

## comparing treatment options for non-alcoholic steatohepatitis

**A**lcohol is not the only cause of liver disease. Non-alcoholic steatohepatitis is a potentially serious condition affecting over half of individuals with type 2 diabetes and three-quarters of those suffering from obesity – thus a significant proportion of the population globally (estimated at 24%).<sup>1</sup> It can lead to cirrhosis, liver failure, and cancer, as well as being implicated in some cases of cardiovascular disease.

A randomised trial in Italy<sup>2</sup> compared the benefits of bariatric metabolic surgery (Roux-en-Y gastric bypass or sleeve gastrectomy) with lifestyle interventions and medical therapies (at three different hospitals) in the treatment of non-alcoholic steatohepatitis among obese patients. The relative success of the treatment pathways were judged by 'histological resolution of NASH without worsening of fibrosis at 1-year follow-up'.

Since weight loss and lifestyle changes are crucial to the reversal of non-alcoholic steatohepatitis, it is not surprising that the study found that surgeries limiting calorie intake were overwhelmingly more successful than education and medical therapies.

1. NICE. Prevalence-Non-alcoholic fatty liver disease – NAFLD. October 2021. [bit.ly/3lZSI19](https://bit.ly/3lZSI19)
2. Verrastro O et al. Bariatric-metabolic surgery versus lifestyle intervention plus best medical care in non-alcoholic steatohepatitis. *Lancet* 2023;401(10390):1786-1797. [bit.ly/3WTFVIH](https://bit.ly/3WTFVIH)

## aging populations and long-term care

**M**uch has been written about the 'demographic time-bomb' expected to occur as birth rates, especially in developed countries, decline and longevity increases. Whether or not this proves to be a serious problem, given high rates of immigration from developing to developed countries, the fact remains that longer lives mean more people in need of expensive long-term care (LTC).

A recent article in the *Lancet*<sup>1</sup> acknowledges the challenges of meeting this need, especially at a time when the infirm elderly can be considered a burden and a drain on scarce resources.<sup>2</sup> The article defines good quality LTC as that which 'aims to enhance the functional ability of individuals with a substantial loss in intrinsic capacity, or a risk of such a loss'. By 'functional ability', they mean quality of life that includes human relationships, mobility, and meaningful activity.

This is the UN-declared 'Decade of Healthy Ageing', and a *Lancet Commission* of relevant experts has been established to 'devise a roadmap to person-centred LTC that respects and restores human rights and optimises the functional ability and wellbeing of older people with ongoing loss in capacity or who are at risk of such a loss'.

1. Pot A et al. Person-centred long-term care for older persons: a new *Lancet Commission*. *Lancet* 2023;401(10390):1754-55. [bit.ly/43rUvie](https://bit.ly/43rUvie)
2. Greer S et al. The politics of healthy ageing: Myths and realities. *World Health Organization*; 2022. [bit.ly/3MSufqg](https://bit.ly/3MSufqg)

## ethical framework for sharing scarce medical resources

**I**n the past 100 years, no other event or novel technology – not the advent of penicillin, dialysis, organ transplantation, or new genetic therapeutics – has necessitated the allocation of scarce health resources for more people worldwide than the COVID-19 pandemic.<sup>1</sup> The pandemic highlighted inequities in the availability of vaccines and medical interventions as these gradually became available. Besides the obvious preferential distribution of vaccine and therapeutics to countries that could afford to pay for them, for example, there were also inequities within countries. This has led policy makers to consider a set of principles that should underpin the allocation of medical resources in times of high risk and low preparedness.

This *Lancet* article sets out five universal ethical values that have come out of the many reports and

assessments prompted by the pandemic: 'maximising benefits and minimising harms, mitigating unfair disadvantage, equal moral concern, reciprocity, and instrumental value'. These are high ideals that will be called upon whenever we face a new threat to global health, as there will always be a time lag between a novel threat and the development of preventative and curative measures.

1. Emanuel E, Persad G. The shared ethical framework to allocate scarce medical resources: a lesson from COVID-19. *Lancet* 2023;401(10391):1892-1902. [bit.ly/3NhbVDR](https://doi.org/10.1016/S0140-6736(23)00100-0)

### campaign to prevent student suicide

Families who have lost children to suicide while they were studying at university had started a petition, signed by over 100,000 people, asking the government to extend existing 'duty of care' responsibilities for children to adults attending institutions of higher learning.

There is resistance to this idea by universities represented by Universities UK and the Department of Education as there is already a general duty to provide education and pastoral care. With many students living off-campus, there is a limit to how much responsibility university staff can be expected to take for the wellbeing of adult students who are largely autonomous. MPs debated the petition's proposal on 5 June, and the Minister for Higher Education has asked universities in England to prioritise mental health and sign up to the University Mental Health Charter. They have also been advised to let family or friends know if there are concerns about an individual's mental health.<sup>1</sup>

1. Universities told to step up to prevent suicides. *BBC News* 6 June 2023. [bit.ly/3MSZhxZ](https://www.bbc.com/news/health-63100000)

### development in Galleri test for cancer

Though further testing will be carried out, a recent large-scale trial within the NHS has confirmed what earlier research in America

found – that the Galleri blood test<sup>1</sup> can detect and identify DNA signals from 50 different kinds of cancer.

Lead researcher Prof Mark Middleton said that 'The test was 85% accurate in detecting the source of the cancer – and that can be really helpful because so many times it is not immediately obvious when you have got the patient in front of you what test is needed to see whether their symptoms are down to cancer.'<sup>2</sup>

This development promises to revolutionise the early detection and treatment of a disease that still presents huge challenges to the medical profession.

1. What is the Galleri blood test? *Cancer Research UK*. 2 September 2022. [bit.ly/3qzc3Ku](https://www.cancerresearchuk.org/press-releases/2022/09/02/what-is-the-galleri-blood-test)
2. Roberts M. Multi-cancer blood test shows real promise in NHS study. *BBC News* 2 June 2023. [bit.ly/45TbmMk](https://www.bbc.com/news/health-63100000)

### preventing heat-related deaths in a time of global warming

Last year saw temperatures soaring to over 40C in the UK for the first time, but almost certainly not for the last time.<sup>1</sup> Global warming is leading to life-threatening temperatures globally, and the very young and the elderly are most at risk, though anyone can suffer from heat exhaustion.

High temperatures cause blood vessels to dilate, lowering blood pressure, and making syncope (collapse) more likely. Excessive sweating can lead to electrolyte imbalances which further compromise well-being.<sup>2</sup>

The Heat Health Alert System<sup>3</sup> is a new initiative that aims to warn of impending high temperatures and offer advice to prevent health consequences, thus reducing pressure on the NHS.

1. Rannard G. Met Office forecasts 2023 will be hotter than 2022. *BBC News* 20 December 2022. [bit.ly/43MyQ3X](https://www.bbc.com/news/health-63100000)
2. Gallagher J. Heatwaves: What do they do to the body and who is at risk? *BBC News* 18 July 2022. [bit.ly/3JZcAem](https://www.bbc.com/news/health-63100000)
3. Health alert system aims to cut heatwave deaths. *BBC News*. 1 June 2023. [bit.ly/45Udxih](https://www.bbc.com/news/health-63100000)

## egg freezing on the rise

With many women now wanting career success before they settle down to have a family, it is perhaps not surprising that more are choosing to put some of their eggs on ice against the risk of decreased fertility in later life. Covid, with its associated social disruption, is also believed to account for some of the increased numbers (from 2,500 in 2019 to more than 4,000 in 2021).<sup>1</sup>

The procedure, technically known as oocyte cryopreservation, involves treatment with hormones that stimulate the production of more eggs than would normally be produced during ovulation.<sup>2</sup> This takes a toll, both physically and emotionally. In addition, there is a considerable financial cost involved with this fertility insurance policy - in the region of £30,000 according to an article in the Guardian warning women about the risks and calling for greater transparency on the part of clinics offering the service.<sup>3</sup>

The chances of a frozen egg resulting in a live birth are not high – just 2-12% – and this needs to be taken into account when making the decision to go down this route.

1. Jones, C. Egg freezing rises as more women look to preserve fertility. *BBC News*. 20 June 2023 [bit.ly/3NjfbLJ](https://www.bbc.com/news/health-67311111)
2. Egg freezing: Procedure, benefits, costs, and side effects. *Medical News Today*, 26 February 2019. [bit.ly/445b10G](https://www.medicalnewstoday.com/articles/366106)
3. Bryant, M. Warning for UK women over physical and financial toll of egg freezing – Fertility problems. *The Guardian*. 8 January 2023 [bit.ly/44bwLPq](https://www.theguardian.com/uk-news/2023/jan/08/egg-freezing-fertility-problems)

## depression – an epidemic?

You might think so when you read that over 8 million people in the UK are prescribed antidepressants, and up to 2 million of these use them long-term (five years or more).<sup>1</sup> A BBC Panorama programme investigating the use of antidepressants obtained these depressing figures from the NHS. While there is no doubt that many people are helped by taking antidepressant drugs in the short-term, there is currently no evidence to

suggest that taking them long-term is beneficial and may even result in negative physical side-effects like heart problems or diabetes. However, the Panorama investigation is primarily concerned with the challenges of drug withdrawal and how pharmaceutical companies have not always been transparent about this aspect of their productions.

1. Schraer, R et al. Antidepressants: Two million taking them for five years or more – BBC News 19 June 2023 [bbc.in/3peLXwd](https://www.bbc.com/news/health-67311111)

## sickle cell – a neglected problem

Sickle cell disease is prevalent wherever there is malaria because (it is commonly believed) having a single copy of the sickle cell trait gene provides a small survival advantage to those infected, but at a huge cost to those who inherit two copies of the gene. It is 'a chronic and progressive condition associated with frequent painful, vaso-occlusive episodes, multiple end-organ complications, and detrimental effects on the psychosocial wellbeing of those affected, their families, and communities.'<sup>1</sup> Yet because it affects mainly people living in low and middle-income countries, it has not received the attention it deserves even though around 300,000 children are born with it every year, and the number is rising with birth rates. Many will die before they reach the age of five.

The greatest incidence of sickle cell disease is in sub-Saharan Africa where nearly 79% of affected children are born. Globally, more than 1,000 people, children and adults, die daily because of the condition. Progress towards a cure and effective treatment has been made, but this *Lancet* article concludes with an exhortation to 'move swiftly as a global health and haematology community towards purposeful action to improve the lives of the global population with sickle cell disease.' ■

1. Osei M, McGann P. Sickle cell disease: time to act on the most neglected global health problem. *The Lancet Haematology*. 15 June 2023 [bit.ly/3Jkqrqb](https://www.thelancet.com/journal/S2468-2667(23)00000-0)