



Healthy Livers, Healthy Lives

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NON-COMMUNICABLE diseases (NCD) represent a major global health challenge, with significant mortality and morbidity. Among these, metabolic-associated steatotic liver disease (MASLD) and its more severe form, metabolic-associated steatohepatitis (MASH), have emerged as critical, but often under-recognised, public health threats. At this year's European Association for the Study of the Liver (EASL) Congress, experts delivered insightful presentations on the topic.

THE 'WHO' PERSPECTIVE ON MULTIMORBIDITY IN NON-COMMUNICABLE DISEASES

Kremlin Wickramasinghe, Regional Adviser for Nutrition, Physical Activity, and Obesity for the World Health Organization (WHO), began his talk by highlighting the rising issue of multimorbidity in NCDs, and the collective goal among research groups to reduce the disease burden. He referenced the WHO Global Health Estimates to illustrate the significant impact of NCDs in the European region, noting that nearly 90% of deaths are related to NCDs, with higher mortality rates in Eastern Europe. He emphasised the importance of international cooperation to address health inequalities.

Looking to the future, Wickramasinghe stressed the need for countries to monitor progress against WHO targets using indicators for premature mortality and risk factors. He highlighted that Europe has the highest alcohol consumption per capita globally, linking it to liver diseases such as fatty liver disease, hepatitis, fibrosis, cirrhosis, and liver cancer. The exponential dose-response relationship between alcohol and liver disease underlines the need for targeted interventions.

Wickramasinghe also discussed the European framework for action on alcohol (2022–2025), focusing on pricing, availability, marketing, health information, health services response, and community action to combat alcohol-related harm. Additionally, the WHO European Regional Obesity Report 2022 aims to halt the rise of obesity, another significant risk factor for NCD.

Wickramasinghe concluded his talk by calling for increased efforts to implement WHO recommendations to combat high-risk factors for NCDs, including rising tobacco consumption. He highlighted the WHO's role in providing tools for better intersectoral engagement, which can support comprehensive regulations and policies to limit harmful industry practices, and promote transparency and accountability.

“Europe has the highest alcohol consumption per capita globally”

Key risk factors contributing to the disease burden in Europe include tobacco and alcohol use, dietary risks, high BMI, and low physical activity. Wickramasinghe introduced the WHO Global Action Plan for NCD prevention and control (2013–2030), which targets a 10% reduction in insufficient physical activity, harmful alcohol use, and halting the rise of diabetes and obesity.

Enhanced collaboration and engagement are crucial for the effective prevention and control of NCDs.

GLOBAL RECOGNITION OF MASLD/MASH AND NAFLD AS PUBLIC HEALTH THREATS

Jeffrey Lazarus, CUNY Graduate School of Public Health & Health Policy, New York, USA, highlighted the under-recognised public health threats of MASLD and MASH, alongside non-alcoholic fatty liver disease (NAFLD), which he believes should be acknowledged as another NCD. Lazarus emphasised the importance of patient and community perspectives in advancing this agenda, alongside clinical societies. MASLD, affecting over 30% of the global adult population, presents significant health, economic, and social challenges that require interdisciplinary and cross-sector collaboration to be addressed effectively.

Lazarus noted the lack of attention MASLD has received from policy makers and the public health community. He discussed his own study, which offers recommendations for improving models of care for MASLD and MASH.¹ The study emphasises the importance of non-invasive screening and testing, developing patient-centred pathways according to disease stage, preventing disease progression, and tailoring treatment strategies. It also advocates for co-locating services to treat NAFLD and its common comorbidities, aiming to integrate care across the healthcare system and define the roles of a multidisciplinary team responsible for managing NAFLD patients.¹

Lazarus recommended liver health checks for all individuals with Type 2 diabetes and improved referral models to hepatology. He outlined risk factors for MASLD and MASH progression, including obesity, alcohol use, drug use, old age, lifestyle, diabetes, iron overload, male sex, and genetic modifiers. Lazarus stressed the importance of shifting from disease-centred to people-centred care, focusing on comorbidities and health-related quality of life.

He also discussed the need for a paradigm shift in gastroenterology and hepatology to address obesity and steatotic liver disease, expanding the emerging steatotic liver disease community of practice.

Lazarus highlighted two of his studies, which identified 28 research priorities,² and 29 action priorities,³ to tackle steatotic liver disease globally. In another recent study, Lazarus et al.⁴ developed a fatty liver disease Sustainable Development Goal country score for 195 countries and territories, providing insights into country-level preparedness to address fatty liver disease through a whole-of-society approach. Higher scores indicate better preparedness, with significant variation observed between countries.⁴

Lazarus concluded by stressing the need for action ahead of the fourth High-Level Meeting of the United Nations (UN) General Assembly on the prevention and control of NCDs in September 2025. He also highlighted the relevance of his findings for policy makers, public health professionals, and advocates, and the necessity for multisectoral collaborations to address fatty liver disease and NCDs overall.

THE ECONOMIC BURDEN OF MASLD AND MASH

Zobair Younossi, Chairman of the Global NASH Council and Professor at Inova Health System, Virginia, USA, highlighted the significant economic burden of MASLD and MASH in his presentation. He noted that the global prevalence of MASLD and MASH stands at 38% and 5%, respectively. While health providers often focus on clinical outcomes and quality of life, Younossi emphasised the need to address the economic burdens, as this will ultimately provide the resources necessary to combat these diseases.

Younossi introduced the use of a Markov model to estimate the economic burden of MASLD and MASH. This model can assess MASH-related direct costs, societal costs, and health outcomes for both existing and new cases in the USA. The model requires data on age-specific prevalence rates,



incidence rates, age-adjusted cause-specific mortality rates, transition rates between states of liver disease, direct healthcare costs, societal costs, and quality of life scores for MASH patients at different stages. He shared his ongoing project for the Global NASH Council, which estimated MASH prevalence in five countries by averaging data from multiple sources. He stressed the importance of having accurate data for each disease stage, and recommended obtaining incidence rates from sources like the Global Burden of Disease (GBD) study and the International Diabetes Federation (IDF).

Younossi also mentioned his study on transition probabilities between different states of NASH.⁵ He detailed the MASH-directed costs in the USA, where a combination of micro-costing and gross-costing methods was used to estimate direct medical costs for each health state based on 2020 Medicare reimbursement rates. This approach allows for a detailed assessment of individual-level costs and broader healthcare system expenses. Additionally, Younossi calculated work productivity impairment using data from MASH patients in the USA and Europe. This

helped estimate productivity costs for each stage of MASLD and MASH.⁵

He then highlighted the clinical burden of MASH in the USA, Germany, and Japan from 2020–2040, noting increases in MASH, diabetes, obesity rates, advanced fibrosis, and mortality. By 2040, the direct healthcare cost in the USA is projected to exceed 60 billion USD, with productivity loss costs nearing 250 billion USD.

Younossi concluded the presentation by stressing that the clinical and economic burden of MASH is expected to grow substantially over the next two decades. Without intervention, the societal costs of MASH will be enormous. These data underscore the urgent need for policymakers to invest in addressing both the clinical and economic aspects of MASH.

“The clinical and economic burden of MASH is expected to grow substantially over the next two decades”

CONCLUSION

The growing prevalence and impact of MASLD and MASH highlight an urgent need for increased recognition and action from policy makers. Experts emphasise the necessity for interdisciplinary collaboration, comprehensive care models, and robust policy measures to address both the clinical and economic burdens of these diseases.

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