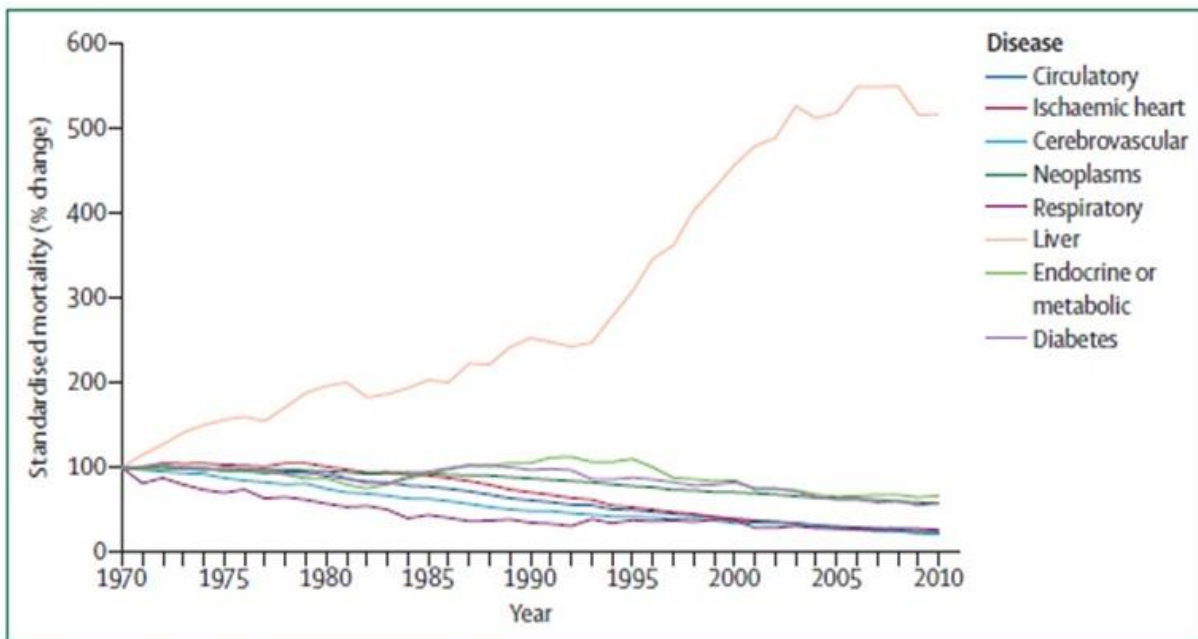


## Liver disease in the UK, an overview

Liver disease is a major, under-recognised cause of preventable morbidity and mortality in the UK. It is the fifth largest cause of premature death in the UK<sup>1</sup>, and is the only common chronic condition with an increasing death rate<sup>2</sup>. Recently, the Chief Medical Officer has identified liver disease as one of the key issues for population health in England<sup>4</sup> with 'The 2020 Chief Medical Officer annual report describes an ongoing gradual increase in deaths from liver disease<sup>4</sup>.



**Figure 1: Standardised UK mortality rate data**

Data were normalised to 100% in 1970, and subsequent trends plotted using the software Statistical Package for the Social Sciences. Data are from the WHO-HFA database.<sup>4</sup> Analysed by Nick Sheron (September, 2013).

**More than 90% of liver disease is preventable<sup>5</sup>.** There are more than 100 different types<sup>5</sup> of chronic liver disease, and together these are thought to affect around 2 million people in the UK. The major causes of chronic liver disease in adults are alcohol misuse, non-alcohol-related fatty liver disease (NAFLD) and chronic infection with hepatitis C or hepatitis B virus. Other significant causes of chronic liver disease include haemochromatosis, primary biliary cholangitis and other autoimmune conditions.

Advanced liver disease, including cirrhosis, that may result from of these conditions tends to develop slowly over years and decades, and most commonly presents late. There may be no signs or symptoms until end-stage liver disease develops. At this stage opportunities to intervene (other than liver transplantation) are to support, stabilise and prevent complications rather than to significantly improve or cure, and are often expensive in costs to the patient, their families and to health services.

The long lead-in time before the development of advanced cirrhosis presents real opportunities for the prevention of liver disease, and primary care has a major role to play in this. Alcohol misuse can be identified early, and there is good evidence to suggest that brief interventions in primary care can be very effective in modifying drinking behaviour and reducing risk<sup>6</sup>. Similarly, identifying patients who are obese or who have metabolic syndrome and promoting lifestyle change with support for weight loss and increased activity can reduce the risk of developing NAFLD. Hepatitis B infection can be prevented through immunisation of at-risk groups, and treatments for hepatitis B and C infections, if identified before the development of cirrhosis, are clinically effective. If liver fibrosis/cirrhosis is identified early in its course, intensified support to modify at-risk behaviour and specialist monitoring and supervision can reduce progression, reduce complications and improve clinical outcomes.

Addressing issues such as obesity and alcohol misuse in our patients will not only reduce the risk of them developing liver disease, but will have a positive impact on diabetes, hypertension, ischaemic heart disease and mental health problems to name a few clinical conditions that share risk factors with liver disease.

NICE, SIGN and the British Society for Gastroenterology have provided a range of guidance that provides a framework for the early identification and management of conditions associated with liver disease. Links to these documents are available via the toolkit:

- NICE NG49 non-alcoholic fatty liver disease guidance (2016)
- NICE NG50 cirrhosis in over 16s guidance (2016)
- BSG LFT guidance (2017)
- NICE PH43 hepatitis B and C testing guidance (2013)
- NICE CG165 hepatitis B (chronic): diagnosis and management (2013)
- SIGN 133 management of hepatitis C guidance (2013)
- SIGN 115 management of obesity guidance (2013)
- NICE CG189: obesity guidance (2014)
- NICE CG115: Alcohol-use disorders: diagnosis, assessment and management of harmful drinking and alcohol dependence (2011)

Liver disease can also affect children through a range of metabolic, genetic, infective or structural processes. One particular area requiring increased clinical awareness is prolonged neonatal jaundice (jaundice persisting beyond two weeks after birth in a full-term baby and three weeks in a pre-term baby) which may be caused by biliary atresia. If biliary atresia is identified early and the infant receives surgical treatment the prognosis is good. If diagnosis is delayed, the infant may develop serious liver disease including irreversible cirrhosis. The Children's Liver Disease Foundation 'Yellow Alert' campaign provides more information about this condition.

*Other useful toolkit resources:*

- Cirrhosis and its management in primary care
- Non-alcohol-related fatty liver disease and its management
- Alcohol-related liver disease and its management
- Chronic hepatitis b infection
- Chronic hepatitis c infection
- Prolonged neonatal jaundice and its management
- LFT blood testing and investigations in liver disease
- Recommended Read Codes for primary care
- Top ten tips articles (bite-sized learning)

*References*

- 1) Living Well for Longer: National Support for Local Action to Reduce Premature Avoidable Mortality. Department of Health. April 2014
- 2) Williams et al. Addressing liver disease in the UK: a blueprint for attaining excellence in health care and reducing premature mortality from lifestyle issues of excess consumption of alcohol, obesity, and viral hepatitis. *Lancet* Vol 384 November 29, 2014.
- 3) Health & Social Care Information Centre. Provisional Monthly Hospital Episode Statistics for Admitted Patient Care, Outpatients and Accident and Emergency Data - April 2012 to December 2012. 2013. Available from: <http://www.hscic.gov.uk/catalogue/PUB10706>
- 4) Annual report of the Chief Medical Officer: Health trends and variations in England 2020
- 5) Improving liver health in the East Midlands. A call to action. Public Health England 2015
- 6) Gornall J Alcohol and Public Health. Under the influence. *BMJ* 2014; **348**: f7646.