



# **Global hepatitis C prevention & control measures: lessons learnt and opportunities**

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# *Hepatitis C global burden*

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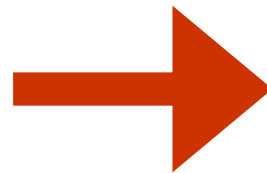
## *Hepatitis C - WHO estimate:*

- 2.3 - 4.7 millions new infections
- 300'000 deaths annually
- 130-170 million persons chronically infected
- Not treated, 14 - 45% of patients develop CLD & cirrhosis after ~20 years

# New Viral Hepatitis Infections

*continue to occur:*

- unscreened blood transfusions or blood products
- failure to sterilize medical equipment & unsafe injections
- dental and “traditional” medicine?
- injection drug users
- hemodialysis



**Prevention  
Activities**

# *End-stage liver disease*

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- Cirrhosis > 783'000 deaths / year
- Liver cancer > 619'000 deaths / year

~1 of every 40 death worldwide

*But no good breakdown according to aetiology*

# *A comprehensive prevention strategy should include:*

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- *Primary prevention* of new infections
- *Secondary prevention* of transmission from infected persons to other persons
- *Tertiary prevention* of the pathological consequences of chronic infection in those persistently infected with the virus

# *Primary prevention of new infections*

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- Hepatitis C vaccine
  - Investigational E1E2/MF59 vaccine (Novartis)
  - Correlates of protection are complex
  - Human studies in planning stage ?
  - Future development ?
- Preventing transmission from blood or blood components, organs, tissue and semen through a comprehensive national plan

# *Secondary prevention of transmission from infected persons to other persons*

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- Infection control practices
- Safe injection practices
  - Communication for behaviour change > consumer demand for injection safety
  - Reduce number of injections
  - Provision of single-use injection equipment and infection control supplies
  - Sharps waste management
- Special groups
  - Hemodialysis
  - Prisoners
  - IVDU

# *Tertiary prevention of the pathological consequences*

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- (peg)-interferon + ribavirin
  - Well established > 40-80% virus elimination
  - Cheaper drugs are partially available
- New antivirals in development
- Treatment is expensive and monitoring is demanding
  - Who should be treated ?
- Treatment may not change the public health problem



# *Strategic approach*

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- holistic strategy to improve the prevention, control and management of hepatitis A, B, C & E
- Public health recognition of viral hepatitis as an important issue
- Government lead for a national strategy
  - for awareness raising, screening, diagnosis, referral and treatment
  - Who should lead: The pharmaceutical industry? Doctors? Rock stars? The media?
- Involve advocacy groups, professionals and scientific societies

# *Success basic requirements*

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- Clear and consistent messages must be communicated to the general public in order to :

(governments, NGOs, public health officials, primary care clinicians, advocacy groups)

- offer the same, complete information
  - raise awareness and understanding
  - overturn misconceptions about Hepatitis B
- set clear, quantifiable targets for
    - reducing incidence and prevalence
    - reducing morbidity & mortality

# *Epidemiological studies & standardized surveillance data are necessary*

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- Avoid heterogeneity in availability/quality of data
- Detect outbreaks of HCV infection
- Assess the burden of disease and infection
- Identify risk factors
- Monitoring of chronic liver disease
- Monitor disease trends
- Identify and follow-up infected persons
- Develop, implement, & evaluate prevention programmes
- Evaluation of the effectiveness of activities
  - Vaccination, Screening, Injection safety, infection control, Safe sex, Counseling, Treatment
- Provide guidance for allocation of resources & decision making

# *Lessons learned*

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- detection & monitoring of chronic liver disease is unspectacular and therefore difficult to sell
- decision making hampered by heterogeneity in availability/quality of data
- evaluation of the effectiveness of activities is often "forgotten"
- planning about planning revision No<sup>N</sup>

# *Opportunities*

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- EMRO 2009 & WHO 2010? resolutions
- Use of existing structures – HIV/AIDS, STDs, others
- Use existing tools
- Sell success stories
  - Vaccination, Blood screening, HCC in Taiwan & Italy
- Use influenza surveillance, diagnostic and logistic tools

# *Conclusions:*

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- New HCV infections continue to occur
- HCC & cirrhosis will increase
- The public ignores most of HCV related issues
- Implementation of comprehensive national programs for prevention and control still needed in 2009
- Conducting surveillance is demanding but essential for decision making & evaluation of activities
- Further research is necessary to define best practices
- Include patient support groups & “traditional / local” communities with high proportions of immigrants

# Thank you

[www.who.int](http://www.who.int)

<http://www.who.int/topics/hepatitis/en/>