The INTERNATIONAL LIVER CANCER NETWORK asks for reinforced efforts to improve patient outcomes: PREVENTION, EARLY DETECTION and ACCESS TO CARE

The world has achieved some significant successes in its fight against cancer in a number of areas. Unfortunately, primary liver cancer continues to increase and remains a high burden for patients as the third most frequent cause of cancer-related death globally (with 830,000 deaths in 2020),¹ despite liver cancer being uniquely placed, with risk populations and prevention strategies well-known for decades.

More than 80% of liver cancer cases occur in low-resource and middle-resource countries, particularly in Eastern Asia, with China counting for 50% of the global cases alone, and sub-Saharan Africa, where medical and social care resources are often constrained.¹

There are parts of the globe where the rate of new liver cancer cases per population (incidence, cases per 100.000) is significantly high, such as Eastern Asia and some West African countries. These countries still have a high prevalence of viral hepatitis and other progressing liver diseases, which are the main causes of liver cancer.

In addition, there are significant disparities with regards to survival of patients diagnosed with liver cancer, with a median survival time from treatment initiation of 60 months in Japan, 33 months in North America, 23/24 months in China and Europe and 3 months only in Sub-Saharan African countries. ³

These inequalities are incompatible with the principle that all people should have access to the highest standard of health, regardless of race, religion, political belief, economic or social condition, which guides the global community driving for universal health coverage as part of UNs Sustainable Development Goal 3.8.⁴

There are three major strategies tackling the global burden of liver cancer: **prevention, surveillance and access to care!** All are well known, based on strong scientific public health evidence and recommended by all clinical guidelines and by the World Health Organisation (WHO). However, there is still a constant need to keep joined efforts reinforced implementing these recommendations into clinical care practice to improve patient outcomes globally.

1. Strengthen prevention measures to avoid new liver cancer cases

The major risk factors for developing liver cancer are progressing underlying liver diseases such as viral hepatitis, fatty liver (NAFLD/NASH) and alcohol-related liver damage. Therefore,, case finding strategies and access to state of the art management of these liver diseases are the core elements of prevention in the fight against liver cancer across the globe.

Japan and Singapore represent best practice examples where the incidence of liver cancer has been reduced successfully over time by implementing viral hepatitis screening and treatment leading to significantly decreasing viral hepatitis burden.⁵ A similar approach has been followed in Gambia, with nationally funded action plans in the public sector and large screen-and-treat operations that demonstrate that virologic control can be achieved with mass screening and prompt linkage to care, and easy access to medications.⁶

In addition, successful hepatitis B vaccination programmes need to be continued as primary liver cancer prevention as most recently emphasized by the 47th World Health Assembly 2021.⁷

Successful liver cancer prevention can be achieved by an integrated approach of primary and secondary prevention measures.

2. Implement better surveillance in at-risk populations aiming for early detection of liver cancer

Prognosis of liver cancer has been significantly improved with the availability of new treatment options when started in curative stages and even in the early palliative stage, which makes timely diagnosis the most critical point with regards to prognosis and patient outcomes (e.g. survival rate) and with a positive impact on overall cost of illness.⁸

Liver cancer is a unique example compared to other cancer entities. High risk populations are well defined and therefore surveillance programmes have been shown to be highly cost effective. 9 Surveillance is recommended in people living with cirrhosis by clinical guidelines consistently across the globe as they have the highest risk for developing liver cancer. In some regions monitoring of hepatitis B patients and patients with NASH is suggested, additionally.

However, the success of surveillance is influenced by the availability and acceptance of efficient diagnostic tests, the availability of effective treatment, the capacity and awareness of health care providers and the level of implementation into clinical routine practice.

There are countries, which follow strictly the scientific recommendation by putting screening programs in place for at-risk populations across all health system levels. Liver cancer patients in Taiwan and Japan have the best clinical outcomes (e.g. survival time), due to the high proportion of cases detected at an early stage as a result of nationwide intensive surveillance programmes in both countries.^{8, 10}

3. Ensure access to state-of-the-art treatment for liver cancer patients

There are clinical management guidelines published and available in all regions defining the same global state-of-the-art treatment of liver cancer patients.¹¹

The level of implementation into clinical practice is generally dependent on many specific factors such as health system structures and funding, availability of diagnostic tools and treatment options, its affordability and local knowledge level. All this leads to significant differences in the quality of clinical management with the consequence of significantly different survival rates.

Even in regions with highest clinical standards, there are limiting factors such as delayed patient access due to complex and time consuming Health Technology Assessment processes. In addition, patients have to overcome barriers and hurdles when seeking for state-of-the-art management. In these contexts, there is a strong need for transparent, dedicated pathways including multidisciplinary care teams and proper hospital, and out-patient care structures.

It is widely accepted that health-literacy and patient empowerment have a positive impact on clinical outcomes. Therefore, patients and their families need to be informed about their treatment options and should have access to independent, valid information, which are understandable and provide a basis for shared decision-making.

To achieve this, joined efforts and multi-stakeholder collaboration are vital, including patient representatives, scientific experts, medical societies, physicians, care-givers, public health actors, policy-makers and institutions – locally, nationally, regionally and globally. This is currently even more important as 90% countries worldwide report disruptions to even lifesaving health services since COVID-19 pandemic.¹²

The public awareness for liver cancer appears to be much lower than for other comparable cancer entities and needs to be increased. Also, the medical awareness is still low although high risk populations are well defined. In addition, there is still a high need to reduce stigma and discrimination even in the medical setting.

Patient organisations can play a critical and integral role in raising awareness, educating and empowering patients and their families. Their ability to communicate from patients to patients makes them a highly credible and essential asset reaching target populations and risk groups. In particular, liver patient organisations have many contact points to diagnosed liver patients and could help forming recommended and highly efficient surveillance programs that are accepted by at-risk populations. Unfortunately, these specific skills are still not utilised enough by governmental health institutions and organisations.

We ask policy-makers and government authorities to ensure that health systems worldwide provide a framework where patients can benefit from liver cancer prevention, screening and access to care.

We ask physicians and care-givers around the globe to be aware of liver cancer, its risk factors and surveillance recommendations, as well as prevention measures (primary and secondary) and to keep those implemented in their clinical practice.

We, members of the International Liver Cancer Network, pledge to continue to support scientific experts, medical societies, physicians, caregivers, public health actors, policy-makers and institutions by providing lived-experiences. They should continue to support awareness-raising efforts and outreach to liver cancer patients and those at risk to increase early detection and treatment rates and therefore support the joined efforts improving outcomes for liver cancer patients worldwide.

The International Liver Cancer Network (ILCN) is a patient-led initiative with the overall objective to improve the lives of people affected by liver cancer across the world. It is an independent group of organisations, associations, companies, etc. as well as non-associated individuals representing a community (e.g. bloggers, influencers).















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THETASK FORCE



































¹ IARC World Cancer Report (2021)

² Mukthinuthalapati V.V.P.K. et al. Hepatocellular Carcinoma in Sub-Saharan Africa, JCO Global Oncol 2021,

³ Yang JD, Hainaut P, Gores GJ, et al: A global view of hepatocellular carcinoma: Trends, risk, prevention and management. Nat Rev Gastroenterol Hepatol 16:589-604, 2019

⁴ https://sdgs.un.org/2030agenda (accessed on Aug 21, 2021)

⁵ Omata M. et al. Asia-Pacific clinical practice guidelines on the management of hepatocellular carcinoma: a 2017 update, Hepatol Int (2017) 11:317-370

⁶ Lemoine M, Shimakawa Y, Njie R, et al: Acceptability and feasibility of a screen-and-treat programme for hepatitis B virus infection in the Gambia: The Prevention of Liver Fibrosis and Cancer in Africa (PROLIFICA) study. Lancet Glob Health 4:e559-67, 2016

⁷ https://apps.who.int/gb/ebwha/pdf_files/WHA74/A74(20)-en.pdf (accessed on Aug 21, 2021)

⁸ Kudo, M. Management of Hepatocellular Carcinoma in Japan as a World-Leading Model. Liver Cancer. 2018, Vol.7, No. 2. May 2018. https://www.karger.com/Article/FullText/484619

⁹ Bruix J, Sherman M. Management of hepatocellular carcinoma: an update. Hepatology 2011;53:102

 $^{^{10}}$ Park JW et al. Global patterns of hepatocellular carcinoma management from diagnosis to death: the bridge study. Liver Int 35, 2155-2166 (2015)



¹¹ Galle PR et al. EASL Clinical Practice Guidelines: Management of hepatocellular carcinoma Journal of Hepatology 2018 vol. 69 j 182–236

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¹² https://www.who.int/news/item/31-08-2020-in-who-global-pulse-survey-90-of-countries-report-disruptions-to-essential-health-services-since-covid-19-pandemic (accessed on Sep 1, 2021)

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