
<td>Helène Norder, Stockholm, Sweden</td>
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<td>John Ward</td>
<td>Françoise Roudot-Thoraval, Paris, France</td>
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<td>CDC, USA</td>
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<td>ELPA (European Liver Patient Association)</td>
<td>Rui Tato Marinho, Lisbon, Portugal</td>
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<td>Nadine Piorkowsky</td>
<td>Daniel Shouval, Jerusalem, Israel</td>
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<td>European Liver Patient Association (ELPA)</td>
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<td>Public Health Institute</td>
<td>Koen Van Herck, Antwerp, Belgium</td>
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<td>Hans Blystad</td>
<td>Alessandro Zanetti, Milan, Italy</td>
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<td>Norway</td>
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<td>David Goldberg</td>
<td>Vana Papaevangelou, Athens, Greece</td>
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<td>Scotland</td>
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<td>Johannes Hallauer</td>
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<td>Germany</td>
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<td>Honorary Members</td>
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<td>Alain Goudeau</td>
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<td>Nicole Guérin</td>
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<td>Peter Grob</td>
<td>Swiss</td>
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<td>Mark Kane</td>
<td>USA</td>
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<td>Harold Margolis</td>
<td>Korea</td>
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These honorary members are elected for a lifelong term and are invited to VHPB meetings on an ad hoc basis.
VHPB Activities

• Meetings
  – 2 - 3 meetings/year (country - technical)

• Viral Hepatitis Newsletter
  – 2 issues/year
  – mailing to ± 4000 readers

• Web site

• Scientific publications

• participate and organize scientific activities in the field of viral hepatitis control and prevention
Meetings and Guidelines

The VHPB has already covered a broad range of control and prevention strategies for all forms of hepatitis

- Surveillance
- Universal Immunisation programs
- Injection safety and safe blood supply
- HBV mutants and variants
- Prevention and control of viral hepatitis in migrants and refugees
- Behavioural issues in hepatitis B vaccination
- How to reach risk groups
- Combined vaccines
- Economic evaluations
- Hepatitis B vaccination safety issues
- Hepatitis B vaccine and long term efficacy
- Hepatitis infections in health care workers
- Perinatal transmission
- Adolescent programmes
- Patient and advocacy groups
- Hepatitis A and E
- Identification and management of persons with CVH
Country meetings

- Italy 2002
- Germany and the Nordic Countries 2003
- France 2004
- UK 2005
- Spain 2006
- Greece 2007
- The Netherlands 2008
- Turkey 2009
- Portugal 2010
- Bulgaria 2011
VHPB Activities

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• **Viral Hepatitis** Newsletter
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Editorial

This issue of Viral Hepatitis reviews topics covered at the VHPB’s spring meeting held on March 18-19, 2010 in Budapest, Hungary. After an overview of existing screening programmes and new developments in the treatment of hepatitis B and C, the meeting evaluated the extent to which the criteria for screening elaborated 40 years ago by Wilson and Jungner are applicable to current screening programmes for chronic hepatitis. Reports of health technology assessments of such programmes were presented, and participants weighed the benefits of screening against costs and potential harms that may ensue. Further discussions covered the conditions for screening, the strengths and weaknesses of the approach and its public health and social implications, including screening’s impact on individuals. The meeting concluded with a review of lessons learnt, challenges, needs and proposed steps forward.

Several organizations have recently taken the initiative to promote screening and the identification of persons with chronic hepatitis. Because the implementation of screening programmes can have a tremendous impact on a country’s health care system and its citizens, the VHPB advisers were convinced that it was important to discuss these issues during the VHPB meeting.

There are approximately 600,000 deaths each year worldwide as a result of hepatitis B (HBV) and 350,000 due to hepatitis C (HCV). Around 500 million people worldwide are chronically infected with HBV or HCV, and most of them are not aware of it. Currently, there is no clear evidence that screening, prevention and control strategies in the general population and even in risk groups are effective. In this meeting the gaps, and needs for policy makers to make decisions on the implementation of new prevention and control strategies, were discussed.

Therefore the VHPB considered it important to take stock of current surveillance and screening of chronic diseases and the lessons learnt. At present, surveillance data are insufficient and too heterogeneous, only in some areas is the quality of the data sufficient to form the basis of informed policy decisions. The collection of data at national and regional levels is incomplete and in response to different needs and requests. The surveillance data lack validation, are based on inconsistent case definitions and are in most cases not comparable. Although there are a substantial amount of data available, mostly this does not provide the reliable information required. Strong coordination of surveillance, collection of data and analysis are required for progress to happen.

The criteria for screening that were published by Wilson and Jungner in 1968 are still valid 40 years later. To make them relevant to current situations they have had to be adapted to take into account changes in medical practice, including defined objectives and target population, proven effectiveness of screening methods, equity of access, minimization of harm and evaluation. The suitability of these adapted criteria with respect to chronic hepatitis was evaluated during the meeting.

Population screening is a strategy used to detect a disease in asymptomatic individuals, enabling earlier interventions and management to reduce morbidity and mortality. However, screening has a considerable financial cost. Furthermore, there is a potential for causing harm, and this needs to be balanced with the potential benefits of a screening programme. The effectiveness of treatments needs to be taken into account in this equation.

It is unlikely that screening the general population for HBV or HCV would be cost-effective, and it would become even less cost-effective as the prevalence is decreasing. Screening high risk groups seems a better strategy, but here also there is a lack of strong evidence. There are difficulties identifying these groups, persuading them of the benefits of screening, and providing treatment for people once identified.

Current initiatives in eight different countries have been recorded and are presented in order to learn about the advantages and disadvantages of different strategies for case finding. It is clear that screening programmes should be linked to primary health care and other ‘easy’ programmes. There is a need to reduce the number of step-down decisions and mechanisms, in favour of patient-based organizations and community led programmes. There is no ‘one solution fits all’ but programmes need to be tailored to local needs, infrastructures and circumstances.

Screening is much more than installing a diagnostic test. Necessary resources must be allocated to develop effective screening programmes. If screening programmes are implemented, there must also be a guaranteed assignment of responsibility, setting of priorities, adequate funding, medical resources to provide follow-up and treatment for suitable candidates, as well as monitoring and evaluation.

David Goldberg and Francisco Rojas-Thorau, on behalf of the Viral Hepatitis Prevention Board
Meetings
- 2 - 3 meetings/year (technical – country)

Viral Hepatitis Newsletter
- 2 issues/year
- mailing to ± 4000 readers

Web site

Scientific publications

participate and organize scientific activities in the field of viral hepatitis control and prevention
• Web site
  – Overview of the VHPB
  – Show all previous recommendations, guidelines and consensus statements
  – All *Viral Hepatitis* issues as of 1996 can be downloaded
  – Presentations of VHPB meetings are on-line since 2001 (>374 presentations of in total >471 documents)
  – Formally approved by WHO Global Advisory Committee on Vaccine Safety

Subscribe on the e-mail service
**VHPB news**

*Viral Hepatitis*, Volume 19, Number 1, prepared from material presented at meeting “Identification and management of persons with chronic viral hepatitis in Europe” is online, 2313Kb (.pdf)

This issue of the Viral Hepatitis is prepared from material presented at the Budapest meeting where international experts from public health and academic sector gave an overview of existing screening programmes and new developments in treatment of hepatitis B and C, they evaluated the applicability to chronic hepatitis of the criteria for screening elaborated 40 years ago by Wilson and Junger. Reports were presented of health technology assessments of such programmes and the benefits of screening against costs and potential harm that may ensue. Further discussions covered the conditions for screening, the strengths and weaknesses of the approach and its public health and social implications, including impact on individuals. The meeting concluded with a review of lessons learnt, challenges, needs and proposed steps forward.

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Meeting "Burden and Prevention of Viral Hepatitis in Portugal" is online.

Objectives of the meeting were:
- provide an overview of surveillance systems for infectious diseases;
- Review the epidemiological situation on viral hepatitis;
- Give an overview of the current prevention and control measures on viral hepatitis;
- Discuss the progress achieved in hepatitis prevention 10 years after the introduction of Universal Hepatitis B vaccination;
- Review the possible implementation of new prevention strategies, control measures and monitoring systems;
- Discuss the successes, problems and barriers to overcome, and the way forward;

The meeting programme, the pre-meeting document and most presentations of this meeting are available.

**VHPB meeting**
Novembar 2010, Lisbon, Portugal.
VHPB Activities

- Meetings
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Conference report

ABSTRACT

In March 2009 the Viral Hepatitis Prevention Board (VHPB) organized a meeting in Antwerp, in order to review the status of epidemiology and prevention of both hepatitis A and E. International hepatitis experts from the public health and academic sector provided the state of the art on HAV and emphasized the growing public health importance of the disease, in particular in intermediate endemicity regions, and the need for control at global level. The information shared on HEV showed clearly that it is emerging, but still a lot of efforts are needed to clarify among others the transmission routes, the clinical presentations and the burden of disease. First data on hepatitis E vaccines were discussed, showing a promising safety and efficacy profile. The meeting was concluded with lessons learnt, challenges, needs and proposed step forwards for both diseases.

Hepatitis A and E: Update on prevention and epidemiology

of symptomatic disease is shifting towards adolescents. People at-risk include travellers to endemic countries, men who have sex
Hepatitis A and B vaccination and public health

F. Blaine Hollinger, B. Bell, D. Levy-Bruhl, D. Shouval, S. Wiersma and P. Van Damme

1 Baylor College of Medicine, Houston, TX, USA; 2Division of Viral Hepatitis, Centers for Disease Control and Prevention, Atlanta, GA, USA; 3Institut de Veille Sanitaire, Saint-Maurice, France; 4Hadassah University Hospital, Jerusalem, Israel; 5World Health Organization, Geneva, Switzerland; and 6Center for the Evaluation of Vaccination, University of Antwerp, Antwerp, Belgium

Received July 2007; accepted for publication August 2007

SUMMARY. The introduction and implementation of hepatitis B vaccination programmes in areas of high endemicity has been very stressful. However, this initial accomplishment has led to the reassessment of priorities in some countries which could undermine these early successes. Work still remains to be done to support and implement interventions that will bring us closer to the WHO goal and to the control of hepatitis B in the community at large. Hepatitis A vaccine strategy for immunizing toddlers is shifting to those countries with intermediate endemicity where increasing morbidity in adults is being observed. Accumulating evidence indicates that such programmes can result in impressive reductions in the incidence of hepatitis A by herd immunity. Monitoring of these populations to determine durability of protection will be important to avoid shifting the infection to the older age population, when symptoms are more likely to occur. National policies need to consider hepatitis A vaccination in the context of other public health priorities.

Keywords: epidemiology, hepatitis A vaccine, hepatitis B vaccine, vaccine prevention.

INTRODUCTION

Hepatitis B immunization for infants and preschool children, even in low endemicity countries,
Has the time come to control hepatitis A globally? Matching prevention to the changing epidemiology


Centre for the Evaluation of Vaccination, Vaccine and Infectious Disease Institute, University of Antwerp, Antwerp, Belgium; Postdoctoral Fellow, Research Foundation – Flanders (FWO), Brussels, Belgium; Division of Viral Hepatitis, Centers for Disease Control and Prevention, Atlanta, GA, USA; Department of Immunizations, Vaccines & Biologicals, World Health Organization, HQ, Geneva, Switzerland; Pan American Health Organization, Washington, DC, USA; and Liver Unit, Hadassah-Hebrew University Hospital, Jerusalem, Israel

SUMMARY. For the first time a global meeting on hepatitis A virus (HAV) infection as vaccine preventable disease was organized at the end of 2007. More than 200 experts from 46 countries gathered to investigate the changing global HAV epidemiology reflecting the increasing numbers of persons at risk for severe clinical disease and mortality from HAV infection. The benefits of childhood and adult hepatitis A (HepA) vaccination strategies and the data needed by individual countries and international health organizations to assess current HepA prevention strategies were discussed. New approaches in preventing HAV infection including universal HepA vaccination were considered. This introductory paper summarizes the major findings of the meeting and describes the changing epidemiology of HAV infections and the impact of HepA vaccination strategies in various countries. Implementation of HepA vaccination strategies should take into account the level of endemicity, the level of the socio-economic development and sanitation, and the risk of outbreaks. A stepwise strategy for introduction of HepA universal immunisation of children was recommended. This strategy should be based on accurate surveillance of cases and qualitative documentation of outbreaks and their control, secure political support on the basis of high-quality results, and comprehensive cost-effectiveness studies. The recognition of the need for increased global attention towards HepA prevention is an important outcome of this meeting.

Keywords: Global hepatitis A meeting, hepatitis A, hepatitis A vaccination, infectious disease control, public health, surveillance.
Benefits of Early Hepatitis B Immunization Programs for Newborns and Infants

Koen Van Herck, MD, PhD,*† and Pierre Van Damme, MD, PhD*

Abstract: Despite the availability of safe and effective hepatitis B virus (HBV) vaccines for >20 years, strategies targeting risk groups failed to sufficiently control hepatitis B disease at the population level; this is mainly because of difficulties in risk identification and in program implementation. Hence, the global burden of disease of HBV still is substantial.

The World Health Organization recommends universal vaccination against hepatitis B to ultimately eliminate HBV; this recommendation had been progressively implemented to reach 168 countries with a universal program by the end of 2006. However, hepatitis B immunization is currently becoming endangered of losing its place on the agendas of governments, agencies, and international organizations, mainly because of the increasing success of these immunization programs and the interest in newer vaccine-preventable diseases and the related programs.

This publication aims to show that vaccination programs targeting newborns and infants are preferable to achieve this goal. The benefits of universal HBV vaccination for newborns and infants are: higher impact on chronic carrier rate and transmission; established potential of high vaccine coverage in this age group; opportunities to combine HBV vaccination with existing universal vaccination programs for newborns and infants; and impact on perinatal transmission, if vaccination is started shortly after birth. Moreover, the safety, immunogenicity, and long-term efficacy of newborn and infant HBV vaccination.

Key Words: universal immunization, vaccination programs, hepatitis B vaccination, public health

(Pediatr Infect Dis J 2008;27: 861–869)

The success of vaccination programs so far and the interest in other vaccine-preventable diseases have led to hepatitis B virus (HBV) vaccination becoming endangered of losing its place on the agenda of governments, agencies, and international organizations, a topic recently discussed at the Viral Hepatitis Prevention Board meeting in Istanbul, Turkey.1 Some agencies are downgrading HBV vaccination and have become reluctant to divert resources to HBV immunization programs,1 while clearly, the burden of HBV disease, compared with vaccine-preventable childhood diseases, is still substantial even in countries with low HBV endemicity.2–8 HBV infection continues to be a serious global health problem, with 2 billion people infected worldwide, and 350 million suffering from chronic HBV infection.9

On the basis of HBV epidemiologic data, a mathematical model was developed to estimate the global hepatitis B disease burden and vaccination impact.10 During the lifetime of the year 2000 worldwide birth cohort, the model estimates that without vaccination there would be 64,766,000 HBV infections; 9,733,000 chronic infections; and 1,405,000 HBV-related deaths.
BURDEN OF VIRAL HEPATITIS IN BULGARIA

Sofia, Bulgaria
March 24-25, 2011
Objectives of the meeting

• Provide an overview of surveillance systems for infectious diseases;
• Review the epidemiological situation on viral hepatitis;
• Give an overview of the current prevention and control measures on viral hepatitis;
• Discuss the progress achieved in hepatitis B prevention 20 years after the introduction of Universal Hepatitis B vaccination;
• Review the possible implementation of new prevention strategies, control measures and monitoring systems.
• Discuss the successes, problems and barriers to overcome, and the way forward