22 Years of VHPB
Achievements and Impact

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Major functions

- Organization of meetings with experts on viral hepatitis topics of current interest
- Dissemination of discussion/conclusions of meetings, through website, newsletters, scientific papers, consensus statements....
- Advocacy for viral hepatitis control: lobbying amongst public health authorities to put viral hepatitis on the agenda
- Alert and rapid response role
TECHNICAL MEETINGS:
REVIEW AND ISSUE GUIDELINES FOR CRITICAL ISSUES IN VIRAL HEPATITIS
- Universal Immunisation programs (transition from risk group strategy to universal immunization)
  - Immense progress (all but 5 countries in EURO Region)
- Surveillance best practice
  - Hepatitis B and C asymptomatic infection and chronic carriage
- Injection safety and safe blood supply
  - Realization that ~50% injections unsafe in developing world
- HBV mutants and variants
  - Prediction “Escape mutants” would negate gains of immunization.
- Prevention and control of hepatitis in migrants and refugees
  - Increasingly important issue
Broad range of topics covered

- Behavioural issues in hepatitis B vaccination
  - “Vaccine hesitancy” an increasing problem
- How to reach risk groups
  - Realization of difficulty in reaching most “high risk” groups
- Combined vaccines
- Economic evaluations (caution)
  - Transition from “anyone can do on back of envelope” to a professional activity
  - Pointing out biases that affect diseases with long incubation period
Broad range of topics covered

- Hepatitis B vaccination safety issues
  - Real vs perceived safety issues
- Hepatitis B vaccine and long term efficacy
  - Following long term studies
  - Determining need for booster doses
- Hepatitis infections and immunization strategies in HCW
- Prevention of perinatal transmission
  - Routine birth dose and/or maternal screening and post exposure prophylaxis
- Adolescent programmes
Broad range of topics covered

- Working with Patient and advocacy groups
- Hepatitis A and E
- Hepatitis A universal immunization
  - Understanding hepatitis E in West
- Identification and management of persons with HBV and HCV
  - Co-infections
  - Making sure immunization does not lose priority
Fact sheets
Viral Hepatitis
Scientific publications

1995

VIRAL HEPATITIS PREVENTION BOARD
ACTION ON HEPATITIS B AS AN OCCUPATIONAL HAZARD

FACT SHEET

Structure
The Viral Hepatitis Prevention Board (VHPB) is an independent, international and multidisciplinary group of experts established to consider various issues related to viral hepatitis in Europe, Australia and North America.

During 1992 the VHPB established an action on hepatitis B as an occupational hazard under the auspices of the Society of Occupational Medicine, and provided authoritative information and advice on hepatitis B infection as an occupational hazard. Hepatitis B is now considered to be the most infectious occupational hazard affecting healthcare professionals and many other workers in contact with blood and other body fluids.

In addition to its own occupational health advisers (listed below), the VHPB seeks advice from other experts and associations. The VHPB’s activities are supported by an educational grant from SmithKline Beecham Biologicals.

The VHPB’s objectives for the occupational health action in 1992 were to:
- increase awareness and understanding of the serious nature of hepatitis B infection among employers, trade unions and workers at occupational risk;
- provide information and advice to employers, employees and interested organisations on the risks of hepatitis B infection to workers;
- develop a set of pan-European recommendations to improve commitment to vaccination of risk occupations;
- support and assist the European Parliament and Commission and appropriate national and regional authorities to adopt clearer guidelines;
- develop guidelines to ensure that healthcare and other workers exposed to blood or other potentially infected body fluids are offered hepatitis B vaccine free of charge.

Meetings
During 1992 the VHPB met on four occasions to consider the following key areas:
- March: Status of hepatitis B as an occupational hazard and its prevention
- June: Hepatitis B as an occupational hazard: Who is at risk?
- September: Effective use of hepatitis B vaccine in occupational risk groups

Actions
During 1992 the VHPB’s action on hepatitis B as an occupational hazard was to:
- develop consensus recommendations;
- issue press materials to key medical, occupational and risk group media;
- publish a journal, Viral Hepatitis, to provide news and updates on hepatitis B;
- present oral and published material in a number of languages to ensure broad readership;
- participate at relevant conferences;
- In addition, the VHPB is organising a congress on hepatitis B as an occupational hazard to be held in March 1993.
Dear Editor,

Microbe, the news magazine of the American Society of Microbiology, recently published a summary (1) based on the paper of Bian et al., entitled “Change in hepatitis B virus large surface antigen variant prevalence 13 years after implementation of a universal vaccination program in China”, published in the Journal of Virology (2): *Universal Hepatitis B Vaccination in China Boosts Breakthrough Mutant Viruses*

The above-mentioned summary as well as the content of the Bian paper was discussed at our recent Viral Hepatitis Prevention Board meeting (Split, November 2013). On behalf of this group of experts we would like to reply with some major comments on both publications.

Wolfgang Jilg, Helen Norder, Alex Vorsters
On behalf of the Viral Hepatitis Prevention Board
COUNTRY MEETINGS
Objectives

• Understand strategies and programs to control viral hepatitis
• Monitor progress of countries in control of viral hepatitis
• Bring together people involved in viral hepatitis
• Draft guidelines to support countries based on lessons learned from other countries
Topics covered

• Surveillance systems
• Epidemiology
• Prevention and control measures
• Successes, issues and barriers to overcome
• Possible implementation of new strategies
• Health technology assessments
Countries covered

- 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)
- Arctic Region (2012)
- Israel (2013)
- Brazil (2014)
• Meeting report
• Often contains data not found elsewhere
Special Meetings

- Bring together all countries in a region to offer expert neutral (not company) advice on important issues
  - Immunization
  - Nosocomial transmission
  - Adoption and institutional transmission
  - Drug use
  - Sexual health
  - Blood bank, dialysis
  - Clinical best practice
Meetings

- Prevention and control of hepatitis B in Central and Eastern Europe and the Newly Independent States (Siofok, Hungary, 1996)

Outcomes:
- consensus statement
- recommendations for action
• Strengthening immunisation systems and introduction of hepatitis B vaccine in Central and Eastern Europe and the Newly Independent States (St Petersburg, Russian Federation, 2001)

• Strengthening immunisation systems and introduction of hepatitis B vaccine in Central and Eastern Europe and the Newly Independent States (Kiev, Ukraine, 2004)
Technical consultations (WHO, ECDC...)

WHO INFORMAL CONSULTATION WITH VHPB
Geneva, Switzerland, May 13-14, 2002

- Meeting Programme -

PUBLIC HEALTH CHALLENGES
FOR CONTROLLING HCV INFECTION
• Global hepatitis A meeting (Miami, USA, 2007)

Objectives of the meeting:
- review the changing epidemiology of HAV and its impact on burden of disease and prevention strategies
- share country experiences and effectiveness of different hepatitis A vaccination strategies
- review diagnostic and surveillance issues
- assess and examine different outbreak control measures
- discuss the economics of universal hepatitis A vaccination in children compared to other health care interventions
- position HAV burden of disease and prevention options vis-à-vis other vaccine-preventable infections
- assess and discuss vaccine efficiency and long term immunogenicity data
- assess the future of global prevention and control of hepatitis A infection.
Thank You!
1992
Hep B as occupational risk

1993
Hep B as community health risk

1994-95
Prevention hep A

1997
National hep B vaccination programmes (WHO recommendation)

2001
Hep C control

2002
Focus on adolescents

2003-04
Hep B vaccine safety & efficacy

2007
Update hep A & E

2008
Role of advocacy groups

2009

2010
Chronic hep B

2013
Hep C treatment
FUTURE CHALLENGES FOR THE VHPB
• Remain alert to changing epidemiology
• Support existing control and prevention programs and assess sustainability
• Convince remaining countries to implement universal hepatitis B vaccination
• Integrate vaccination programs into larger programs, including screening and treatment
• Collaborate with all other stakeholders in the fight against viral hepatitis
Advisors meetings 2-3 year

Agenda setting:
- Selection of technical meeting topics
- Selection of country meetings
- Composition of the board/members

Permanent scientific secretariat at CEV, University of Antwerp
Independent from
- International organisations like WHO/ECDC/EU
- Ministries of health
- Professional and scientific societies
- Industry
Secretariat implements:

• Preparation and organisation of meetings
• Publications
• Media activities
• Website
• Participation in third party meetings

Permanent intensive communication between VHPB board members and secretariat
Advisors

• Act in their personal capacity, and not as representatives of their main institutions
• Are often affiliated with stakeholding partners

This provides open and honest discussions

Advisors and speakers at VHPB meetings are not paid

No formal organisation with president, vice-president etc: minimal bureaucracy structure
Methodology
Identifying and analyzing

- Upcoming discussions and responds with technical topic meetings
- Foreseeing needs for advice on unresolved issues, gaps in guidelines
- Formulate support and targets to facilitate progress in prevention and control
- Proposing contributions to meetings or countries
- Uncertainties and how to interpret new findings
- Consequences and adaptations of guidelines or strategies
Starting in Western Europe

- Knowledge about safe blood supply and exposure prevention
- Since 1981 safe and effective vaccine was licensed and available; sustained vaccine supply in place; vaccine is affordable; delivery system in place
- Recommendation for vaccination of people at risk
What happened

• This strategy failed. No impact on morbidity and mortality of hepatitis in spite of all available compounds

• VHPB became driving force to change the strategy towards infant universal vaccination

• Monitoring of compliance

• Adressing constraints and hazards
VHPB Support to the introduction of hepatitis B vaccination in Europe

Meetings:

• Prevention and control of hepatitis B in Central and Eastern Europe and the Newly Independent States (Siofok, Hungary, 1996)


• Strengthening immunisation systems and introduction of hepatitis B vaccine in Central and Eastern Europe and the Newly Independent States (St Petersburg, Russian Federation, 2001)

• Strengthening immunisation systems and introduction of hepatitis B vaccine in Central and Eastern Europe and the Newly Independent States (Kiev, Ukraine, 2004)
Advocacy through Viral Hepatitis

HIGH-RISK STRATEGY IS FAILING

Dr Mark Kane outlines the inadequacies of selective hepatitis B vaccination programmes

The epidemiology of hepatitis B in Europe, North America, and Australia is similar. Most infections occur in adult groups defined by lifestyle or occupation. This was the historical basis for the "high-risk" strategy in areas of low and intermediate hepatitis B endemicity, aimed at groups such as those who might become infected sexually (including homosexual men and prostitutes), injecting/intravenous drug users (IVDUs), healthcare and other occupationally at-risk workers, and travellers. This strategy has failed for several reasons. At-risk workers represent a minority of total infections, yet most effort and most vaccine was directed at this group.

In many low endemicity countries sexual activity is the dominant means of hepatitis B transmission. It has proved difficult to target the homosexual community successfully, and similarly efforts to deliver vaccine comprehensively to heterosexuals attending STD clinics have failed.

Attempts to reach IVDUs have been the least effective for many of the reasons discussed on page 7. IVDUs are often infected before they become aware of the hepatitis B risk. The last reason for the failure of the high-risk strategy is that a substantial minority of those infected fall outside the known risk factors. These "unknowns" are a very difficult group to target and unless a high-risk strategy can reach them hepatitis B infection will continue to be a serious public health problem.

1. Universal vaccination: the need for early cover

Universal childhood and early adolescent vaccination protects individuals from infection later in life, whatever the cause of occupational risk, sexual activity or other behaviour such as intravenous drug use which poses a hepatitis B risk.

The sooner individuals are vaccinated against hepatitis B the better. Early vaccination protects individuals from childhood infection which results in high carrier rates and chronic disease. Chronic disease is associated with serious and fatal liver diseases such as cirrhosis and liver cancer.

Infant vaccination programmes:

The Viral Hepatitis Prevention Board (VHPB) endorses the 1991 statement of the World Health Organisation (WHO) Working Group on the Control of Viral Hepatitis in Europe which stated: "The routine immunisation of infants and adolescents should receive the highest priority. Hepatitis B vaccination should be integrated into the routine infant immunisation programme in all countries."

Adolescent vaccination programmes:

The Board also supports recommendations made by the WHO Global Advisory Group of the Expanded Programme on Immunisation endorsed by the World Health Assembly in 1992: "Hepatitis B vaccine should be integrated into the national immunisation programmes in all countries by 1997. Countries with a low prevalence may consider immunisation of all adolescents as an addition or alternative to infant immunisation."

Adolescent programmes should be directed at young adolescents before the age of 11, and are appropriate in countries where there are structural and financial reasons for delivery of vaccine to young adolescents such as school health services. Infant plus adolescent vaccination programmes: Combined universal, early adolescent and infant vaccination programmes have been shown to have the greatest impact on reducing levels of hepatitis B infection. Vaccination of young adolescents can of course stop once the first group of individuals vaccinated as infants reach early adolescence.

High-risk strategies plus universal vaccination: High-risk group approaches have failed to control hepatitis B infection in the general population. But it is good medical practice to protect individuals in these groups. Strategies aimed at vaccinating and changing behaviour at high-risk groups should therefore continue.

Where effective maternal screening programmes do not exist, the VHPB feels that resources may be better directed towards a universal vaccination programme aimed at adolescents or infants, or both.

3. Combined vaccines

The VHPB supports efforts to add hepatitis B vaccine to existing childhood vaccines in combinations. However, it believes that universal hepatitis B vaccination of infants should not be delayed until such combined vaccines are available. The introduction of these combined vaccines may take some years.

4. Raising awareness about the dangers of hepatitis B

The VHPB recognises the importance of raising the awareness of healthcare providers, health policy makers and the general public (especially parents) about the dangers of hepatitis B as a community health risk and the need for preventive measures — the most important of which is universal vaccination. It aims to produce and support educational initiatives targeted at these groups.

References

Publications
Viral hepatitis

- 2 issues/year
- Distributed:
  - PDF on website
  - Mailing to ±3600 readers
- Replaced by shorter newsletter (2013)

N° 1, 1992
N° 23/1, 2013
A cohesive European policy for hepatitis B vaccination, are we there yet?

T. Lernout, G. Hendrickx, A. Vorsters, L. Mosina, N. Emiroglu, P. Van Damme

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Clinical Microbiology and Infection
Early View (Online Version of Record published before inclusion in an issue)

in countries with medium and low prevalence, is a priority. There is no reason why hepatitis B should not follow the success of smallpox, polio, diphtheria and measles vaccination.

Keywords: Hepatitis B; Viral Hepatitis Board; North America
THE VIRAL HEPATITIS PREVENTION BOARD (VHPB) RECOMMENDS UNIVERSAL CHILDHOOD VACCINATION AGAINST HEPATITIS A BE CONSIDERED FOR EUROPEAN COMMUNITIES WITH REPEATED OUTBREACKS

Aanpak hepatitis in Nederland loopt achter

Nederland loopt achter in het voorkomen van hepatitis als gevolg van virusinfecies, zoals Hepatitis B en C. Ook de opsporing van hepatitis kan beter. Op donderdag 13 november komen kopstukken uit de wereld bijeen in Rotterdam om te praten over de Nederlandse situatie. Volgens deskundigen moet er vooral meer aandacht komen voor vaccinatie tegen Hepatitis B en moet de opsporing van hepatitis aanzienlijk worden verbeterd. De bedoeling is het aantal patiënten met hepatitis drastisch te verlagen.
Hep B immunization programmes in WHO/EURO region, 1993
Hep B immunization programmes in WHO/EURO region, 1996

- Universal immunization
- No universal immunization
Hep B immunization programmes in WHO/EURO region, 1998

- Universal immunization
- No universal immunization
Hep B immunization programmes in WHO/EURO region, 2008

- Universal immunization
- No universal immunization

WHO Regional Office for Europe
Hep B immunization programmes in WHO/EURO region, 2013

47/53 (89%) universal programme
remaining 6: risk group vaccination
Promoting and supporting viral hepatitis surveillance:

**Eurohep.net**: multi-country European project 2002-2005, coordinated by VHPB

- Survey: overview of surveillance systems in participating countries, hep A and B prevention programmes and burden of disease
- Collection of data for 1990-2001 for 22 European countries
- Elaboration of guidelines for harmonised surveillance and prevention of vaccine preventable viral hepatitis in Europe
SIMILARITIES WITH LATIN AMERICA
Why might the VHPB concept be of interest to the LA context?

- Many different countries like in Europe
- Tremendous range of socio-economic levels
- In principle capable health care systems
- Science-based medical education and performance
- Excellent expertise in the region
- States in charge of public health
• Learning from best practices of neighbouring countries
• Same target groups across borders like newborns, infants, migrants, minorities, risk behavior groups, health care workers
• Same tools for epidemiological surveillance of acute and chronic viral hepatitis, liver cirrhosis and HCC
• Same tools for measuring burden of disease
• Advantage of only two major languages spoken
Sharing experience and working together contributes to people’s health and personal satisfaction.

THANK YOU FOR YOUR ATTENTION