Technical matters:

Viral hepatitis

Viral hepatitis is a serious public health problem worldwide, as well as for the South-East Asia Region. Hepatitis B and C account for a greater health burden and a higher mortality rate because they can cause chronic infection, which, in turn, can lead to hepatic cirrhosis and cancer.

Approximately 1.4 million deaths are caused every year worldwide by hepatitis viruses. Of these, an estimated 800 000 are due to hepatitis B and about 500 000 due to hepatitis C infection. Around 500 000 estimated deaths in the WHO South-East Asia Region occur due to hepatitis viruses.

The regional strategy for the prevention and control of viral hepatitis (SEA-CDD-282) published in 2013 has six strategic pillars: (a) policy, planning and resource mobilization; (b) surveillance; (c) research; (d) prevention and control; (e) education; and (f) medical care and treatment.

The regional strategy can be considered for adoption by Member States in their own context and in alignment with their needs and health system requirements.

The High-Level Preparatory (HLP) Meeting held in the Regional Office in New Delhi from 14 to 17 July 2014 reviewed the attached working paper and made the following recommendations:

Action by Member States

(1) Member States may consider launching a coordinated, collaborative and sustained approach for viral hepatitis prevention, education, surveillance, medical care and treatment, research, policy, planning and resource mobilization and may wish to align it with the Regional Strategy on Prevention and Control of Viral Hepatitis (2013).

Actions by the WHO Regional Office

(1) Technical assistance may be provided, on request, to Member States in developing national plans in the context of local epidemiology.
(2) Member States should be assisted in strengthening diagnostic laboratories and laboratory-based surveillance for accurate estimation of disease burden as well as ensuring rational case management.

(3) The subject of viral hepatitis may be included in the agenda of the Sixty-seventh Session of the Regional Committee at Dhaka in September 2014.

The working paper and the HLP recommendations are submitted to the Sixty-seventh Session of the Regional Committee for its consideration.
Introduction

1. Viral hepatitis – clinically manifested by jaundice, is caused by five distinct viruses (A, B, C, D and E). Viral hepatitis A and E are foodborne and waterborne infections and are caused by enteric transmission of these viruses. Hepatitis B and C are transmitted through infected body fluids (including blood), sexual contact, mother-to-child transmission during birth, or through use of contaminated medical equipment.

2. Viral hepatitis is a serious public health problem worldwide, as well as for the South-East Asia Region. Hepatitis B and C account for a greater health burden and a higher mortality rate because they can cause chronic infections, which, in turn, can lead to hepatic cirrhosis and cancer.

3. Hepatitis E causes explosive outbreaks with mortality ranging up to 25% in pregnant women. These outbreaks are often due to contamination of drinking water supplies in developing countries with sewage.

4. Hepatitis B and C viruses are responsible for carrier state, can persist in the human body life-long after establishing their chronicity. A large number of carriers progress to liver cirrhosis and liver cancers. An estimated 78% of all cases of liver cancer and 57% of all liver cirrhosis are caused by chronic hepatitis B or C virus infection.

5. Widespread use of hepatitis B vaccine has significantly altered disease burden in settings where these vaccines have been used widely and continuously.

6. Preventive measures and interventions are now available against viral hepatitis but need substantial scaling-up.

Situation in the South-East Asia Region

7. Approximately 1.4 million deaths are caused every year worldwide by hepatitis viruses. Of these, an estimated 800 000 are due to hepatitis B and 500 000 are a result of hepatitis C infection. Around 500 000 of estimated deaths due to hepatitis viruses occur in the WHO South-East Asia Region. The deaths associated with viral hepatitis exceed the mortality estimates for malaria, dengue and HIV/AIDS combined.

8. Estimated annual cases and deaths due to different types of viral hepatitis in the South-East Asia Region are given below:

<table>
<thead>
<tr>
<th>Type of hepatitis</th>
<th>Estimated cases/year</th>
<th>Estimated deaths/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>400 000</td>
<td>800</td>
</tr>
<tr>
<td>B</td>
<td>1 380 000</td>
<td>300 000</td>
</tr>
<tr>
<td>C</td>
<td>500 000</td>
<td>120 000</td>
</tr>
<tr>
<td>E</td>
<td>12 000 000</td>
<td>42 000</td>
</tr>
<tr>
<td>Acute hepatitis of Unknown aetiology</td>
<td>200 000</td>
<td>5 000</td>
</tr>
</tbody>
</table>
9. However, the available data from the Region on rates of infection with hepatitis viruses, rates of clinical disease caused by these viruses, and the associated morbidity and mortality, are limited and fragmentary and may not provide a complete picture. Further, there are no data on the societal and economic impact (in terms of years of life lost, disability, loss of productivity, expenditure on medical care, etc.) of these infections in the Region.

10. Globally, an estimated 240 million persons are chronically infected with hepatitis B virus and 150 million with hepatitis C virus. Of these, 100 million people infected with hepatitis B virus and 30 million infected with hepatitis C reside in the South-East Asia Region. In addition, because of the high cost of treatment and care, hepatitis adds to the economic burden of millions of people.

11. The prevalence of hepatitis B and hepatitis C coinfection is up to 60% among persons living with HIV infection. All these infections have a similar route of transmission and are more prevalent in the South-East Asia Region, and hence require special attention. Coinfected individuals have more rapid progression of liver disease and a greater probability of developing cirrhosis and liver cancer.

**Current global and national response**

12. The challenges posed by hepatitis were formally acknowledged by the World Health Assembly in 2010 when it adopted its first resolution on viral hepatitis, WHA63.18 and called for a comprehensive approach to prevention and control.

13. This promoted a new era of awareness with governments proactively working to address the disease. Reinforcing that call for action, WHO has been collaborating closely with countries and partners to build a strong global response.

14. In June 2013, WHO launched the Global Hepatitis Network. One of its aims is to support countries with planning and implementation of viral hepatitis prevention and control programmes. Resolution WHA67.6 calls upon all Member States to launch nationally coordinated programmes to combat viral hepatitis.

15. WHO is updating its prequalified list of hepatitis B and C serological tests and preparing treatment guidelines for hepatitis B and C for issue in 2014.

16. Universal immunization of all neonates for hepatitis B, including a ‘birth dose’, has been introduced in all countries; however, the coverage rates remain low in some areas. Also, quality screening of blood and blood products for agents that cause viral hepatitis is lacking in some areas.

**Regional strategy for the prevention and control of viral hepatitis**

17. The regional strategy for the prevention and control of viral hepatitis (SEA-CD-282) published in 2013 is aligned with the WHO global action plan. The strategy defines actions that need to be undertaken by countries with support from WHO.
18. The regional strategy has six key pillars:

1. policy, planning and resource mobilization;
2. surveillance;
3. research;
4. prevention and control;
5. education; and

19. The regional strategy may be considered by Member States in their own context and in alignment with their needs and health system requirements.

**Challenges**

20. The challenges facing Member States are as follows:

1. low levels of awareness among health administrators and policy-makers, medical professionals and the general population about hepatitis viruses, including their routes of transmission, risk factors and impact on human health;
2. inadequate disease surveillance systems, with a high likelihood of underreporting of both acute and chronic infections, leading to insufficient understanding of the magnitude and seriousness of the public health problems associated with viral hepatitis;
3. limited knowledge, availability of, access to and use of preventive services for viral hepatitis, including screening of transfused blood and blood products;
4. rapid urbanization, overpopulated cities and lack of access to clean water and sanitation;
5. limited testing facilities for detection of chronic viral hepatitis infections, leading to a large proportion of persons with chronic infection remaining undiagnosed;
6. high cost of and inadequate access to treatment for viral hepatitis and for its long-term complications (cirrhosis and liver cancer) and liver transplantation in patients with end-stage disease;
7. inadequate financial and manpower resource allocation and public spending on programmes for surveillance, prevention and control of viral hepatitis, leading to insufficient understanding of the extent and seriousness of this public health problem; and
8. low rates of infant hepatitis B vaccine coverage, particularly for the dose at birth, in some parts of the Region.

21. All these issues have been considered during the finalization of the regional strategy for the prevention and control of viral hepatitis in the South-East Asia Region.
Way forward

22. Viral hepatitis demands high-level consideration in terms of awareness and commitment of governments, and adequate allocation of resources for prevention and control.

23. The regional strategy aims to provide a way forward to Member States to launch a coordinated, collaborative and sustained approach for viral hepatitis prevention, education, surveillance, medical care and treatment, research, policy, planning and resource mobilization. By aligning activities with the regional strategy, the countries of the Region can maximally utilize opportunities to prevent new hepatitis A, B, C and E infections and improve the quality of life of individuals living with chronic hepatitis B and C.