

Combating Hepatitis B and C: Elimination by 2030?

Overview

Hepatitis is an inflammation of the liver. The most common forms of hepatitis are caused by hepatitis viruses, of which there are five main types. The World Health Organization (WHO) states that these are of greatest concern because of the “burden of illness and death they cause and the potential for outbreaks and epidemic spread”.¹ It cites types B and C as most concerning. These lead to chronic disease in hundreds of millions of people globally and, taken together, are the most common cause of liver cirrhosis and cancer. The WHO also believes the condition is being overlooked:

Viral hepatitis B and C affect 325 million people worldwide, leading to about 1.4 million deaths a year. It is the second major killer infectious disease after tuberculosis, and 9 times more people are infected with hepatitis than HIV. Deaths from hepatitis have been increasing over the past two decades, which points to a lack of global awareness and action, including among top decision-makers.²

The need to combat hepatitis globally forms one of the targets under the sustainable development goals. These were agreed by UN member states, including the UK, in 2015.³ The WHO subsequently set the goal of eliminating viral hepatitis as a “major public health threat” by 2030 and reducing the mortality rate by 10% by 2020.⁴ The UK Government has stated it is committed to the goal of eliminating hepatitis C (the most common form of the virus in the UK) by 2030.

World Hepatitis Day is held annually on 28 July and is promoted by the World Hepatitis Alliance. This year’s theme is ‘Invest in Eliminating Hepatitis’.

Hepatitis B

Hepatitis B can cause both acute and chronic disease. The WHO states that the virus is most commonly transmitted from mother to child during birth and delivery, as well as through contact with blood or other body fluids. This includes through tattooing, piercings and sexual transmission. Infection in adulthood leads to chronic hepatitis in less than 5% of cases, whereas infection in infancy and early childhood leads to chronic hepatitis in about 95% of cases.⁵

In 2015, it was estimated that 257 million people were living with chronic hepatitis B. This resulted in 887,000 deaths (eg through cirrhosis or liver cancer). However, of those living with the condition, only 27 million people were aware of their infection and only 4.5 million were on treatment. As a result, the WHO states that many people are only diagnosed when they already have advanced liver disease. It estimated that prevalence is highest in the Western Pacific Region and in the African Region, where 6.2% and 6.1% of the adult population is infected respectively.

Hepatitis B can be prevented through a vaccine that is almost 100% effective and which requires three or four doses. The WHO recommends that all infants receive the first dose of the vaccine as soon as

possible after birth. Discussing the success of the vaccine, it states:

Routine infant immunization against hepatitis B has increased globally with an estimated coverage (third dose) of 84% in 2017. The low prevalence of chronic HBV infection in children under 5 years of age, estimated at 1.3% in 2015, can be attributed to the widespread use of hepatitis B vaccine.⁶

There is no specific treatment for acute/short-term hepatitis B. Most people recover after a few months. The chronic condition can be treated with medicines, including oral antiviral agents. However, not all people require treatment. The WHO estimates it is only 10% to 40% depending on setting and eligibility criteria. Treatment can slow the progression of cirrhosis, reduce incidence of liver cancer and improve long-term survival. Although some people may be cured of the condition, most people are not and will require treatment for life.

The NHS states that hepatitis B is less common in the UK than in other parts of the world, but that certain groups of people are at an increased risk of it.⁷ This includes “people originally from high-risk countries, people who inject drugs, and people who have unprotected sex with multiple sexual partners”.

Hepatitis C

As with hepatitis B, the hepatitis C virus (HCV) can cause both acute and chronic hepatitis. It can range in severity from a mild illness lasting a few weeks to a serious, lifelong illness. It is a bloodborne virus, which is most commonly transmitted through:

- the sharing of equipment for intravenous drug use;
- inadequate safety when using syringes or needles in healthcare environments;
- unscreened blood transfusions; and
- sexual practices leading to exposure to blood.

The WHO estimates that around 30% of infected people clear the virus within six months of infection without any treatment.⁸ The remaining 70% will develop chronic HCV infection, with between 15% and 30% of those people then developing cirrhosis within 20 years.

The WHO estimates that 71 million people globally have chronic HCV. It also estimated that 399,000 people died due to the condition in 2016, mostly from cirrhosis and liver cancer. The organisation states that the virus is most prevalent in the Eastern Mediterranean Region and the European Region, with an estimated prevalence in 2015 of 2.3% and 1.5% respectively.

As with hepatitis B, the WHO stated that the condition is often left undiagnosed until it causes more severe liver damage. As a result, the WHO recommends regularly testing those people who are most at risk of the virus. Many people will not need treatment for the condition. However, treatment is necessary if the condition becomes chronic. The WHO recommends treatment through direct-acting antivirals (DAAs). It stated that DAAs cure most people with the infection and treatment usually lasts 12 to 24 weeks (depending on the absence or presence of cirrhosis). The WHO noted that prices for the medicines were still high in a number of countries, but had dropped “dramatically” in many lower-income countries.

It is estimated that 19% (13.1 million) of the 71 million people with the condition knew they had it and that, of those diagnosed with chronic HCV, around 5 million persons had been treated with DAAs by the end of 2017.

The NHS states that HCV is the most common form of viral hepatitis in the UK.⁹

World Hepatitis Day

World Hepatitis Day is held annually on 28 July. This year, the WHO is calling on countries and partner organisations to promote the theme ‘Invest in Eliminating Hepatitis’.¹⁰ It has called for an additional US\$6 billion of annual funding to meet the 2030 elimination target:

A new WHO costing analysis underlines that an additional funding of US\$6 billion per year will be needed in low- and middle-income countries between 2016 and 2030, in order to achieve hepatitis elimination targets [...] Only US\$0.5 billion were invested in 2016, and this sum primarily consisted of domestic financing.

In addition, the WHO has also called on countries to:

- ensure that national hepatitis testing and treatment plans include dedicated funding and investments;
- seek optimal prices for medicines and diagnostics; and
- encourage the sharing of information regarding hepatitis (for example, by promoting the need for testing).

It accepted that the extra investment would lead to a 1.5% increase in the spend on global health, but stated it would “bring greater returns on better general health outcomes”.

World Hepatitis Day is also promoting the theme: ‘Find the Missing Millions’, a three-year campaign that was first launched in 2018. The World Hepatitis Alliance urges countries to raise awareness of hepatitis through events and activities. It stated: “Without finding the undiagnosed and linking them to care, millions will continue to suffer, and lives will be lost”.¹¹ Assessing the campaign’s success in 2018, the World Hepatitis Alliance spoke positively of the number of countries involved and the people that had been reached:

This year’s participation figures demonstrate the continued global influence and impact of the day, with 144 countries, 93 governments and 53 WHO country offices taking part across the six regions. Over 1,600 events were organised, and a staggering 318,914 people attended events in their local community or country, while over millions more were reached online via global media, and the Find the Missing Millions social media campaign.¹²

UK Policy

UK policy focuses primarily on tackling hepatitis C, which is the most common form of the virus in the UK. Recently, NHS England announced a “ground-breaking deal” with drug companies. This it hoped would lead to England being one of the first countries in the world to eliminate the virus.

NHS England stated that it was looking to achieve this through an increased focus on finding and testing those people who may have the virus:

Over 30,000 people have already benefitted from new drugs which cure hepatitis C being made available on the NHS over the last few years. As a result of this investment, the death rate from hepatitis C-related liver diseases has already fallen by more than 16% between 2015 and 2017. The NHS is also seeing cost savings from a fall in liver transplants for patients with hepatitis C, with a reduction of almost 40% in 2017 compared to 2015.

Now, as part of the long-term plan and thanks to a first-of-its-kind agreement being announced today, NHS England and three drug companies will work together to proactively identify and treat others who may be unaware they have hepatitis C, including homeless people and those with mental health problems.¹³

The Government has stated it is committed to achieving the WHO target of eliminating hepatitis C by 2030. It believes it is on target to meet the interim goal of a 10% reduction in the mortality rate by 2020.¹⁴

Further Reading

- Public Health England, [Hepatitis C in England 2019](#), April 2019
- World Health Organization, [Hepatitis](#), accessed 17 July 2019
- Stanley Smith et al, [Global Progress on the Elimination of Viral Hepatitis as a Major Public Health Threat: An Analysis of WHO Member State Responses 2017](#), *JHEP Reports*, May 2019

¹ World Health Organization, [World Hepatitis Day 2019](#), accessed 11 July 2019.

² *ibid.*

³ United Nations, [Transforming Our World: the 2030 Agenda for Sustainable Development](#), accessed 16 July 2019.

⁴ World Health Organization, [Global Health Sector Strategy On Viral Hepatitis 2016–2021](#), June 2016.

⁵ World Health Organization, [Hepatitis B](#), 5 July 2019.

⁶ *ibid.*

⁷ NHS, [Overview: Hepatitis B](#), accessed 11 July 2019.

⁸ World Health Organization, [Hepatitis C](#), 9 July 2019.

⁹ NHS, [Hepatitis](#), accessed 11 July 2019.

¹⁰ World Health Organization, [World Hepatitis Day 2019](#), accessed 11 July 2019.

¹¹ World Hepatitis Alliance, [World Hepatitis Day](#), accessed 15 July 2019.

¹² World Hepatitis Alliance, [World Hepatitis Day 2018: Global Summary Report](#), 2019.

¹³ NHS England, [NHS England Strikes World Leading Deal to Help Eliminate Hepatitis C](#), 30 April 2019.

¹⁴ House of Commons, [Written question: Hepatitis: Disease Control](#), 13 May 2019, 249819.

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