## **EDITORIAL**

## ELIMINATING VIRAL HEPATITIS

## Eliminating viral hepatitis momentum must keep building

...global mortality from all forms of viral hepatitis has risen 22% since 2000

The field of viral hepatitis is a field in flux. Breakthrough basic science discoveries and the development of new techniques and models have ushered in a new era of research on hepatitis viruses. In the clinic, hepatitis C is now eminently treatable in the majority of patients with the disease, driven by improvements in drug efficacy that seemed unimaginable only a decade ago. Public and political awareness of viral hepatitis is also building year-on-year, after spending far too long in the shadow of diseases responsible for similarly severe global disease burdens, such as tuberculosis or AIDS. However, these welcome notes of optimism have to be heard alongside the sobering reminder that, worldwide, ~1.3 million people die from viral hepatitis each year, the majority (96%) from hepatitis B and C, with a smaller proportion of deaths from hepatitis A (~0.8%) and hepatitis E (~3.3%). Pressingly, global mortality from all forms of viral hepatitis has risen 22% since 2000. Against this backdrop, on World Hepatitis Day Nature Reviews Gastroenterology & Hepatology launches the "Eliminating viral hepatitis" series in our August issue, an ongoing collection of articles covering relevant aspects of viral hepatitis — from basic and translational science to public health policy.

April 2017 saw the WHO release the Global Hepatitis Report, which determined global and regional estimates of viral hepatitis burden and care access, and "provides a baseline for the drive towards elimination". The report follows the adoption by WHO member states of the first global health sector strategy on viral hepatitis that calls for the elimination of viral hepatitis as a major public health threat by 2030. Such an ambitious target was borne of the dramatic efficacy of new oral directacting antiviral agents (DAAs) for treating HCV infection and increasing hepatitis B vaccine coverage. The development of DAAs for HCV is one of medicine's

banner success stories: a tale of unparalleled advances in treatment outcomes blossoming, seemingly overnight, from decades of cumulative preclinical research. The resultant regimens have cured millions — and

> made billions. Yet the development of effective and well-tolerated drugs means nothing if they cannot be administered to the patients who need them. Lack of diagnosis (globally, only an estimated 20% of individuals infected with HCV

knew their status in 2015) or inhibited access to treatment (just 7% of those diagnosed with chronic HCV infection started on treatment in 2015) are major challenges. In a similar fashion, despite growing numbers of children worldwide receiving the hepatitis B vaccine (and subsequent declining rates of new HBV infections), only an estimated 9% of people infected with HBV were diagnosed in 2015, and only 8% of those were receiving WHO-recommended antiviral agents.

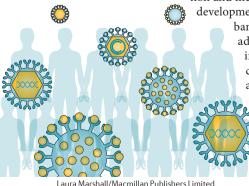
These data are a stark illustration that the success of eliminating viral hepatitis hinges on preventing new infections, dramatically improving rates of diagnosis and ensuring that access to effective treatment is affordable and unobstructed. The tools and interventions are available; whether the political will exists to put them to use remains to be seen. In this Issue, the newly launched ACHIEVE Coalition, which brings together patient and community groups, clinicians and researchers, stress the urgent need for better monitoring of viral hepatitis elimination efforts in Europe. Only with this information can successful elimination strategies be designed and implemented, in a manner tailored to the needs of specific patient groups.

Complementing this message, Nasrullah and colleagues summarize the progress of the world's first national HCV elimination programme in Georgia, a nation with a very high prevalence of HCV infection (5.4% of adults). The pioneering and ambitious nature of this programme promises many invaluable lessons for countries hoping to emulate their efforts.

Embodying ongoing advances in expanding treatment options for previously underserved patient populations, Etienne Sokal discusses a new study showing a near 100% sustained virologic response in adolescents with HCV treated with a DAA-based regimen. Notably, these positive data led to FDA approval for use of this regimen in children aged 12-17 years, and further trials in younger children and those with comorbidities are underway.

The battle to eliminate viral hepatitis, waged since the discovery of HBV and the subsequent development of the hepatitis B vaccine in the 1960s, has now hopefully entered its final and yet most daunting phase. We at Nature Reviews Gastroenterology & Hepatology hope that the articles published in this article series will help drive momentum towards the global elimination of viral hepatitis as a public health threat by 2030.

doi:10.1038/nrgastro.2017.107 Published online 26 Jul 2017



Laura Marshall/Macmillan Publishers Limited