CHALLENGES TO MEETING WHO HBV AND HCV ELIMINATION TARGETS: WHICH TARGETS ARE LESS FEASIBLE TO REACH

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Globally, in 2015 an estimated 257 million people were living with chronic HBV infection, and 71 million people with chronic HCV infection. Viral hepatitis is responsible for 1.34 million deaths per year, including 0.72 million from liver failure and 0.47 million from primary liver cancer. In May 2016, the World Health Assembly adopted the Global Health Sector Strategy on viral hepatitis, with WHO member states committing to *eliminating viral hepatitis as a public health threat by 2030*. The definition for this "elimination" strategy was, compared to 2015, a 90% reduction in incidence of new infections (95% for HBV and 80% for HCV) and 65% reduction in mortality. Five synergistic prevention and treatment interventions were outlines as key to achieving elimination: 1) HBV immunization; 2) prevention of mother-to-child HBV transmission; 3) blood and injection safety; 4) harm reduction implementation for people who inject drugs (PWID); and 5) testing and treatment.

To achieve the key elimination targets, HBV and HCV diagnosis needs to be increased from 9% and 20%, respectively, to 90%. HBV and HCV treatment needs to increase from 8% and 7%, respectively, to 80% of people eligible. Importantly, harm reduction needs to increase from a global average of 27 needles/syringes distributed per year per PWID to 300.

Achieving the mortality reduction target is highly dependent on the age structure of HBV and HCV epidemics. For example, in Australia, without DAA therapy the liverrelated mortality was projected to double by 2030. Therefore, a 65% reduction compared to 2015 would be a much greater reduction if compared to the "expected" mortality in 2030. In contrast, countries with older age-based epidemics, such as United States and Japan, will be more likely to achieve this reduction with similar treatment uptake, as mortality was not projected to continue to increase through 2030.