

# Elimination of hepatitis B by 2030'

World Health Organization(WHO) estimates that in 2015, 257 million people all over the world were living with chronic hepatitis B virus (HBV) infection and there occurred 887000 deaths in 2015, mostly from cirrhosis and primary carcinoma of the liver. As of 2016, 27 million persons (10.57% of all people estimated to be living with hepatitis B infection) were aware about the infection. Left untreated, chronic HBV can lead to cirrhosis, liver cancer and premature death<sup>1</sup>. HBV infection most commonly spreads by mother to child (vertical) transmission during the perinatal period or horizontal transmission during childhood. The infection can be prevented with vaccines that are safe and 98-100% effective. Oral treatment has been recommended by WHO for a subset of the patients and can lead to suppression of replication of the virus and most people need to continue the treatment for life. This slows the progression of the disease, reducing the incidence of cirrhosis and liver cancer, thus improving survival<sup>2</sup>.

The United Nations (UN) has identified viral hepatitis control as a sustainable development goal. The global targets for 2030 set by the WHO include 90% prevention of mother to child HBV transmission, 100% blood transfusion and injection safety, 90% diagnosis of HBV infection and 80% treatment of eligible patients<sup>3</sup>.

Reduction of the prevalence of chronic HBV infection in children less than five years of age, estimated at 1.3% in 2015, can be attributed to the widespread use of HB vaccine. In Bangladesh HB vaccine has been included in the Expanded Programme on Immunization (EPI) since 2003. EPI programme was started in Bangladesh in 1979 and has since been expanded to encompass all the children in the country with vaccines against ten diseases<sup>4</sup>. The coverage was more than 95% with most vaccine types by 2018. Bangladesh achieved Global Alliance for Vaccines and Immunization (GAVI) alliance award in 2009 and 2012, which was given as a recognition to achieving the Millennium Development Goal (MDG)<sup>5</sup>. The existence of a very active and widespread immunization programme has enabled Bangladesh to successfully vaccinate children with the HB vaccine. The hepatitis B immunoglobulin is recommended to be given with the first dose of vaccine to newborns of mothers with high HBV load within 24 hours of delivery.

This has not been generally achieved. As reported in this paper, the prevalence of HBV infection in Bangladesh has been reduced. But to achieve the goal set by WHO, further effort is needed. Wide testing for HBV infection is needed to detect all chronically infected persons. This may begin with free testing of high risk groups such as household or sexual contacts of people with chronic HBV infection, healthcare workers, people who use intravenous drugs, people in prisons etc. The capacity to test wider sections of the population needs to be scaled up rapidly. Currently only a small proportion of those in need of treatment are getting the drugs. Increased case detection will lead to greater numbers of people needing drugs. Current specialist manpower available throughout the country will be able to manage these patients. If needed, further manpower can be trained. But we will need to enable them to get the drugs free of cost. These are beyond the capacity of the medical profession and needs governmental intervention and may well need national and international collaboration. The article by Dr. Md. Golam Mustafa and colleagues is therefore very relevant in addressing these issues with the hope that relevant authorities can be moved in the needed direction.

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