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Hepatitis elimination by 2030: Progress and challenges

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Abstract

Globally, over 300 million people are living with viral hepatitis with approximately 1.3 million deaths per year. In 2016, World Health Assembly adopted the Global Health Sector Strategy on viral hepatitis to eliminate hepatitis by 2030. Different World Health Organization member countries are working on hepatitis control strategies to achieve hepatitis elimination. So far, only 12 countries are on track to achieve hepatitis elimination targets. The aim of the study was to give an update about the progress and challenges to achieving hepatitis elimination by 2030. According to the latest data, 87% of infants had received the three doses of hepatitis B virus (HBV) vaccination in the first year of their life and 46% of infants had received a timely birth dose of HBV vaccination. There is a strong need to improve blood and injection safety. Rates of hepatitis B and C diagnosis are very low and only 11% of hepatitis B and C cases are diagnosed. There is a dire need to speed up hepatitis diagnosis and find the missing millions of people living with viral hepatitis. Up to 2016, only 3 million hepatitis C cases have been treated. Pricing of hepatitis C virus drugs is also reduced in many countries. The major hurdle to achieve hepatitis elimination is lack of finances to support hepatitis programs. None of the major global donors are committed to invest in the fight against hepatitis. It will be very difficult for the low and middle-income countries to fund their hepatitis control program. Hepatitis elimination needs strong financial and political commitment, support from civil societies, and support from pharmaceutical and medical companies around the globe.

Key words: Hepatitis; Global Health Sector Strategy; Hepatitis B virus vaccination; Injection safety; Find

missing millions; Harm reduction

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Core tip: Viral hepatitis is one of the leading causes of deaths worldwide. World Health Organization has produced a strategy to eliminate hepatitis by 2030. The major hurdle to achieve hepatitis elimination is lack of financial resources. If the targets in Global Health Sector Strategy are achieved, then the millions of lives will be saved from liver related premature deaths.

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INTRODUCTION

Hepatitis B and C are major causes of liver-related deaths^[1]. Globally, 257 million and 71 million people are living with hepatitis B virus (HBV) and hepatitis C virus (HCV), respectively^[2]. In the last 15 years, massive progress has been achieved in the fights against human immunodeficiency virus, malaria and tuberculosis, mainly by heavy commitments by the global donor agencies while viral hepatitis remains neglected^[3]. In 2015, United Nations included hepatitis in its Sustainable Development Goals.

In 2016, World Health Assembly has adopted the Global Health Sector Strategy (GHSS) on viral hepatitis to eliminate hepatitis by 2030. The goal of the World Health Organization (WHO) GHSS is to reduce hepatitis incidence from 6-10 million cases to 0.9 million cases, and to reduce annual hepatitis deaths from 1.4 million to 0.5 million, by 2030^[4].

The WHO is helping different countries to develop hepatitis control programs^[5]. By November 2017, 84 countries had developed hepatitis control programs^[6]. Due to lack of international investment in viral hepatitis programs, only a few countries included hepatitis treatment and prevention strategies for all patients in their national hepatitis programs^[1]. According to Polaris data, only 12 countries, namely Australia, Iceland, Switzerland, Italy, Mongolia, Spain, Egypt, France, Georgia, Japan, Netherlands, and United Kingdom are on track to achieve the WHO hepatitis elimination targets^[7].

GLOBAL HEALTH SECTOR STRATEGY ON VIRAL HEPATITIS: TARGETS AND PROGRESS

World Health Organization's GHSS document showed the five areas, in which efforts are required to eliminate hepatitis by 2030. These five core intervention areas are

(1) HBV vaccination; (2) prevention of mother to child transmission of HBV; (3) injection and blood safety; (4) harm reduction; and (5) test and treatment of HBV and HCV^[4].

In 2015, the global coverage of 3rd dose infant HBV vaccination was 82%, which is close to the target of 90% HBV vaccine coverage by 2030^[4]. According to the latest data, 87% of infants had received the three doses of HBV vaccination in the first year of their life^[8]. There are many countries in the European Union who have not included the HBV vaccination into their routine immunization schedule^[9]. There is a dire need to speed up HBV vaccination and reach every child for vaccination, to save the future generations from HBV.

Mother to child transmission of HBV is prevented by the timely administration of HBV birth dose vaccine (within 24 h of birth)^[9]. In 2015, only 38% of children were administered the birth dose of HBV vaccine in a timely manner and the target is to administer the timely HBV vaccine to 90% of children^[4]. According to the latest data, 46% of infants were administered the birth dose of HBV vaccine in a timely manner^[8].

Blood and injection safety is very important to achieve the global hepatitis elimination target. In 2015, 39 countries were not routinely screening all blood donations for transfusion transmitted infections and 89% of donations underwent a quality control check^[4]. There is a strong need to improve injection safety and also reduce the use of unnecessary injections, especially in the low and middle-income countries (LMICs).

The prevalence of HBV and HCV are very high in People who inject drugs (PWID)^[4]. In 2015, only 20 sterile syringes were provided to per PWID per year and the target is to provide 300 syringes per PWID per year^[4]. A lot of financial effort is needed to reach the 2030 target of harm reduction.

Only 11% of HBV and HCV cases are diagnosed. The target in GHSS is to diagnose 90% of HBV and HCV positive cases by 2030^[4]. Observing the miserable condition of hepatitis diagnosis, World Hepatitis Alliance has started an initiative named "Find the Missing Millions", to find the millions of undiagnosed people living with viral hepatitis^[10].

Current hepatitis B and C treatment rates are very low. According to Global Hepatitis Report 2017, 1.7 million HBV and 1.1 million HCV patients were on treatment in the year 2015^[2]. In 2016, 1.76 million additional HCV patients received treatment and the cumulative 2015-2016 HCV treatment number reached 3 million^[6]. To eliminate hepatitis, the goal is to treat 80% of HBV and HCV patients by 2030^[4]. Highly effective HCV drugs are available in the market. The price of HCV drugs has been reduced in over 100 countries, but drug pricing is still a problem in many developed countries. There is a strong need to find a highly effective treatment for hepatitis B virus.

CONCLUSION

There is a dire need to strengthen the health care sys-

tems in different LMICs. There are many low-income countries in which a large proportion of births are not taking place in health care settings. The major obstacle to eliminate hepatitis by 2030 is lack of financial resources. None of the major global donors gave a financial commitment to eliminate viral hepatitis. There is also a strong need to provide funds to The Global Alliance for Vaccines and Immunisation to support the HBV birth dose vaccination scheme. Donors are also needed to develop and support the national hepatitis plans in LMICs^[1]. Hepatitis elimination needs strong financial and political commitment, support from civil societies, and support from pharmaceutical and medical companies around the globe^[11].

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