Improving the health of patients with viral hepatitis

Report by the Secretariat

1. Viral hepatitis is caused by five distinct viruses (hepatitis A, B, C, D, and E), each of which has a distinct transmission route, and consequent disease course. Hepatitis A and E viruses are spread through fecal–oral contamination and hepatitis E virus is also transmitted by consumption of meat from infected animals. The disease caused by hepatitis A and E viruses is usually self-limiting, but can cause death due to acute liver failure. In addition, infection with hepatitis E virus results in high mortality among pregnant women. Hepatitis B and C viruses are spread through bloodborne transmission (e.g., blood transfusion, contaminated injections); through sexual intercourse; and from mother to child. Although these viruses cause some cases of acute disease, their greatest damage is caused decades after infection, as most deaths result from liver cancer and cirrhosis. For this reason, viral hepatitis is called the “silent epidemic”.

2. Viral hepatitis causes a significant burden of disease. Estimates vary, but approximately 240 million persons are chronically infected with hepatitis B virus and 150 million with hepatitis C virus. These viruses are also responsible for significant mortality. Annually, some 500,000 persons die from diseases related to hepatitis B and some 350,000 from hepatitis-C-related diseases. The most notable new piece of evidence that catalogues the burden of hepatitis-related disease comes from the *Global Burden of Disease 2010* study: the estimate is that, annually, a total of 1.4 million deaths are due to acute and chronic hepatitis infections (hepatitis A–E). This is similar to the number of deaths attributable to HIV infection, and makes viral hepatitis the eighth leading cause of death globally.

3. In view of the different routes of transmission, effective prevention requires a comprehensive approach that includes a number of interventions. To reduce infection with hepatitis A and E viruses, improved sanitation and access to clean water are a priority. The improvement in living standards in many countries has resulted in a documented reduction in incidence of hepatitis A disease. Vaccination is also an effective preventive strategy. Several countries have adopted universal vaccination of infants against hepatitis A infection, further reducing the incidence of hepatitis A disease.

4. An effective vaccine also exists against hepatitis B infection. Over the past two decades, countries have adopted universal vaccination for children, and by 2011, 180 countries had included universal vaccination against hepatitis B for infants as well. Globally, coverage with hepatitis B vaccine is estimated at 75% and is as high as 91% in the Western Pacific Region, and 90% in the Region of the Americas. Vaccination against hepatitis B in the South-East Asia Region reached 56% in 2011. The current emphasis is on raising the universal coverage of vaccination of infants at birth against hepatitis B (i.e., within 24 hours of birth). Thanks to these interventions, the Western Pacific Region was the first WHO region to achieve the goal of controlling hepatitis B (the prevalence of hepatitis B surface antigen is less than 2% among five-year-olds). According to a WHO analysis,
through continued investments in hepatitis B vaccination, an estimated 3.4 million hepatitis B-related deaths due to liver cancer and cirrhosis will be prevented. In fact, vaccination coverage against hepatitis B virus is one of the 25 indicators of the draft action plan for the prevention and control of noncommunicable diseases 2013–2020.¹

5. Progress is also noted in the prevention of bloodborne transmission of hepatitis B and C. Among countries that provide reports, 90% indicate that all blood donations are screened for hepatitis B and C viruses. Regarding injection safety, continued efforts both to improve access to disposable syringes and needles, and to train health care workers in universal precautions have decreased the rate of unsafe injections.

6. The most significant advances regarding hepatitis control are in the area of treatment. Treatment experts predict that in the next two to five years, 90% of hepatitis C infections will be curable with an all-oral, once-daily, 12-week regimen of safe medicines (as compared to the current regimen that requires 24 to 48 weeks of weekly injections and that has a cure rate of between 45% and 80%). The new medicines have the potential to cure millions of persons who have chronic infection and thereby prevent deaths from cancer and cirrhosis. Therapy to treat chronic hepatitis B infection is also improving; new medicine regimens are being developed that are more potent and are easier to administer. The complexity and toxicity of existing regimens have deterred advocacy for making these medicines available in low-income countries. Few national governments have plans for scaling up hepatitis therapy. However, with the arrival of the new medicines in the next few years, Member States, WHO and other international organizations can expect patients’ advocacy groups to exert significant pressure in pursuit of lower prices and greater access to the medicines. Currently, some groups are advocating for WHO to include pegylated interferon in the WHO Model List of Essential Medicines, to prequalify diagnostic tests and medicines for hepatitis, and to negotiate with industry for lower medicine prices.

PREVIOUS HEALTH ASSEMBLY ACTION AND SECRETARIAT ONGOING RESPONSE

7. The Health Assembly has previously considered specific aspects of hepatitis. In 2010, the Health Assembly adopted resolution WHA63.18, in which, inter alia, it urged Member States to support or enable an integrated and cost-effective approach to the prevention, control and management of viral hepatitis, recognizing the scale of the disease burden attributable to viral hepatitis. To facilitate implementation of the resolution, the Secretariat established the global hepatitis programme in December 2011. In 2012 the Sixty-fifth World Health Assembly noted a progress report on implementation of the resolution.²

8. Resolution WHA63.18 requests the Director-General, inter alia, to establish in collaboration with Member States the necessary guidelines, strategies, time-bound goals and tools for the surveillance, prevention and control of viral hepatitis. The framework for global action responds to this request, with work aligned along four strategic axes:

¹ See document A66/9, Appendix 2.

² Document A65/26, section G, and document WHA65/2012/REC/3, summary record of the sixth meeting of Committee B.
• **Strategic axis 1: raising awareness and mobilizing resources.** Activities focus on increasing awareness about viral hepatitis among policy-makers, health professionals and the public; strengthening prevention and control measures; and removing discrimination against those who are infected. Priority activities include working with Member States to commemorate World Hepatitis Day (July 28) more visibly.

• **Strategic axis 2: data for policy and action.** The Secretariat is updating estimates of the global prevalence and burden of viral hepatitis. Guidelines and standards for disease surveillance are being finalized so that countries can better prioritize resources and select appropriate interventions. The Secretariat is developing approaches that will allow countries to better assess the cost-effectiveness of various hepatitis interventions, including expanding therapy. The next step is to create a comprehensive approach to the development of national hepatitis control plans and programmes.

• **Strategic axis 3: prevention of transmission.** Successful prevention efforts are being adapted in response to growing populations, changing epidemiology and new economic constraints. WHO is re-examining policies on immunization such as those relating to immunization schedules, the protection of neonates and health care workers (especially against infection with hepatitis B virus), expanded roles for existing hepatitis A vaccines and new hepatitis E vaccines, and innovative approaches for the future. WHO continues to work with partners to enhance the screening of blood for bloodborne pathogens including hepatitis B and C viruses and to reduce unnecessary and unsafe injections.

• **Strategic axis 4: screening, care and treatment.** The Secretariat is developing guidelines for treatment of infection with hepatitis B and C viruses. WHO is also assessing whether pegylated interferon should be included in the WHO List of Essential Medicines and is initiating discussions with global partners to advocate for increased access to medicines to treat hepatitis.

**ACTION BY THE EXECUTIVE BOARD**

9. The Executive Board is invited to take note of the report and provide further strategic guidance.