

## Press release

# Nationwide population-based study (2005 to 2018) of 250 million hospital admissions in Germany reveals changed trends and the course of liver cirrhosis and its complications

- *Number of hospital admissions with cirrhosis has increased*
- *Patients admitted with cirrhosis are younger and have the highest in-hospital mortality rate*
- *Diagnosis of non-alcoholic fatty liver disease induced cirrhosis has increased four-fold*
- *Increase of the presence of adiposity*
- *Hepatitis-C Virus induced cirrhosis has decreased*

End-stage chronic liver disease (cirrhosis) is a major cause of morbidity and mortality and has a large socioeconomic impact because of high health care costs and the patients' inability to work or seek employment. Patients show symptoms, start suffering, and eventually die of chronic liver cirrhosis when the body essentially can't compensate the mis- or dysfunctional liver condition any longer.

In Europe and world-wide, the epidemiology of cirrhosis is undergoing demographic changes due to increased presence of overweight and also new emerging treatments of Hepatitis-C. Yet, over the last decades, limited evidence is available on the profile of cirrhosis in Germany.

Scientists from Goethe University Hospital Frankfurt under leadership of Prof. Jonel Trebicka analyzed the data from the Federal Statistical Office of Germany of around 250 million hospital admissions in Germany from 2005 to 2018 and found out that the number of hospital admissions with cirrhosis has increased nationwide, and its diagnosis as a comorbidity doubles the mortality rate of other chronic diseases. In addition, compared to other chronic diseases, patients admitted with cirrhosis are younger and have the highest in-hospital mortality rate. The diagnosis of non-alcoholic fatty liver disease induced cirrhosis has increased four-fold during the last 14 years paralleled by an increase of the presence of adiposity, while Hepatitis-C Virus induced cirrhosis has decreased with the same pace. Despite these changes over time, alcohol consumption remains by far the most frequent trigger for development of cirrhosis, with 20 times as many hospital admissions compared to other etiologies.

The study further revealed that also complications of cirrhosis have changed over time, which may be a merit of the wide implementation of the national and international guidelines in Germany: A significant decrease in gastrointestinal and especially variceal bleeding was observed, probably as a result of widely implemented endoscopic procedures and treatments using non-selective betablockers and TIPS (Transjugular Intrahepatic Portosystemic Shunt). However, decompensation episodes, mainly due to ascites, hepatic encephalopathy and infections have increased over these years.

These results of this nationwide study published in "The Lancet Regional Health - Europe", demonstrate the need for development of strategies to improve care in cirrhosis to decrease this considerable healthcare burden.

Publication:

<https://reader.elsevier.com/reader/sd/pii/S266677622100226X?token=66A070B04C853A73AE076E88C28C758BBCE4EAA34AC20D4A45BAB42BA22B667485AAF61510880F3C06B0FD4634A54D5F&originRegion=eu-west-1&originCreation=20211110135642>

Frankfurt, 11.11.2021

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## Funding

This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No. 825694. This press release reflects only the view of the author or authors (scientific coordinator and contact & translating personnel), and the *European Commission* is not responsible for any use that may be made of the information it contains. Reproduction is authorised provided the source is acknowledged.

